



LEADING WITH
PURPOSE

2022 ANNUAL REPORT TO SHAREHOLDERS



Hawaiian*
Electric

Provides electricity and related services for 95% of Hawai'i's population and operates 3 utilities and 5 separate island grids



AMERICAN
Savings Bank

One of Hawai'i's largest financial institutions, providing a wide array of banking and other financial services across 5 islands

PACIFIC CURRENT

Invests in sustainable infrastructure as part of HEI's strategy to be a catalyst for a better Hawai'i

Financial Highlights

YEARS ENDED DECEMBER 31 (in millions, except per share amounts)	2022	2021	2020
Operating income ¹	\$381	\$386	\$311
Net income (loss) for common stock by segment			
Electric utility	189	178	169
Bank ¹	80	101	58
Other	(28)	(33)	(29)
Net income for common stock ¹	241	246	198
Diluted earnings per common share ¹	2.20	2.25	1.81
Return on average common equity ¹	10.5%	10.4%	8.6%
Dividends per common share	1.40	1.36	1.32
Annual dividend yield ²	3.3%	3.3%	3.7%
Common shares (in millions)			
December 31	109.5	109.3	109.2
Weighted-average – basic	109.4	109.3	109.1
Weighted-average – diluted	109.8	109.6	109.4

¹ Due to the economic impact from the COVID-19 pandemic, the provision for credit losses was elevated in 2020, but was negative (i.e., a benefit) in 2021 as economic conditions and credit quality improved. The negative provision for credit losses was \$25.8 million (-\$18.9 million after tax) in 2021, compared to a provision for credit losses of \$2.0 million (\$1.5 million after tax) and \$50.8 million (\$37.2 million after tax) in 2022 and 2020, respectively.

² At December 31.

* Hawaiian Electric Company, Inc. is a subsidiary of HEI. As a holding company, HEI does not sell products or services and therefore is not regulated by the state Public Utilities Commission.



Cover, above: HEI is a proud sponsor of the Polynesian Voyaging Society (PVS), as its canoes Hōkūle'a and Hikianalia set to embark on their next journey, Moananuiākea Voyage. Their crews will circumnavigate the Pacific Ocean, covering 41,000 miles, 345 ports, 46 countries and archipelagoes and 100 indigenous territories. PVS seeks to perpetuate the art and science of traditional Polynesian voyaging and the spirit of exploration through experiential educational programs that inspire students and their communities to respect and care for themselves, each other and their natural and cultural environments.

FELLOW SHAREHOLDERS

Aloha mai kākou,

The HEI family of companies is guided by a common purpose: to create a better Hawai'i that is thriving economically, environmentally, culturally and socially, where everyone in our community enjoys an abundance of resources and opportunities that enable them to achieve their hopes and dreams.

This purpose reflects and gives deep meaning to the roles our companies play in our island state. Our operations touch all of the major islands, with the utility serving 95% of the state's population and our bank serving many thousands of local customers. Operating on islands, we're acutely aware that resources are finite, that important decisions involve tradeoffs and that we are part of an intricately interdependent community. For these reasons we focus first on seeking to ensure that our customers are satisfied, our employees are engaged and thriving and we contribute to our community's well-being.



Our companies provide critical infrastructure and services, helping lead efforts to transition Hawai'i away from fossil fuels and toward a sustainable economy. Our utility, **Hawaiian Electric**, anchors these efforts as it works to decarbonize Hawai'i's power and ground transportation sectors while enhancing the resilience of our community and ensuring an equitable energy transition. Our bank, **American Savings Bank**, invests in our state by lending to families and businesses and advancing financial literacy, economic development, affordability and environmentally sustainable operations. Our infrastructure investment platform, **Pacific Current**, invests in innovative projects to help Hawai'i achieve its climate ambitions and a more sustainable future. The collective impact of our businesses is amplified by the talent, innovation and commitment of employees working together across our family of companies and with partners throughout Hawai'i.

2022 Business Performance

2022 was a year of strong achievement for HEI, highlighting the strategic benefits we continue to see from the combined efforts of our companies. Despite a challenging macroeconomic backdrop of high inflation, high fuel prices and a constrained global supply chain, we remained focused on providing value for our customers, communities and shareholders. We delivered \$241 million in net income and \$2.20 in EPS for the full year. These results and our confidence in our future prospects enabled us to increase our dividend to shareholders for the fifth year in a row. Following is a brief summary of our performance over the past year.



Opposite: In 2022, Hawaiian Electric president and CEO Shelee Kimura, HEI president and CEO Scott Seu and American Savings Bank president and CEO Ann Teranishi completed their first year together as HEI's leadership team. We rededicated ourselves to working together across our family of companies and with partners throughout the state to serve our communities and create a better Hawai'i. Our collective charitable contributions and employee volunteer hours (see above) are among the many ways in which our family of companies seeks to benefit Hawai'i.

Total Shareholder Return*
(percent)

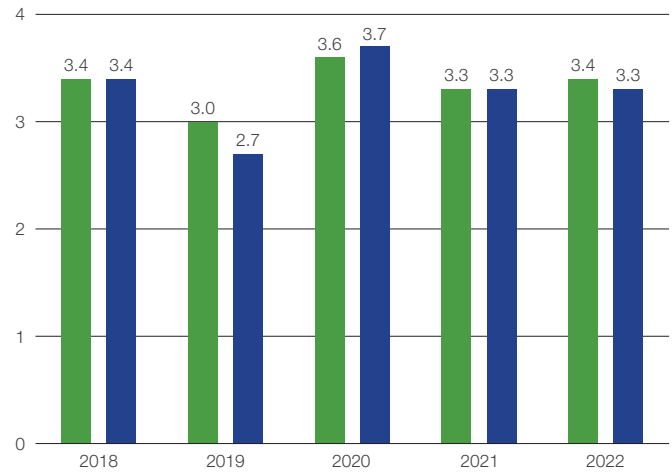
	HEI	S&P 500 Index	Edison Electric Institute (EEI) Index	KBW Regional Banking Index
2022	4.3	-18.1	1.2	-6.9
3-Year	-1.2	24.8	17.1	16.1
5-Year	36.8	56.9	52.7	18.6
10-Year	143.4	226.5	180.5	167.2

*Reflects cumulative total shareholder return for HEI Common Stock and the indices shown, assuming reinvestment of dividends.

HEI NYSE symbol: HE

Source: S&P Global Inc.

Dividend Yield
(percent)



■ EEI Index ■ HEI

Sources: S&P Global Inc. and Edison Electric Institute

Hawaiian Electric

Hawaiian Electric deftly navigated a global oil crisis, lingering pandemic impacts and recession concerns, making significant progress on its strategic priorities and our common purpose in 2022.

The company achieved a major milestone in its Climate Change Action Plan with the closure of Hawai'i's last coal plant when the 30-year contract ended between Hawaiian Electric and the plant's operator. Hawaiian Electric managed its generation fleet to enable a reliable transition, bringing critical grid-scale and customer-sited renewable resources online. This included Mililani I Solar, the largest utility-scale solar and storage project in the state and one of more than a half-dozen clean energy projects scheduled to come online through 2024. Over time, these projects will help stabilize the cost of energy for customers while reducing emissions and bringing our state closer to its renewable energy goals.

With electric bills at decade-high levels due to record-high oil prices, Hawaiian Electric responded by finding more ways to care for our customers in need of assistance, including through payment plans and connecting customers with financial support programs. We also announced 7 community solar projects designed to benefit low- and middle-income customers and moved forward with requests for proposals for firm renewable energy generation on O'ahu, Maui and Hawai'i Island. In recognition of our customers' role in achieving Hawai'i's climate goals, Hawaiian Electric began providing a cash incentive and bill credits for customers on O'ahu and Maui to add battery storage to existing or new rooftop solar systems. This win-win program benefits all customers, as the batteries are programmed to discharge solar power to the grid during the evening peak period.

Additional progress toward greater reliability, resilience and clean energy included filing for approval of our Climate Adaptation Transmission and Distribution Resilience Program, a five-year, \$190 million action plan to harden grids and better prepare communities for severe weather; deployment of nearly 200,000 advanced meters; the launch of electric vehicle charging pilot programs for commercial and eBus customers; installation of more than a half-dozen new public fast electric vehicle chargers; and completion of a decarbonization pathways study that forecasts how our entire economy will have to adapt to meet Hawai'i's ambitious climate change goals.



32%

**2022 RENEWABLE
PORTFOLIO STANDARD**
(RPS, % OF GENERATION)

1,118 MW

TOTAL SOLAR CAPACITY

99.8%

RELIABILITY
(AVERAGE SERVICE
AVAILABILITY)

91%

**OF NEW ROOFTOP SOLAR
INSTALLED IN 2022 WITH
BATTERY STORAGE**



Left: Mililani I Solar, a 39-MW/156-MWh solar-plus-battery storage project, came online in July 2022. Photo courtesy of Clearway Energy and Moss Solar.

Top: Hawaiian Electric and HEI employees joined nonprofit Kāko'o 'Ōiwi to clear taro patches in preparation for a new planting.

Above: Hawaiian Electric crews replace a substation transformer at one of the Army's largest installations on O'ahu to help improve reliability for 3,500 military homes in Schofield Barracks.

American Savings Bank

American Savings Bank (ASB) demonstrated its commitment to our common purpose by investing in Hawai'i families and businesses and continuing its efforts to strengthen economic development, housing affordability and environmentally sustainable operations. With the strongest loan portfolio growth in decades, ASB funded over \$2 billion in loans to help Hawai'i families and businesses grow and thrive.

One example of ASB's investment in Hawai'i is its funding to support more than 25 low-income housing projects throughout the state. ASB is also a major supporter of the Hawai'i Community Foundation's House Maui Initiative, a program designed to expand access to affordable housing in Maui County. And ASB is proud of its recent approval as a lender for the U.S. Department of Housing and Urban Development's Section 184A Native Hawaiian Housing Loan Guarantee program, whose objective is to increase availability of mortgage lending for homes located on Hawaiian home lands.

In addition to supporting housing affordability, ASB originated over 270 new clean energy loans totaling \$12 million in 2022 — loans that help protect and care for our land and natural resources while strengthening Hawai'i's economy by enabling homeowners to purchase and install their own photovoltaic systems, solar water heaters, solar air conditioning and battery backup and storage systems.

And finally, the ASB Buy Local program supports local businesses while offering customers exclusive savings. Participating retailers have experienced a welcome, post-pandemic boost in business along with valuable promotional opportunities.



14 Years

BEST PLACES TO WORK
HAWAII BUSINESS
MAGAZINE LIST

\$2 Billion

INVESTED IN OUR
COMMUNITY
IN 2022

25+

STATEWIDE
LOW-INCOME HOUSING
PROJECT INVESTMENTS



Left: The bank continues to work to strengthen the area around its campus, including through investing \$20.4 million in the Halewai'olu Senior Residences affordable housing project under construction just steps from ASB's headquarters.

Left, below: ASB collaborated with one of its community partners, Kupu, to locate a food truck at ASB's headquarters to provide fresh, healthy and convenient lunch options for teammates and the surrounding community.

Bottom: Teammates pledged more than \$212,000 to our Kahiau partners through our annual Kahiau Giving Campaign. Combined with ASB's matching amount of \$150,000, ASB donated more than \$362,000 to five nonprofit partners to support underserved communities.



Pacific Current

Pacific Current advances our common purpose through its focus on catalyzing Hawai'i's transition to a zero carbon footprint, self-sufficiency and resiliency. In 2022, Pacific Current acquired a ~7 MW closed loop biomass plant on Kaua'i and completed construction on the University of Hawai'i's fifth solar + storage project at Honolulu Community College, growing its renewable asset portfolio and contributing to progress toward achievement of Hawai'i's climate goals. In addition, Pacific Current continued to deploy electric vehicle charging systems for multi-unit dwellings, expanding charging options for electric vehicle owners and supporting the state's transportation decarbonization goals.



Pacific Current's newest addition is the Mahipapa biomass plant, which provides nearly 7 MW of firm renewable energy to Kaua'i residents. The plant is located in Kōloa, surrounded by the eucalyptus trees that power the facility.

Leading With Purpose

The HEI family of companies humbly recognizes its duty to serve as an example for other businesses, near and far, as they pursue their own goals in an increasingly complex world. We do this by demonstrating what it means to be grounded by a purpose that goes beyond our day-to-day business and to think and act as part of an island community — to recognize that we all have limited resources, collective interdependence and a responsibility to take actions today that will enable future generations to thrive.

As we reflect upon 2022 while looking forward over the horizon to the future, we believe that our common purpose will serve the long-term interests of all our stakeholders. On behalf of our employees, our leadership team and our Board, I wish to thank you, our shareholders, for your continued confidence and support. With deep aloha for our community, respect for our lands and integrity and humility in our leadership, we will successfully navigate a course toward a resilient and sustainable future.

Me ke aloha pumehana — with warm regards,

A handwritten signature in black ink, appearing to read "Scott W.H. Seu".

Scott W.H. Seu

HEI President and Chief Executive Officer

Hawaiian Electric Industries, Inc.

2022 Annual Report to Shareholders

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D. C. 20549
FORM 10-K

- ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE
SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2022
OR
 TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF
THE SECURITIES EXCHANGE ACT OF 1934

Exact Name of Registrant as Specified in Its Charter	Commission File Number	I.R.S. Employer Identification No.
Hawaiian Electric Industries, Inc.	1-8503	99-0208097
Hawaiian Electric Company, Inc.	1-4955	99-0040500

State of Hawaii

(State or other jurisdiction of incorporation)

1001 Bishop Street, Suite 2900, Honolulu, Hawaii 96813 - Hawaiian Electric Industries, Inc. (HEI)

1099 Alakea Street, Suite 2200, Honolulu, Hawaii 96813 - Hawaiian Electric Company, Inc. (Hawaiian Electric)

(Address of principal executive offices and zip code)

Registrant's telephone number, including area code:

(808) 543-5662 - HEI

(808) 543-7771 - Hawaiian Electric

Not applicable

(Former name or former address, if changed since last report.)

Securities registered pursuant to Section 12(b) of the Act:

Registrant	Title of each class	Trading Symbol	Name of each exchange on which registered
Hawaiian Electric Industries, Inc.	Common Stock, Without Par Value	HE	New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act:

Registrant	Title of each class
Hawaiian Electric Industries, Inc.	None
Hawaiian Electric Company, Inc.	Cumulative Preferred Stock

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Hawaiian Electric Industries, Inc. Yes No Hawaiian Electric Company, Inc. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act.

Hawaiian Electric Industries, Inc. Yes No Hawaiian Electric Company, Inc. Yes No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Hawaiian Electric Industries, Inc. Yes No Hawaiian Electric Company, Inc. Yes No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).

Hawaiian Electric Industries, Inc. Yes No Hawaiian Electric Company, Inc. Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of “large accelerated filer,” “accelerated filer”, “smaller reporting company” and “emerging growth company” in Rule 12b-2 of the Exchange Act.

Hawaiian Electric Industries, Inc.:		Hawaiian Electric Company, Inc.:	
Large accelerated filer	<input checked="" type="checkbox"/>	Large accelerated filer	<input type="checkbox"/>
Smaller reporting company	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
Accelerated filer	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Emerging growth company	<input type="checkbox"/>	Emerging growth company	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Non-accelerated filer	<input checked="" type="checkbox"/>

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Hawaiian Electric Industries, Inc. Yes No Hawaiian Electric Company, Inc. Yes No

Indicate by check mark whether the registrant has filed a report on and attestation to its management’s assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.

Hawaiian Electric Industries, Inc. Hawaiian Electric Company, Inc.

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements.

Hawaiian Electric Industries, Inc. Hawaiian Electric Company, Inc.

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant’s executive officers during the relevant recovery period pursuant to §240.10D-1(b).

Hawaiian Electric Industries, Inc. Hawaiian Electric Company, Inc.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Hawaiian Electric Industries, Inc. Yes No Hawaiian Electric Company, Inc. Yes No

	Aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrants as of		Number of shares of common stock outstanding of the registrants as of	
	June 30, 2022		June 30, 2022	February 15, 2023
Hawaiian Electric Industries, Inc. (Without Par Value)	\$4,477,193,306		109,466,829	109,472,304
Hawaiian Electric Company, Inc. (\$6-2/3 Par Value)	None		17,753,533	17,854,278

DOCUMENTS INCORPORATED BY REFERENCE

- Hawaiian Electric’s Exhibit 99.1, consisting of:
- Hawaiian Electric’s Directors, Executive Officers and Corporate Governance—Part III
 - Hawaiian Electric’s Executive Compensation—Part III
 - Hawaiian Electric’s Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters—Part III
 - Hawaiian Electric’s Certain Relationships and Related Transactions, and Director Independence—Part III
 - Hawaiian Electric’s Principal Accounting Fees and Services—Part III

Selected sections of Proxy Statement of HEI for the 2023 Annual Meeting of Shareholders to be filed-Part III

This combined Form 10-K represents separate filings by Hawaiian Electric Industries, Inc. and Hawaiian Electric Company, Inc. Information contained herein relating to any individual registrant is filed by each registrant on its own behalf. Hawaiian Electric makes no representations as to any information not relating to it or its subsidiaries.

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GLOSSARY OF TERMS

Defined below are certain terms used in this report:

<u>Terms</u>	<u>Definitions</u>
ABOs	Accumulated benefit obligations
ACL	Allowance for credit losses as determined under the credit loss standard (ASU No. 2016-13, adopted by the Company on January 1, 2020), which requires the measurement of lifetime expected credit losses for financial assets held at the reporting date (based on historical experience, current conditions and reasonable and supportable forecasts)
AES Hawaii	AES Hawaii, Inc.
AFS	Available-for-sale
AFUDC	Allowance for funds used during construction
AOCI	Accumulated other comprehensive income (loss)
APBO	Accumulated postretirement benefit obligation
ARA	Annual revenue adjustment
AROs	Asset retirement obligations
ASB	American Savings Bank, F.S.B., a wholly-owned subsidiary of ASB Hawaii Inc.
ASB Hawaii	ASB Hawaii, Inc., a wholly-owned subsidiary of Hawaiian Electric Industries, Inc. and the parent company of American Savings Bank, F.S.B.
ASC	Accounting Standards Codification
ASU	Accounting Standards Update
Btu	British thermal unit
CARES Act	The Coronavirus Aid, Relief, and Economic Security Act enacted March 27, 2020
CBRE	Community-based renewable energy
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
Company	When used in Hawaiian Electric Industries, Inc. sections and in the Notes to Consolidated Financial Statements, “Company” refers to Hawaiian Electric Industries, Inc. and its direct and indirect subsidiaries, including, without limitation, Hawaiian Electric Company, Inc. and its subsidiaries (listed under Hawaiian Electric); ASB Hawaii, Inc. and its subsidiary, American Savings Bank, F.S.B.; and Pacific Current, LLC and its subsidiaries (listed under Pacific Current). The Old Oahu Tug Service, Inc. was dissolved in March 2022. When used in Hawaiian Electric Company, Inc. sections, “Company” refers to Hawaiian Electric Company, Inc. and its direct subsidiaries.
Consolidated Financial Statements	HEI’s or Hawaiian Electric’s Consolidated Financial Statements, including notes, in Item 8 of this Form 10-K
Consumer Advocate	Division of Consumer Advocacy, Department of Commerce and Consumer Affairs of the State of Hawaii
CSSM	Collective Shared Savings Mechanism
D&O	Decision and order from the PUC
DBF	State of Hawaii Department of Budget and Finance
DER	Distributed energy resources
Dodd-Frank Act	Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010
DOH	State of Hawaii Department of Health
DRIP	HEI Dividend Reinvestment and Stock Purchase Plan
ECAC	Energy cost adjustment clause
ECRC	Energy cost recovery clause
EIP	2010 Equity and Incentive Plan, as amended
EPA	Environmental Protection Agency - federal
EPRM	Exceptional Project Recovery Mechanism
EPS	Earnings per share
ERISA	Employee Retirement Income Security Act of 1974, as amended
ERL	Environmental Response Law of the State of Hawaii
ERP/EAM	Enterprise Resource Planning/Enterprise Asset Management
ESG	Environmental, Social & Governance
ESM	Earnings Sharing Mechanism
Exchange Act	Securities Exchange Act of 1934
FASB	Financial Accounting Standards Board

GLOSSARY OF TERMS *(continued)*

<u>Terms</u>	<u>Definitions</u>
FDIC	Federal Deposit Insurance Corporation
federal	U.S. Government
FERC	Federal Energy Regulatory Commission
FHLB	Federal Home Loan Bank
FICO	Fair Isaac Corporation
Fitch	Fitch Ratings, Inc.
FRB	Federal Reserve Board
GAAP	Accounting principles generally accepted in the United States of America
GCOD	Guaranteed commercial operation date
GHG	Greenhouse gas
Gramm Act	Gramm-Leach-Bliley Act of 1999
Hamakua Energy	Hamakua Energy, LLC, an indirect subsidiary of Pacific Current
Hawaii Electric Light	Hawaii Electric Light Company, Inc., an electric utility subsidiary of Hawaiian Electric Company, Inc.
Hawaiian Electric	Hawaiian Electric Company, Inc., an electric utility subsidiary of Hawaiian Electric Industries, Inc. and parent company of Hawaii Electric Light Company, Inc., Maui Electric Company, Limited and Renewable Hawaii, Inc.
Hawaiian Electric's MD&A	Hawaiian Electric Company, Inc.'s Management's Discussion and Analysis of Financial Condition and Results of Operations in Item 7 of this Form 10-K
HEI	Hawaiian Electric Industries, Inc., direct parent company of Hawaiian Electric Company, Inc., ASB Hawaii, Inc. and Pacific Current, LLC. The Old Oahu Tug Service, Inc. was dissolved in March 2022.
HEI's 2023 Proxy Statement	Selected sections of Proxy Statement for the 2023 Annual Meeting of Shareholders of Hawaiian Electric Industries, Inc. to be filed after the date of this Form 10-K and not later than 120 days after December 31, 2022, which are incorporated in this Form 10-K by reference
HEI's MD&A	Hawaiian Electric Industries, Inc.'s Management's Discussion and Analysis of Financial Condition and Results of Operations in Item 7 of this Form 10-K
HEIRSP	Hawaiian Electric Industries Retirement Savings Plan
HELOC	Home equity line of credit
HPOWER	City and County of Honolulu with respect to a power purchase agreement for a refuse-fired plant
HSFO	High sulfur fuel oil
HTM	Held-to-maturity
IPP	Independent power producer
Ka'ie'ie Waho	Ka'ie'ie Waho Company, LLC, a subsidiary of Pacific Current
Kalaeloa	Kalaeloa Partners, L.P.
kW	Kilowatt/s (as applicable)
kWh	Kilowatt-hour/s (as applicable)
LSFO	Low sulfur fuel oil
LTIP	Long-term incentive plan
Mahipapa	Mahipapa, LLC, a subsidiary of Pacific Current
Maui Electric	Maui Electric Company, Limited, an electric utility subsidiary of Hawaiian Electric Company, Inc.
Mauo	Mauo, LLC, a subsidiary of Pacific Current
MBtu	Million British thermal unit
MD&A	Management's Discussion and Analysis of Financial Condition and Results of Operations
Moody's	Moody's Investors Service's
MPIR	Major Project Interim Recovery
MSR	Mortgage servicing right
MW	Megawatt/s (as applicable)
MWh	Megawatt-hour/s (as applicable)
NA	Not applicable
NEE	NextEra Energy, Inc.
NII	Net interest income
NPBC	Net periodic benefits costs
NPPC	Net periodic pension costs
O&M	Other operation and maintenance

GLOSSARY OF TERMS *(continued)*

<u>Terms</u>	<u>Definitions</u>
OCC	Office of the Comptroller of the Currency
OPEB	Postretirement benefits other than pensions
OTS	Office of Thrift Supervision, Department of Treasury
Pacific Current	Pacific Current, LLC, a wholly owned subsidiary of HEI and parent company of Hamakua Holdings, LLC, Mauo, LLC, Alenuihaha Developments, LLC, Ka'ie'ie Waho Company, LLC, Ka'aipua'a, LLC, Upena, LLC and Mahipapa, LLC
PBO	Projected benefit obligation
PBR	Performance-based regulation
PCB	Polychlorinated biphenyls
PGV	Puna Geothermal Venture
PIMs	Performance incentive mechanisms
PPA	Power purchase agreement
PPAC	Purchased power adjustment clause
PUC	Public Utilities Commission of the State of Hawaii
PURPA	Public Utility Regulatory Policies Act of 1978
PV	Photovoltaic
QF	Qualifying Facility under the Public Utility Regulatory Policies Act of 1978
QTL	Qualified Thrift Lender
RAM	Revenue adjustment mechanism
RBA	Revenue balancing account
Registrant	Each of Hawaiian Electric Industries, Inc. and Hawaiian Electric Company, Inc.
RFP	Request for proposals
RHI	Renewable Hawaii, Inc., a wholly-owned nonregulated subsidiary of Hawaiian Electric Company, Inc.
ROACE	Return on average common equity
RORB	Return on rate base
RPS	Renewable portfolio standards
S&P	S&P Global Ratings
SEC	Securities and Exchange Commission
See	Means the referenced material is incorporated by reference (or means refer to the referenced section in this document or the referenced exhibit or other document)
SLHCs	Savings & Loan Holding Companies
Spin-Off	The previously planned distribution to HEI shareholders of all of the common stock of ASB Hawaii immediately prior to the Merger, which was terminated
SPRBs	Special Purpose Revenue Bonds
SSM	Shared Savings Mechanism
state	State of Hawaii
Tax Act	2017 Tax Cuts and Jobs Act (H.R. 1, An Act to provide for reconciliation pursuant to titles II and V of the concurrent resolution on the budget for fiscal year 2018)
TDR	Troubled debt restructuring
ULSD	Ultra-low sulfur diesel
Utilities	Hawaiian Electric Company, Inc., Hawaii Electric Light Company, Inc. and Maui Electric Company, Limited
VIE	Variable interest entity

Cautionary Note Regarding Forward-Looking Statements

This report and other presentations made by Hawaiian Electric Industries, Inc. (HEI) and Hawaiian Electric Company, Inc. (Hawaiian Electric) and their subsidiaries contain “forward-looking statements,” which include statements that are predictive in nature, depend upon or refer to future events or conditions and usually include words such as “will,” “expects,” “anticipates,” “intends,” “plans,” “believes,” “predicts,” “estimates” or similar expressions. In addition, any statements concerning future financial performance, ongoing business strategies or prospects or possible future actions are also forward-looking statements. Forward-looking statements are based on current expectations and projections about future events and are subject to risks, uncertainties and the accuracy of assumptions concerning HEI and its subsidiaries (collectively, the Company), the performance of the industries in which they do business and economic, political and market factors, among other things. These forward-looking statements are not guarantees of future performance and actual results and financial condition may differ materially from those indicated in the forward-looking statements.

Risks, uncertainties and other important factors that could cause actual results to differ materially from those described in forward-looking statements and from historical results include, but are not limited to, the following:

- international, national and local economic and political conditions—including the state of the Hawaii tourism, defense and construction industries; the strength or weakness of the Hawaii and continental U.S. real estate markets (including the fair value and/or the actual performance of collateral underlying loans held by ASB, which could result in higher loan loss provisions and write-offs); decisions concerning the extent of the presence of the federal government and military in Hawaii; the implications and potential impacts of future Federal government shutdowns, including the impact to our customers’ ability to pay their electric bills and/or bank loans and the impact on the state of Hawaii economy; the implications and potential impacts of U.S. and foreign capital and credit market conditions and federal, state and international responses to those conditions; the potential impacts of global and local developments (including global economic conditions and uncertainties, unrest, terrorist acts, wars, conflicts, political protests, deadly virus epidemic or other crisis); the effects of changes that have or may occur in U.S. policy, such as with respect to immigration and trade; and pandemics;
- the ongoing impact of the COVID-19 pandemic, including any recurrence of the COVID-19 pandemic due to new variants and the potential reinstatement of related government orders and restrictions, and the resulting impact on our employees, customers and suppliers;
- ability to adequately address risks and capitalize on opportunities related to our environmental, social and governance priority areas, which currently include decarbonization, economic health and affordability, reliability and resilience, secure digitalization, diversity, equity and inclusion, employee engagement, and climate-related risks and opportunities;
- citizen activism, including civil unrest, especially in times of severe economic depression and social divisiveness, which could negatively impact customers and employees, impair the ability of the Company and the Utilities to operate and maintain their facilities in an effective and safe manner, and citizen or stakeholder activism that could delay the construction, increase project costs or preclude the completion of third-party or Utility projects that are required to meet electricity demand, resilience and reliability objectives and renewable portfolio standards (RPS) and other climate-related goals;
- the effects of future actions or inaction of the U.S. government or related agencies, including those related to the U.S. debt ceiling or budget funding, monetary policy, trade policy and tariffs, energy and environmental policy, and other policy and regulatory changes advanced or proposed by President Biden and his administration;
- weather, natural disasters (e.g., hurricanes, earthquakes, tsunamis, lightning strikes, lava flows and the increasing effects of climate change, such as more severe storms, flooding, droughts, heat waves, and rising sea levels) and wildfires, including their impact on the resilience and reliability and cost of the Company’s and Utilities’ operations, collateral underlying ASB loans and the economy;
- the timing, speed and extent of changes in interest rates and the shape of the yield curve, which could result in lower portfolio yields and net interest margin, or higher borrowing costs;
- the ability of the Company and the Utilities to access the credit and capital markets (e.g., to obtain commercial paper and other short-term and long-term debt financing, including lines of credit, and, in the case of HEI, to issue common stock) under volatile and challenging market conditions, and the potential higher cost of such financings, if available;
- the risks inherent in changes in the value of the Company’s pension and other retirement plan assets and ASB’s securities available for sale, and the risks inherent in changes in the value of the Company’s pension liabilities, including changes driven by interest rates and mortality improvements;
- changes in laws, regulations (including tax regulations), market conditions, interest rates and other factors that result in changes in assumptions used to calculate retirement benefits costs and funding requirements;
- increasing competition in the banking industry from traditional financial institutions as well as from non-traditional providers of financial services, including financial service subsidiaries of commercial and manufacturing companies (e.g., increased price competition for loans and deposits, or an outflow of deposits to alternative investments or platforms, which may have an adverse impact on ASB’s net interest margin and portfolio growth);
- the potential delay by the Public Utilities Commission of the State of Hawaii (PUC) in considering (and potential disapproval of actual or proposed) renewable energy or resilience proposals, among others, and related costs; reliance by the Utilities on outside

- parties such as the state, independent power producers (IPPs) and developers; supply-chain challenges; and uncertainties surrounding technologies, solar power, wind power, biofuels, environmental assessments required to meet RPS and other climate-related goals; the impacts of implementation of the renewable energy and resilience proposals on future costs of electricity and potential penalties imposed by the PUC for delays in the commercial operations of renewable energy projects;
- the ability of the Utilities to develop, implement and recover the costs of implementing the Utilities’ action plans included in their updated Power Supply Improvement Plans, Demand Response Portfolio Plan, Distributed Generation Interconnection Plan, Grid Modernization Plans, and business model changes, which have been and are continuing to be developed and updated in response to the orders issued by the PUC, the PUC’s April 2014 statement of its inclinations on the future of Hawaii’s electric utilities and the vision, business strategies and regulatory policy changes required to align the Utilities’ business model with customer interests and the state’s public policy goals, and subsequent orders of the PUC;
 - the ability of the Utilities to recover undepreciated cost of fossil fuel generating units, if they are required to be retired before the end of their expected useful life;
 - capacity and supply constraints or difficulties, especially if generating units (utility-owned or IPP-owned) fail or measures such as demand-side management, distributed generation, combined heat and power or other firm capacity supply-side resources fall short of achieving their forecasted benefits or are otherwise insufficient to reduce or meet peak demand;
 - high and/or volatile fuel prices, which increases working capital requirements and customer bills, or delivery of adequate fuel by suppliers (including as a result of the Russia-Ukraine war), which could affect the reliability of utility operations, and the continued availability to the electric utilities of their energy cost recovery clauses (ECRCs);
 - the continued availability to the electric utilities or modifications of other cost recovery mechanisms, including the purchased power adjustment clauses (PPACs), annual revenue adjustment (ARA) and pension and postretirement benefits other than pensions (OPEB) tracking mechanisms, and the continued decoupling of revenues from sales to mitigate the effects of declining kilowatt-hour sales;
 - the ability of the Utilities to recover increasing costs and earn a reasonable return on capital investments not covered by the ARA, while providing the customer dividend required by performance-based regulation (PBR);
 - the impact from the PUC’s implementation of PBR for the Utilities pursuant to Act 005, Session Laws 2018, including the potential addition of new performance incentive mechanisms (PIMs), third-party proposals adopted by the PUC in its implementation of PBR, and the implications of not achieving performance incentive goals;
 - the impact of fuel price levels and volatility on customer satisfaction and political and regulatory support for the Utilities;
 - unfavorable changes in economic conditions, such as sustained inflation, higher interest rates or recession, may negatively impact the ability of the Company’s customers to pay their utility bills or loan payments, reduce loan production, and increase operating costs of the Utilities or Bank that cannot be passed on to, or recovered, from customers;
 - the risks associated with increasing reliance on renewable energy, including the availability and cost of non-fossil fuel supplies for renewable energy generation and the operational and related cost impacts of adding intermittent sources of renewable energy to the electric grid;
 - the growing risk that energy production from renewable generating resources may be curtailed and the interconnection of additional resources will be constrained as more generating resources are added to the Utilities’ electric systems and as customers reduce their energy usage;
 - the ability of IPPs to deliver the firm capacity anticipated in their power purchase agreements (PPAs);
 - the potential that, as IPP contracts near the end of their terms, there may be less economic incentive for the IPPs to make investments in their units to ensure the availability of their units;
 - the ability of the Utilities to negotiate, periodically, favorable agreements for significant resources such as fuel supply contracts and collective bargaining agreements and avoid or mitigate labor disputes and work stoppages;
 - new technological developments that could affect the operations and prospects of the Utilities and ASB or their competitors such as the commercial development of energy storage and microgrids and banking through alternative channels, including use of digital currencies, which could include a central bank digital currency;
 - cybersecurity risks and the potential for cyber incidents, including potential incidents at HEI, its subsidiaries (including at ASB branches and electric utility plants), its third-party service providers, contractors and customers with whom they have shared data (IPPs, distributed energy resources (DER) aggregators and customers enrolled under DER programs) and incidents at data processing centers used, to the extent not prevented by intrusion detection and prevention systems, anti-virus software, firewalls and other general IT controls;
 - failure to achieve remaining cost savings commitment related to the management audit committed savings of \$33 million over the 2021 to 2025 multi-year rate period (MRP);
 - federal, state, county and international governmental and regulatory actions, such as existing, new and changes in laws, rules and regulations applicable to HEI, the Utilities and ASB (including changes in taxation and tax rates, increases in capital requirements, regulatory policy changes, environmental laws and regulations (including resulting compliance costs and risks of fines and penalties and/or liabilities), the regulation of greenhouse gas emissions, governmental fees and assessments (such as Federal Deposit Insurance Corporation assessments), and potential carbon pricing or “cap and trade” legislation that may fundamentally alter costs to produce electricity and accelerate the move to renewable generation);

- developments in laws, regulations and policies governing protections for historic, archaeological and cultural sites, and plant and animal species and habitats, as well as developments in the implementation and enforcement of such laws, regulations and policies;
- discovery of conditions that may be attributable to historical chemical releases, including any necessary investigation and remediation, and any associated enforcement, litigation or regulatory oversight;
- decisions by the PUC in rate cases and other proceedings (including the risks of delays in the timing of decisions, adverse changes in final decisions from interim decisions and the disallowance of project costs as a result of adverse regulatory audit reports or otherwise);
- decisions by the PUC and by other agencies and courts on land use, environmental and other permitting issues (such as required corrective actions, restrictions and penalties that may arise, such as with respect to environmental conditions or RPS);
- potential enforcement actions by the Office of the Comptroller of the Currency (OCC), the Federal Reserve Board (FRB), the Federal Deposit Insurance Corporation (FDIC) and/or other governmental authorities (such as consent orders, required corrective actions, restrictions and penalties that may arise, for example, with respect to compliance deficiencies under existing or new banking and consumer protection laws and regulations or with respect to capital adequacy);
- the risks associated with the geographic concentration of HEI's businesses and ASB's loans, ASB's concentration in a single product type (i.e., first mortgages) and ASB's significant credit relationships (i.e., concentrations of large loans and/or credit lines with certain customers);
- changes in accounting principles applicable to HEI and its subsidiaries, including the adoption of new U.S. accounting standards, the potential discontinuance of regulatory accounting related to PBR or other regulatory changes, the effects of potentially required consolidation of variable interest entities (VIEs), or required finance lease or on-balance-sheet operating lease accounting for PPAs with IPPs;
- downgrades by securities rating agencies in their ratings of the securities of HEI and Hawaiian Electric and their impact on results of financing efforts;
- faster than expected loan prepayments that can cause a decrease in net interest income and portfolio yields, an acceleration of the amortization of premiums on loans and investments and the impairment of mortgage-servicing assets of ASB;
- changes in ASB's loan portfolio credit profile and asset quality and/or mix, which may increase or decrease the required level of provision for credit losses, allowance for credit losses (ACL) and charge-offs;
- changes in ASB's deposit levels, cost or mix which may have an adverse impact on ASB's cost of funds;
- unanticipated changes from the expected discontinuance of LIBOR and the transition to an alternative reference rate, which may include adverse impacts to the Company's cost of capital, loan portfolio and interest income on loans;
- the final outcome of tax positions taken by HEI and its subsidiaries;
- the risks of suffering losses and incurring liabilities that are uninsured (e.g., damages to the Utilities' transmission and distribution system and losses from business interruption) or underinsured (e.g., losses not covered as a result of insurance deductibles or other exclusions or exceeding policy limits), and the risks associated with the operation of transmission and distribution assets and power generation facilities, including public and employee safety issues, and assets causing or contributing to wildfires;
- the ability of the Company's non-regulated subsidiary, Pacific Current, LLC (Pacific Current), to achieve its performance and growth objectives, which in turn could affect its ability to service its non-recourse debt;
- the Company's reliance on third parties and the risk of their non-performance, which has increased due to the impact from the COVID-19 pandemic supply chain issues; and
- other risks or uncertainties described elsewhere in this report (e.g., Item 1A. Risk Factors) and in other reports previously and subsequently filed by HEI and/or Hawaiian Electric with the Securities and Exchange Commission (SEC).

Forward-looking statements speak only as of the date of the report, presentation or filing in which they are made. Except to the extent required by the federal securities laws, HEI, Hawaiian Electric, ASB, Pacific Current and their subsidiaries undertake no obligation to publicly update or revise any forward-looking statements, whether written or oral and whether as a result of new information, future events or otherwise.

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PART I

ITEM 1. BUSINESS

HEI Consolidated

HEI and subsidiaries and lines of business. HEI is a holding company with its subsidiaries principally engaged in electric utility, banking, and non-regulated renewable/sustainable infrastructure businesses operating in the State of Hawaii. As a holding company with no significant operations of its own, HEI's sources of funds are dividends or other distributions from its operating subsidiaries, borrowings, and sales of equity. The rights of HEI and its creditors and shareholders to participate in any distribution of the assets of any of HEI's subsidiaries are subject to the prior claims of the creditors and preferred shareholders of such subsidiary, except to the extent that claims of HEI in its capacity as a creditor are recognized as primary. The abilities of certain of HEI's subsidiaries to pay dividends or make other distributions to HEI are subject to contractual and regulatory restrictions (see Note 14 of the Consolidated Financial Statements). HEI is headquartered in Honolulu, Hawaii and has three reportable segments—Electric utility, Bank, and Other.

Electric Utility. Hawaiian Electric and its operating utility subsidiaries, Hawaii Electric Light Company, Inc. (Hawaii Electric Light) and Maui Electric Company, Limited (Maui Electric), are regulated electric public utilities that provide essential electric service to approximately 95% of Hawaii's population through the operation of five separate grids that serve communities on the islands of Oahu, Hawaii, Maui, Lanai and Molokai. See also "Electric utility" section below.

Bank. ASB is one of the largest financial institutions in the State of Hawaii (based on total assets), with assets totaling approximately \$9.5 billion as of December 31, 2022. ASB provides a wide array of banking and other financial services to Hawaii consumers and businesses. See also "Bank" section below.

Other. The "Other" segment is composed of HEI's corporate-level operating, general and administrative expenses and the results of Pacific Current, LLC (Pacific Current). Pacific Current was formed in September 2017 to focus on investing in non-regulated clean energy and sustainable infrastructure in the State of Hawaii to help reach the state's sustainability goals. See also "Electric utility—Hawaii Electric Light firm capacity PPAs" section below and Note 2 of the Consolidated Financial Statements for additional information on Pacific Current activities. The "Other" segment also includes ASB Hawaii, Inc. (ASB Hawaii) (a holding company), which owns ASB.

Additional information. For additional information about HEI, see HEI's MD&A, HEI's "Quantitative and Qualitative Disclosures about Market Risk" and HEI's Consolidated Financial Statements.

The Company's website address is www.hei.com, where annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and all amendments to those reports (last 10 years) are made available free of charge in the Investor Relations section as soon as reasonably practicable after such material is electronically filed with, or furnished to, the SEC (and available at the SEC's website at www.sec.gov). The information on the Company's website is not incorporated by reference in this annual report on Form 10-K unless, and except to the extent, specifically incorporated herein by reference. HEI and Hawaiian Electric intend to continue to use HEI's website as a means of disclosing additional information. Accordingly, investors should routinely monitor such portions of HEI's website, in addition to following HEI's, Hawaiian Electric's and ASB's press releases, SEC filings and public conference calls and webcasts. Investors may also wish to refer to the PUC website at dms.puc.hawaii.gov/dms in order to review documents filed with and issued by the PUC. No information at the PUC website is incorporated herein by reference, and the Company has no control over its accuracy or completeness.

Regulation. HEI and Hawaiian Electric are each holding companies within the meaning of the Public Utility Holding Company Act of 2005 and implementing regulations, which requires holding companies and their subsidiaries to grant the Federal Energy Regulatory Commission (FERC) access to books and records relating to FERC's jurisdictional rates. FERC granted HEI and Hawaiian Electric a waiver from its record retention, accounting and reporting requirements, effective May 2006.

HEI is subject to an agreement entered into with the PUC (the PUC Agreement) which, among other things, requires PUC approval of any change in control of HEI. The PUC Agreement also requires HEI to provide the PUC with periodic financial information and other reports concerning intercompany transactions and other matters. It also prohibits the electric utilities from loaning funds to HEI or its nonutility subsidiaries and from redeeming common stock of the electric utility subsidiaries without PUC approval. Further, the PUC could limit the ability of the electric utility subsidiaries to pay dividends on their common stock. See also Note 14 of the Consolidated Financial Statements and "Electric utility—Regulation" below.

In October 2021, Pacific Current requested informal guidance from the PUC regarding application of the affiliate transaction requirements (ATRs) to certain investments. In response, in January 2022, the PUC issued guidance (Order No. 38186, Docket No. 2018-0065) providing that, if Pacific Current acquires or invests in an unaffiliated entity that has been awarded a power purchase agreement with the Utilities through the Stage 1 or 2 Request for proposals (RFPs), such entity

would become an “Affiliate” or “Affiliate-Related Entity” under the ATRs, and any wholesale power transactions between the entity and the Utilities, including under the awarded power purchase agreement, would require PUC review and approval. Such a requirement may impact Pacific Current’s competitiveness in acquiring and investing in new utility-scale projects in the Utilities’ service territory and thereby impact the pace and extent of Pacific Current’s growth. As a result of the D&O, Pacific Current intends to focus its future growth activities on projects not subject to a power purchase agreement with the Utilities or projects outside of the Utilities’ service territory.

HEI and ASB Hawaii are subject to Federal Reserve Board (FRB) regulation, supervision and reporting requirements as savings and loan holding companies. As a result of the enactment of the Dodd-Frank Act, supervision and regulation of HEI and ASB Hawaii, as thrift holding companies, moved to the FRB, and supervision and regulation of ASB, as a federally chartered savings bank, moved to the Office of the Comptroller of the Currency (OCC) in July 2011. In the event the OCC has reasonable cause to believe that any activity of HEI or ASB Hawaii constitutes a serious risk to the financial safety, soundness or stability of ASB, the OCC is authorized to impose certain restrictions on HEI, ASB Hawaii and/or any of their subsidiaries. Possible restrictions include precluding or limiting: (i) the payment of dividends by ASB; (ii) transactions between ASB, HEI or ASB Hawaii, and their subsidiaries or affiliates; and (iii) any activities of ASB that might expose ASB to the liabilities of HEI and/or ASB Hawaii and their other affiliates. See also Note 14 of the Consolidated Financial Statements.

The Gramm-Leach-Bliley Act of 1999 (Gramm Act) permitted banks, insurance companies and investment firms to compete directly against each other, thereby allowing “one-stop shopping” for an array of financial services. Although the Gramm Act further restricted the creation of so-called “unitary savings and loan holding companies” (i.e., companies such as HEI whose subsidiaries include one or more savings associations and one or more nonfinancial subsidiaries), the unitary savings and loan holding company relationship among HEI, ASB Hawaii and ASB is “grandfathered” under the Gramm Act so that HEI and its subsidiaries will be able to continue to engage in their current activities so long as ASB maintains its qualified thrift lender (QTL) status test discussed under “Bank—Regulation—Qualified thrift lender test.” ASB met the QTL test at all times during 2022; however, the failure of ASB to satisfy the QTL test in the future could result in a need for HEI to divest ASB. Under the Gramm Act, any proposed sale of ASB would have to satisfy applicable statutory and regulatory requirements and potential acquirers of ASB would most likely be limited to companies that are already qualified as, or capable of qualifying as, either a traditional savings and loan association holding company or a bank holding company, or as one of the authorized financial holding companies permitted under the Gramm Act.

HEI is also affected by provisions of the Dodd-Frank Act relating to corporate governance and executive compensation, including provisions requiring shareholder “say on pay” and “say on pay frequency” votes, mandating additional disclosures concerning executive compensation and compensation consultants and advisors and further restricting proxy voting by brokers in the absence of instructions. See “Bank—Legislation and regulation” in HEI’s MD&A for a discussion of effects of the Dodd-Frank Act on HEI and ASB.

Environmental regulation. HEI and its subsidiaries are subject to federal and state statutes and governmental regulations pertaining to water quality, air quality and other environmental factors. See the “Environmental regulation” discussions in the “Electric utility” and “Bank” sections below, and Note 1 of the Consolidated Financial Statements.

Human Capital Resources.

Employees. The Company had total and full-time employees as follows:

December 31	2022		2021		2020	
	Total employees	Full-time employees	Total employees	Full-time employees	Total employees	Full-time employees
HEI and Pacific Current	79	79 *	49	49	49	49
Hawaiian Electric and its subsidiaries	2,605	2,511	2,504	2,469	2,636	2,579
ASB	1,072	1,050	1,096	1,079	1,084	1,064
	3,756	3,640	3,649	3,597	3,769	3,692

*The increase in employees from 2021 is related to Pacific Current’s acquisition of a closed-loop biomass plant in 2022.

The employees of HEI and its direct and indirect subsidiaries, other than the electric utilities, are not covered by any collective bargaining agreement. The International Brotherhood of Electrical Workers Local 1260 represents roughly half of the Utilities’ workforce covered by a collective bargaining agreement that expires on October 31, 2024.

Diversity & inclusion. Diversity and inclusion are essential to the continued success of the Company. The Company values gender, religious beliefs, race, marital status, ethnicity, parental status, age, education, physical and mental ability, income, sexual orientation, occupation, language, geographic location, and many more components, and believes that an inclusive and collaborative culture produces excellent performance and innovation and helps guide the Company’s decision-making and its

ability to meet its customers' and community's needs. Additionally, because the Company's businesses operate exclusively in Hawaii, which is one of the most racially diverse states in the U.S., the Company believes it is important that its workforce reflects this diversity. The diversity information that follows is based on total employees, including employees on long-term leave, part-time employees and temporary employees.

Diversity representation

	HEI ⁵		Hawaiian Electric		ASB	
	Female	Racially diverse ¹	Female	Racially diverse ¹	Female	Racially diverse ¹
Executives ²	40.0%	70.0%	37.5%	56.3%	40.0%	80.0%
Leaders ³	77.8%	100.0%	28.9%	85.0%	64.9%	84.6%
All workforce ⁴	60.0%	88.8%	28.8%	89.9%	65.1%	88.9%

¹ Racially diverse defined as all races/ethnicities that are not 'White' (as defined by the EEO-1 categories)

² Executives includes EE0-1 category 1.1-Executive/Sr. Level Officials

³ Leaders includes EE0-1 category 1.2-First/Mid-Level Officials

⁴ All Workforce includes EE0-1 categories 1.1-Executive/Sr. Level Officials, 1.2-First/ Mid-Level Officials, 2-Professionals, 3-Technicians, 4-Sales Workers, 5-Administrative Support Workers, 6-Craft Workers, 7-Operatives, 8-Laborers and Helpers, 9-Service Workers

⁵ Includes Pacific Current employees, but excludes new employees related to the acquisition of a closed-loop biomass plant in 2022 for which complete employee information was not available

Racial composition

	Hawaii ¹	Diversity-All workforce		
		HEI ²	Hawaiian Electric	ASB
White	20.8%	12.0%	10.1%	11.1%
Asian	36.5%	66.0%	51.1%	60.1%
Black	1.8%	0.0%	0.6%	0.8%
Hispanic	11.1%	0.0%	4.2%	5.1%
Native Hawaiian or other Pacific Islander	9.6%	6.0%	12.4%	13.8%
American Indian or Alaska Native	0.1%	2.0%	0.3%	0.2%
Two or more races	19.8%	14.0%	21.3%	8.9%

¹ Source: 2021 U.S. Census Bureau American Community Survey 1-Year Estimate

² Includes Pacific Current employees, but excludes new employees related to the acquisition of a closed-loop biomass plant in 2022 for which complete employee information was not available

Employee development & training. In order to meet the changing demands of the industries in which the Company operates, address the needs of the Company's stakeholders, attract, engage and retain talented employees, and design and carry out the Company's strategies, it is crucial for the Company's workforce to be highly skilled in their areas of focus and be able to adapt and evolve over time. As such, the Company invests in specific skill enhancement training as well as industry and leadership development programs.

Hawaiian Electric. Hawaiian Electric offers Hawaiian Electric and HEI holding company employees skills and professional training programs, including leadership development courses, employee development courses, technical training, apprenticeship programs, operational, environmental compliance, cybersecurity awareness and required safety training. Hawaiian Electric also offers tailored leadership development programs, including supervisor training to transition new supervisors to critical operational, administrative, and leadership roles as well as leadership and employee assessments geared to improve productivity and effectiveness in the workplace. Leadership development metrics are included in executive and management incentive plans. Learning and development initiatives are integrated with annual performance evaluations to reinforce development as integral parts of individual performance goals. Annual succession planning ensures the identification and development of successors, high potential individuals, and nurtures a leadership pipeline.

ASB. ASB invests in continuous training and development of its employees. Curriculum includes technical banker training programs that cover all aspects of banking laws, banking operations, new product and service offerings, legal and regulatory compliance and company procedures and ethics. The Bank delivers company-wide financial education, empowering its employees to make wise personal decisions to help meet their financial goals and provide valuable customer guidance. ASB offers opportunities for all employees to grow and build their careers, through a multitude of professional training and leadership sessions, including Communicating with Confidence, Managing Conflict, Diversity and Inclusion, and Respect in the Workplace. ASB further invests in leadership development through their leadership cohort programs, designed to help employees grow professionally and personally, enhance their leadership skills, and broaden their understanding of the banking industry. These include an 8-week personal leadership program for individual contributors or aspiring managers, a 6-month development experience for mid-level managers, and Leadership Academy, a robust 12-15 month program for well-established

leaders. Offerings are delivered in online, instructor-led, and on-the-job learning formats. ASB's focus on meaningful growth and development opportunities positions the Bank to recruit and retain top talent.

Safety and health. As a key priority, the Company strives to create workplace environments where employees feel physically and emotionally safe. For the Utility, safety is of paramount importance due to the inherent risks involved in certain aspects of its operations and the critical importance to the State of Hawaii of maintaining the electrical grid. During the COVID-19 pandemic, the Company has continued to modify its operations and policies to align with guidance from the Centers of Disease Control and Prevention and the State of Hawaii Department of Health (DOH). The Company also monitors the rates of infection within the state and makes adjustments, accordingly, to limit the risk of transmission in the workplace and ensure the health of the Company's employees.

Hawaiian Electric. Hawaiian Electric is committed to maintaining a strong safety culture. Due to the nature of its operations, safety is of paramount importance. Management strives to provide visible leadership and strategic direction for the health and safety management system and programs in their area of responsibility. This leadership and direction help to build and maintain a strong safety culture and drive safety improvement, allocates adequate resources to enable implementation of safety programs and holds safety leaders accountable for the implementation of safety programs and resulting health and safety performance. Executive compensation is tied to achievement of quantified severity and total case incident rate targets (TCIR). These targets reward improvements in workplace safety, promote employee well-being, and help reduce expenses over time. Hawaiian Electric promotes a safety culture that aims for zero incidents through all employees taking ownership of safety for themselves, their co-workers, contractors, and the public. More information on such targets is available in HEI's annual proxy statement. Hawaiian Electric also provides a variety of programs and benefits that support employee physical, financial and emotional well-being. These programs include access to fitness and yoga classes, online corporate wellness activities and education, gym and group fitness discounts, and financial well-being classes.

ASB. ASB is committed to supporting the continued health and safety of its employees through a wellness program which takes a holistic approach to improving the health and well-being of its employees by focusing on all aspects of wellness including nutrition, fitness, mindfulness and finances. ASB also encourages participation in the program through various physical challenges and community charity walks. ASB also offers outdoor and virtual fitness classes, including high intensity interval training and yoga. ASB's employees can also participate in a program which allows employees to enjoy national fitness center chains or workout in their homes at a reduced price. To further support ASB's employees' well-being, ASB rewards everyone who completes an annual preventative health screening with a Wellness Holiday, offers a robust employee assistance program, and provides many family friendly benefits, including generous and gender-neutral parental leave.

Workforce Stability. The Company's employees are its greatest asset and the Company strives to create a highly desirable place to work.

Hawaiian Electric. Hawaiian Electric seeks to provide compensation and benefits that are comprehensive, market-competitive, and internally equitable to attract, engage, and retain highly skilled employees. Hawaiian Electric believes that employee engagement is key to creating a desirable, inclusive, rewarding place to work and conducts employee engagement surveys on a regular cycle, and, more recently, change management surveys to assess and support the organizations' adaptability to change. Hawaiian Electric is expanding its strategic workforce planning initiative to build its workforce to support future transformation plans.

ASB. ASB seeks to attract, develop, and retain high performers who not only excel at their jobs but who also align with ASB's priorities and objectives. ASB strives to provide competitive pay and benefits and an award-winning culture that attracts top talent. ASB regularly conducts anonymous employee surveys to gather feedback on their work experience. Topics covered include confidence in company leadership, career growth opportunities, diversity and inclusion, and suggestions on how to create a great place to work. Survey results are shared with leaders, who prioritize actions and activities in response to feedback to drive meaningful improvements in employee engagement. ASB's talent management process is integrated into its business process and its human capital management strategy is part of its business strategy. ASB's investment in creating a great place to work and innovative, inclusive programs have resulted in it being recognized both locally and nationally for its workplace culture.

Properties. HEI leases office space from nonaffiliated lessors in downtown Honolulu under leases that expire in December 2027. See "Electric Utility" and "Bank" sections for a description of properties they own and lease.

Hamakua Energy, LLC (Hamakua Energy), an indirect wholly owned subsidiary of Pacific Current, which is included in the "Other" segment, owns a 60-MW dual-train combined-cycle facility and a total of approximately 93 acres located on the Hamakua coast on the island of Hawaii. Its power plant is situated on approximately 59 acres and the remaining 34 acres includes surrounding parcels of which 30 acres are located on the ocean front. Ka'ie'ie Waho Company, LLC (Ka'ie'ie Waho), a wholly owned subsidiary of Pacific Current, owns a 6-MW solar photovoltaic facility located on approximately 20 acres on the

southern coast of the island of Kauai. Mahipapa, LLC (Mahipapa), a wholly owned subsidiary of Pacific Current, owns a 7.5-MW biomass facility located on approximately 65 acres of land and leases 3,500 acres on the island of Kauai.

Electric utility

Hawaiian Electric and subsidiaries and service areas. Hawaiian Electric, Hawaii Electric Light and Maui Electric (Utilities) are regulated operating electric public utilities engaged in the production, purchase, transmission, distribution and sale of electricity on the islands of Oahu; Hawaii; and Maui, Lanai and Molokai, respectively.

In 2022, the electric utilities' revenues and net income amounted to approximately 91% and 78% respectively, of HEI's consolidated revenues and net income, compared to approximately 89% and 72% in 2021 and approximately 88% and 86% in 2020, respectively.

The islands of Oahu, Hawaii, Maui, Lanai and Molokai have a combined population estimated at 1.4 million, or approximately 95% of the total population of the State of Hawaii, and comprise a service area of 5,815 square miles. The principal communities served include Honolulu (on Oahu), Hilo and Kona (on Hawaii) and Wailuku and Kahului (on Maui). The service areas also include numerous suburban communities, resorts, U.S. Armed Forces installations and agricultural operations. In November 2020, the PUC approved Hawaiian Electric's acquisition of the electric distribution systems serving 12 U.S. Army installations on Oahu, including Schofield Barracks, Wheeler Army Airfield, Tripler Army Medical Center, Fort Shafter and Army housing areas.

The state has granted Hawaiian Electric, Hawaii Electric Light and Maui Electric nonexclusive franchises, which authorize the Utilities to construct, operate and maintain facilities over and under public streets and sidewalks. Each of these franchises will continue in effect for an indefinite period of time until forfeited, altered, amended or repealed.

Climate change action plan. The Utilities have set an aggressive goal to cut carbon emissions from power generation 70% by 2030, compared with 2005 levels. The emissions covered by this goal include stack emissions from generation owned by Hawaiian Electric and independent power producers (IPPs) who sell electricity to the Utilities. In addition, the Utilities have committed to achieving net zero carbon emissions from power generation by 2045 or sooner. These commitments are aligned with the Intergovernmental Panel on Climate Change recommendation of no more than 1.5°C average global warming to avoid potentially devastating climate events.

Key elements of the 2030 plan to reduce emissions include:

- The closing of the state's last coal plant, which occurred in September 2022 upon expiry of the PPA
- Adding nearly 50,000 rooftop solar systems, more than a 50% increase, compared to the approximately 90,000 systems online in 2021 when the Climate Change action plan was developed
- Retiring at least six fossil-fueled generating units and significantly reducing the use of others as new renewable resources come online
- Adding additional renewable energy projects capable of generating a total of at least 1 gigawatt beyond resources in place in 2021, including shared solar (community-based renewable energy)
- Using more grid-scale and customer-owned energy storage
- Expanding geothermal resources
- Creating innovative programs that provide customers incentives for using clean, lower-cost energy at certain times of the day and using less fossil-fueled energy at night

By 2030, Hawaiian Electric's renewable portfolio standard is expected to exceed 70%, with renewable resources available to provide close to 100% of the electricity generated on Hawaii Island and in Maui County. Achieving the 70% carbon emissions reduction by 2030 is highly dependent on the successful completion of renewable IPP projects under Phase 1, Phase 2, Phase 3 and other RFPs.

After 2030, progress on elimination of carbon from power generation assumes continued use of proven resources, including wind, solar, geothermal, hydroelectric, biofuels and energy storage, along with the development of new technologies. Those technologies may include offshore wind, green hydrogen, wave energy and carbon-capture—all currently under development around the world—as well as other solutions that will emerge. A diverse portfolio of resources will also enhance resilience to climate-related events.

Sales of electricity.

Years ended December 31	2022		2021		2020	
(dollars in thousands)	Customer accounts*	Electric sales revenues	Customer accounts*	Electric sales revenues	Customer accounts*	Electric sales revenues
Hawaiian Electric	306,978	\$ 2,422,232	308,721	\$ 1,772,183	307,378	\$ 1,592,463
Hawaii Electric Light	88,757	479,566	88,103	375,775	87,357	329,195
Maui Electric	73,933	464,823	73,788	359,648	73,304	317,872
	469,668	\$ 3,366,621	470,612	\$ 2,507,606	468,039	\$ 2,239,530

* As of December 31.

Regulatory mechanisms. Base electric rates are set in rate cases, and on April 29, 2020, the PUC issued an order terminating the mandatory triennial rate case cycle in anticipation of the performance-based regulation framework (PBR Framework). The regulatory framework in effect in 2020 included a number of mechanisms designed to provide utility financial stability during the transition toward the state’s 100% renewable energy goals. For example, under the sales decoupling mechanism, the Utilities are allowed to recover from customers, target test year revenues, independent of the level of kilowatt-hour (kWh) sales. The decoupling mechanism (i.e., the Revenue Balancing Account) continues under the PBR Framework.

On December 23, 2020, the PUC issued a D&O in Phase 2 of the PBR proceeding, establishing the PBR Framework for the Utilities. The PBR Framework includes, among other matters, a five-year multi-year rate plan with an index-driven annual revenue adjustment (ARA), which replaces the RAM, modification of the MPIR mechanism (renamed Exceptional Project Recovery Mechanism (EPRM)) to include deferred and operation and maintenance (O&M) expense projects and to permit the Utilities to include the full amount of approved costs in the EPRM for recovery in the first year the project goes into service, pro-rated for the portion of the year the project is in service, and continuation of (i) the revenue balancing account, (ii) the pension and other postretirement benefit tracking mechanisms, and (iii) energy cost recovery clause, purchased power adjustment clause, and other recovery mechanisms. See “Commitments and contingencies-Regulatory proceedings-Performance-based regulation framework” in Note 3 of the Consolidated Financial Statements.

A summary of these regulatory mechanisms, most of which have been either maintained, modified, or approved under PBR as noted, is as follows:

Mechanism	Description	PBR Framework (effective June 2021)
Sales decoupling	Provides predictable revenue stream by fixing net revenues at the level approved in last rate case (revenues not linked to kWh sales).	Maintained under PBR.
Annual Revenue Adjustment (ARA)	Annually adjusts revenue levels during a Multi-Year Rate Period, determined by formula which includes an inflation factor, a predetermined productivity adjustment (currently set at zero), adjustments for exceptional circumstances not in the Utilities' control and a customer dividend.	Replaced the Revenue Adjustment Mechanism (RAM) effective June 1, 2021. The transition to the ARA includes the continuation of the 2020 RAM revenue adjustment.
Exceptional Project Recovery Mechanism (EPRM)	Reduces regulatory lag and permits recovery of revenues for net costs of approved eligible projects placed in service during the Multi-Year Rate Period through the revenue balancing account (RBA) that is not provided for by other effective tariffs, the ARA, Performance Incentive Mechanism (PIMS) or Shared Savings Mechanisms (SSMs).	Formerly known as the Major Project Interim Recovery (MPIR) adjustment mechanism. The EPRM was modified to include recovery of both capital and O&M expenses and to permit the Utilities to include the full amount of approved costs for recovery in the first year that projects are placed into service, pro-rated for the portion of the year that projects are in service.
Energy cost recovery clause (ECRC) and purchased power adjustment clause (PPAC)	Allows for timely recovery of fuel and purchased power costs to reduce earnings volatility. Symmetrical fossil fuel cost risk-sharing (98% customer/2% utility) mechanism established for Hawaiian Electric, Hawaii Electric Light and Maui Electric capped at \$2.5 million, \$0.6 million and \$0.6 million annually, respectively.	Maintained under PBR.
Performance incentive mechanism (PIM) / Shared Savings Mechanism (SSM)	Annually adjusts revenue to recover from or credit customers for specific areas of the Utilities' performance measured against the PUC's approved targets.	Maintained under PBR with a portfolio of SSMs and new PIMs added to encourage acceleration in renewables, grid services, interconnection of DERs, low-to-moderate income energy efficiency, advanced metering infrastructure, generation-based reliability (penalties only), interconnection of utility scale renewable projects, and cost control of non-ARA costs and allows for financial rewards for exemplary performance.
Pension and other post-employment benefit trackers	Allow tracking of pension and other post-employment benefit costs and contributions above or below the cost included in rates in a separate regulatory asset/liability account.	Maintained under PBR.
Renewable energy infrastructure program	Permits recovery of renewable energy infrastructure projects through a surcharge.	Maintained under PBR.
Expedited Pilot Process	Fosters innovation by establishing an expedited implementation process for pilots that test new technologies, programs, business models and other arrangements. Proposed pilots are subject to PUC approval with a total annual cap of \$10 million.	Approved under PBR to allow for timely cost recovery of annual expenditures of approved pilot projects through an adjustment to target revenues.
Earnings Sharing Mechanism (ESM)	Protects the Utilities and customers from excessive earnings or losses, as measured by the Utilities' achieved rate making ROACE.	Maintained under PBR, adjusted to reflect a symmetrical ESM for achieved rate making ROACE outside of a 300 basis points dead band above or below the current authorized ROACE of 9.5% for each of the Utilities.

Seasonality. kWh sales of the Utilities follow a seasonal pattern, but they do not experience extreme seasonal variations experienced by some electric utilities on the U.S. mainland. In Hawaii, kWh sales tend to increase in the warmer, more humid months as a result of increased demand for air conditioning, and with cloudy and rainy weather due to lower production by privately owned customer photovoltaic (PV) systems. In 2022, kWh sales increased compared to the prior year due to the easing of remaining pandemic related restrictions and increased domestic travel to Hawaii, which in turn increased the demand for electricity.

Significant customers. The Utilities derived approximately 12%, 11% and 11% of their operating revenues in 2022, 2021 and 2020, respectively from the sale of electricity to various federal government agencies. Hawaiian Electric continues to work with various federal agencies to implement measures that will help them achieve their energy efficiency, resilience and clean energy objectives.

Selected consolidated electric utility operating statistics.

Years ended December 31	2022	2021	2020	2019	2018
MWh sales (thousands)					
Residential	2,415.2	2,491.6	2,525.4	2,439.3	2,410.8
Commercial	2,628.8	2,572.5	2,456.0	2,793.0	2,810.8
Industrial	3,295.7	3,174.3	3,118.0	3,467.2	3,425.1
Other	14.3	22.7	20.8	40.5	42.1
	8,354.0	8,261.1	8,120.2	8,740.0	8,688.8
MWh net generated and purchased (thousands)					
Net generated	5,011.9	4,501.0	4,629.2	4,972.7	4,966.4
Purchased	3,750.4	4,153.7	3,896.2	4,168.6	4,139.3
	8,762.3	8,654.7	8,525.4	9,141.3	9,105.7
MWh customer-sited solar (thousands)	1,522.4	1,418.0	1,325.8	1,224.6	948.4
RPS (%) ¹	31.8	38.4	34.5	28.4	26.7
Losses and system uses (%)	4.4	4.3	4.5	4.2	4.4
Energy supply (December 31)					
Net generating capability—MW	1,738	1,738	1,737	1,737	1,739
Firm and other purchased capability—MW ²	362	540	517	517	517
	2,100	2,278	2,254	2,254	2,256
Net peak demand—MW ³	1,467	1,471	1,471	1,601	1,598
Btu per net kWh generated	10,941	10,988	10,834	10,860	10,826
Average fuel oil cost per MBtu (cents)	2,310.9	1,305.4	1,028.7	1,337.6	1,420.2
Customer accounts (December 31)					
Residential	413,744	414,713	412,484	409,689	407,505
Commercial	54,416	54,373	54,035	54,233	54,075
Industrial	696	698	694	700	696
Other	812	828	826	844	813
	469,668	470,612	468,039	465,466	463,089
Electric revenues (thousands)					
Residential	\$ 1,069,974	\$ 843,655	\$ 770,135	\$ 791,398	\$ 788,028
Commercial	1,077,521	802,878	708,180	829,000	843,326
Industrial	1,211,242	853,293	754,775	884,722	882,443
Other	7,884	7,780	6,440	11,915	12,410
	\$ 3,366,621	\$ 2,507,606	\$ 2,239,530	\$ 2,517,035	\$ 2,526,207
Average revenue per kWh sold (cents)					
	40.30	30.35	27.58	28.80	29.07
Residential	44.30	33.86	30.50	32.44	32.69
Commercial	40.99	31.21	28.83	29.68	30.00
Industrial	36.75	26.88	24.21	25.52	25.76
Other	55.24	34.19	31.01	29.39	29.47
Residential statistics					
Average annual use per customer account (kWh)	5,821	6,022	6,145	5,967	5,923
Average annual revenue per customer account	\$ 2,579	\$ 2,039	\$ 1,874	\$ 1,936	\$ 1,936
Average number of customer accounts	414,910	413,725	410,973	408,768	407,044

¹In July 2022, Governor Ige signed Act 240 (H.B.2089), which amended the RPS calculation from renewable energy as a percentage of sales to renewable energy as a percentage of total generation. The amended RPS calculation results in a lower calculated percentage than the amount calculated under the previous methodology.

²Puna Geothermal Venture (PGV) with 34.6 MW of firm capacity went offline due to lava flow on Hawaii Island since May 2018, but returned to service with firm capacity of 13 MW in the first quarter of 2021 and ramped up to 25.7 MW in the second quarter of 2022 and continued to provide 25.7 MW for the remainder of 2022.

³Sum of the net peak demands on all islands served, noncoincident and nonintegrated.

Generation statistics. The following table contains certain generation statistics as of and for the year ended December 31, 2022. The net generating and firm purchased capability available for operation at any given time may be more or less than shown because of capability restrictions or temporary outages for inspection, maintenance, repairs or unforeseen circumstances.

	Hawaiian Electric	Hawaii Electric Light	Maui Electric			Total
	Island of Oahu	Island of Hawaii	Island of Maui	Island of Lanai	Island of Molokai	
Net generating and firm purchased capability (MW) as of December 31, 2022 ¹						
Conventional oil-fired steam units	999.5	50.1	35.9	—	—	1,085.5
Diesel internal combustion engine	—	29.5	96.8	9.4	9.8	145.5
Simple-cycle combustion turbines	230.8	46.3	—	—	2.2	279.3
Dual train combined-cycle unit	—	56.3	113.6	—	—	169.9
Biodiesel internal combustion engine	57.4	—	—	—	—	57.4
Firm contract power ²	276.5	85.7	—	—	—	362.2
	1,564.2	267.9	246.3	9.4	12.0	2,099.8
Net peak demand (MW) ³	1,072.0	187.7	195.1	6.0	5.8	1,466.6
Reserve margin	45.2%	42.7%	29.5%	56.7%	107.1%	43.2%
Annual load factor	69.2%	68.2%	63.1%	69.2%	62.4%	68.2%
MWh net generated and purchased (thousands)	6,495.2	1,121.1	1,077.9	36.4	31.7	8,762.3

¹ Hawaiian Electric units at normal ratings; Hawaii Electric Light and Maui Electric units at reserve ratings.

² Nonutility generators - Hawaiian Electric: 208 MW (Kalaelo Partners, L.P., oil-fired) and 68.5 MW (HPOWER, refuse-fired); Hawaii Electric Light: 60 MW (Hamakua Energy, oil-fired). Hawaii Electric Light also has a firm capacity PPA with PGV for 34.6 MW that went offline due to lava flow on Hawaii Island since May 2018, but returned to service with firm capacity of 13 MW in the first quarter of 2021 and ramped up to 25.7 MW in the second quarter of 2022. PGV's capability of 25.7 MW has been incorporated into the utility's firm contract power capability as of December 31, 2022.

³ Noncoincident and nonintegrated.

Generating reliability and reserve margin. Hawaiian Electric serves the island of Oahu and Hawaii Electric Light serves the island of Hawaii. Maui Electric has three separate electrical systems—one each on the islands of Maui, Molokai and Lanai. Hawaiian Electric, Hawaii Electric Light and Maui Electric have isolated electrical systems that are not currently interconnected to each other or to any other electrical grid and, thus, each maintains a higher level of reserve generation and cost structure than is typically carried by interconnected mainland U.S. utilities, which are able to share reserve capacity. These higher levels of reserve margins are required to meet peak electric demands, to provide for scheduled maintenance of generating units (including the units operated by IPPs relied upon for firm capacity) and to allow for the forced outage of the largest generating unit in the system.

Nonutility generation. The Utilities have supported state and federal energy policies which encourage the development of renewable energy sources that reduce the use of fuel oil as well as the development of qualifying facilities. The Utilities' renewable energy sources and potential sources range from wind, solar, photovoltaic, geothermal, wave and hydroelectric power to energy produced by municipal waste and other biofuels.

The rate schedules³ of the electric utilities contain ECRCs and PPACs that allow them to recover costs of fuel and purchase power expenses.

In addition to the firm capacity PPAs described below, the electric utilities also purchase energy on an as-available basis directly from nonutility generators and through its Feed-In Tariff programs, as well as through a new renewable dispatchable generation power purchase agreement. The electric utilities also receive renewable energy from customers under its Net Energy Metering and Customer Grid Supply programs.

The PUC has allowed rate recovery for the firm capacity and purchased energy costs for the electric utilities' approved firm capacity and as-available energy PPAs.

Hawaiian Electric firm capacity PPAs. Hawaiian Electric currently has two major PPAs that provide a total of 276.5 MW of firm capacity, representing 18% of Hawaiian Electric's total net generating and firm purchased capacity on the Island of Oahu as of December 31, 2022.

Under a 1988 PPA, as amended, Hawaiian Electric is committed to purchase 208 MW of firm capacity from Kalaeloa Partners, L.P. (Kalaeloa). The Kalaeloa facility, which is a Qualifying Facility (QF), is a combined-cycle operation, consisting of two oil-fired combustion turbines burning low sulfur fuel oil (LSFO) and a steam turbine that utilizes waste heat from the combustion turbines. The PPA term ended on May 23, 2016 and was extended while the parties were in negotiations for a new agreement. The parties executed an Amended and Restated Power Purchase Agreement (ARPPA) on October 29, 2021, which among other provisions extends the term for ten contract years after the effective date. The ARPPA was approved on November 23, 2022. The parties executed a letter agreement to establish that the rates under the ARPPA became effective on January 1, 2023.

Hawaiian Electric also entered into a PPA in March 1986 and a firm capacity amendment in April 1991 with the City and County of Honolulu with respect to a refuse-fired plant (HPOWER). Under the PPA, as amended and restated, Hawaiian Electric is committed to purchase 68.5 MW of firm capacity annually up until the PPA expires on April 2, 2033.

Hawaiian Electric formerly entered into a PPA with AES Hawaii, Inc. (AES Hawaii), a Hawaii-based, indirect subsidiary of The AES Corporation. The PPA, under which AES Hawaii provided 180 MW of firm capacity from its coal-fired cogeneration plant, expired on September 1, 2022 and was not renewed. The shutdown of the AES Hawaii coal plant represents the end of coal use for power generation in Hawaii. See “Commitments and contingencies—Power purchase agreements—AES Hawaii, Inc.” in Note 3 of the Consolidated Financial Statements for an update regarding this PPA.

Hawaii Electric Light firm capacity PPAs. Hawaii Electric Light has two major PPAs that provide a total of 85.7 MW of firm capacity, representing 32% of Hawaii Electric Light’s total net generating and firm purchased capacity on the Island of Hawaii as of December 31, 2022.

In October 1997, Hawaii Electric Light entered into an agreement with Encogen, which was succeeded by Hamakua Energy Partners, L. P. (HEP). The agreement requires Hawaii Electric Light to purchase up to 60 MW (net) of firm capacity for a period of 30 years, expiring on December 31, 2030. The dual-train combined-cycle facility consists of two oil-fired combustion turbines and a steam turbine that utilizes waste heat from the combustion turbines, which primarily burns naphtha (a mixture of liquid hydrocarbons) and, starting in late 2019, biodiesel (comprising approximately 21% of HEP’s fuel mix in 2022). In November 2017, Hamakua Energy, an indirect subsidiary of HEI, purchased the plant from HEP.

Hawaii Electric Light has a 35-year PPA, as amended, with Puna Geothermal Venture (PGV) for 34.6 MW of firm capacity from its geothermal steam facility, which will expire on December 31, 2027. However, the PGV facility went offline in May 2018 due to lava flow on Hawaii Island. In March 2019, Hawaii Electric Light entered into a Rebuild Agreement with PGV, which sets forth the parties’ respective responsibilities associated with restoration of the facility. The Rebuild Agreement shall govern the terms until PGV becomes fully operational. In December 2019, Hawaii Electric Light entered into an Amended and Restated PPA with PGV to, among other things, extend the term by 25 years to 2052 and expand the firm capacity capable of being delivered to 46 MW, subject to PUC approval. PGV returned to service at a level providing limited output without firm capacity in the fourth quarter of 2020 and is currently providing 25.7 MW of capacity. See “New renewable PPAs” in the “Developments in renewable energy efforts” section in Hawaiian Electric’s MD&A.

In May 2012, Hawaii Electric Light signed a PPA with Hu Honua Bioenergy, LLC (Hu Honua) for 21.5 MW of renewable, dispatchable firm capacity fueled by locally grown biomass on the island of Hawaii. This PPA was approved by the PUC in December 2013, however, the approval was appealed. The Supreme Court of Hawaii issued a decision remanding the matter to the PUC for further proceedings. See “Commitments and contingencies—Power purchase agreements—Hu Honua Bioenergy, LLC” in Note 3 of the Consolidated Financial Statements for an update regarding this PPA.

Maui Electric firm capacity PPAs. Maui Electric has no firm capacity PPAs.

Fuel oil usage and supply. The rate schedules of the Utilities include ECRCs under which electric rates (and consequently the revenues of the electric utility subsidiaries generally) are adjusted for changes in the weighted-average price paid for fuel oil and certain components of purchased power, and the relative amounts of company-generated power and purchased power. See discussion of rates and issues relating to the ECRC below under “Rates.”

Hawaiian Electric’s steam generating units consume LSFO and Hawaiian Electric’s combustion turbine peaking units consume diesel. Hawaiian Electric’s Schofield Generating Station consumes mostly B99 grade biodiesel, but is permitted to also burn ultra-low sulfur diesel (ULSD).

Hawaii Electric Light’s and Maui Electric’s steam generating units burn high sulfur fuel oil (HSFO) and Hawaii Electric Light’s and Maui Electric’s Maui combustion turbine generating units burn diesel. Hawaii Electric Light’s and Maui Electric’s Maui, Molokai, and Lanai diesel engine generating units burn ULSD.

See “Fuel contracts” in Hawaiian Electric’s MD&A.

The following table sets forth the average cost of fuel oil used by Hawaiian Electric, Hawaii Electric Light and Maui Electric to generate electricity in 2022, 2021 and 2020:

	Hawaiian Electric		Hawaii Electric Light		Maui Electric		Consolidated	
	\$/Barrel	¢/MBtu	\$/Barrel	¢/MBtu	\$/Barrel	¢/MBtu	\$/Barrel	¢/MBtu
2022	144.63	2,339.5	131.36	2,183.4	135.39	2,274.5	141.49	2,310.9
2021	79.10	1,275.9	80.52	1,333.9	83.45	1,404.0	80.06	1,305.4
2020	62.06	1,003.7	63.21	1,048.3	66.81	1,122.7	63.00	1,028.7

The average per-unit cost of fuel oil consumed to generate electricity for Hawaiian Electric, Hawaii Electric Light and Maui Electric reflects a different volume mix of fuel types and grades as follows:

	Hawaiian Electric		Hawaii Electric Light		Maui Electric	
	% LSFO	% Biodiesel/Diesel	% HSFO	% Diesel	% HSFO	% Diesel
2022	93	7	36	64	24	76
2021	93	7	41	59	22	78
2020	94	6	39	61	24	76

The prices that Hawaiian Electric and Hawaii Electric Light pay for purchased energy from certain older nonutility generators are generally linked to the price of oil. The AES Hawaii energy prices varied primarily with an inflation index. The energy prices for Kalaeloa, which purchases LSFO from Par Hawaii Refining, LLC (PAR), vary primarily with the price of Asian crude oil. On December 31, 2019, Hawaii Electric Light and PGV entered into an Amended and Restated Power Purchase Agreement, which delinks the pricing for energy delivered from the facility from fossil fuel prices. Hamakua Energy's energy prices vary primarily with the cost of naphtha.

The Utilities estimate that 75% of the net energy they generate will come from fossil fuel oil in 2023 compared to 67% in 2022. Hawaiian Electric generally maintains an average system fuel inventory level equivalent to 47 days of forward consumption. Hawaii Electric Light and Maui Electric generally maintain an average system fuel inventory level equivalent to approximately one month's supply of both HSFO and diesel. The PPA with Hamakua Energy requires that it maintains certain minimum fuel inventory levels.

Rates. Hawaiian Electric, Hawaii Electric Light and Maui Electric are subject to the regulatory jurisdiction of the PUC with respect to rates, issuance of securities, accounting and certain other matters. See "Regulation" below.

General rate increases require the prior approval of the PUC after public and contested case hearings. Rates for Hawaiian Electric and its subsidiaries include ECRCs, and PPACs. Under current law and practices, specific and separate PUC approval is not required for each rate change pursuant to automatic rate adjustment clauses previously approved by the PUC. Public Utility Regulatory Policies Act of 1978 (PURPA) requires the PUC to periodically review the adjustment clauses related to energy cost of electric and gas utilities in the state, and such clauses, as well as the rates charged by the utilities generally, are subject to change. PUC approval is also required for all surcharges and adjustments before they are reflected in rates.

See "Utility projects" under "Commitments and contingencies" in Note 3 of the Consolidated Financial Statements.

Competition. See "Competition" in Hawaiian Electric's MD&A.

Regulation. The PUC regulates the rates, issuance of securities, accounting and certain other aspects of the operations of Hawaiian Electric and its electric utility subsidiaries. See the previous discussion under "Rates".

On September 15, 2014, the State of Hawaii and the U.S. Department of Energy executed a Memorandum of Understanding (MOU) recognizing that Hawaii is embarking on the next phase of its clean energy future. The MOU provides the framework for a comprehensive, sustained effort to better realize its vast renewable energy potential and allow Hawaii to push forward in three main areas: the power sector, transportation and energy efficiency. This next phase is focused on stimulating deployment of clean energy infrastructure as a catalyst for economic growth, energy system innovation and test bed investments.

Energy efficiency. The PUC issued an order on January 3, 2012 approving a framework for Energy Efficiency Portfolio Standards (EEPS) that set 2008 as the initial base year for evaluation and linearly allocated the 2030 goal to interim incremental reduction goals of 1,375 GWH by 2015 and 975 GWH by each of the years 2020, 2025 and 2030. Pursuant to the PUC's EEPS framework, the PUC has contracted with a public benefits fee administrator to operate and manage energy efficiency programs, and any incentive and/or penalty mechanisms applicable solely to the public benefit fee administrator and related to the achievement of the goals are at the discretion of the PUC.

The Division of Consumer Advocacy's 2021 Compliance Resolution Fund Report states that Hawaii continues to progress towards its 2030 Renewable Portfolio Standards and EEPS goals. The EEPS has contributed to lower kWh sales; however, the implementation of sales decoupling has delinked sales and revenues. See "Regulatory mechanisms" above.

Electrification of Transportation. In June 2018, the PUC initiated a proceeding to review the Utilities' Electrification of Transportation (EoT) Strategic Roadmap, which provided an economic analysis for light duty electric vehicles on the island of Oahu, Maui and Hawaii. In July 2019 the Utilities filed a study analyzing data regarding the critical backbone for electric vehicle charging needs in their service territories. In October 2019, the Utilities filed their EoT Workplan, establishing a schedule to continue implementation of the EoT roadmap with a focus on EV rate design and make-ready charging infrastructure in the near-term. The Utilities followed through on the EoT Workplan in 2020, with three filings: the electric bus make ready infrastructure pilot, Charge Ready Hawaii commercial infrastructure pilot, and two commercial EV rates, EV-J and EV-P. The electric bus make ready infrastructure pilot, EV-J and EV-P, and Charge Ready Hawaii commercial infrastructure pilot were approved by the PUC on May 7, 2021, December 30, 2021 and January 24, 2022, respectively, and launched in the first and fourth quarters of 2022. In August 2020, the Utilities committed to electrifying 100% of its class 1 vehicles (sedans, SUVs and light trucks) by 2035. The Utilities operate 30 public DC fast chargers (DCFC) as part of the EV-U pilot and EV-MAUI tariff. They filed a request in the fourth quarter of 2021 to expand and make permanent the public charging pilot with an additional 150 DCFCs and 150 level 2 charging stations at 75 locations. This request will be ready for decision making in the first quarter of 2023.

Renewable Portfolio Standards. In 2015, Hawaii's RPS law was amended to require electric utilities to meet an RPS of 15%, 30%, 40%, 70% and 100% by December 31, 2015, 2020, 2030, 2040 and 2045, respectively. Energy savings resulting from energy efficiency programs do not count toward the RPS since 2014 (only electrical generation using renewable energy as a source counts). In July 2022, Governor Ige signed Act 240 (H.B.2089), that amended the RPS calculation from renewable energy as a percentage of sales to renewable energy as a percentage of total generation. The amended RPS calculation results in a lower calculated percentage than the amount calculated under the previous methodology. For example, the 2022 RPS achieved under the revised RPS calculation would have been 39.1% under the prior method versus 31.8% under the revised method. The change in the definition is to be applied prospectively to future milestone measurements and will require that the Utilities acquire more renewable energy than under the previous RPS calculation to comply with the RPS milestones; however, the Utilities expect to continue to meet the RPS milestones under the amended RPS law to exceed the 2030 RPS requirement of 40%.

Affiliate transactions. Certain transactions between HEI's electric public utility subsidiaries (Hawaiian Electric, Hawaii Electric Light and Maui Electric) and HEI and affiliated interests (as defined by statute) are subject to regulation by the PUC.

In December 1996, the PUC issued an order in a docket to review the relationship between HEI and Hawaiian Electric and the effects of that relationship on the operations of Hawaiian Electric. The order required Hawaiian Electric to continue to provide the PUC with periodic status reports on its compliance with the PUC Agreement (pursuant to which HEI became the holding company of Hawaiian Electric). Hawaiian Electric files such status reports annually. In the order, the PUC also required the Utilities to present a comprehensive analysis of the impact that the holding company structure and investments in nonutility subsidiaries have on a case-by-case basis on the cost of capital to each utility in future rate cases and remove any such effects from the cost of capital. The Utilities have made presentations in their subsequent rate cases to support their positions that there was no evidence that would modify the PUC's finding that Hawaiian Electric's access to capital did not suffer as a result of HEI's involvement in nonutility activities and that HEI's diversification did not permanently raise or lower the cost of capital incorporated into the rates paid by Hawaiian Electric's utility customers.

In December 2018, the PUC established a set of requirements governing transactions and sharing of information between the Utilities and its affiliates (Affiliate Transaction Requirements, ATRs), which was subsequently modified and clarified in January 2019 following the Utilities' motion for reconsideration. The PUC stated the intent of the ATRs is to establish safeguards to avoid potential market power benefits and cross-subsidization between regulated and unregulated activities. The requirements include rules on interactions with affiliates, information handling, business development, political activities, promotional activities, sales of products and services, and employee sharing restrictions. The ATRs include implementing an internal code of conduct, a compliance plan, including policies and procedures to comply with the requirements, and having an audit conducted every three years that examines the compliance with the requirements. Penalties for non-compliance depend on the severity of the violation, and can range from daily fines to divestiture of the Utilities by the holding company. On January 26, 2023, the PUC approved the Utilities' internal code of conduct. The PUC also directed the Utilities to make language changes to parts of the Utilities' 2023 Compliance Plan. On February 6, 2023, the Utilities filed a motion for clarification and/or reconsideration of the PUC's order which instructed a change to the definition of "Affiliate" as used in the 2023 Affiliate Transaction Requirements Compliance Plan.

Other regulations. The Utilities are not subject to regulation by the FERC under the Federal Power Act, except under Sections 210 through 212 (added by Title II of PURPA and amended by the Energy Policy Act of 1992), which permit the FERC to order electric utilities to interconnect with qualifying cogenerators and small power producers, and to wheel power to other electric utilities. Title I of PURPA, which relates to retail regulatory policies for electric utilities, and Title VII of the Energy Policy Act of 1992, which addresses transmission access, also apply to the Utilities. The Utilities are also required to file various operational reports with the FERC.

Because they are located in the State of Hawaii, Hawaiian Electric and its subsidiaries are exempt by statute from limitations set forth in the Powerplant and Industrial Fuel Use Act of 1978 on the use of petroleum as a primary energy source.

Regulatory Developments. See “Regulatory proceedings” in Note 3 of the Consolidated Financial Statements for additional discussions.

See also “HEI–Regulation” above.

Environmental regulation. Hawaiian Electric, Hawaii Electric Light and Maui Electric, like other utilities, are subject to periodic inspections by federal, state and, in some cases, local environmental regulatory agencies, including agencies responsible for the regulation of water quality, air quality, hazardous and other waste and hazardous materials. These inspections may result in the identification of items needing corrective or other action. Except as otherwise disclosed in this report (see “Risk Factors” in Item 1A, and Notes 1 and 3 of the Consolidated Financial Statements), the Utilities believe that each subsidiary has appropriately responded to environmental conditions requiring action and that, as a result of such actions, such environmental conditions will not have a material adverse effect on the capital expenditures, earnings and competitive position of the Utilities.

Water quality controls. The generating stations, substations and other utility facilities operate under federal and state water quality regulations and permits, including, but not limited to, the Clean Water Act National Pollution Discharge Elimination System (governing point source discharges, including wastewater and storm water discharges) and the Safe Drinking Water Act Underground Injection Control (regulating disposal of wastewater into the subsurface).

Oil pollution controls. The Oil Pollution Act of 1990 (OPA) establishes programs that govern actual or threatened oil releases and imposes strict liability on responsible parties for clean-up costs and damages to natural resources and property. The federal Environmental Protection Agency (EPA) regulations under OPA require certain facilities that use or store oil to prepare and implement Spill Prevention, Control and Countermeasures (SPCC) Plans in order to prevent releases of oil to navigable waters of the U.S. Certain facilities are also required to prepare and implement Facility Response Plans (FRPs) to ensure prompt and proper response to releases of oil. The utility facilities that are subject to SPCC Plan and FRP requirements have prepared and implemented SPCC Plans and FRPs.

Air quality controls. The Clean Air Act (CAA) establishes permitting programs to reduce air pollution. The CAA amendments of 1990, established the federal Title V Operating Permit Program (in Hawaii known as the Covered Source Permit program) to ensure compliance with all applicable federal and state air pollution control requirements. The 1977 CAA Amendments established the New Source Review (NSR) permitting program, which affect new or modified generating units by requiring a permit to construct under the CAA and the controls necessary to meet the National Ambient Air Quality Standards.

Title V operating permits have been issued for all of the Utilities’ affected generating units.

Hazardous waste and toxic substances controls. The operations of the electric utility are subject to EPA regulations that implement provisions of the Resource Conservation and Recovery Act (RCRA), the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA, also known as Superfund), the Superfund Amendments and Reauthorization Act (SARA), and the Toxic Substances Control Act (TSCA).

RCRA underground storage tank (UST) regulations require all facilities that use USTs for storing petroleum products to comply with established leak detection, spill prevention, standards for tank design and retrofits, financial assurance, operator training, and tank decommissioning and closure requirements. All of the Utilities’ USTs currently meet the applicable requirements.

The Emergency Planning and Community Right-to-Know Act under SARA Title III requires the Utilities to report potentially hazardous chemicals present in their facilities in order to provide the public with information so that emergency procedures can be established to protect the public in the event of hazardous chemical releases. Since January 1, 1998, the steam electric industry category has been subject to Toxics Release Inventory (TRI) reporting requirements.

The TSCA regulations specify procedures for the handling and disposal of polychlorinated biphenyls (PCBs), a compound found in some transformer and capacitor dielectric fluids. The TSCA regulations also apply to responses to releases of PCBs to the environment. The Utilities have instituted procedures to monitor compliance with these regulations and have implemented a

program to identify and replace PCB transformers and capacitors in their systems. On October 22, 2021, the EPA published its proposed rule entitled “Alternate PCB Extraction Methods and Amendments to PCB Cleanup and Disposal Regulations” in the Federal Register. The EPA is proposing to expand options for the methods used to characterize and verify the cleanup of PCBs, and amend the performance-based disposal option along with other amendments to improve the implementation of the regulations, clarify ambiguity, and correct technical errors. The EPA comments period closed on January 20, 2022.

Hawaii’s Environmental Response Law (ERL), as amended, governs releases of hazardous substances, including oil, to the environment in areas within the state’s jurisdiction. Responsible parties under the ERL are jointly, severally, and strictly liable for a release of a hazardous substance. Responsible parties include owners or operators of a facility where a hazardous substance is located and any person who at the time of disposal of the hazardous substance owned or operated any facility at which such hazardous substance was disposed.

The Utilities periodically discover leaking oil-containing equipment such as USTs, piping, and transformers. Each subsidiary reports releases from such equipment when and as required by applicable law and addresses the releases in compliance with applicable regulatory requirements.

Additional information. For additional information about Hawaiian Electric, see Hawaiian Electric’s MD&A, Hawaiian Electric’s “Quantitative and Qualitative Disclosures about Market Risk” and Hawaiian Electric’s Consolidated Financial Statements, including the Notes thereto.

Properties. As of December 31, 2022, the Utilities’ ownership in generating assets was as follows:

Property	Location (island)	Principal Fuel Type	Generating Capacity (MW)	Status
Hawaiian Electric:				
Waiau ¹	Oahu	LSFO / Diesel	480.8	Active
Kahe ¹	Oahu	LSFO	620.5	Active
Campbell Industrial Park (CIP) ¹	Oahu	Diesel	129.0	Active
Honolulu Power Plant ¹	Oahu	N/A	—	Deactivated in 2014
Schofield Generating Station ²	Oahu	Biodiesel / ULSD	49.4	Active
West Loch PV Project ³	Oahu	Renewable (Solar)	20.0	Active
Hawaii Electric Light⁴:				
Shipman	Hawaii	N/A	—	Retired in 2015
Waimea	Hawaii	ULSD	7.5	Active
Keahole	Hawaii	Diesel / ULSD	77.6	Active
Puna	Hawaii	HSFO / Diesel	36.7	Active
Hill/Kanoiehua	Hawaii	HSFO / ULSD	55.4	Active
Distributed generators at substation sites	Hawaii	ULSD	5.0	Active
Maui Electric⁵:				
Kahului	Maui	HSFO	35.9	Active
Maalaea	Maui	Diesel / ULSD	210.4	Active
Miki Basin	Lanai	ULSD	9.4	Active
Palaau	Molokai	ULSD	12.0	Active

¹ The four plants are situated on Hawaiian Electric-owned land having a combined area of 542 acres.

² Hawaiian Electric has a 35-year land lease on 8.13 acres, effective September 1, 2016 (with an option to extend an additional 10 years), with the Department of the Army.

³ Hawaiian Electric has a 37-year land lease on 102 acres, effective July 1, 2017, with the Secretary of the Navy.

⁴ The plants are situated on Hawaii Electric Light-owned land having a combined area of approximately 44 acres. The distributed generators are located within Hawaii Electric Light-owned substation sites having a combined area of approximately four acres.

⁵ The four plants are situated on Maui Electric-owned land having a combined area of 60.7 acres.

As of December 31, 2022, the Utilities' ownership in fuel storage facilities was as follows:

Facility	Location (island)	Fuel Type	Capacity (barrels in thousands)	Generation Served
Hawaiian Electric:				
Barbers Point Tank Farm	Oahu	LSFO	1,000	Kahe, Waiau
Generation sites - various (in aggregate)	Oahu	LSFO	770	Various
Generation sites - various (in aggregate)	Oahu	Diesel	132	Various
Generation sites - various (in aggregate)	Oahu	Biodiesel	11	Various
Hawaii Electric Light¹:				
Generation sites - various (in aggregate)	Hawaii	HSFO	48	Various
Generation sites - various (in aggregate)	Hawaii	Diesel	82	Various
Maui Electric²:				
Generation sites - various (in aggregate)	Maui	HSFO	81	Various
Generation sites - various (in aggregate)	Maui	Diesel	95	Various

¹ There are an additional 19,200 barrels of diesel and 24,770 barrels of HSFO storage capacity for Hawaii Electric Light-owned fuel off-site at Island Energy Services, LLC-owned terminalling facilities.

² There are an additional 56,358 barrels of diesel oil storage capacity off-site at Aloha Petroleum, Ltd.-owned terminalling facilities.

Other properties. The Utilities own overhead transmission and distribution lines, underground cables, pole (some jointly) and metal high voltage towers. Electric lines are located over or under public and nonpublic properties.

Hawaiian Electric owns a total of 133 acres of land on which substations, transformer vaults, distribution baseyards and the Kalaeloa cogeneration facility are located. Hawaiian Electric also owns buildings and approximately 11.6 acres of land located in Honolulu, which house its operating and engineering departments. It also leases an office building and certain office spaces in Honolulu, land for office spaces and storage in Pearl City, and a warehousing center in Kapolei.

Hawaii Electric Light owns 6 acres of land in Kona, which is used for a baseyard, and one acre of land in Hilo, which houses its accounting, customer services and administrative offices. Hawaii Electric Light also leases 3.7 acres of land for its baseyard in Hilo under a lease expiring in 2030. In addition, Hawaii Electric Light owns a total of approximately 150 acres of land, and leases a total of approximately 6 acres of land, on which hydro facilities, substations and switching stations, microwave facilities and transmission lines are located. The deeds to the sites located in Hilo contain certain restrictions, but the restrictions do not materially interfere with the use of the sites for public utility purposes.

Maui Electric's administrative offices, as well as its engineering and distribution departments, are situated on 9.1 acres of Maui Electric-owned land in Kahului. Maui Electric also owns approximately 18 acres of land which house some of its substations, leases approximately 3,600 square feet of land for its telecommunication and microwave facilities, leases approximately 6,000 square feet of land at Kahului Harbor for pipeline purposes, and leases 17,958 square feet of land at Puunene for the Puunene Substation. Maui Electric also owns approximately 89 acres of undeveloped land at Waena, Palaau, and Kahului. Fuel storage facilities are located on Maui Electric-owned properties at Kahului Baseyard, Kahului Power Plant, Maalaea Power Plant, Miki Basin, Palaau, and Hana. Two, 1-MW stand-by diesel generators are located within the Maui Electric-owned land at Hana Substation.

See "Hawaiian Electric and subsidiaries and service areas" above for a discussion of the nonexclusive franchises of Hawaiian Electric and subsidiaries.

See "Generation statistics" above for a further discussion of some of the electric utility properties.

Bank

General. ASB is one of the largest financial institutions headquartered in the State of Hawaii with assets of \$9.5 billion and deposits of \$8.2 billion, as of December 31, 2022. ASB is a full-service community bank that serves both consumer and commercial customers and operates 38 branches on the islands of Oahu (27), Maui (5), Hawaii (3), Kauai (2), and Molokai (1) as of December 31 2022. Subsequently, ASB closed two additional branches on the island of Oahu to reduce the total branch count to 36 branches as of February 2023.

In 2022, ASB's revenues and net income amounted to approximately 9% and 33% of HEI's consolidated revenues and net income, respectively, compared to approximately 11% and 41% in 2021 and approximately 12% and 29% in 2020.

At the time of HEI's acquisition of ASB, HEI agreed with the Office of Thrift Supervision (OTS), Department of Treasury's predecessor regulatory agency, that ASB's regulatory capital would be maintained at a level of at least 6% of ASB's total liabilities, or at such greater amount as may be required from time to time by regulation. Under the agreement, HEI's obligation to contribute additional capital to ensure that ASB would have the capital level required by the OTS was limited to a maximum aggregate amount of approximately \$65.1 million. As of December 31, 2022, as a result of certain HEI contributions of capital to ASB over the years, HEI's maximum obligation under the agreement to contribute additional capital has been reduced to approximately \$28.3 million. ASB is subject to OCC regulations on dividends and other distributions and ASB must receive a letter from the FRB communicating the OCC's and FRB's non-objection to the payment of any dividend ASB proposes to declare and pay to ASB Hawaii and HEI. In addition to OCC oversight, federal law and Federal Reserve Board policy require that HEI, as a savings and loan holding company, serve as a source of financial and managerial strength for any FDIC-insured depository institution that it controls. Accordingly, if ASB were to be in financial distress or to otherwise be viewed by the regulators as in unsatisfactory condition, HEI could be required to provide additional capital or liquidity support or take other action, in support of ASB.

Lending activities. See Note 4 of the Consolidated Financial Statements for the composition of ASB's loan portfolio.

Origination, purchase and sale of loans. Generally, residential and commercial real estate loans originated by ASB are collateralized by real estate located in Hawaii. For additional information, including information concerning the geographic distribution of ASB's mortgage-backed securities portfolio and the geographic concentration of credit risk, see Note 15 of the Consolidated Financial Statements. The demand for loans is primarily dependent on the Hawaii real estate market, business conditions, interest rates and loan refinancing activity.

Residential mortgage lending. ASB originates fixed rate and adjustable rate loans secured by single family residential property, including investor-owned properties, with maturities of up to 30 years. ASB's general policy is to require private mortgage insurance when the loan-to-value ratio of the property exceeds 80% of the lower of the appraised value or purchase price at origination. For non-owner-occupied residential property purchases, the loan-to-value ratio typically may not exceed 75% of the lower of the appraised value or purchase price at origination.

Construction and development lending. ASB provides fixed rate loans for the construction of one-to-four unit residential and commercial properties. Construction loan projects are typically short term in nature. Construction and development financing generally involves a higher degree of credit risk than long-term financing on improved, occupied real estate. Accordingly, construction and development loans are generally priced higher than loans collateralized by completed structures. ASB's underwriting, monitoring and disbursement practices with respect to construction and development financing are designed to ensure sufficient funds are available to complete construction projects. See "Bank—Loan portfolio risk elements" in HEI's MD&A and "Multifamily residential and commercial real estate lending" below.

Multifamily residential and commercial real estate lending. ASB provides permanent financing and construction and development financing collateralized by multifamily residential properties (including apartment buildings) and collateralized by commercial and industrial properties (including office buildings, shopping centers and warehouses) for its own portfolio as well as for participation with other lenders. Commercial real estate lending typically involves long lead times to originate and fund. As a result, production results can vary significantly from period to period.

Consumer lending. ASB offers a variety of secured and unsecured consumer loans. Loans collateralized by deposits are limited to 90% of the available account balance. ASB offers home equity lines of credit, clean energy loans, secured and unsecured VISA cards (through a third party issuer), checking account overdraft protection and other general purpose consumer loans.

Commercial lending. ASB provides both secured and unsecured commercial loans to business entities. This lending activity is designed to diversify ASB's asset structure, shorten maturities, improve rate sensitivity of the loan portfolio and attract commercial checking deposits. ASB offers commercial loans with terms generally up to ten years.

Loan origination fee and servicing income. In addition to interest earned on residential mortgage loans, ASB receives income from servicing loans, for late payments and from other related services. Servicing fees are received on loans originated and subsequently sold by ASB where ASB acts as collection agent on behalf of third-party purchasers.

ASB charges the borrower at loan settlement a loan origination fee. See "Loans" in Note 1 of the Consolidated Financial Statements.

Deposits and sources of funds. Deposits continue to be the largest source of funds for ASB for use in lending, meeting liquidity requirements and making investments, and are affected by market interest rates, competition and management's responses to these factors. In 2020 and 2021 deposits had increased in part due to PPP loan proceeds and consumer economic impact payments from the CARES Act stimulus program. In 2022, with the rising interest rate environment and inflationary

pressures in the economy, there was an outflow of core deposits. Retention and sustained growth of these low-cost deposit types will be challenging in the current environment. ASB borrows on a short-term basis to compensate for seasonal or other reductions in deposit flows. ASB may borrow on a longer-term basis to support expanded lending or investment activities. Advances from the Federal Home Loan Bank (FHLB) of Des Moines and securities sold under agreements to repurchase continue to be additional sources of funds, but they are a higher cost funding source than deposits.

Competition. The banking industry in Hawaii is highly competitive. At December 31, 2022, there were 7 financial institutions insured by the FDIC headquartered in the State of Hawaii. While ASB is one of the largest financial institutions in Hawaii, based on total assets, ASB faces vigorous competition for deposits and loans from two larger banking institutions based in Hawaii and from smaller institutions that heavily promote their services in niche areas, such as providing financial services to small and medium-sized businesses, as well as national financial services organizations. Competition for loans and deposits comes primarily from other savings institutions, commercial banks, credit unions, securities brokerage firms, money market and mutual funds and other investment alternatives. ASB faces additional competition in seeking deposit funds from various types of corporate and government borrowers, including insurance companies. Competition for origination of mortgage loans comes primarily from mortgage banking and brokerage firms, commercial banks, other savings institutions, insurance companies and real estate investment trusts. These entities may have a physical presence in the State of Hawaii or operate from out of state and provide online services. See also “Bank—Executive overview and strategy” in HEI’s MD&A.

To remain competitive and continue building core franchise value, ASB continues to develop and introduce new products and services to meet the needs of its consumer and commercial customers. Additionally, the banking industry is constantly changing and ASB is making the investment in its people and technology necessary to adapt and remain competitive.

The primary factors in ASB’s competition for mortgage and other loans are the competitive interest rates and loan origination fees it charges, the wide variety of loan programs it offers and the quality and efficiency of the services it provides to borrowers and the business community. ASB believes that it is able to compete for such loans primarily through the competitive interest rates and loan fees it charges, the type of mortgage loan programs it offers and the efficiency and quality of the services it provides to individual borrowers and the business community.

The primary factors in competing for deposits are interest rates, the quality and range of services offered, marketing, convenience of locations, hours of operation, availability and functionality of other non-branch channels such as online and mobile banking and perceptions of the institution’s financial soundness and safety. To compete effectively, ASB offers a variety of savings and checking accounts at competitive rates, convenient business hours, convenient branch locations with interbranch deposit and withdrawal privileges at each branch, convenient automated teller machines and other banking options including online and mobile banking platforms. ASB also conducts advertising and promotional campaigns.

ASB has been diversifying its loan portfolio from single-family home mortgages to higher-spread, shorter-duration consumer, commercial and commercial real estate loans. The origination of consumer, commercial and commercial real estate loans involves risks and other considerations different from those associated with originating residential real estate loans. For example, the sources and level of competition may be different and credit risk is generally higher than for residential mortgage loans. These different risk factors are considered in the underwriting and pricing standards and in the allowance for credit losses established by ASB for its consumer, commercial and commercial real estate loans.

Regulation. ASB, a federally chartered saving bank, is subject to examination and comprehensive regulation by the Department of Treasury, OCC and the FDIC, and is subject to reserve requirements established by the Board of Governors of the Federal Reserve System. Regulation by these agencies focuses in large measure on the adequacy of ASB’s capital and the results of periodic “safety and soundness” examinations conducted by the OCC. In addition, ASB’s holding companies are subject to the regulatory supervision of the FRB. See “HEI Consolidated—Regulation” above.

See “Bank—Legislation and regulation” in HEI’s MD&A for the final capital rules under the Basel III regulatory capital framework.

Examinations. ASB is subject to periodic “safety and soundness” examinations and other examinations by the OCC. In conducting its examinations, the OCC utilizes the Uniform Financial Institutions Rating System adopted by the Federal Financial Institutions Examination Council, which system utilizes the “CAMELS” criteria for rating financial institutions. The six components in the rating system are: Capital adequacy, Asset quality, Management, Earnings, Liquidity and Sensitivity to market risk. The OCC examines and rates each CAMELS component. An overall CAMELS rating is also given, after taking into account all of the component ratings. A financial institution may be subject to formal regulatory or administrative direction or supervision such as a “memorandum of understanding” or a “cease and desist” order following an examination if its CAMELS rating is not satisfactory. An institution is prohibited from disclosing the OCC’s report of its safety and soundness examination or the component and overall CAMELS rating to any person or organization not officially connected with the institution as an officer, director, employee, attorney or auditor, except as provided by regulation. The OCC also regularly

examines ASB's information technology practices and its performance under Community Reinvestment Act measurement criteria.

The Federal Deposit Insurance Act, as amended, addresses the safety and soundness of the deposit insurance system, supervision of depository institutions and improvement of accounting standards. Pursuant to this Act, federal banking agencies have promulgated regulations that affect the operations of ASB and its holding companies (e.g., standards for safety and soundness, real estate lending, accounting and reporting, transactions with affiliates and loans to insiders).

Deposit insurance coverage. The Federal Deposit Insurance Act, as amended, and regulations promulgated by the FDIC, govern insurance coverage of deposit accounts. In July 2010, the Dodd-Frank Act permanently raised the current standard maximum deposit insurance amount to \$250,000. Generally, the amount of all deposits held by a depositor in the same capacity (even if held in separate accounts) is aggregated for purposes of applying the insurance limit.

See "Federal Deposit Insurance Corporation assessment" in Note 4 of the Consolidated Financial Statements for a discussion of FDIC deposit insurance assessment rates.

Recent legislation and issuances. See "Bank-Legislation and regulation" in HEI's MD&A.

Affiliate transactions. Significant restrictions apply to certain transactions between ASB and its affiliates, including HEI and its direct and indirect subsidiaries. For example, ASB is prohibited from making any loan or other extension of credit to an entity affiliated with ASB unless the affiliate is engaged exclusively in activities which the FRB has determined to be permissible for bank holding companies. There are also various other restrictions which apply to certain transactions between ASB and certain executive officers, directors and insiders of ASB. ASB is also barred from making a purchase of or any investment in securities issued by an affiliate, other than with respect to shares of a subsidiary of ASB.

Financial derivatives and interest rate risk. ASB is subject to OCC rules relating to derivatives activities, such as interest rate swaps, interest rate lock commitments and forward commitments. See "Derivative financial instruments" in Note 4 of the Consolidated Financial Statements for a description of interest rate lock commitments and forward commitments used by ASB. Currently ASB does not use interest rate swaps to manage interest rate risk, but may do so in the future. Generally speaking, the OCC rules permit financial institutions to engage in transactions involving financial derivatives to the extent these transactions are otherwise authorized under applicable law and are safe and sound. The rules require ASB to have certain internal procedures for handling financial derivative transactions, including involvement of the ASB Board of Directors.

Management believes ASB's interest rate risk processes are aligned with the Interagency Advisory on Interest Rate Risk Management and appropriate with earnings and capital levels, balance sheet complexity, business model and risk tolerance.

Liquidity. OCC regulations require ASB to maintain sufficient liquidity to ensure safe and sound operations. ASB's principal sources of liquidity are customer deposits, borrowings, the maturity and repayment of portfolio loans and securities and the sale of loans into secondary market channels. ASB's principal sources of borrowings are advances from the FHLB of Des Moines and securities sold under agreements to repurchase from broker/dealers. ASB is approved by the FHLB of Des Moines to borrow an amount of up to 45% of assets to the extent it provides qualifying collateral and holds sufficient FHLB of Des Moines stock. As of December 31, 2022, ASB's unused FHLB of Des Moines borrowing capacity was approximately \$1.6 billion. ASB utilizes growth in deposits, advances from the FHLB of Des Moines and securities sold under agreements to repurchase to fund maturing and withdrawable deposits, repay maturing borrowings, fund existing and future loans and make investments. As of December 31, 2022, ASB had loan commitments, undisbursed loan funds and unused lines and letters of credit of \$2.1 billion. Management believes ASB's current sources of funds will enable it to meet these obligations while maintaining liquidity at satisfactory levels.

Supervision. The Federal Deposit Insurance Corporation Improvement Act of 1991 (the FDICIA) establishes a statutory framework that is triggered by the capital level of a financial institution and subjects it to progressively more stringent restrictions and supervision as capital levels decline. The prompt corrective action capital requirements establish thresholds for varying degrees of oversight and intervention by regulators. Declines in levels of capital, depending on their severity, will result in increasingly stringent mandatory and discretionary regulatory consequences. Capital levels may decline for any number of reasons, including reductions that would result if there were losses from operations, deterioration in collateral values or the inability to dispose of real estate owned (typically acquired by foreclosure). The regulators have substantial discretion in the corrective actions they might direct and could include restrictions on dividends and other distributions that ASB may make to HEI (through ASB Hawaii) and the requirement that ASB develop and implement a plan to restore its capital. The OCC rules implement the system of prompt corrective action. In particular, the rules define the relevant capital measures for the categories of "well capitalized," "adequately capitalized," "undercapitalized," "significantly undercapitalized" and "critically undercapitalized." As of December 31, 2022, ASB was "well-capitalized."

Interest rates. FDIC regulations restrict the ability of financial institutions that are undercapitalized to offer interest rates on deposits that are significantly higher than the rates offered by competing institutions. As of December 31, 2022, ASB was “well capitalized” and thus not subject to these interest rate restrictions.

Qualified thrift lender test. ASB is a “qualified thrift lender” (QTL) under its federal thrift charter and, in order to maintain this status, ASB is required to maintain at least 65% of its assets in “qualified thrift investments,” measured on a monthly average basis in 9 out of the previous 12 months, which include housing-related loans (including mortgage-backed securities) as well as certain small business loans, education loans, loans made through credit card accounts and a basket (not exceeding 20% of total assets) of other consumer loans and other assets. Institutions that fail to maintain QTL status are subject to various penalties, including limitations on their activities. In ASB’s case, the activities of HEI, ASB Hawaii and HEI’s other subsidiaries would also be subject to restrictions if ASB failed to maintain its QTL status, and a failure or inability to comply with those restrictions could effectively result in the required divestiture of ASB. As of December 31, 2022, and at all times during 2022, ASB was a qualified thrift lender.

Federal Home Loan Bank System. ASB is a member of the FHLB System, which consists of 11 regional FHLBs, and ASB’s regional bank is the FHLB of Des Moines. The FHLB System provides a central credit facility for member institutions. Historically, the FHLBs have served as the central liquidity facilities for savings associations and sources of long-term funds for financing housing. At such time as an advance is made to ASB or renewed, it must be collateralized by collateral from one of the following categories: (1) fully disbursed, whole first mortgages on improved residential property, or securities representing a whole interest in such mortgages; (2) securities issued, insured or guaranteed by the U.S. Government or any agency thereof; (3) FHLB deposits; and (4) other real estate-related collateral that has a readily ascertainable value and with respect to which a security interest can be perfected. The aggregate amount of outstanding advances collateralized by such other real estate-related collateral may not exceed 300% of ASB’s capital.

ASB’s required holding in the stock of the FHLB is both membership and activity-based. Membership is based on a percentage of total assets (0.12%) while the portion related to activity is based on a percentage of outstanding activity, mainly advances (4%). As of December 31, 2022, ASB was required and owned capital stock in the FHLB of Des Moines in the amount of \$26.6 million.

Community Reinvestment. The Community Reinvestment Act (CRA) requires financial institutions to help meet the credit needs of their communities, including low- and moderate-income areas, consistent with safe and sound lending practices. The OCC will consider ASB’s CRA record in evaluating an application for a new deposit facility, including the establishment of a branch, the relocation of a branch or office, or the acquisition of an interest in another bank. ASB currently holds a “satisfactory” CRA rating.

Secured Overnight Financing Rate (SOFR) Rules. The Federal Reserve Board announced the adoption of a final rule that implements the Adjustable Interest Rate (LIBOR) Act by identifying benchmark rates based on SOFR that will replace LIBOR in certain financial contracts after June 30, 2023. SOFR is a broad measure of the cost of borrowing cash overnight collateralized by U. S. Treasury securities. The Federal Reserve Bank of New York, in cooperation with the U.S. Department of the Treasury’s Office of Financial Research, publishes SOFR daily. In particular, some residential mortgage promissory notes held by ASB are based on LIBOR but do not identify a specific replacement index. The Adjustable Interest Rate (LIBOR) Act addresses the issue by specifying a specific SOFR rate that replaces certain LIBOR rates. ASB is preparing itself to meet the June 30, 2023, deadline.

Other laws. ASB is subject to federal and state consumer protection laws which affect deposit and lending activities, such as the Truth in Lending Act, the Truth in Savings Act, the Equal Credit Opportunity Act, the Real Estate Settlement Procedures Act, the Home Mortgage Disclosure Act and several federal and state financial privacy acts intended to protect consumers’ personal information and prevent identity theft, such as the Gramm Act and the Fair and Accurate Transactions Act. ASB is also subject to federal laws regulating certain of its lending practices, such as the Flood Disaster Protection Act, and laws requiring reports to regulators of certain customer transactions, such as the Currency and Foreign Transactions Reporting Act and the International Money Laundering Abatement and Anti-Terrorist Financing Act. ASB’s relationship with Cetera Investment Services LLC and Cetera Investment Advisers LLC is also governed by regulations adopted by the FRB under the Gramm Act, which regulate “networking” relationships under which a financial institution refers customers to a broker-dealer for securities services and employees of the financial institution are permitted to receive a nominal fee for the referrals. These laws may provide for substantial penalties in the event of noncompliance.

Proposed legislation. See the discussion of proposed legislation in “Bank–Legislation and regulation” in HEI’s MD&A.

Environmental regulation. ASB may be subject to the provisions of Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), ERL and regulations promulgated thereunder, which impose liability for environmental cleanup costs on certain categories of responsible parties. CERCLA and ERL exempt persons whose ownership

in a facility is held primarily to protect a security interest, provided that they do not participate in the management of the facility.

Additional information. For additional information about ASB, see the sections under “Bank” in HEI’s MD&A, HEI’s “Quantitative and Qualitative Disclosures about Market Risk” and HEI’s Consolidated Financial Statements, including Note 4 thereto.

Properties. ASB owns or leases several office buildings in Honolulu and owns land on which a number of its branches are located.

The following table sets forth the number of bank branches owned and leased by ASB by island:

December 31, 2022	Number of branches		
	Owned	Leased	Total
Oahu	8	19	27
Maui	1	4	5
Hawaii	2	1	3
Kauai	1	1	2
Molokai	—	1	1
	12	26	38

As of December 31, 2022, the net book value (NBV) of branches and office facilities was \$171 million (\$165 million represents the NBV of the land and improvements for the branches and office facilities owned by ASB and \$6 million represents the NBV of ASB’s leasehold improvements). As of December 31, 2021, the NBV of branches and office facilities was \$175 million (\$168 million represents the NBV of the land and improvements for the branches and office facilities owned by ASB and \$7 million represents the NBV of ASB’s leasehold improvements). The leases expire on various dates through December 2040, but many of the leases have extension provisions.

As of December 31, 2022, ASB owned 122 automated teller machines.

In January and February 2023, ASB closed two branches on the island of Oahu that were leased by the Bank.

ITEM 1A. RISK FACTORS

The businesses of HEI and its subsidiaries involve numerous risks which, if realized, could have a material and adverse effect on the Company’s financial statements. For additional information for certain risk factors enumerated below and other risks of the Company and its operations, see “Cautionary Note Regarding Forward-Looking Statements” above and HEI’s MD&A, HEI’s “Quantitative and Qualitative Disclosures about Market Risk,” the Notes to the Consolidated Financial Statements, Hawaiian Electric’s MD&A and Hawaiian Electric’s “Quantitative and Qualitative Disclosures About Market Risk.”

Holding company and company-wide risks.

COVID-19—Our business, financial condition, liquidity and results of operations have been affected and could continue to be adversely impacted by the ongoing effects of the COVID-19 pandemic and economic conditions. While COVID-19 restrictions in Hawaii have been lifted as vaccination rates increased and new daily case counts moderated, which lead to improved economic conditions in the state, new COVID-19 variants could result in a reinstatement of restrictions that could threaten the ongoing economic recovery and have a material adverse effect on the Company. For example, an economic downturn or recession could result in an increase in late payments, non-payments, higher costs, and reduced access to credit, which could have a significant impact on our business, financial condition and results of operations.

During the pandemic, the Utilities placed a moratorium on customer disconnections, which led to increasing past due past due accounts receivables that had an impact on liquidity. Although the Utilities have adequate access to liquidity sources, there can be no assurance that the Utilities will be able to secure additional liquidity sources at a reasonable cost, or at all, in the future. In addition to lower and lagged collections caused by the pandemic, the Utilities incurred higher costs and expenses. While the Utilities have been granted deferral treatment of certain COVID-19 related costs, such as higher bad debt expense, non-collection of late payment fees, higher financing costs, sequestration costs for mission-critical employees and other costs and expenses, there can be no assurance that the PUC will grant recovery of such costs, and the denial of such cost recovery could be material. Additionally, in light of the significant impact that economic conditions have had on residents and businesses in the state, a stipulated settlement between Hawaiian Electric and the Division of Consumer Advocacy of the Department of Commerce and Consumer Affairs, reflecting no base rate increase, was submitted in the Hawaiian Electric 2020 test year rate case, and approved by the PUC in October 2020. While the Utilities were successful in offsetting the no base rate increase with

corresponding cost decreases, such reduction of cost in future periods is not assured and, therefore, the inability to achieve targeted cost savings could adversely affect the Utilities' results of operations in future periods.

ASB's balance sheet has historically been asset sensitive and its net interest income is highly sensitive to interest rates. Accordingly, an extended economic slowdown or recession could have a significant impact on its net interest income if interest rates decline. In addition, while economic conditions improved in 2022, the emergence of new COVID-19 variants could lead to an extended economic slowdown or recession that may affect the ability of borrowers to make payments on their loans, which would have an adverse impact on ASB's provision for credit losses and its results of operations.

While the Company believes that it has sufficient liquidity to continue to operate under current economic conditions, there can be no assurance that sufficient liquidity will be available if there is a significant slowdown in economic activity for an extended period of time or if economic conditions worsen from current levels, leading to a recession.

Holding Company Risk—HEI is a holding company that derives its income from its operating subsidiaries and depends on the ability of those subsidiaries to pay dividends or make other distributions to HEI and on its own ability to raise capital. HEI is a legal entity separate and distinct from its various subsidiaries. As a holding company with no significant operations of its own, HEI's cash flows and consequent ability to service its obligations and pay dividends on its common stock is dependent upon its receipt of dividends or other distributions from its operating subsidiaries and its ability to issue common stock or other equity securities and to incur additional debt. The ability of HEI's subsidiaries to pay dividends or make other distributions to HEI, in turn, is subject to the risks associated with their operations and to contractual and regulatory restrictions, including:

- the provisions of an HEI agreement with the PUC, which could limit the ability of HEI's principal electric public utility subsidiary, Hawaiian Electric, to pay dividends to HEI in the event that the consolidated common stock equity of the Utilities falls below 35% of total capitalization of the electric utilities;
- the provisions of an HEI agreement entered into with federal bank regulators in connection with its acquisition of its bank subsidiary, ASB, which requires HEI to contribute additional capital to ASB (up to a maximum amount of additional capital of \$28.3 million as of December 31, 2022 under the Regulatory Capital Maintenance/Dividend Agreement dated May 26, 1988, between HEI, HEIDI (HEI Diversified Inc.) and the Federal Savings and Loan Insurance Corporation) upon request of the regulators in order to maintain ASB's regulatory capital at the level required by regulation;
- obligations under federal law and Federal Reserve Board policy, which require that a savings and loan holding company serve as a source of financial and managerial strength for any FDIC-insured depository institution that it controls, and accordingly, if ASB were to be in financial distress or to otherwise be viewed by the regulators as in unsatisfactory condition, HEI could be required to provide additional capital or liquidity support or take other action, in support of ASB;
- the minimum capital and capital distribution regulations of the OCC that are applicable to ASB and capital regulations that become applicable to HEI and ASB Hawaii;
- the receipt of a letter from the FRB communicating the OCC's and the FRB's non-objection to the payment of any dividend ASB proposes to declare and pay to ASB Hawaii and HEI; and
- the provisions of preferred stock resolutions and debt instruments of HEI and its subsidiaries.

Credit and Capital Market Risk—The Company, and its credit rating, is subject to risks associated with the Hawaii economy (in the aggregate and on an individual island basis), volatile U.S. capital markets and changes in the interest rate and credit market environment that have or could result in higher retirement benefit plan funding requirements, declines in ASB's interest rate margins and investment values, higher delinquencies and charge-offs in ASB's loan portfolio and restrictions on the ability of HEI or its subsidiaries to borrow money or issue securities. The two largest components of Hawaii's economy are tourism and the federal government (including the military). Because the core businesses of HEI's subsidiaries are providing local public electric utility services (through Hawaiian Electric and its subsidiaries) and banking services (through ASB) in Hawaii, the Company's operating results are significantly influenced by: Hawaii's economy, which in turn is influenced by economic conditions in the mainland U.S. (particularly California) and Asia (particularly Japan) as a result of the impact of those conditions on tourism; by the impact of interest rates on the construction and real estate industries and by the impact of federal government spending in Hawaii, which can be affected by world conditions; and, from time to time, the expiration of federal government appropriations bills. In addition, the Hawaii economy could be directly or indirectly affected by implications and potential impacts of U.S. and foreign capital and credit market conditions and federal, state and international responses to those conditions and the potential impacts of global and local developments (including economic conditions and uncertainties; unrest, terrorist acts, wars (such as the Russia-Ukraine war), conflicts, political protests, deadly virus epidemic, pandemics, or other crisis; the effects of changes that have or may occur in U.S. policy, such as with respect to immigration and trade).

HEI's and Hawaiian Electric's credit ratings only reflect the view, at the time the ratings are issued, of the applicable rating agency. There is no assurance that any such credit rating will remain in effect for any given period of time or that such rating will not be lowered, suspended or withdrawn entirely by the applicable rating agency if, in such rating agency's judgment,

circumstances, such as current, past or future effects or events so warrant. Any such lowering, suspension or withdrawal of any rating may have an adverse effect on the availability of capital to the Company or the market price or marketability of HEI's and/or Hawaiian Electric's securities, which could increase the cost of capital of HEI and Hawaiian Electric, and such increased costs, including interest charges, under HEI's and/or Hawaiian Electric's debt securities and credit facilities, would result in reductions in HEI's consolidated net income in future periods. Further, if HEI's or Hawaiian Electric's commercial paper ratings were to be downgraded, HEI and Hawaiian Electric might not be able to sell commercial paper and might be required to draw on more expensive bank lines of credit or to defer capital or other expenditures. Neither HEI nor Hawaiian Electric management can predict future rating agency actions or their effects on the future cost of capital of HEI or Hawaiian Electric. Such ratings are not recommendations to buy, sell or hold any securities; such ratings may be subject to revision or withdrawal at any time by the rating agencies; and each rating should be evaluated independently of any other rating.

Changes in the U.S. capital markets can also have significant effects on the Company. For example, pension funding requirements are affected by the market performance of the assets in the master pension trust maintained for pension plans, and by the discount rate used to estimate the service and interest cost components of net periodic pension cost and value obligations. The Utilities' pension tracking mechanisms help moderate pension expense; however, a significant reduction in the discount rate or in the value of the Company's defined benefit pension plan assets could result in a substantial increase in the gap between the projected benefit obligations under the plans and the value of plan assets, resulting in increases in funding requirements.

Because the earnings of ASB depend primarily on net interest income, interest rate risk is a significant risk of ASB's operations. HEI and the Utilities are also exposed to interest rate risk primarily due to their periodic borrowing requirements, the discount rate used to determine pension funding requirements and the possible effect of interest rates on the electric utilities' rates of return. Interest rates are sensitive to many factors, including general economic conditions and the policies of government and regulatory authorities. HEI cannot predict future changes in interest rates, nor be certain that interest rate risk management strategies it or its subsidiaries have implemented will be successful in managing interest rate risk.

Interest rate risk also represents a market risk factor affecting the fair value of ASB's investment securities. Increases and decreases in prevailing interest rates generally translate into decreases and increases in the fair values of those instruments, respectively. Disruptions in the credit markets, a liquidity crisis in the banking industry or increased levels of residential mortgage delinquencies and defaults may result in decreases in the fair value of ASB's investment securities and an impairment, requiring ASB to write down its investment securities. As of December 31, 2022, ASB's investment in U.S. Treasury and federal agency obligations, and mortgage-backed securities have an implicit guarantee from the U.S. government. Decreases in the fair value of ASB's investment securities may also result in lower equity capital balances as unrealized losses in the available-for-sale investment securities portfolio are recorded as a decrease in equity capital through accumulated other comprehensive losses. The lower equity capital balance could result in a lower tangible equity capital ratio and restrict ASB's permissible activities if the tangible equity capital ratio falls below 2%. A negative tangible equity capital ratio would impact ASB's availability to borrow funds from the FHLB of Des Moines.

Geographic Concentration Risk—The Company is subject to the risks associated with the geographic concentration of its businesses and current lack of interconnections that could result in service interruptions at the Utilities or higher default rates on loans held by ASB. The business of the Utilities is concentrated on the individual islands they serve in the State of Hawaii. Their operations are more vulnerable to service interruptions than that of many U.S. mainland utilities because none of the systems of the Utilities are interconnected with the systems on the other islands they serve. Because of this lack of interconnections, it is necessary to maintain higher generation reserve margins than are typical for U.S. mainland utilities to help ensure reliable service. Service interruptions, including, in particular, extended interruptions that could result from a natural disaster or terrorist activity, could adversely impact the revenues and costs of some or all of the Utilities.

Substantially all of ASB's consumer loan customers are Hawaii residents. A significant portion of the commercial loan customers are also located in Hawaii. While a majority of customers are on Oahu, ASB also has customers on the neighbor islands (whose economies have traditionally been weaker than Oahu's economy during economic downturns). Substantially all of the real estate underlying ASB's residential and commercial real estate loans are located in Hawaii. These assets may be subject to a greater risk of default due to geographic concentration than other comparable assets held by financial institutions with more diverse geographic exposure in the event of adverse economic, political or business developments or natural disasters affecting Hawaii and affect the ability of ASB's customers to make payments of principal and interest on their loans.

Competitive and Technological Risk—Increasing competition and technological advances could cause HEI's businesses to lose customers or render their operations obsolete. The banking industry in Hawaii, and certain aspects of the electric utility industry, are competitive. The success of HEI's subsidiaries in meeting competition and responding to technological advances will continue to have a direct impact on HEI's consolidated financial performance. For example:

- ASB, one of the largest financial institutions in the state, is in direct competition for deposits and loans not only with two larger institutions that have substantial capital, technology and marketing resources, but also with smaller Hawaii institutions and other U.S. institutions, including credit unions, mutual funds, mortgage brokers, finance companies, non-traditional providers of financial services and investment banking firms. Larger financial institutions may have greater access to capital at lower costs, which could impair ASB's ability to compete effectively. New or significant advances in technology (e.g., significant advances in internet or mobile banking) or customer adoption of alternative banking channels could render the operations of ASB less competitive or obsolete.
- The Utilities face competition from IPPs; customer self-generation, with or without cogeneration; customer energy storage; and the potential formation of community-based, cooperative ownership or municipality structures for electrical service on all islands it serves. With the exception of certain identified projects, the Utilities are required to use competitive bidding to acquire a future generation resource unless the PUC finds competitive bidding to be unsuitable. The PUC sets policies for distributed generation interconnection agreements and standby rates. The results of competitive bidding, competition from IPPs, customer self-generation, and potential cooperative ownership or municipality structures for electric utility service, and the rate at which technological developments facilitating nonutility generation of electricity, combined heat and power technology, off-grid microgrids, and customer energy storage may render the operations of the Utilities less competitive or outdated and adversely affect the Utilities and the results of their operations.

Cybersecurity Risk—The Company may be subject to information technology and operational system failures, network disruptions, cyber attacks and breaches in data security that could adversely affect its businesses and reputation. The Company and its subsidiaries rely on information technology systems, some of which are managed or hosted by third party service providers, to manage its business data, communications, and other business processes. Such information technology systems may be vulnerable to cyberattacks or other security incidents, which could result in unauthorized access to confidential data, ransomware demands or disruptions to operations. In addition, there is increasing cybersecurity risk associated with the broad adoption of a remote working environment as a result of the pandemic. If the Company is unable to prevent or adequately respond to and resolve an incident, it may have a material impact on the Company's operations or business reputation.

Utilities. The Utilities rely on evolving and increasingly complex operational and information systems, networks and other technologies, which are interconnected with the systems and network infrastructure owned by third parties to support a variety of business processes and activities, including procurement and supply chain, invoicing and collection of payments, customer relationship management, human resource management, the acquisition, generation and delivery of electrical service to customers, and to process financial information and results of operations for internal reporting purposes and to comply with regulatory financial reporting and legal and tax requirements. The Utilities use their systems and infrastructure to create, collect, store, and process sensitive information, including personal information regarding customers, employees and their dependents, retirees, and other individuals. Despite the Utilities security measures, all of their systems are vulnerable to disability, failures or unauthorized access caused by natural disasters, cybersecurity incidents, security breaches, user error, unintentional defects created by system changes, military or terrorist actions, power or communication failures or similar events. Any such failure could have a material adverse impact on the Utilities' ability to process transactions and provide service, as well as the Utilities' financial condition and results of operations. Further, a data breach involving theft, improper disclosure, or other unauthorized access to or acquisition of confidential information could subject the Utilities to penalties for violation of applicable privacy laws, claims by third parties, and enforcement actions by government agencies. A data breach could also reduce the value of proprietary information, and harm the reputation of the Utilities.

Private and public entities, such as the North American Electric Reliability Corporation, and the U.S. federal government, including the Departments of Defense, Homeland Security and Energy, and the White House, have noted that cyber-attacks targeting utility systems are increasing in sophistication, magnitude, and frequency. The Utilities' systems have been, and will likely continue to be, a target of attacks. Further, the Utilities' operational networks may be subject to new cybersecurity risks due to modernizing and interconnecting existing infrastructure with new technologies and control systems, including those owned by third parties, such as independent power producers, distributed energy resource aggregators and customers. Although the Utilities have not experienced a material cybersecurity breach to date, such incidents may occur and may have a material adverse effect on the Utilities and the Company in the future. In order to address cybersecurity risks to their information systems, the Utilities maintain security measures designed to protect their information technology systems, network infrastructure and other assets. The Utilities actively monitor developments in the area of cybersecurity and are involved in various related government and industry groups, and brief the Company's Board quarterly on relevant cybersecurity issues. Although the Utilities continue to make investments in their cybersecurity program, including personnel, technologies, cyber insurance and training of Utilities personnel, there can be no assurance that these systems or their expected functionality will be implemented, maintained, or expanded effectively; nor can security measures completely eliminate the possibility of a cybersecurity breach. The Utility maintains cyber liability insurance that covers certain damages caused by cyber incidents. However, there is no guarantee that adequate insurance will continue to be available at rates the Utility believes are reasonable or that the costs of responding to and recovering from a cyber incident will be covered by insurance or recoverable

in rates. If the Utilities' cybersecurity measures were to be breached, the Utilities could suffer financial loss, business disruptions, liability to customers, regulatory intervention or damage to their reputations.

Due to the size, scope and complexity of the Utilities' business, the development and maintenance of information technology systems to process and track information is critical and challenging. The Utilities often rely on third-party vendors to host, maintain, modify, and update its systems and these third-party vendors could cease to exist, fail to establish adequate processes to protect the Utilities systems and information, experience supply chain compromises or other internal or external security incidents. In addition, the Utilities are pursuing complex business transformation initiatives, which include the implementation of new systems and the upgrade or replacement of existing systems. Significant system changes increase the risk of system interruptions. Although the Utilities maintain change control processes to mitigate this risk, system interruptions may occur. Further, delay or failure to complete the integration of information systems and processes may result in delays in regulatory cost recovery, or the failure to realize the benefits anticipated to be derived from these initiatives.

The Utilities have disaster recovery and incident response plans in place to protect their businesses from information technology service interruptions. The disaster recovery plans, however, may not be successful in preventing the loss of customer data, service interruptions and disruptions to operations or damage to important facilities. If any of these systems fail to operate properly or become disabled and the Utilities' disaster recovery plans do not effectively resolve the issues in a timely manner, the Utilities could suffer financial loss, business disruptions, liability to customers, regulatory intervention or damage to their reputations, any of which could have a material adverse effect on the Utilities' and the Company's financial condition and results of operations.

ASB. ASB is highly dependent on its ability to process, on a daily basis, a large number of transactions and relies heavily on communication and information systems, including those of third-party vendors and other service providers. Communication and information system failures can result from a variety of risks including, but not limited to, events that are wholly or partially out of ASB's control, such as communication line integrity, weather, terrorist acts, natural disasters, accidental disasters, unauthorized breaches of security systems, energy delivery systems, cyberattacks and other events.

ASB is under continuous threat of loss due to cyberattacks, especially as ASB continues to expand customer capabilities to utilize the Internet and other digital channels to transact business. Two of the most significant cyberattack risks that ASB faces are e-fraud and loss of sensitive customer data. Loss from e-fraud occurs when cybercriminals extract funds directly from ASB or its customers' accounts using fraudulent schemes that may include Internet-based funds transfers. ASB has been subject to e-fraud incidents historically. Loss of sensitive customer data are attempts to steal sensitive customer data, such as account numbers and social security numbers, through unauthorized access to computer systems, including computer hacking. Such attacks are less frequent, but could present significant reputational, legal and regulatory costs if successful. Intrusion detection and prevention systems, anti-virus software, firewalls and other general information technology controls have been put in place to detect and prevent cyberattacks or information system breaches. A disaster recovery plan has been developed in the event of a natural disaster, security breach, military or terrorist action, power or communication failure or similar event. The disaster recovery plan, however, may not be successful in preventing the loss of customer data, service interruptions, disruptions to operations or damage to important facilities. Although ASB devotes significant resources to maintain and regularly upgrade its systems and processes that are designed to protect the security of ASB's computer systems, software, networks and other technology assets and the confidentiality, integrity and availability of information belonging to ASB and its customers, there can be no assurance that such failures, interruptions or security breaches will not occur or, if they do occur, that they will be adequately corrected by ASB or its vendors.

If any of these systems fail to operate properly or become disabled even for a brief period of time, ASB could suffer financial loss, business disruptions, liability to customers, regulatory intervention or damage to its reputation, any of which could have a material adverse effect on ASB's and the Company's financial condition and results of operations.

Uninsured Losses—HEI's businesses could suffer losses that are uninsured due to a lack of affordable insurance coverage, unavailability of insurance coverage or limitations on the insurance coverage the Company does have. In the ordinary course of business, HEI and its subsidiaries purchase insurance coverages (e.g., property and liability coverages) to protect against loss of, or damage to, their properties and against claims made by third parties and employees for property damage or personal injuries. However, the protection provided by such insurance is limited in significant respects and, in some instances, there is no coverage. Some of the insurance coverages have substantial deductibles or has limits on the maximum amounts that may be recovered. In common with other companies in its line of business, the Utilities' overhead and underground transmission and distribution systems (with the exception of substation buildings and contents), which have a replacement value roughly estimated at \$9 billion, are largely not insured against loss or damage because the amount of transmission and distribution system insurance capacity is limited and the premiums are cost prohibitive. Similarly, the Utilities have no business interruption insurance as the premiums for such insurance would be cost prohibitive, particularly since the Utilities are not interconnected to other systems. If a hurricane or other uninsured catastrophic natural disaster were to occur, and if the PUC did not allow the affected Utilities to recover from ratepayers restoration costs and revenues lost from business interruption, the lost revenues and

repair expenses could result in a significant decrease in HEI's consolidated net income or in significant net losses for the affected periods.

ASB generally does not obtain credit enhancements, such as mortgagor bankruptcy insurance, but does require standard hazard and hurricane insurance and may require flood insurance for certain properties. ASB is subject to the risks of borrower defaults and bankruptcies, special hazard losses not covered by the required insurance and the insurance company's inability to pay claims on existing policies.

Environmental Regulation—Increased federal and state environmental regulation will require an increasing commitment of resources and funds and could result in construction delays or penalties and fines for non-compliance. HEI and its subsidiaries are subject to federal, state and local environmental laws and regulations relating to air quality, water quality, hazardous substances, waste management, natural resources and health and safety, which regulate, among other matters, the operation of existing facilities, the construction and operation of new facilities and the proper cleanup and disposal of hazardous and toxic wastes and substances. These laws and regulations could result in increased capital, operating, and other costs. HEI or its subsidiaries are currently involved in investigatory or remedial actions at current, former or third-party sites and there is no assurance that the Company will not incur material costs relating to these sites. In addition, compliance with these legal requirements requires the Utilities to commit significant resources and funds toward, among other things, environmental monitoring, installation of pollution control equipment and payment of emission fees. These laws and regulations, among other things, require that certain environmental permits be obtained in order to construct or operate certain facilities, and obtaining such permits can entail significant expense and cause substantial construction delays. Also, these laws and regulations may be amended from time to time, including amendments that increase the burden and cost of compliance. For example, emission and/or discharge limits may be tightened, more extensive permitting requirements may be imposed and additional substances may become regulated. In addition, significant regulatory uncertainty exists regarding the impact of federal or state greenhouse gas emission limits and reductions.

If HEI or its subsidiaries fail to comply with environmental laws and regulations, even if caused by factors beyond their control, that failure may result in civil or criminal penalties and fines or the cessation of operations that could have a material adverse on the Company's financial condition or results of operations.

Electric utility risks.

The following risks are generally specific to Hawaiian Electric, but could have a material adverse effect on the Company's consolidated results of operations, financial condition and liquidity.

Regulatory Risk—Actions of the PUC are outside the control of the Utilities and could result in inadequate or untimely rate increases, rate reductions or refunds or unanticipated delays, expenses or writedowns in connection with the construction of new projects. The rates the Utilities are allowed to charge for their services and the timeliness of permitted rate increases are among the most important items influencing the Utilities' results of operations, financial condition and liquidity. The PUC has broad discretion over the rates that the Utilities charge their customers. On December 23, 2020, as part of the D&O establishing the PBR Framework, the PUC established a five-year Multi-year Rate Period (MRP) during which there will be no general rate cases. In the fourth year of the MRP, the PUC will comprehensively review the PBR Framework to determine if any modifications or revisions are appropriate.

Any adverse decision by the PUC concerning the level or method of determining electric utility rates at the end of the MRP, including the items and amounts that may be included in rate base, the returns on equity or rate base found to be reasonable, the potential consequences of exceeding or not meeting such returns, the denial of exceptional project recovery applications during the MRP, adverse impact of adjustments made to the PBR Framework, decisions on recovery of exogenous items under the PBR Framework, or any prolonged delay in rendering a decision in a rate or other proceeding could have a material adverse effect on Hawaiian Electric's consolidated results of operations, financial condition and liquidity.

To improve the timing and certainty of the recovery of their costs, the Utilities have proposed and/or received approval of various cost recovery mechanisms, including an ECRC (includes a PUC-ordered 98%/2% risk-sharing split between customers and the Utilities for fossil fuel price variations from baseline prices, with a current annual aggregate exposure cap of +/- \$3.7 million), a PPAC, and pension and OPEB tracking mechanisms, as well as a decoupling mechanism, an exceptional project recovery mechanism (EPRM) (formerly Major Project Interim Recovery (MPIR) adjustment mechanism), and a Renewable Energy Infrastructure Program surcharge. A change in, or the elimination of, any of these cost recovery mechanisms, could have a material adverse effect on the Utilities. See "Regulatory mechanisms" in Electric Utility's Business.

Under the PBR Framework, the Utilities' annual revenue adjustment (ARA) includes a customer dividend consisting of a negative adjustment of 0.22% compounded annually and a flow through of the "pre-PBR" savings commitment from the management audit recommendations developed in the 2020 test year rate case. The ability of the Utilities to recover increasing costs and earn a reasonable return on capital investments not covered by the ARA or not achieving the customer dividend and

cost savings commitment could have a material adverse effect on the Utilities. Under the PBR Framework, the existing PIMs continue, and the PUC established new PIMs and is working on additional PIMs with stakeholders. The assessment of penalties for not achieving performance goals or the failure to achieve PIMs rewards could affect the Utilities' ability to achieve their allowed ROACEs and have a material adverse effect on the Utilities.

Based on the current operations of the Utilities and regulatory framework, including the impact of the approved PBR Framework, the Utilities continue to follow regulatory accounting under Accounting Standards Codification (ASC) 980. Continued accounting in this manner requires that certain criteria relating to the recoverability of such costs through rates be met, including achieved financial results that support the recovery of costs. If events or circumstances should change, such that the criteria are no longer satisfied, the Utilities expect that their regulatory assets (amounting to \$243 million as of December 31, 2022), net of regulatory liabilities (amounting to \$1,056 million as of December 31, 2022), would be charged to the statement of income in the period of discontinuance. See "Performance-based regulation framework" in Note 3 of the Consolidated Financial Statements.

The Utilities could be required to refund to their customers, with interest, revenues that have been or may be received under interim rate orders in their rate case proceedings and other proceedings, if and to the extent they exceed the amounts allowed in final orders.

Many public utility projects require PUC approval and various permits (e.g., environmental and land use permits) from other governmental agencies. Difficulties in obtaining, or the inability to obtain, the necessary approvals or permits, or any adverse decision or policy made or adopted, or any prolonged delay in rendering a decision, by an agency with respect to such approvals and permits, can result in significantly increased project costs or even cancellation of projects. In the event a project does not proceed, or if the PUC disallows cost recovery for all or part of a project, or if project costs exceed caps imposed by the PUC in its approval of the project, project costs may need to be written off in amounts that could result in significant reductions in Hawaiian Electric's consolidated net income.

See risk factor, "*COVID-19—Our business, financial condition, liquidity and results of operations are being and could continue to be adversely impacted by the ongoing effects of the COVID-19 pandemic*" in the "*Holding company and company-wide*" risk factor section for a discussion regarding the risks related to the recovery of deferred COVID-19 costs and expenses.

Weather Conditions Risk—Electric utility operations are significantly influenced by weather conditions and natural disasters. The Utilities' results of operations can be affected by the weather and natural disasters. Weather conditions, particularly temperature and humidity, directly influence the demand for electricity. In addition, severe weather and natural disasters, such as hurricanes, earthquakes, tsunamis, lava flows and lightning storms, some of which may become more severe or frequent as a result of global climate changes, have occurred in the past (such as the Kilauea eruption in 2018 which resulted in PGV's shutdown, and the Mauna Loa eruption in 2022) and will likely continue to occur in the future. When these events occur, they can cause outages and property damage and require the Utilities to incur significant additional expenses that may not be recoverable.

Climate Change Risk—Electric utility operations may be significantly influenced by climate change. While the timing, extent and ultimate effects of climate change cannot be determined with any certainty, climate change is predicted to result in sea level rise, which could potentially impact coastal and other low-lying areas (where much of the Utilities' electric infrastructure is sited), and could cause erosion of beaches, saltwater intrusion into aquifers and surface ecosystems, higher water tables and increased flooding and storm damage due to heavy rainfall. The effects of climate change on the weather (for example, floods, hurricanes, heat waves or drought conditions, the latter of which could increase wildfire risk), sea levels, and water availability and quality, all have the potential to materially adversely affect the results of operations, financial condition and liquidity of the Utilities. For example, severe weather and its related impacts could cause significant harm to the Utilities' physical facilities.

Third Party Performance Risk—Electric utility operations depend heavily on third-party suppliers of fuel and purchased power. The Utilities rely on fuel suppliers and shippers, and IPPs to deliver fuel and power, respectively, in accordance with contractual agreements. Approximately 72% of the net energy generated or purchased by the Utilities in 2022 was generated from the burning of fossil fuel oil, and purchases of power by the Utilities provided about 43% of their total net energy generated and purchased for the same period. Failure or delay by fuel suppliers and shippers to provide fuel pursuant to existing contracts, or failure by a major IPP to deliver the firm capacity anticipated in its PPA, could disrupt the ability of the Utilities to deliver electricity, affect the Utilities' maintenance schedules that could affect future reliability and require the Utilities to incur additional expenses to meet the needs of their customers that may not be recoverable. In addition, as the IPP contracts near the end of their terms, there may be less economic incentive for the IPPs to make investments in their units to ensure the availability of their units. Also, as these contractual agreements end, the Utilities may not be able to purchase fuel and power on terms equivalent to the current contractual agreements.

Capacity Risk—The capacity provided by the Utilities’ generating resources and third-party purchased power may not be sufficient to meet customers’ energy requirements. The Utilities rely upon their generating resources and purchased power from third parties to meet their customers’ energy requirements. The Utilities update their generation capacity evaluation each year to determine the Utilities’ ability to meet reasonably expected demands for service and provide reasonable reserves for emergencies and other unplanned events. These evaluations are impacted by a variety of factors, including customer energy demand, energy conservation and efficiency initiatives, economic conditions, and weather patterns. If the capacity provided by the Utilities’ generating resources and third-party purchased power is not adequate relative to customer demand, the Utilities may have to contract to buy more power from third parties, invest in additional generating facilities over the long-term, or extend the operating life of existing utility units. Any failure to meet customer energy requirements could negatively impact the satisfaction of the Utilities’ customers, which could have an adverse impact on the Utilities’ business, reputation and results of operations.

Stakeholder Activism Risk—Electric utility and third-party purchased power projects may be significantly impacted by stakeholder activism. The potential impact of stakeholder activism could increase total utility project costs, and delay the permitting, construction and overall timing or preclude the completion of third-party or utility projects that are required to meet electricity demand, resilience and reliability objectives, and RPS and other climate related goals. If a utility project cannot be completed, the project costs may need to be written off in amounts that could result in significant reductions in Hawaiian Electric’s consolidated net income and negatively impact its financial condition and liquidity.

Operational Risk—Electric utility generating facilities are subject to operational risks that could result in unscheduled plant outages, unanticipated and/or increased operation and maintenance expenses and increased power purchase costs. Operation of electric generating facilities involves certain risks which can adversely affect energy output and efficiency levels. Included among these risks are facility shutdowns or power interruptions due to insufficient generation or a breakdown or failure of equipment or processes. In addition, operations could be negatively impacted by interruptions in fuel supply, inability to negotiate satisfactory collective bargaining agreements when existing agreements expire or other labor disputes, inability to comply with regulatory or permit requirements, disruptions in delivery of electricity, operator error and catastrophic events such as earthquakes, tsunamis, hurricanes, fires, explosions, lava flows, floods or other similar occurrences affecting the Utilities’ generating facilities or transmission and distribution systems.

Legislative Risk—The Utilities may be adversely affected by new legislation or administrative actions. Congress, the Hawaii legislature and governmental agencies periodically consider legislation and other initiatives that could have uncertain or negative effects on the Utilities and their customers. Congress, the Hawaii legislature and governmental agencies have adopted, or are considering adopting, a number of measures that will significantly affect the Utilities, as described below.

Renewable Portfolio Standards law. The 2001 Hawaii Legislature adopted a law requiring the Utilities to meet a renewable portfolio standard, which has been amended over the years. The most recent amendment to Hawaii’s RPS law occurred in 2015, which requires the electric utilities to meet an RPS of 15%, 30%, 40%, 70% and 100% by December 31, 2015, 2020, 2030, 2040 and 2045 respectively. Energy savings resulting from energy efficiency programs do not count toward the RPS after 2014. In July 2022, Governor Ige signed Act 240 (H.B.2089), that amended the RPS calculation from renewable energy as a percentage of sales to renewable energy as a percentage of total generation. The amended RPS calculation results in a lower calculated percentage than the amount calculated under the previous methodology. The change in the definition is to be applied prospectively to future milestone measurements and will require that the Utilities acquire more renewable energy than under the previous RPS calculation to comply with the RPS milestones. The Utilities are committed to achieving these goals and met the 2015 and 2020 RPS; however, due to the exclusion of energy savings in calculating RPS after 2014 and risks such as potential delays in IPPs being able to deliver contracted renewable energy, it is possible the Utilities may not attain the required renewable percentages in the future, and management cannot predict the future consequences of failure to do so (including potential penalties to be assessed by the PUC). On December 19, 2008, the PUC approved a penalty of \$20 for every MWh that an electric utility is deficient under Hawaii’s RPS law. The PUC noted, however, that this penalty may be reduced, in the PUC’s discretion, due to events or circumstances that are outside an electric utility’s reasonable control, to the extent the event or circumstance could not be reasonably foreseen and ameliorated, as described in the RPS law and in an RPS framework adopted by the PUC. In addition, the PUC ordered that the Utilities will be prohibited from recovering any RPS penalty costs through rates.

Renewable energy. In 2007, a measure was passed by the Hawaii legislature stating that the PUC may consider the need for increased renewable energy in rendering decisions on utility matters. Due to this measure, it is possible that, if energy from a renewable source is more expensive than energy from fossil fuel, the PUC may still approve the purchase of energy from the renewable source, resulting in higher costs.

Global climate change and greenhouse gas emissions reduction. National and international concern about climate change and the contribution of greenhouse gas (GHG) emissions (including carbon dioxide emissions from the combustion of

fossil fuels) to climate change have led to federal legislative and regulatory proposals and action by the state of Hawaii to reduce GHG emissions.

In July 2007, the State Legislature passed Act 234, which requires a statewide reduction of GHG emissions by January 1, 2020 to levels at or below the statewide GHG emission levels in 1990. On June 20, 2014, the Governor signed the final rules required to implement Act 234 and these rules went into effect on June 30, 2014. In general, Act 234 and the GHG rule require affected sources that have the potential to emit GHGs in excess of established thresholds to reduce their GHG emissions by 16% below 2010 emission levels by 2020. In accordance with state requirements, the Utilities submitted an Emissions Reduction Plan (ERP) to the DOH on June 30, 2015, with the most recent revision filed on June 9, 2020, to reflect the partnership established between the Utilities and several IPPs. In this plan, the partnership committed to a 16% reduction in GHG emissions in accordance with the rule, which the partnership achieved in 2017 in advance of the 2020 requirement. The DOH issued the air permits incorporating the ERP, including provisions to address the period of unavailability of the PGV facility on Hawaii Island. It is expected that with the advent of additional renewable projects and the application to the PUC with respect to the expansion of the PPA for the PGV project, the goals should be attainable.

Hawaii Revised Statutes (HRS) § 269-6(b) requires that “in making determinations of the reasonableness of the costs pertaining to electric or gas utility system capital improvements and operations, the PUC shall explicitly consider, quantitatively or qualitatively, the effect of the state’s reliance on fossil fuels on price volatility, export of funds for fuel imports, fuel supply reliability risk, and greenhouse gas emissions.” Based on HRS § 269-6(b) and recent case law discussing the scope of this section, the Utilities are performing GHG analyses to quantitatively or qualitatively describe the GHG emissions of proposed projects that are submitted to the PUC for approval.

In June 2018, House Bill 2182 was signed into law as Act 15 and took effect on July 1, 2018. Among its provisions, Act 15 aligned the state’s clean energy and carbon sequestration efforts with climate initiative goals and established a statewide carbon neutral goal by 2045. Under this Act, efforts would be made to “sequester more atmospheric carbon and greenhouse gases than emitted within the state as quickly as practicable, but no later than 2045.” The Hawaii Climate Change Mitigation and Adaptation Commission, administratively placed under the State Department of Land and Natural Resources, was charged with endeavoring to achieve the target, and giving consideration to the impact of its plans, decisions and strategies on the state’s ability to attain the goal. The general functions, duties and powers of the Hawaii Climate Change Mitigation and Adaptation Commission are set forth in HRS § 225P-3. To achieve its mandates, the Hawaii Climate Change Mitigation and Adaptation Commission may recommend plans, decisions and strategies that could have an impact on various entities including the Utilities. In July 2022, House Bill 1800 was signed into law as Act 238 and took effect on July 1, 2022. The Act established a goal for the statewide greenhouse gas emissions limit to be at least 50% below 2005 levels by 2030.

The Utilities have taken, and continue to identify opportunities to take, direct action to reduce GHG emissions from their operations, including, but not limited to, supporting demand-side management programs that foster energy efficiency, using renewable resources for energy production and purchasing power from IPPs generated by renewable resources, and burning renewable biodiesel at selected Hawaiian Electric and Maui Electric generating units. In November 2021, the Utilities committed to a 70% reduction in power generation GHG emissions by 2030 compared to a 2005 baseline and achievement of net zero carbon emissions from power generation by 2045. While the reduction is not mandated by law, the Utilities could suffer reputational harm if it fails to achieve its commitments, which may negatively impact its business.

The foregoing legislation or legislation that now is, or may in the future be, proposed, such as potential carbon “cap and trade” legislation that, if applicable, may fundamentally alter costs to produce electricity and accelerate the move to renewable generation, present risks and uncertainties for the Utilities.

Renewable Transition Risk—The Utilities may be subject to increased operational challenges and their results of operations, financial condition and liquidity may be adversely impacted in meeting the commitments and objectives of clean energy initiatives, Renewable Portfolio Standards (RPS) and other climate related goals. The far-reaching nature of the Utilities’ renewable energy commitments and the RPS and other climate related goals present risks to the Company. Among such risks are: (1) the potential delay by the Public Utilities Commission of the State of Hawaii (PUC) in considering (and potential disapproval of actual or proposed) renewable energy proposals and related costs; (2) the dependence on outside parties, such as the state, developers and third-party suppliers of renewable purchased energy, which if the Utilities are unsuccessful in negotiating purchased power agreements with such IPPs or if a major IPP delays or fails to deliver the anticipated capacity and/or energy in its purchased power agreement, could impact the Utilities’ achievement of their commitments to RPS and other climate related goals, eligibility for performance incentive mechanisms associated with the speed of increasing renewable generation, the ability to retire fossil fuel units, and/or the Utilities’ ability to deliver reliable service; (3) delays in acquiring or unavailability of non-fossil fuel supplies for renewable generation; (4) the impact of intermittent power to the electrical grid and reliability of service if appropriate supporting infrastructure is not installed or does not operate effectively; (5) the inability to recover the undepreciated cost of fossil fuel generating units if they are required to be retired before the end of their expected useful life; (6) uncertainties surrounding current and future renewable technologies,

such as solar power, wind power, biofuels, battery storage, hydro, hydrogen, as well as related environmental assessments required to meet RPS and other climate related goals; (7) the impacts of implementation of the renewable energy proposals on future costs of electricity and potential penalties imposed by the PUC for delays in the commercial operations of renewable energy projects; (8) the likelihood that the Utilities may need to make substantial investments in related infrastructure, which could result in increased borrowings and, therefore, materially impact the financial condition and liquidity of the Utilities; (9) the imputed debt related to the pending renewable power purchase agreements under the stage 1, stage 2, stage 3 and other RFPs could result in a credit rating downgrade for the Utilities and the Company; and (10) the commitment to support a variety of initiatives, which, if approved by the PUC, may have a material impact on the results of operations and financial condition of the Utilities depending on their design and implementation. These initiatives include, but are not limited to, programs to enable more customer-sited generation. The implementation of these or other programs may adversely impact the results of operations, financial condition and liquidity of the Utilities.

Bank risks.

The following risks are generally specific to ASB, but could have a material adverse effect on the Company's consolidated results of operations, financial condition and liquidity.

Interest Rate Risk—Fluctuations in interest rates could result in lower net interest income, impair ASB's ability to originate new loans or impair the ability of ASB's adjustable-rate borrowers to make increased payments or cause such borrowers to repay their adjustable-rate loans or impact ASB's ability to attract deposits. Interest rate risk is a significant risk of ASB's operations. ASB's net interest income consists primarily of interest income received on fixed-rate and adjustable-rate loans, mortgage-backed securities and investments, less interest expense consisting primarily of interest paid on deposits and other borrowings. Interest rate risk arises when earning assets mature or when their interest rates change in a time frame different from that of the costing liabilities. Changes in market interest rates, including changes in the relationship between short-term and long-term market interest rates (e.g., a flat or an inverted yield curve) or between different interest rate indices, and the duration and severity of the changes in market interest rates can impact ASB's net interest margin. See "Quantitative and Qualitative Disclosures about Market Risk."

Although ASB pursues an asset-liability management strategy designed to mitigate its risk from changes in market interest rates, unfavorable movements in interest rates could result in lower net interest income. Residential 1-4 family fixed-rate mortgage loans comprised about 38% of ASB's loan portfolio as of December 31, 2022 and do not re-price with movements in interest rates. ASB continues to face a challenging interest rate environment. Increases in market interest rates could have an adverse impact on ASB's cost of funds. Higher market interest rates could lead to higher interest rates paid on deposits and other borrowings. Significant increases in market interest rates, or the perception that an increase may occur, could adversely affect ASB's ability to originate new loans and grow. An increase in market interest rates, especially a sudden increase, similar to the rapid federal funds rate increases experienced in 2022, could also adversely affect the ability of ASB's adjustable-rate borrowers to meet their higher payment obligations. If this occurred, it could cause an increase in nonperforming assets and charge-offs. Conversely, a decrease in interest rates or a mismatching of maturities of interest sensitive financial instruments could result in an acceleration in the prepayment of loans and mortgage-backed securities and impact ASB's ability to reinvest its liquidity in similar yielding assets.

ASB relies on customer deposits as a sizable source of relatively stable and low-cost funds. Changes in market interest rates impact the interest paid on deposits and can significantly impact the Bank's net interest income. Changes in interest rates may also impact the level of low-cost core deposits that the Bank's customers maintain in their accounts, which may require ASB to seek higher costing wholesale borrowings.

LIBOR Sunset Transition Risk—Changes in the method for determining London Interbank Offered Rate (LIBOR) and the potential replacement of LIBOR may affect our loan portfolio and interest income on loans. On July 27, 2017, the United Kingdom's Financial Conduct Authority (FCA), which regulates LIBOR, announced that it intended to phase out LIBOR by the end of 2021. On March 5, 2021, the ICE Benchmark Administration Limited (IBA), as administrator of LIBOR, publicly announced that it intended to cease publication of one week and two-month USD LIBOR tenors on December 31, 2021 and the remaining USD LIBOR tenors on June 30, 2023. The U.S. Federal Reserve, in conjunction with the Alternative Reference Rates Committee, a steering committee composed of large U.S. financial institutions, announced replacement of U.S. dollar LIBOR with a new index calculated by short-term repurchase agreements, backed by U.S. Treasury securities called the Secured Overnight Financing Rate (SOFR). ASB has loans and other financial instruments with rates that are either directly or indirectly tied to LIBOR. Failure to adequately manage this transition process with our customers could adversely impact the Bank's reputation.

ASB has formed a cross-functional project team to oversee the transition. The project team reports to Management and the Board on a periodic basis. The project team is organized around key work streams which cover products, systems and operational processes impacted by the transition as well as client communication. The project team has completed an inventory

of existing LIBOR-indexed products, which are monitored on an ongoing basis. In addition, the project team has retired all LIBOR-based originations as of December 31, 2021 and continues to offer floating rate loans with alternative indices, including SOFR. ASB will continue to monitor legacy contracts and will continue the orderly transition away from LIBOR by June 30, 2023 in accordance with the OCC and other federal financial institution regulatory agencies' statement on LIBOR transition.

Credit Risk—ASB's allowance for credit losses may not cover actual loan losses. ASB's allowance for credit losses is ASB's estimate of lifetime expected credit losses on financial instruments and other commitments to extend credit and is based on a continuing assessment of:

- existing risks in the loan portfolio;
- historical loss experience with ASB's loans;
- changes in collateral value;
- current conditions (for example, economic conditions, real estate market conditions and interest rate environment); and
- reasonable and supportable forecasts that affect the collectability of the reported amount.

If ASB's actual loan losses exceed its allowance for credit losses, it may incur losses, its financial condition may be materially and adversely affected, and additional capital may be required to enhance its capital position. In addition, various regulatory agencies, as an integral part of their examination process, regularly review the adequacy of ASB's allowance. These agencies may require ASB to establish additional allowances based on their judgment of the information available at the time of their examinations. No assurance can be given that ASB will not sustain loan losses in excess of present or future levels of its allowance for credit losses.

Operational Risk—ASB's operations are affected by factors that are beyond its control, that could result in lower revenues, higher expenses or decreased demand for its products and services. ASB's results of operations depend primarily on the income generated by the supply of, and demand for, its products and services, which primarily consist of loans and deposit services. ASB's revenues and expenses may be adversely affected by various factors, including:

- local, regional, national and other economic and political conditions that could result in declines in employment and real estate values, which in turn could adversely affect the ability of borrowers to make loan payments and the ability of ASB to recover the full amounts owing to it under defaulted loans;
- the ability of borrowers to obtain insurance and the ability of ASB to place insurance where borrowers fail to do so, particularly in the event of catastrophic damage to collateral securing loans made by ASB;
- faster than expected loan prepayments that can cause an acceleration of the amortization of premiums on loans and investments and the impairment of mortgage servicing assets of ASB;
- changes in ASB's loan portfolio credit profiles and asset quality, which may increase or decrease the required level of allowance for credit losses;
- technological disruptions affecting ASB's operations or financial or operational difficulties experienced by any outside vendor on whom ASB relies to provide key components of its business operations, such as business processing, network access or internet connections;
- events of default and foreclosure of loans whereby ASB becomes the owner of mortgage properties that presents environmental risk or potential clean up liability;
- the impact of legislative and regulatory changes, including changes affecting capital requirements, increasing oversight of and reporting by banks, or affecting the lending programs or other business activities of ASB;
- additional legislative changes regulating the assessment of overdraft, interchange and credit card fees, which can have a negative impact on noninterest income;
- public opinion about ASB and financial institutions in general, which, if negative, could impact the public's trust and confidence in ASB and adversely affect ASB's ability to attract and retain customers and expose ASB to adverse legal and regulatory consequences;
- increases in operating costs (including employee compensation expense and benefits and regulatory compliance costs), inflation and other factors, that exceed increases in ASB's net interest, fee and other income; and
- the ability of ASB to maintain or increase the level of deposits, ASB's lowest costing funds.

Banking Regulatory Risk—Banking and related regulations could result in significant restrictions being imposed on ASB's business or in a requirement that HEI divest ASB. ASB is subject to examination and comprehensive regulation by the Department of Treasury, the OCC and the FDIC, and is subject to reserve requirements established by the Board of Governors of the Federal Reserve System. In addition, the FRB is responsible for regulating ASB's holding companies, HEI and ASB Hawaii. The regulatory authorities have extensive discretion in connection with their supervisory and enforcement activities and examination policies to address not only ASB's compliance with applicable banking laws and regulations, but also capital adequacy, asset quality, management ability and performance, earnings, liquidity and various other factors.

Under certain circumstances, including any determination that ASB's relationship with HEI results in an unsafe and unsound banking practice, these regulatory authorities have the authority to restrict the ability of ASB to transfer assets and to make distributions to its shareholders (including payment of dividends to HEI), or they could seek to require HEI to sever its relationship with or divest its ownership of ASB. Payment by ASB of dividends to HEI may also be restricted by the OCC and FRB under its prompt corrective action regulations or its capital distribution regulations if ASB's capital position deteriorates. In order to maintain its status as a QTL, ASB is required to maintain at least 65% of its assets in "qualified thrift investments." Institutions that fail to maintain QTL status are subject to various penalties, including limitations on their activities. In ASB's case, the activities of HEI and HEI's other subsidiaries would also be subject to restrictions, and a failure or inability to comply with those restrictions could effectively result in the required divestiture of ASB. Federal legislation has also been proposed in the past that could operate to eliminate the thrift charter or the grandfathered status of HEI as a unitary thrift holding company, which in turn would result in a required divestiture of ASB. In the event of a required divestiture, federal law substantially limits the types of entities that could potentially acquire ASB.

Bank Regulatory Risk - Heightened regulatory requirements if ASB's total assets exceed \$10 billion. As of December 31, 2022, ASB had total assets of approximately \$9.5 billion and it is possible that total assets could exceed \$10 billion in the near future. The Dodd-Frank Act and its implementing regulations impose enhanced supervisory requirements on financial institutions with more than \$10 billion in total assets. For financial institutions with more than \$10 billion in total assets, such requirements include, among other things:

- Applicability of Volcker Rule requirements and restrictions;
- Increased capital leverage, liquidity and risk management standards;
- Examinations by the CFPB for compliance with federal consumer financial protection laws and regulations; and
- Limits on interchange fees on debit cards (Durbin Amendment).

The Economic Growth, Regulatory Relief and Consumer Protection Act (EGRRCPA), which was enacted in 2018, amended the Dodd-Frank Act to raise the \$10 billion stress testing threshold to \$250 billion, among other things. The federal financial regulators issued final rules in 2019 to increase the threshold for these stress testing requirements from \$10 billion to \$250 billion, consistent with the EGRRCPA.

ASB is already subject to limits for its interchange fees on debit cards as the Bank's parent company, HEI, has total assets exceeding \$10 billion and the Durbin Amendment did not exclude unitary thrift holding companies from the threshold for holding company assets subject to interchange fee limits.

Federal financial regulators may require ASB to take actions to prepare for compliance with the foregoing requirements before it exceeds \$10 billion in total assets. ASB's regulators may consider its preparation for compliance with these regulatory requirements when examining the Bank's operations or considering any request for regulatory approval. ASB may, therefore, incur compliance costs before it reaches \$10 billion in total assets and may be required to maintain the additional compliance procedures even if the Bank does not grow at the anticipated rate or at all.

Failure to comply with these new requirements may negatively impact the results of ASB's operations and financial condition. To ensure compliance, the Bank may be required to invest significant resources, which may necessitate hiring additional personnel and implementing additional internal controls. These additional compliance costs may have a material adverse effect on our business, results of operations and financial condition.

Legislative Risk—Legislative and regulatory initiatives could have an adverse effect on ASB's business. From time to time, new legislative and other regulatory initiatives are enacted, which could have an adverse effect on ASB's business. For example, the Dodd-Frank Act, which became law in July 2010, has had a substantial impact on the financial services industry. Failure to comply with laws, regulations or policies could result in sanctions by regulatory agencies, civil money penalties and/or reputational damage, which could have a material adverse effect on ASB's business, results of operations, financial condition and liquidity.

Product Concentration Risk—A large percentage of ASB's loans and securities are collateralized by real estate, and adverse changes in the real estate market and/or general economic or other conditions may result in loan losses and adversely affect the Company's profitability. As of December 31, 2022 approximately 83% of ASB's loan portfolio was comprised of loans primarily collateralized by real estate, most of which was concentrated in the State of Hawaii. During 2022, ASB's home equity lines of credit (HELOC) increased 20% and the residential 1-4 family portfolios increased by 8%, comprising approximately 70% of total real estate loans. ASB's financial results may be adversely affected by changes in prevailing economic conditions, either nationally or in the state. ASB had been pursuing a strategy that included expanding its commercial, commercial real estate and consumer lines of business. Commercial and commercial real estate loans have a higher risk profile than residential loans, in part due to larger average balances than residential loans. Though both commercial and commercial real estate loans have shorter terms and earn higher spreads than residential mortgage loans, these loan types

generally entail higher underwriting and other service costs and present greater credit risks than traditional residential mortgages. Commercial loans are secured by the assets of the business and, upon default, any collateral repossessed may not be sufficient to repay the outstanding loan balance. In addition, loan collections are dependent on the borrower's continuing financial stability and, thus, are more likely to be affected by current economic conditions and adverse business developments. Commercial real estate properties tend to be unique and are more difficult to value than residential real estate properties. Commercial real estate loans may not be fully amortizing, meaning that they have a significant principal balance or "balloon" payment due at maturity. In addition, commercial real estate properties, particularly industrial and warehouse properties, are generally subject to relatively greater environmental risks than noncommercial properties and to the corresponding burdens and costs of compliance with environmental laws and regulations. Also, there may be costs and delays involved in enforcing rights of a property owner against tenants in default under terms of leases with respect to commercial properties. For example, a tenant may seek protection under bankruptcy laws, which could result in termination of the tenant's lease.

ASB also has a national syndicated lending portfolio where ASB is a participant in credit facilities agented by established and reputable national lenders. Management selectively chooses each deal based on conservative credit criteria to ensure a high-quality, well diversified portfolio. In the event the borrower encounters financial difficulties and ASB is unable to sell its participation interest in the loan in the secondary market, ASB is typically reliant on the originating lender for managing any loan workout or foreclosure proceedings that may become necessary. Accordingly, ASB has less control over such proceedings than loans it originates and may be required to accommodate the interests of other participating lenders in resolving delinquencies or defaults on participated loans, which could result in outcomes that are not fully consistent with ASB's preferred strategies. In addition, a significant proportion of ASB's syndicated loans are originated in states other than Hawaii and are subject to the local regional and regulatory risks specific to those states.

Similar to the national syndicated lending portfolio, ASB does not service commercial loans in which it has participation interests rather than being the lead or agent lender and is subject to the policies and practices of the agent lender, who is the loan servicer, in resolving delinquencies or defaults on participated loans.

The consumer loan portfolio primarily consists of personal unsecured loans with risk-based pricing. Repayment is based on the borrower's financial stability as these loans have no collateral and there is less assurance that ASB will be able to collect all payments due under these loans or have sufficient collateral to cover all outstanding loan balances.

General Risk Factors.

ESG Risk—Increased scrutiny and changing stakeholder expectations with respect to our environmental, social and governance (ESG) programs may result in increased costs and expenses and may expose the Company to new or incremental risks. Companies across all industries, including HEI, face increasing stakeholder scrutiny related to ESG practices. These stakeholders include investors, customers, consumers, employees, lenders and other stakeholders, and in recent years, certain stakeholders have placed increasing importance on the impact and social cost of their investments. This increased focus and activism related to ESG may hinder the cost of, or access to, capital or financing as these investors or lenders may elect to increase their required returns on capital offered to the company, reallocate capital or not commit capital as a result of their assessment of a company's ESG risk profile. Additionally, if the Company fails to adapt, or is perceived to have failed in addressing investor, lender, and other stakeholder ESG expectations or standards, which continue to evolve, or if the Company fails to fully and accurately report its progress on managing risk under its ESG initiatives, the Company may suffer reputational damage and its business or financial condition could be materially and adversely affected.

Human Capital Risk—HEI's businesses may be unable to attract, hire, engage and retain a highly skilled and diverse workforce, including senior management, which could affect the Company's execution of its growth strategy and profitability and adversely affect its future performance. The skill and experience of the Company's employees, particularly with respect to the senior management team, are vital to the Company's success. The management teams of HEI's businesses have significant industry experience and would be difficult to replace. Failure to attract, hire, develop, motivate, and retain highly qualified and diverse employee talent, to develop and implement adequate succession plans for the senior management team, or to maintain a successful work culture that fosters collaboration, innovation, and good communication could disrupt the Company's operations and adversely affect its businesses and its future success. In addition, a variety of economic and social factors are exacerbating the current labor supply shortage, which may make it difficult to staff critical positions and retain key employees, and could result in significantly higher costs to maintain appropriate staffing levels with the right talent. The inability to fill these positions or a delay in staffing these positions could have a significant impact on the Company's initiatives and strategies, which in turn would adversely affect the Company's businesses and their future prospects.

Inflation Risk—The Company's costs and expenses could increase as a result of inflationary pressures and such increases may not be fully offset by an increase in revenues. A variety of economic and social factors have recently driven inflation to levels above the Federal Reserve Board's long-term target of 2%. Long-term inflationary pressures could result in higher labor, fuel oil, commodities, materials and supplies, outside services and capital costs, among others, that may not fully be offset by

an increase in revenues, which would adversely affect the Company's profitability and results of operations. For example, while the Utilities' annual revenue adjustment mechanism provides for an annual inflationary adjustment, recent months' annualized rates of inflation have surpassed the rate of the last inflationary adjustment for the Utilities' target revenues. To the extent the Utilities' increase in actual expenses exceeds the amount provided by the last inflationary adjustment and the Utilities are unable to offset such excess with other efficiencies or cost savings, the Utilities' profitability could be adversely impacted. Similarly, to the extent that higher labor and other costs at ASB, due to inflation or other factors, is not fully offset by an increase in non-interest income or net interest income, which is dependent on interest rates, the shape of the yield curve, earning assets growth and low-cost deposit liabilities, the Bank's profitability and results of operations would be adversely impacted.

Pension Liability Risk—HEI and Hawaiian Electric and their subsidiaries may incur higher retirement benefits expenses and have and will likely continue to be subject to substantial liabilities for retirement benefits. Retirement benefits expenses and cash funding requirements could increase in future years depending on numerous factors, including, but not limited to, the performance of the U.S. equity markets, trends in interest rates and health care costs, plan amendments, mortality improvements, new laws relating to pension funding and changes in accounting principles. For the Utilities, however, retirement benefits expenses, as adjusted by the pension and postretirement benefits other than pensions (OPEB) tracking mechanisms, have been an allowable expense for rate-making purposes.

Tax Legislation Risk—Adverse tax rulings or developments or changes in tax legislation could result in significant increases in tax payments and/or expense. Governmental taxing authorities could challenge a tax return position taken by HEI or its subsidiaries and if the taxing authorities prevail, HEI's consolidated tax payments and/or expense, including applicable penalties and interest, could increase significantly. Additionally, changes in tax legislation or IRS interpretations could increase the Company's tax burden and adversely affect the Company's financial position, results of operations, and cash flows.

Litigation Risk—The Company could be subject to the risk of uninsured losses in excess of its accruals for litigation matters. HEI and its subsidiaries are involved in routine litigation in the ordinary course of their businesses, most of which is covered by insurance (subject to policy limits and deductibles). However, other litigation may arise that is not routine or involves claims that may not be covered by insurance. Because of the uncertainties associated with litigation, there is a risk that litigation against HEI or its subsidiaries, even if vigorously defended, could result in costs of defense and judgment or settlement amounts not covered by insurance and in excess of reserves established in HEI's consolidated financial statements.

Changes in Accounting Estimates Risk—Changes in accounting principles and estimates could affect the reported amounts of the Company's assets and liabilities or revenues and expenses. HEI's consolidated financial statements are prepared in accordance with accounting principles generally accepted in the U.S. Changes in accounting principles (including the possible adoption of International Financial Reporting Standards or new U.S. accounting standards), or changes in the Company's application of existing accounting principles, could materially affect the financial statement presentation of HEI's or the Utilities' consolidated results of operations and/or financial condition. Further, in preparing the consolidated financial statements, management is required to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities and the reported amounts of revenues and expenses. Actual results could differ significantly from those estimates. Material estimates that are particularly susceptible to significant change include the amounts reported for electric utility revenues; allowance for credit losses; income taxes; investment securities, property, plant and equipment; regulatory assets and liabilities; derivatives; pension and other postretirement benefit obligations; and contingencies and litigation.

Changes in accounting principles can also impact HEI's consolidated financial statements. For example, if management determines that a PPA requires the consolidation of the IPP in the financial statements, the consolidation could have a material effect on Hawaiian Electric's and HEI's consolidated financial statements, including the recognition of a significant amount of assets and liabilities and, if such a consolidated IPP were operating at a loss and had insufficient equity, the potential recognition of such losses.

ITEM 1B. UNRESOLVED STAFF COMMENTS

HEI: None.

Hawaiian Electric: Not applicable.

ITEM 2. PROPERTIES

HEI and Hawaiian Electric: See the "Properties" sections under "HEI," "Electric utility" and "Bank" in Item 1. Business above.

ITEM 3. LEGAL PROCEEDINGS

HEI and Hawaiian Electric: HEI and Hawaiian Electric (including their direct and indirect subsidiaries) may be involved in ordinary routine PUC proceedings, environmental proceedings and/or litigation incidental to their respective businesses. See the

descriptions of legal proceedings (including judicial proceedings and proceedings before the PUC and environmental and other administrative agencies) in “Item 1. Business,” in HEI’s MD&A and in the Notes 3 and 4 of the Consolidated Financial Statements. The outcomes of litigation and administrative proceedings are necessarily uncertain and there is a risk that the outcome of such matters could have a material adverse effect on the financial position, results of operations or liquidity of HEI or one or more of its subsidiaries for a particular period in the future.

ITEM 4. MINE SAFETY DISCLOSURE

HEI and Hawaiian Electric: Not applicable.

INFORMATION ABOUT OUR EXECUTIVE OFFICERS (HEI)

The executive officers of HEI are listed below. Mss. Kimura and Teranishi are officers of HEI subsidiaries rather than of HEI, but are deemed to be executive officers of HEI under SEC Rule 3b-7 promulgated under the 1934 Exchange Act. HEI executive officers serve from the date of their initial appointment and are reappointed annually by the HEI Board (or annually by the applicable HEI subsidiary board), and thereafter are appointed for one-year terms or until their successors have been duly appointed and qualified or until their earlier resignation or removal. HEI executive officers may also hold offices with HEI subsidiaries and affiliates in addition to their current positions listed below.

Name	Age	Business experience for last 5 years and prior positions with the Company
Scott W. H. Seu	57	<ul style="list-style-type: none"> HEI President and Chief Executive Officer since 1/22 HEI Director since 1/22 ASB Chair of the Board since 1/22 ASB Hawaii Director since 1/22 <ul style="list-style-type: none"> · Hawaiian Electric President and Chief Executive Officer, 2/20 to 12/21 · Hawaiian Electric Director, 2/20 to 12/21 · Hawaiian Electric Senior Vice President, Public Affairs, 1/17 to 2/20 · Hawaiian Electric Vice President, System Operation, 5/14 to 12/16 · Hawaiian Electric Vice President, Energy Resources and Operations, 1/13 to 4/14 · Hawaiian Electric Vice President, Energy Resources, 8/10 to 12/12 · Hawaiian Electric Manager, Resource Acquisition Department, 3/09 to 8/10 · Hawaiian Electric Manager, Energy Projects Department, 5/04 to 3/09 · Hawaiian Electric Manager, Customer Installations Department, 1/03 to 5/04 · Hawaiian Electric Manager, Environmental Department, 4/98 to 12/02 · Hawaiian Electric Principal Environmental Scientist, 1/97 to 4/98 · Hawaiian Electric Senior Environmental Scientist, 5/96 to 12/96 · Hawaiian Electric Environmental Scientist, 8/93 to 5/96
Paul K. Ito	52	<ul style="list-style-type: none"> HEI Executive Vice President, Chief Financial Officer and Treasurer, since 1/23 <ul style="list-style-type: none"> · HEI Vice President - Tax, Controller and Treasurer and Interim Chief Financial Officer, 7/22 to 12/22 · HEI Vice President - Tax, Controller and Treasurer, 11/19 to 7/22 · HEI Vice President - Tax and Controller, 2/18 to 11/19 <ul style="list-style-type: none"> · Prior to joining the Company in 2018: Alexander & Baldwin, Senior Vice President, Chief Financial Officer and Treasurer 2012 - 2018
Kurt K. Murao	53	<ul style="list-style-type: none"> HEI Executive Vice President, General Counsel, Chief Administrative Officer and Corporate Secretary since 1/20 <ul style="list-style-type: none"> · HEI Vice President - Legal & Administration and Corporate Secretary, 10/16 to 12/19 · HEI Associate General Counsel, 3/11 to 10/16
Shelee M. T. Kimura	49	<ul style="list-style-type: none"> Hawaiian Electric President and Chief Executive Officer since 1/22 <ul style="list-style-type: none"> · Hawaiian Electric Senior Vice President, Customer Service and Public Affairs, 3/21 to 12/21 · Hawaiian Electric Senior Vice President, Customer Service, 2/19 to 3/21 · Hawaiian Electric Senior Vice President, Business Development & Strategic Planning, 1/17 to 2/19 · Hawaiian Electric Vice President, Corporate Planning & Business Development, 5/14 to 1/17 · HEI Director, Investor Relations, Strategic Planning & Budget, 11/09 to 5/14 · HEI Manager, Corporate Finance and Investments, 8/04 to 11/09
Ann C. Teranishi	48	<ul style="list-style-type: none"> ASB President and Chief Executive Officer since 5/21 ASB Director since 5/21 <ul style="list-style-type: none"> · ASB Executive Vice President, Operations, 2/18 to 5/21 · ASB Senior Vice President, Director of Operations, 1/17 to 1/18 · ASB Senior Vice President, Customer Experience, 5/14 to 1/17 · ASB Senior Vice President, Director of Retail Credit Management, 4/13 to 4/14 · ASB Senior Vice President, Director of Consumer Credit Management, 4/11 to 4/13 · ASB Senior Vice President, Director of Regulatory Compliance, 9/07 to 3/11

Family relationships; executive arrangements

There are no family relationships between any HEI executive officer and any other HEI executive officer or any HEI director or director nominee. There are no arrangements or understandings between any HEI executive officer and any other person pursuant to which such executive officer was selected.

PART II

ITEM 5. MARKET FOR REGISTRANT’S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

HEI:

Certain of the information required by this item is disclosed in Note 14, “Regulatory restrictions on net assets” and “Equity compensation plan information” under “Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters” of this Form 10-K.

HEI’s common stock is traded on the New York Stock Exchange under the ticker symbol “HE.” The total number of holders of record of HEI common stock (i.e., registered holders) as of February 13, 2023, was 4,990. On February 10, 2023, the HEI Board of Directors approved a 1 cent increase in the quarterly dividend from \$0.35 per share to \$0.36 per share, starting with the dividend in the first quarter of 2023. HEI currently expects to maintain the dividend at its present level; however, the HEI Board of Directors evaluates the dividend quarterly and considers many factors in the evaluation including, but not limited to, the Company’s results of operations, the long-term prospects for the Company, and the current and expected future economic conditions.

Purchases of HEI common shares were made during the fourth quarter to satisfy the requirements of certain plans as follows:

ISSUER PURCHASES OF EQUITY SECURITIES

Period*	Total Number of Shares Purchased **	Average Price Paid per Share **	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Maximum Number (or Approximate Dollar Value) of Shares that May Yet Be Purchased Under the Plans or Programs
October 1 to 31, 2022	19,933	\$ 35.60	—	NA
November 1 to 30, 2022	12,776	38.70	—	NA
December 1 to 31, 2022	164,435	40.89	—	NA
Total	<u>197,144</u>		—	NA

NA Not applicable.

* Trades (total number of shares purchased) are reflected in the month in which the order is placed.

** The purchases were made to satisfy the requirements of the HEI Dividend Reinvestment and Stock Purchase Plan (DRIP), the Hawaiian Electric Industries Retirement Savings Plan (HEIRSP), and the ASB 401(k) Plan for shares purchased for cash or by the reinvestment of dividends by participants under those plans and none of the purchases were made under publicly announced repurchase plans or programs. Average prices per share are calculated exclusive of any commissions payable to the brokers making the purchases for the DRIP, the HEIRSP and the ASB 401(k) Plan. Of the “Total number of shares purchased,” 167,202 of the 197,144 shares were purchased for the DRIP; 23,976 of the 197,144 shares were purchased for the HEIRSP; and the remaining of the 5,966 shares were purchased for the ASB 401(k) Plan. The repurchased shares were issued for the accounts of the participants under registration statements registering the shares issued under these plans.

Hawaiian Electric:

Since a corporate restructuring on July 1, 1983, all the common stock of Hawaiian Electric has been held solely by its parent, HEI, and is not publicly traded. Accordingly, information required with respect to “Market information” and “holders” is not applicable to Hawaiian Electric.

The dividends declared and paid on Hawaiian Electric’s common stock for the quarters of 2022 and 2021 were as follows:

Quarters ended	2022	2021
(in thousands)		
March 31	\$ 31,475	\$ 27,925
June 30	31,475	27,925
September 30	31,475	27,925
December 31	31,475	27,925
Total	<u>\$ 125,900</u>	<u>\$ 111,700</u>

Also, see “Liquidity and capital resources” in HEI’s MD&A.

See the discussion of regulatory and other restrictions on dividends or other distributions in Note 14 of the Consolidated Financial Statements.

ITEM 6. [RESERVED]

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

HEI and Hawaiian Electric (in the case of Hawaiian Electric, only the information related to Hawaiian Electric and its subsidiaries):

The following discussion should be read in conjunction with the Consolidated Financial Statements and the related Notes that appear in Item 8 of this report. For information on factors that may cause HEI's and Hawaiian Electric's actual future results to differ from those currently contemplated by the relevant forward-looking statements, see "Cautionary Note Regarding Forward-Looking Statements" at the front of this report and "Risk Factors" in Item 1A. The general discussion of HEI's consolidated results should be read in conjunction with the Electric utility and Bank segment discussions that follow.

HEI Consolidated

Executive overview and strategy. HEI is a holding company with operations primarily focused on Hawaii's electric utility and banking sectors. In 2017, HEI formed Pacific Current to make investments in non-regulated renewable energy and sustainable infrastructure projects. HEI has three reportable segments—Electric utility, Bank, and Other.

Electric utility. Hawaiian Electric, Hawaii Electric Light and Maui Electric (Utilities) are regulated operating electric public utilities engaged in the production, purchase, transmission, distribution and sale of electricity on the islands of Oahu; Hawaii; and Maui, Lanai and Molokai, respectively.

Bank. ASB is a full-service community bank serving both consumer and commercial customers in the State of Hawaii and has 38 branches on the islands of Oahu (27), Maui (5), Hawaii (3), Kauai (2), and Molokai (1).

Other. The Other segment comprises the results of Pacific Current, which invests in non-regulated clean energy and sustainable infrastructure in the State of Hawaii to help reach the state's sustainability goals, and HEI's corporate-level operating, general and administrative expenses.

A major focus of HEI's financial strategy is to grow core earnings/profitability at the Utilities, Bank and Pacific Current in a controlled risk manner and optimize operating, capital and tax efficiencies in order to support its dividend and deliver shareholder value. Together, HEI's unique combination of power, sustainable investments, and financial services companies provides the Company with a strong balance sheet and the financial resources to invest in the strategic growth of its subsidiaries, while providing an attractive dividend for investors.

Recent developments. New 7-day average daily COVID-19 case counts in Hawaii have declined to low levels following peaks in the daily average case counts earlier in the year. The 7-day average daily case count remains relatively stable at 84 as of February 13, 2023. Hospitalizations have remained at low levels with approximately 79% of the state's population vaccinated with at least one dose and approximately 27% of the state's population received a booster in the last 12 months as of February 13, 2023.

In March 2022, the state ended the Safe Travels program for domestic U.S. travelers and the indoor mask mandate. On June 12, 2022, the U.S. Centers for Disease Control and Prevention ended the requirement that required air passengers traveling from a foreign country to the United States to show a negative COVID-19 test before boarding their flight. On October 11, 2022, Japan eliminated the daily entry cap into Japan, which had made travel to and from Hawaii more difficult. The loosening of these COVID-19 restrictions has led to an improvement in economic conditions in Hawaii over the past year. However, new variants could present potential risks to the ongoing economic recovery. At this time, the Company does not expect that COVID restrictions will be reinstated, but will continue to monitor the situation.

In 2022, total tourism passenger counts increased 34% compared to 2021 as increased vaccination rates allowed for the elimination of COVID-19 restrictions in many of Hawaii's tourism markets. Domestic tourism has recovered significantly and exceeded pre-pandemic levels, with 9.6 million domestic passengers traveling to Hawaii in 2022 compared to 8.7 million passengers in 2019. However, international passenger counts remain below pre-pandemic levels with 0.8 million international passengers traveling to Hawaii in 2022 compared with 2.8 million passengers in 2019. However, with the recent lifting of travel restrictions in Japan, Hawaii's largest international tourism market, international tourism counts are expected to continue to improve in 2023.

With the improvement in tourism and economic activity in 2022, the Utilities' kWh sales in 2022 have increased 1.1% above 2021 levels, but were 4.4% below pre-pandemic levels. While the level of kWh sales does not affect Utility revenues due to decoupling, it may increase or decrease the price per kWh paid by customers. See "Decoupling" in Note 3 of the Consolidated Financial Statements for a discussion of the decoupling mechanism.

At the Bank, an improving Hawaii economy helped fuel loan growth and has supported stable credit trends. Loan growth in 2022 was broad based, driven by the improvement in Hawaii's economy, and required additional provision for credit losses.

However, the additional provision was partially offset by the release of credit loss reserves as a result of improved credit quality, resulting in a \$2.0 million provision for credit losses in 2022, compared to a \$25.8 million negative provision for credit losses in 2021. The higher interest rate environment and higher earning asset balances benefited net interest income, which increased \$15.4 million to \$252.6 million in 2022 compared to net interest income of \$237.2 million in 2021. The increase in net interest income was partially offset by higher other borrowings and higher cost of funds. Additional federal funds rate increases may not further increase the Bank's net interest margin if core deposit growth ceases and funding is replaced with other borrowings. The higher interest rate environment also reduced the fair value of the Bank's investment portfolio, which was recorded as an other comprehensive loss (see "Transfer of available-for-sale securities to held-to-maturity" in Note 4 of the Consolidated Financial Statements).

In 2022, inflation increased rapidly as reflected in the U.S. Consumer Price Index (CPI). While inflationary pressures, as measured by CPI, appear to have peaked in June 2022, inflation remains elevated at 6.4% as of February 15, 2023. In addition, fuel costs have risen rapidly and remain at elevated levels. Fuel costs for 2022 were up 76.7% compared to 2021. Short-term interest rates have also increased significantly following the Federal Reserve's ongoing rate increases to the federal funds target rate. These inflationary pressures are expected to continue into 2023 and have led to higher costs for O&M and capital projects and higher interest expense at the Utility and HEI, as well as higher compensation and benefits cost at the bank.

For further discussion of the impacts of the COVID-19 pandemic, fuel prices and other macro-economic factors impacting the Utilities and the Bank, see "Recent Developments" in the Electric Utility and Bank sections below. There has been no material impact on the "Other" segment and Pacific Current as a result of the COVID-19 pandemic as the primary businesses of Pacific Current are supported by PPAs that provide for contractual cash flows with credit-worthy counterparties.

Environmental, Social & Governance. At HEI, environmental, social and governance (ESG) principles and sustainability have long been embedded as applicable within the Company's activities and are integral to the Company's efforts to create value for all of its stakeholders. With all of its operations isolated in the middle of the Pacific Ocean, the Company's long-term health and financial performance is inextricably linked with the strength of the Hawaii economy, its communities, and the environment. That is why long-term shareholder and broader stakeholder value are both served by the Company's efforts to serve as a catalyst for a better Hawaii.

In 2021, the Company identified a number of priorities that reflect the essential connection between the health of Hawaii's environment, economy and communities and HEI's long-term success. The key ESG priorities the Company is working to advance include:

- decarbonizing the Company's operations and the broader Hawaii economy;
- promoting Hawaii's economic health and improving affordability for all residents;
- ensuring reliability and resilience as the Company navigates the clean energy transition and adapts to a changing climate;
- advancing digitalization of the Company's operations to better serve customers and increase efficiency while protecting against cyber-security challenges;
- promoting diversity, equity and inclusion both within the Company and in the ways the Company interacts with and impacts external stakeholders;
- increasing employee engagement; and
- identifying and integrating climate-related risks and opportunities throughout the Company's planning and decision-making.

The Company has also focused on ensuring that ESG considerations are appropriately integrated into governance structures, strategies and risk management. This includes:

- Integration of Board oversight of important ESG matters into its existing governance structures and processes. This includes full Board review of ESG-related strategies, Audit & Risk Committee oversight of ESG risks, Compensation & Human Capital Management Committee responsibility for ESG-related compensation matters and human capital management and Nominating and Corporate Governance Committee responsibility for ensuring an appropriate board governance framework is in place with respect to ESG.
- Robust ESG expertise among board members, including directors with direct experience in renewable energy, climate change policy and strategy and environmental management.
- Expanded ESG goals as part of HEI and Utility executive incentive compensation.
- ESG considerations explicitly woven into strategic planning efforts and enterprise risk management processes.

The Company is committed to transparency and providing information to allow customers, community leaders, investors and other stakeholders to understand how the Company’s strategies and operations advance ESG objectives and contribute to long-term stakeholder value creation.

The Company issued its first ESG report in September 2020. The report encompassed ESG policies, principles and results reported during 2019 across the Company’s two primary operating subsidiaries, Hawaiian Electric and ASB, and was aligned with Sustainability Accounting Standards Board (SASB) guidance—using the electric utilities standard for Hawaiian Electric, and the commercial banks, commercial finance, and mortgage finance standards for ASB. In April 2021, the Company issued its second ESG report, including SASB disclosures for Hawaiian Electric and ASB and disclosures regarding risks and opportunities related to climate change, as well as associated risk management and governance processes, based on recommendations from the Task Force on Climate-related Financial Disclosures. It also outlined key impacts for the Company under two climate scenarios, including a scenario targeted to limit global temperature rise to 2 degrees Celsius or lower. In April 2022, the Company issued its third and most comprehensive ESG report. The report includes HEI's first enterprise-wide GHG emissions inventory, providing the basis to further guide the company's ESG strategies and enable greater transparency around its progress on climate issues. Net enterprise-wide GHG emissions in measured categories have decreased over time, driven largely by reductions in the utility's generation-related emissions. The Company’s ESG reports can be found at www.hei.com/esg.

HEI consolidated results of operations.

(dollars in millions, except per share amounts)	2022	% change	2021	% change	2020
Revenues	\$ 3,742	31	\$ 2,850	10	\$ 2,580
Operating income	381	(1)	386	24	311
Net income for common stock	241	(2)	246	24	198
Net income (loss) by segment:					
Electric utility	\$ 189	6	\$ 178	5	\$ 169
Bank	80	(21)	101	76	58
Other	(28)	15	(33)	(12)	(29)
Net income for common stock	\$ 241	(2)	\$ 246	24	\$ 198
Basic earnings per share	\$ 2.20	(2)	\$ 2.25	24	\$ 1.81
Diluted earnings per share	\$ 2.20	(2)	\$ 2.25	24	\$ 1.81
Dividends per share	\$ 1.40	3	\$ 1.36	3	\$ 1.32
Weighted-average number of common shares outstanding (millions)	109.4	—	109.3	—	109.1
Dividend payout ratio	64%		60%		73%

In 2022, net income for HEI common stock decreased (2)% to \$241 million (\$2.20 diluted earnings per share), compared to \$246 million (\$2.25 diluted earnings per share) in 2021, due to \$21 million lower net income at ASB, partly offset by \$11 million higher net income at the Utilities and \$5 million lower net loss at the “other” segment. The decrease in ASB’s 2022 net income compared to 2021 was primarily due to an increase in provision for credit losses in 2022 as compared to 2021 net income, which benefited from a negative provision of \$25.8 million as result of improved credit quality as the local economy improved significantly from 2020. The increase in the Utilities’ 2022 net income compared to 2021 was principally due to higher ARA revenues, which included the customer dividend delivered to customers, partially offset by higher operating expenses. See “Electric utility,” “Bank,” and “HEI Consolidated—Other segment” sections below for additional information on year-to-year fluctuations.

The Company’s effective tax rate (combined federal and state income tax rates) was comparable at 20% in 2022 and 2021.

For a discussion of 2020 results, please refer to the “HEI consolidated results of operations” section in Item 7, “Management Discussion and Analysis of Financial Condition and Results of Operations—HEI Consolidated,” in the Company’s 2021 Form 10-K.

Other segment. The “other” business segment (loss)/income includes results of the stand-alone corporate operations of HEI, ASB Hawaii, and Pacific Current.

(in millions)	2022	2021	Increase (decrease)	Primary reason(s)
Revenue ¹	\$ 12	\$ 4	\$ 8	Increase in other sales at Pacific Current subsidiaries.
Operating loss ¹	(20)	(22)	2	Lower HEI corporate operating loss (\$22 million in 2022 vs. \$25 million in 2021) primarily due to a decrease in incentive compensation and consulting expenses. Lower Pacific Current operating income (\$2 million in 2022 vs \$3 million in 2021) primarily due to higher expenses.
Interest expense & other	(27)	(22)	(5)	Interest expense & other in 2022 was higher than in 2021 primarily due to higher interest expense at corporate (higher balances and rate) and Pacific Current (higher balances).
Gain on sales of equity-method investment	8	—	8	Gain on sale of an equity-method investment at Pacific Current.
Income tax benefit	11	11	—	Lower pretax loss, partly offset by higher deductible executive compensation in 2022.
Net loss	<u>\$ (28)</u>	<u>\$ (33)</u>	<u>\$ 5</u>	

¹ Hamakua Energy’s sales to Hawaii Electric Light (a regulated affiliate) are eliminated in consolidation.

Economic conditions.

Note: The statistical data in this section is from public third-party sources that management believes to be reliable (e.g., Department of Business, Economic Development and Tourism (DBEDT), University of Hawaii Economic Research Organization (UHERO), U.S. Bureau of Labor Statistics, Department of Labor and Industrial Relations (DLIR), Hawaii Tourism Authority (HTA), Honolulu Board of REALTORS® and national and local news media).

By the end of December 2022, the national and state COVID-19 restrictions were lifted and lower case counts across most states led to stronger demand for travel to Hawaii in the fourth quarter of 2022. The average daily passenger count was 19.4% higher than the comparable period in the prior year, but remained 7.2% below 2019. The recovery in total passenger counts from the low levels in 2020 thus far has been driven by domestic travelers, with international travelers remaining at low levels, but gradually increasing. In December 2022, domestic passenger counts were up 3.3% compared to 2019 pre-COVID-19 levels, while international passenger counts were down 51% compared to 2019 pre-COVID-19 levels. On October 11, 2022, Japan eliminated the daily entry cap into Japan, which had made travel to and from Hawaii more difficult. Since then, international visitor arrivals have increased.

Hawaii’s seasonally adjusted unemployment rate in December 2022 was 3.2%, which was lower compared to the December 2021 rate of 4.3%. The national unemployment rate in December 2022 was 3.5% compared to 3.9% in December 2021. Hawaii’s unemployment rate is expected to continue to improve now that restrictions have been lifted and non-farm jobs are expected to increase this year.

Hawaii real estate activity through December 2022, as indicated by Oahu’s home resale market, resulted in an increase in the median sales price of 3.6% for condominiums and a decrease of 0.05% for single-family homes compared to the same period in 2021, with the December median single-family home price of \$1,049,500, below the record \$1,153,500 set in May. The number of closed sales decreased 11.8% for condominiums and 23.2% for single-family residential homes through the fourth quarter of 2022 compared to 2021.

Hawaii’s petroleum product prices reflect supply and demand in the Asia-Pacific region and the price of crude oil in international markets. The price of crude oil increased significantly from January 2022 through July 2022, but started to decline in August 2022 through November 2022.

At its February 1, 2023 meeting, the Federal Open Market Committee (FOMC) decided to raise the federal funds rate target range to 4.50%-4.75% and anticipates ongoing increases as appropriate. With inflation being above the longer-run goal of 2 percent, the FOMC raised the federal funds rate 25 basis points and intends to further reduce the Federal Reserve’s holdings of Treasury securities, agency debt, and agency mortgage-backed securities.

The most recent forecast by UHERO, issued on December 16, 2022, forecasts full year 2022 real GDP growth of 2.0%, an increase in total visitor arrivals of 36.9%, a decrease in real personal income of 6.4%, and an unemployment rate of 3.8%. This forecast anticipates a potential slowdown in recovery due to rising inflation, interest rates, and supply chain issues despite the

return of Japanese visitors. However, in the event of a U.S. recession, UHERO believes that Hawaii is unlikely to suffer as severely compared to the U.S. mainland due to anticipated visitor arrivals and a surge in public sector construction. Downward risks are forecasted to include ongoing global economic fallout from Russia's invasion of Ukraine, possibility of a global recession, and uncertainties of international and domestic visitor arrivals due to higher travel costs. If economic conditions worsen from current levels or remain depressed for an extended period of time, it could have a material unfavorable impact on the Company's financial position or results of operations.

The Company expects economic conditions in Hawaii to remain relatively stable going forward, supported by the expected recovery in the international tourism market and increased construction spending in the public sector; however, it is difficult to predict the future path of the pandemic. If economic conditions worsen from current levels or remain depressed for an extended period of time, it could have a material unfavorable impact on the Company's financial position or results of operations.

See also "Recent Developments" in the "Electric utility" and "Bank" sections below for further discussion of the economic impact caused by the pandemic.

Liquidity and capital resources. As of December 31, 2022, HEI and Hawaiian Electric had approximately \$50 million and \$88 million of commercial paper outstanding, respectively, and Hawaiian Electric had \$39 million of cash and cash equivalents.

As of December 31, 2022, there was no balance on HEI's revolving credit facility and the available committed capacity under the revolving credit facility was \$175 million (see Note 5 of the Consolidated Financial Statements). As of December 31, 2022, there was no balance on Hawaiian Electric's revolving credit facility and the available committed capacity under the revolving credit facility was \$200 million. As of December 31, 2022, ASB's unused FHLB borrowing capacity was approximately \$1.6 billion and ASB had unpledged investment securities of \$1.6 billion that were available to be used as collateral for additional borrowing capacity.

As of December 31, 2022, the total amount of available borrowing capacity (net of commercial paper outstanding) under the Company's committed lines of credit was approximately \$237 million, which was a decrease of approximately \$84 million compared to December 31, 2021.

On September 29, 2021, HEI executed a \$125 million private placement, utilizing a delayed draw feature with two tranches. The first tranche of \$75 million was drawn on December 29, 2021 and the proceeds were primarily used to invest in the Utilities' equity to support its capital expenditure program and maintain the Utilities' equity capitalization ratio at approximately 58%. The second and final tranche of \$50 million was drawn on October 26, 2022, to refinance a portion of \$150 million of debt that matured on November 20, 2022.

On September 29, 2022, HEI executed a private placement under which HEI has authorized the issue and sale of \$110 million of unsecured senior notes. The proceeds, totaling \$110 million, were drawn on November 1, 2022 to refinance the remaining portion of the \$150 million of debt that matured on November 20, 2022. See Note 6 of the Consolidated Financial Statements for additional information.

On October 20, 2022, HEI entered into a term loan facility in the aggregate principal amount of \$100 million. The term loan facility allows HEI to draw down proceeds on a delayed basis through March 31, 2023, at which time the term loan commitment expires. On December 28, 2022, HEI drew \$35 million on the term loan. Any borrowings under the facility mature on November 30, 2023. Borrowings under the facility bear interest at Term SOFR, as defined in the agreement, plus an applicable margin and a SOFR spread adjustment. See Note 5 of the Consolidated Financial Statements for additional information.

The Company believes that its cash and cash equivalents, expected operating cash flow from subsidiaries, existing credit facilities, and access to the capital markets will be sufficient to meet the Company's cash requirements over the next twelve months and beyond based on its current business plans. However, the Company expects that its liquidity will continue to be moderately impacted at the Utilities due to higher working capital requirements resulting from lingering COVID-19 impacts to the local economy and elevated fuel prices. For the Utilities, the elevated fuel prices have increased the cost of carrying fuel inventory and have also resulted in higher customer accounts receivable balances as fuel is consumed and billed to customers. The higher accounts receivable balance, which has increased by \$101 million since December 31, 2021, has led to higher bad debt expense and may result in higher write-offs in the future. As of December 31, 2022, approximately \$50 million of the Utilities' accounts receivables were over 30 days past due. Of the over 30 days past due amounts, approximately 17% were on payment plans. In addition to the cash flow impact from delayed collection of accounts receivable, lower kWh sales relative to the level of kWh sales approved in the last rate case generally result in delayed timing of cash flows, resulting in higher working capital requirements (see "Recent Developments" in the Electric utility section below). At this time, the delay in customer cash collections has not significantly affected the Company's liquidity. The Company is prepared to address, if needed, the potential financing requirement related to the delayed timing of customer collections.

At ASB, liquidity remains at satisfactory levels. ASB's cash and cash equivalents was \$156 million as of December 31,

2022, compared to \$251 million as of December 31, 2021. ASB remains well above the “well capitalized” level under the FDIC Improvement Act prompt correction action capital category, and while the economic outlook has improved and is expected to continue to improve, there are emerging risks from inflation and the tightening of monetary policy that increase the risk of a recession, as well as ongoing COVID-19 risks, such as new variants, all of which could create increased uncertainty regarding the impact on loan performance and the allowance for credit losses (see “Recent Developments” in the Bank section below).

If further liquidity is deemed necessary, which is not contemplated at this time, the Utilities could also reduce the pace of capital spending related to non-essential projects. Additionally, the Company has the option to issue new shares rather than purchase currently outstanding shares on the open market to satisfy share issuances under its Dividend Reinvestment and Stock Purchase Plan program. The estimated amount of equity capital that could be raised by issuing new shares, rather than utilizing open market purchases, is estimated to be approximately \$30 million on an annual basis, based on historical demand, but such future amount is dependent on a number of factors, including, without limitation, future share prices, number of shares and participants in the DRIP program, and the amount of new investment in HEI’s stock by DRIP participants.

HEI material cash requirements. HEI’s material cash requirements include: Utility capital expenditures, labor and benefit costs, O&M expenses, fuel and purchase power costs, and debt and interest payments; investments in loans and investment securities at the Bank; labor and benefits costs, shareholder dividends and debt and interest payments at HEI; and HEI equity contributions to support Pacific Current’s sustainable infrastructure investments. Forecasted HEI consolidated “net cash used in investing activities” (excluding “investing” cash flows from ASB) for 2023 through 2027 consists primarily of the net capital expenditures of the Utilities principally related to maintaining and modernizing the grid to allow for the integration of more renewable energy, improved customer reliability, greater system efficiency and enhanced resilience. The Utilities’ capital expenditures are approximately \$2.2 billion over the next five years and are expected to be funded primarily through a combination of retained earnings and proceeds from debt issuance, and if required, contributions of equity from HEI to maintain the Utilities’ equity capitalization at approximately 58% (see also discussion regarding other material cash requirements under “Financial Condition–Liquidity and capital resources,” contained in the “Electric utility” and “Bank” sections below). In addition to the funds required for the Utilities’ construction programs and debt maturities, with respect to HEI, over the next five years, approximately \$50 million will be required in 2023 and \$50 million in 2025 to repay maturing long-term debt. Debt maturities are expected to be repaid with the proceeds from the issuance of commercial paper, bank borrowings, other medium- or long-term debt, issuance of common stock and/or dividends from subsidiaries. Additional debt and/or equity financing may be utilized to invest in the Utilities, Bank or Pacific Current; to pay down commercial paper or other short-term borrowings; to pay interest costs; or to fund unanticipated expenditures not included in the 2023 through 2027 forecast, such as increases in the costs of, or an acceleration of, the construction of capital projects of the Utilities or unanticipated utility capital expenditures. In addition, existing debt may be refinanced prior to maturity with additional debt or equity financing (or both).

Selected short-term and long-term contractual obligations and commitments. Information about payments under the specified contractual obligations and commercial commitments of HEI and its subsidiaries was as follows:

December 31, 2022

(in millions)	Less than 1 year	1-3 years	3-5 years	More than 5 years	Total
Contractual obligations					
Investment in qualifying affordable housing projects	\$ —	\$ 60	\$ 9	\$ 1	\$ 70
Time certificates	496	94	19	3	612
Short-term borrowings	173	—	—	—	173
Other bank borrowings	695	—	—	—	695
Long-term debt	172	122	248	1,858	2,400
Interest on CDs, other bank borrowings, short-term loan and long-term debt	100	179	162	780	1,221
Operating and finance leases					
PPAs classified as leases	11	22	22	104	159
Other leases	23	37	24	39	123
Service bureau contract, maintenance agreements and other	22	29	13	1	65
Hawaiian Electric open purchase order obligations ¹	178	65	12	—	255
Hawaiian Electric fuel oil purchase obligations (estimate based on fuel oil price at December 31)	5	9	5	—	19
Hawaiian Electric power purchase—minimum fixed capacity charges not classified as leases	80	160	160	521	921
Liabilities for uncertain tax positions	—	8	13	—	21
Total (estimated)	\$ 1,955	\$ 785	\$ 687	\$ 3,307	\$ 6,734

¹ Includes contractual obligations and commitments for capital expenditures and expense amounts.

The table above does not include other categories of obligations and commitments, such as deferred taxes, certain trade payables, amounts that will become payable in future periods under collective bargaining and other employment agreements and employee benefit plans, and potential refunds of amounts collected from ratepayers (e.g., under the earnings sharing mechanism). As of December 31, 2022, the fair value of the assets held in trusts to satisfy the obligations of the Company's retirement benefit plans did not exceed the retirement benefit plans' benefit obligation. Minimum funding requirements for retirement benefit plans have not been included in the tables above; however, see Note 10 of the Consolidated Financial Statements for 2023 estimated contributions.

See Note 3 of the Consolidated Financial Statements for a discussion of the Utilities' commitments. See Note 4 of the Consolidated Financial Statements for a further discussion of ASB's commitments.

Operating activities provided net cash of \$454 million in 2022 and \$376 million in 2021. Investing activities used net cash of \$1,129 million in 2022 and \$1,180 million in 2021. In 2022, net cash used in investing activities was primarily due to net increase in loans receivable, purchases of available-for-sale investment securities, capital expenditures, purchases of loans held for investment and net purchases of stock from Federal Home Loan Bank, partly offset by receipt of repayments from available-for-sale and held-to-maturity investment securities. In 2021, net cash used in investing activities was primarily due to purchases of available-for-sale and held-to-maturity investment securities, capital expenditures, and purchases of stock from Federal Home Loan Bank, partly offset by receipt of repayments from available-for-sale and held-to-maturity investment securities, proceeds from sale of available-for-sale investment securities, net decrease in loans held for investment, proceeds from sale of residential loans and redemption of stock from Federal Home Loan Bank.

Financing activities provided net cash of \$568 million in 2022 and \$756 million in 2021. In 2022, net cash provided by financing activities included net increases in other short-term borrowings and proceeds from issuance of short-term and long-term debt and net increases in short-term borrowings, partly offset by repayment of long-term debt and payment of common and preferred stock dividends. In 2021, net cash provided by financing activities included net increases in deposits and proceeds from issuance of long-term debt, partly offset by payment of common and preferred stock dividends, repayment of long-term debt, short-term debt and net decreases in short-term borrowings.

For a discussion of 2020 operating, investing and financing activities, please refer to the "Liquidity and capital resources" section in Item 7, "Management Discussion and Analysis of Financial Condition and Results of Operations—HEI Consolidated," in the Company's 2021 Form 10-K.

Other than capital contributions from their parent company, intercompany services (and related intercompany payables and receivables), Hawaiian Electric's periodic short-term borrowings from HEI (and related interest) and the payment of dividends

to HEI, the electric utility and bank segments are largely autonomous in their operating, investing and financing activities. (See the electric utility and bank segments' discussions of their cash flows in their respective "Liquidity and capital resources" sections below.) During 2022, Hawaiian Electric and ASB (through ASB Hawaii) paid cash dividends to HEI of \$126 million and \$42 million, respectively.

A portion of the net assets of Hawaiian Electric and ASB is not available for transfer to HEI in the form of dividends, loans or advances without regulatory approval. In the absence of an unexpected material adverse change in the financial condition of the electric utilities or ASB, such restrictions are not expected to significantly affect the operations of HEI, its ability to pay dividends on its common stock or its ability to meet its debt or other cash obligations. See Note 14 of the Consolidated Financial Statements.

The Company believes that its ability to generate cash, both internally from electric utility and banking operations and externally from issuances of equity and debt securities, as well as bank borrowings, is adequate to maintain sufficient liquidity to fund its contractual obligations and commercial commitments, its forecasted capital expenditures and investments, its expected retirement benefit plan contributions and other short-term and long-term material cash requirements. However, the economic impact of higher fuel prices, inflation, higher interest rates, tightening of monetary policy and the ongoing COVID-19 pandemic, create significant uncertainty, and the Company cannot predict the future effects that these factors will have on the global, national or local economy, including the impact on the Company's cost of capital and its ability to access additional capital, or the future impacts on the Company's financial position, results of operations, and cash flows. See Item 1A. "Risk Factors" in Part I for further discussion of risks and uncertainties.

The consolidated capital structure of HEI (excluding deposit liabilities and other bank borrowings) was as follows:

December 31	2022		2021	
(dollars in millions)				
Short-term borrowings, net—other than bank	\$ 173	3%	\$ 54	1%
Long-term debt, net—other than bank	2,385	50	2,322	48
Preferred stock of subsidiaries	34	1	34	1
Common stock equity	2,202	46	2,391	50
	\$ 4,794	100%	\$ 4,801	100%

HEI's commercial paper borrowings and line of credit facility were as follows:

(in millions)	Year ended December 31, 2022		
	Average balance	End-of-period balance	December 31, 2021
Commercial paper	\$ 50	\$ 50	\$ 54
Line of credit draws on revolving credit facility	—	—	—

Note: This table does not include Hawaiian Electric's separate commercial paper issuances and line of credit facilities and draws, which are disclosed below under "Electric utility—Liquidity and capital resources" below. The maximum amount of HEI's short-term commercial paper borrowings in 2022 was \$80 million. As of December 31, 2022, available committed capacity under HEI's line of credit facility was \$175 million.

HEI utilizes short-term debt, typically commercial paper, to support normal operations, to refinance commercial paper, to retire long-term debt, to pay dividends and for other temporary requirements, including short-term financing needs of its subsidiaries. HEI also periodically makes short-term loans to Hawaiian Electric to meet Hawaiian Electric's cash requirements, including the funding of loans by Hawaiian Electric to Hawaii Electric Light and Maui Electric, but no such short-term loans to Hawaiian Electric were outstanding as of December 31, 2022. HEI periodically utilizes long-term debt, historically unsecured indebtedness, to fund investments in and loans to its subsidiaries to support their capital improvement or other requirements, to repay long-term and short-term indebtedness and for other corporate purposes. As of December 31, 2022, HEI's debt maturities in 2023 include \$50 million of long-term debt that matures in March 2023. See Notes 5 and 6 of the Consolidated Financial Statements for a brief description of the Company's loans.

The rating of HEI’s commercial paper and debt securities could significantly impact the ability of HEI to sell its commercial paper and issue debt securities and/or the cost of such debt. As of February 13, 2023, the Fitch, Moody’s and S&P ratings of HEI were as follows:

	Fitch	Moody’s	S&P
Long-term issuer default, long-term and issuer credit, respectively	BBB	WR*	BBB-
Commercial paper	F3	P-2	A-3
Outlook	Positive	Stable	Stable

* Moody’s long-term debt rating was withdrawn because HEI does not currently have any outstanding, publicly traded debt. Moody’s continues to rate Hawaiian Electric’s long-term debt. See ‘Electric utility–Liquidity and capital resources’ below.

Note: The above ratings reflect only the view, at the time the ratings are issued or affirmed, of the applicable rating agency, from whom an explanation of the significance of such ratings may be obtained. Such ratings are not recommendations to buy, sell or hold any securities; such ratings may be subject to revision or withdrawal at any time by the rating agencies; and each rating should be evaluated independently of any other rating.

There were no new issuances of common stock through the HEI DRIP, HEIRSP or the ASB 401(k) Plan in 2022, 2021 or 2020 and HEI satisfied the share purchase requirements of the DRIP, HEIRSP and ASB 401(k) Plan through open market purchases of its common stock.

Off-balance sheet arrangements. Although the Company and the Utilities have certain off-balance sheet arrangements, management has determined that it has no off-balance sheet arrangements that either have, or are reasonably likely to have, a current or future effect on the Company’s and the Utilities’ financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources that are material to investors, including the following types of off-balance sheet arrangements:

1. obligations under guarantee contracts,
2. retained or contingent interests in assets transferred to an unconsolidated entity or similar arrangements that serve as credit, liquidity or market risk support to that entity for such assets,
3. obligations under derivative instruments, and
4. obligations under a material variable interest held by the Company or the Utilities in an unconsolidated entity that provides financing, liquidity, market risk or credit risk support to the Company or the Utilities, or engages in leasing, hedging or research and development services with the Company or the Utilities.

Material estimates and critical accounting policies. In preparing financial statements, management is required to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities and the reported amounts of revenues and expenses. Actual results could differ significantly from those estimates.

Material estimates that are particularly susceptible to significant change include the amounts reported for pension and other postretirement benefit obligations; contingencies and litigation; income taxes; regulatory assets and liabilities; allowance for credit losses; fair value; and asset retirement obligations (AROs). Management considers an accounting estimate to be material if it requires assumptions to be made that were uncertain at the time the estimate was made and changes in the assumptions selected could have a material impact on the estimate and on the Company’s results of operations or financial condition.

In accordance with SEC Release No. 33-8040, “Cautionary Advice Regarding Disclosure About Critical Accounting Policies,” management has identified the accounting policies it believes to be the most critical to the Company’s financial statements—that is, management believes that the policies discussed below are both the most important to the portrayal of the Company’s results of operations and financial condition, and currently require management’s most difficult, subjective or complex judgments. The policies affecting both of the Company’s two principal segments are discussed below and the policies affecting just one segment are discussed in the respective segment’s section of “Material estimates and critical accounting policies.” Management has reviewed the material estimates and critical accounting policies with the HEI Audit & Risk Committee and, as applicable, the Hawaiian Electric Audit & Risk Committee.

For additional discussion of the Company’s accounting policies, see Note 1 of the Consolidated Financial Statements and for additional discussion of material estimates and critical accounting policies, see the electric utility and bank segment discussions below under the same heading.

Pension and other postretirement benefits obligations. The Company’s benefit obligations and reported costs of providing retirement benefits are dependent upon numerous factors resulting from actual plan experience and assumptions about future experience. For example, retirement benefits costs are impacted by actual employee demographics (including age and compensation levels), the level of contributions to the plans, earnings and realized and unrealized gains and losses on plan assets, and changes made to the provisions of the plans. Costs may also be significantly affected by changes in key actuarial assumptions, including the expected return on plan assets, the discount rate and mortality. The Company’s accounting for

retirement benefits under the plans in which the employees of the Utilities participate is also adjusted to account for the impact of decisions by the PUC. Changes in obligations associated with the factors noted above may not be immediately recognized as costs on the income statement, but generally are recognized in future years over the remaining average service period of plan participants.

The discount rate used to calculate the Company's benefit obligations is a significant assumption that affects the Company's benefit obligations. As of December 31, 2022, the discount rates for HEI and the Utilities' pension and other benefits plans were 5.67% and 5.66%, respectively. Based on various assumptions in Note 10 of the Consolidated Financial Statements, sensitivities of the projected benefit obligation (PBO) and accumulated postretirement benefit obligation (APBO) as of December 31, 2022, associated with a change in the discount rate, were as follows and constitute "forward-looking statements":

Actuarial assumption	Change in assumption in basis points	Impact on HEI Consolidated PBO or APBO	Impact on Consolidated Hawaiian Electric PBO or APBO
(dollars in millions)			
Pension benefits			
Discount rate	+/-50	\$(116)/\$130	\$(109)/\$122
Other benefits			
Discount rate	+/-50	\$(8)/\$9	\$(8)/\$9

Also, see Notes 1 and 10 of the Consolidated Financial Statements.

Contingencies and litigation. The Company is subject to proceedings (including PUC proceedings), lawsuits and other claims. Management assesses the likelihood of any adverse judgments in or outcomes of these matters as well as potential ranges of probable losses, including costs of investigation. A determination of the amount of reserves required, if any, for these contingencies is based on an analysis of each individual case or proceeding often with the assistance of outside counsel. The required reserves may change in the future due to new developments in each matter or changes in approach in dealing with these matters, such as a change in settlement strategy.

In general, environmental contamination treatment costs are charged to expense, unless it is probable that the PUC would allow such costs to be recovered through future rates, in which case such costs would be capitalized as regulatory assets. Also, environmental costs are capitalized if the costs extend the life, increase the capacity, or improve the safety or efficiency of property; the costs mitigate or prevent future environmental contamination; or the costs are incurred in preparing the property for sale.

See Notes 1, 3 and 4 of the Consolidated Financial Statements.

Income taxes. Deferred income tax assets and liabilities are established for the temporary differences between the financial reporting bases and the tax bases of the Company's assets and liabilities using tax rates expected to be in effect when such deferred tax assets or liabilities are realized or settled. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences become deductible.

Management evaluates its potential exposures from tax positions taken that have or could be challenged by taxing authorities. These potential exposures result because taxing authorities may take positions that differ from those taken by management in the interpretation and application of statutes, regulations and rules. Management considers the possibility of alternative outcomes based upon past experience, previous actions by taxing authorities (e.g., actions taken in other jurisdictions) and advice from its tax advisors. Management believes that the Company's provision for tax contingencies is reasonable. However, the ultimate resolution of tax treatments disputed by governmental authorities may adversely affect the Company's current and deferred income tax amounts.

See Note 12 of the Consolidated Financial Statements.

Following are discussions of the electric utility and bank segments. Additional segment information is shown in Note 2 of the Consolidated Financial Statements. The discussion concerning Hawaiian Electric should be read in conjunction with its consolidated financial statements and accompanying notes.

Electric utility

Executive overview and strategy. The Utilities provide electricity on all the principal islands in the state, other than Kauai, to approximately 95% of the state's population, and operate five separate grids. The Utilities' mission is to provide innovative energy leadership for Hawaii, to meet the needs and expectations of customers and communities, and to empower them with affordable, reliable and clean energy. The goal is to create a modern, resilient, flexible, and dynamic electric grid that enables an optimal mix of distributed energy resources, such as private rooftop solar, demand response, and grid-scale resources to

enable the creation of smart, sustainable, resilient communities and achieve its decarbonization goals that are aligned with the statutory goal of 100% renewable energy by 2045.

Recent developments. See also Recent developments in HEI's MD&A.

For the full year 2022, kWh sales volume increased 1.1% from 2021 levels; however, the full year 2022 kWh sales are still 4.4% below the pre-pandemic level of kWh sales in 2019. The increase in kWh sales in 2022 is primarily due to an improvement in economic activity in Hawaii, driven largely by a significant rebound in the domestic tourism market.

Fuel costs have risen rapidly in 2022 and average fuel prices have increased 76.7% compared to the prior year. Although the Utilities are able to pass through fuel costs to customers and have limited fuel cost exposure under a 2% fuel-cost risk sharing mechanism (approximately \$3.7 million maximum exposure annually, and the amount the Utilities have recognized as a penalty for 2022), higher customer bills could reduce customers' ability to pay timely or increase the risk of non-payment. In addition, the higher customer bills may lead the PUC to consider other actions to limit or delay any proposed increase in rates in order to mitigate the overall bill impact of rising fuel prices.

In December 2022, the consumer price index moderated to 6.5% from a peak of 9.1% in June 2022. In Hawaii, the November 2022 Urban Hawaii (Honolulu) Consumer Price Index (CPI) was modestly lower, with an increase of 5.8% over the last twelve months. Under the PBR framework, inflation risk for the Utilities is mitigated by an Annual Rate Adjustment (ARA), which is based on a formula that includes a compounded and non-compounded portion.

- The compounded portion of the ARA adjustment includes an adjustment for inflation based on the estimated change in Gross Domestic Product Price Index (GDPPI) for the upcoming year, less a predetermined annual productivity factor (currently set at zero), less a 0.22% customer dividend, applied to a basis equal to test year target revenues plus the RAM Revenue adjustments in effect prior to the implementation of PBR, plus the prior adjustment year's compounded portion of the ARA adjustment. The GDPPI adjustment is determined using the forecasted GDPPI in October, which is effective for the following calendar year. For the 2022 calendar year, GDPPI was measured at 2.78% (net of the 0.22% customer dividend) in October 2021 and was effective in rates on January 1, 2022. For the 2023 calendar year, the forecasted 2023 GDPPI was 3.68% (net of the 0.22% customer dividend), measured in October 2022, and became effective in rates on January 1, 2023.
- The non-compounded portion of the ARA adjustment includes a subtractive component, representing the management audit savings commitment, or refund to customers, which was approved by the PUC for the years 2021 through 2025.

Accounts receivable increased in 2022 by \$101 million, or 54% with the number of accounts past due remaining relatively flat since December 31, 2021. The increase in accounts receivables was primarily driven by higher customer bills impacted by the increase in fuel prices, offset by payments on installment plans and higher cash receipts associated with increased disconnection efforts. At this time, the delay in customer cash collections has not significantly affected the Utilities' liquidity. The Utilities are prepared to address, if needed, the financing requirement related to the delayed timing of cash flows collected under the decoupling mechanism through the Revenue Balancing Account and the impact of higher fuel prices on accounts receivable balances. See "Financial Condition—Liquidity and capital resources" for additional information.

In the second quarter of 2020, the PUC approved the deferral of certain COVID-19 related costs, such as higher bad debt expense, higher financing costs, non-collection of late payment fees, increased personal protective equipment costs, and sequestration costs for mission-critical employees. The Utilities deferred COVID-19 related costs through a PUC approved period that ended on December 31, 2021. In the second quarter of 2022, the Utilities filed an application to seek recovery of the COVID-19 deferred costs, not to exceed the amount of \$27.8 million. In the Utilities' Reply Statement of Position submitted to the PUC on November 30, 2022, the Utilities updated the estimated maximum COVID-19 total recovery request amount to \$14.3 million. As of December 31, 2022, the Utilities have recorded \$11.4 million in regulatory assets for deferral of COVID-19 related costs. The updated amounts have been reflected in the Utilities' Supplemental Response to the PUC filed on January 12, 2023. On January 25, 2023, the PUC issued an order to modify the procedural schedule to allow more time for more discovery and consideration of the application. (See discussion under "Regulatory assets for COVID-19 related costs" in Note 3 of the Consolidated Financial Statements).

Hawaii COVID-19 case counts and hospitalizations have declined following peaks earlier in the year; however, a worsening of COVID-19 cases driven by new variants or a reinstatement of COVID-19 restrictions could adversely affect the ability of the Utilities' contractors, suppliers, IPPs, and other business partners to perform or fulfill their obligations timely, or at all, or require modifications to existing contracts, which could adversely affect the Utilities' business, increase expenses, and impact the Utilities' ability to achieve their RPS and other climate related goals.

Regulatory Developments. See "Regulatory proceedings" in Note 3 of the Consolidated Financial Statements for discussions related to recent regulatory developments.

Performance-based regulations. On December 23, 2020, the PUC issued a D&O (PBR D&O) approving a new performance-based regulation framework (PBR Framework). See “Regulatory proceedings” under “Commitments and contingencies” in Note 3 of the Consolidated Financial Statements.

Transition to a decarbonized and sustainable energy future. The Utilities are fully committed to leading and enabling pathways to a decarbonized and sustainable energy future for Hawaii. The Utilities believe that a holistic approach to decarbonization is needed, and that such a strategy requires achieving the Utilities’ decarbonization and renewable energy commitments, facilitating and promoting beneficial electrification, and deploying carbon removal and offsets, among other levers, to reduce statewide emissions.

In the fourth quarter of 2021, the Utilities outlined their Climate Action Plan to cut carbon emissions from power generation 70% by 2030, compared to a 2005 baseline. The emissions covered by this goal include stack emissions from generation owned by Hawaiian Electric and IPPs who sell electricity to the Utilities. The 2030 commitment would provide a significant portion of the reduction the entire Hawaii economy needs to meet the U.S. target of cutting carbon emissions by at least 50% economy-wide by 2030. Hawaiian Electric has also committed to achieving net zero carbon emissions from power generation by 2045 or sooner. Key elements of the 2030 plan include the closure of the state’s last coal-fired IPP plant that occurred in September 2022, increasing rooftop solar by more than 50% over 2021 levels, retiring six fossil fuel generating units, adding at least 1 GW of renewable generation to what was already in place in 2021, increasing grid-scale and customer-owned storage, expanding geothermal resources, and creating customer incentives for using clean, lower-cost energy at certain times of the day and using less fossil-fueled energy at night. The retirement of fossil-fueled generating units to achieve the Utilities’ 70% decarbonization goal is consistent with state policy and supported by Hawaii State law. See “Forecast of capital expenditures—Liquidity and capital resources” for a discussion of potential capital expenditures related to decarbonization efforts.

On September 1, 2022, the last coal-fired IPP plant in the state, providing approximately 10% of Oahu’s generation, ceased operations, removing a significant source of GHG emissions from the Utilities’ generation mix. In advance of the retirement of the coal-fired IPP plant, the Utilities developed plans, including contingency plans, to ensure reliable service through the transition period. These plans include the anticipated addition of renewable energy/storage projects, reserve capacity from existing generation sources, the acceleration of maintenance work during periods with anticipated higher reserve levels, and multiple demand response/DER programs. For example, the state’s largest solar plus battery storage project to date, totaling 39 MW, reached commercial operations on July 31, 2022.

While the Utilities continue to execute on their plans, delays and cancellations in the commercial operation of new renewable third-party generation resources and higher costs as a result of supply chain issues and inflationary pressures, as well as federal policies related to solar panel imports, have slowed the pace of progress toward achieving the Utilities’ 70% GHG emissions reduction goal. Despite these headwinds, the Utilities currently believe that the 70% GHG emissions reduction target remains achievable; however, additional renewable energy procurements and timely construction of significant generating capacity beyond the Stage 3 RFPs are required. Future events that impact the pace and amount of newly installed renewable variable and firm generation, including unexpected issues with existing generation, among other factors, could disrupt the ability of the Utilities to deliver reliable service. Also, see the “Developments in renewable energy efforts—New renewable PPAs” section below.

Hawaii’s renewable portfolio standard law requires electric utilities to meet an RPS of 30%, 40%, 70% and 100% by December 31, 2020, 2030, 2040 and 2045, respectively. Hawaii law has also established a target of sequestering more atmospheric carbon and greenhouse gases than emitted within the state by 2045. The Utilities’ strategies and plans are fully aligned in meeting these targets.

The Utilities have made significant progress on the path to clean energy and have been successful in achieving RPS goals. To date the Utilities have met all of the statutory RPS goals, including exceeding the last milestone RPS target of 30% for 2020, where it achieved an RPS of 34.5%. In July 2022, Governor Ige signed Act 240 (H.B.2089), that amended the RPS calculation from renewable energy as a percentage of sales to renewable energy as a percentage of total generation. The amended RPS calculation results in a lower calculated percentage than the amount calculated under the previous methodology. For example, the 2022 RPS achieved under the revised RPS calculation would have been 31.8% versus 39.1% under the prior method. The change in the definition is to be applied prospectively to future milestone measurements and will require that the Utilities acquire more renewable energy than under the previous RPS calculation to comply with the RPS milestones; however, the Utilities expect to continue to meet the RPS milestones under the amended RPS law. (See “Developments in renewable energy efforts” below).

If the Utilities are not successful in meeting the RPS targets as mandated by law, the PUC could assess a penalty of \$20 for every MWh that an electric utility is deficient. Based on the level of total generation in 2022, a 1% shortfall in meeting the 2030 RPS requirement of 40% would translate into a penalty of approximately \$2.1 million. The PUC has the discretion to reduce the

penalty due to events or circumstances that are outside an electric utility's reasonable control, to the extent the event or circumstance could not be reasonably foreseen and ameliorated. In addition to penalties under the RPS law, failure to meet the mandated RPS targets would be expected to result in a higher proportion of fossil fuel-based generation than if the RPS target had been achieved, which in turn would be expected to subject the Utilities to limited commodity fossil fuel price exposure under a fuel cost risk-sharing mechanism. The fuel cost risk-sharing mechanism apportions 2% of the fuel cost risk to the utilities (and 98% to ratepayers) and has a maximum exposure (or benefit) of \$3.7 million. Conversely, the Utilities have incentives under PIMs that provide a financial reward for accelerating the achievement of renewable generation as a percentage of total generation, including customer supplied generation. The Utilities may earn a reward for the amount of system generation above the interpolated statutory RPS goal at \$20/MWh in 2022, \$15/MWh in 2023, and \$10/MWh for the remainder of the multi-year rate period.

The Utilities are fully aligned with, and supportive of, state policy to achieve a decarbonized future and have made significant progress in reducing emissions through renewable energy and electrification. This alignment with state policy is reflected in management compensation programs and the Utilities' long-range plans, which include aspirational targets in order to catalyze action and accelerate the transition away from fossil fuels throughout its operations at a pace more rapid than dictated by current law. The long-range plans, including aspirational targets, serve as guiding principles in the Utilities' continued transformation, and are updated regularly to adapt to changing technology, costs and other factors. While there is no financial penalty for failure to achieve the Utilities' long-range aspirational objectives, the Utilities recognize that there are environmental and social costs from the continued use of fossil fuels.

The State of Hawaii's policy is supported by the regulatory framework and includes a number of mechanisms designed to maintain the Utilities' financial stability during the transition toward the State's decarbonized future. Under the sales decoupling mechanism, the Utilities are allowed to recover from customers, target test year revenues, independent of the level of kWh sales, which have generally trended lower over time as privately-owned DER have been added to the grid and energy efficiency measures have been put into place. Other regulatory mechanisms under the PBR framework reduce some of the regulatory lag during the multi-year rate plan (MRP), such as the annual revenue adjustment to provide annual changes in utility revenues, including inflationary adjustments, and the exceptional project recovery mechanism, which allows the Utilities to recover and earn on certain approved eligible projects placed into service. See "Regulatory proceedings" under "Commitments and contingencies" and "Decoupling" in Note 3 of the Consolidated Financial Statements.

Integrated Grid Planning. Achieving high levels of renewable energy and a carbon free electric system will require modernizing the grid through coordinated energy system planning in partnership with local communities and stakeholders. To accomplish this, the Utilities are implementing an innovative systems approach to energy planning intended to yield the most cost-effective renewable energy and decarbonization pathways that incorporates customer and stakeholder input.

The Integrated Grid Planning (IGP) utilizes an inclusive and transparent Stakeholder Engagement model to provide an avenue for interested parties to engage with the Utilities and contribute meaningful input throughout the IGP process. The IGP Stakeholder Council, Technical Advisory Panel and Working groups have been established and meet regularly to provide feedback and input on specific issues and process steps in the IGP. The Utilities submitted an updated IGP work plan to the PUC in January 2021. In August 2021, the Utilities submitted their Revised Inputs and Assumptions to the PUC for review and approval, marking the significant progress made through the stakeholder engagement phase of the IGP process. On March 31, 2022, the Utilities submitted the final Inputs and Assumptions approved by the PUC. On September 26, 2022, the PUC approved the Utilities' planning methodologies and criteria. The Grid Needs Assessment is now underway and is expected to be completed in the second quarter of 2023.

Demand response programs. Pursuant to PUC orders, the Utilities are developing an integrated Demand Response (DR) Portfolio Plan that will enhance system operations and reduce costs to customers. The reduction in cost for the customer will take the form of either rates or incentive-based programs that will compensate customers for their participation individually, or by way of engagements with turnkey service providers that contract with the Utilities to aggregate and deliver various grid services on behalf of participating customers and their distributed assets.

On June 9, 2021, the PUC issued an order providing guidance to the third Grid Service RFP filed on February 23, 2021. The proposed Grid Service RFP focused only on Oahu and is seeking 132 MW of grid services with focus on capacity reduction (60 MW) similarly in response to the potential reserve shortfall from the AES coal plant retirement that occurred on September 1, 2022. The Utilities executed a GSPA for a total grid services amount of 97.4 MW and filed with the PUC to request approval on March 16, 2022. On July 26, 2022, the Consumer Advocate filed its Statement of Position not objecting to the PUC approving the GSPA if certain conditions are adopted. The Utilities responded to the Statement of Position on August 9, 2022 to comment to the various conditions proposed by the Consumer Advocate. The procedural schedule steps are completed and the GSPA is ready for the PUC's decision. As of December 31, 2022, the PUC has not ruled on this GSPA approval request.

On June 8, 2021, the PUC approved the new program, Emergency Demand Response Program (EDRP), a battery storage incentive program to dispatch electricity between 6 p.m. to 8 p.m. daily from participating residential and commercial customers, to address the potential reserve shortfalls following the AES coal plant retirement. As of December 31, 2022, the Utilities have received and approved the applications totaling approximately 15 MW on Oahu.

On March 30, 2022, the Utilities filed with the PUC to request expanding the EDRP for up to 15 MW on the island of Maui and received PUC approval on May 20, 2022. The EDRP on Maui became effective as of June 1, 2022. Subsequently, on June 23, 2022, the PUC approved the cost recovery of the additional incentives for both Oahu and Maui through the Demand-Side Management Surcharge. As of December 31, 2022, the Utilities have received and approved the applications totaling approximately 1.2 MW on Maui.

On October 31, 2022, the PUC issued an order, directing the Utilities to solicit comments from all interested parties and stakeholders on the Utilities' Draft Grid Services RFP filed on June 30, 2022. The proposed Draft Grid Services RFP focused only on Maui and is seeking 15 MW of grid services. Only one vendor provided comment recommending to not proceed with the RFP unless significant modifications were made to the RFP and GSPA. Comment was filed to the PUC on November 7, 2022. On December 22, 2022, the PUC issued an order approving Hawaiian Electric to proceed with the RFP with modifications. Hawaiian Electric submitted an update to the RFP per the order on January 16, 2023, and issued the RFP on February 1, 2023.

Grid modernization. The overall goal of the Grid Modernization Strategy is to deploy modern grid investments at an appropriate priority, sequence and pace to cost-effectively maximize flexibility, minimize the risk of redundancy and obsolescence, deliver customer benefits and enable greater DER and renewable energy integration. Under the Grid Modernization Strategy, the Utilities expect that new technology will help increase adoption of private rooftop solar and make use of rapidly evolving products, including storage and advanced inverters. On March 25, 2019, the PUC approved a plan for the Utilities to implement Phase 1 of their Grid Modernization Strategy, which is the proportional deployment of advanced metering infrastructure (AMI). On February 28, 2022, the PUC expanded the scope of Phase 1 to the full service territory with a completion date set for the third quarter of 2024. The estimated cost of full deployment (including proportional deployment) is approximately \$143 million in capital and deferred software cost and is expected to be incurred over five years. As of December 31, 2022, approximately \$72 million of capital and deferred software cost has been incurred to date under Phase 1 and is currently being recovered under the MPIR mechanism until such costs are included in base rates. On June 24, 2022, the PUC approved with certain conditions the Utilities' request to aggregate the per-meter and network cost caps and to recover O&M costs associated with full-service territory AMI deployment under the MPIR mechanism. As of December 31, 2022, the Utilities have deployed about 193,000 advanced meters, servicing approximately 41% of total customers.

The Utilities filed an application with the PUC on September 30, 2019 for an Advanced Distribution Management System (ADMS) as part of Phase 2 of their Grid Modernization Strategy implementation. However, on December 30, 2019, the PUC suspended the Utilities' application for the ADMS pending the Utilities' filing of a supplemental application for the broad deployment of field devices. This supplement and update to the Grid Modernization Strategy Phase 2 field devices application was filed on March 31, 2021. The estimated cost for the implementation over five years of the ADMS and field devices, which includes capital, deferred software costs and O&M costs, is \$105 million. A PUC order was issued on April 27, 2021, unsuspending and resuming consideration of the Phase 2 Application. The Utilities filed the reply statement of position on October 15, 2021, completing the discovery phase of the docket. On November 16, 2021, the PUC suspended the Utilities' ADMS and Phase 2 field device application to focus the Utilities' attention on completing Phase 1. The Utilities filed a Motion for Reconsideration with the PUC in response to the suspension, but the motion was denied. The PUC subsequently clarified that the Utilities may resume the Phase 2 docket no earlier than six months before Phase 1 is scheduled to be completed in the third quarter of 2024. Resumption of the Phase 2 proceeding would likely commence six months prior to the scheduled completion date selected by the PUC.

Community-based renewable energy. In December 2017, the PUC adopted a community-based renewable energy (CBRE) program framework which allows customers who cannot, or chose not to, take advantage of private rooftop solar to receive the benefits of renewable energy to help offset their monthly electric bills and support clean energy for Hawaii. The program has two phases.

The first phase, which commenced in July 2018, totaling 8 MW of solar photovoltaic (PV) only with one credit rate for each island, closed on April 9, 2020. Two phase 1 projects (28.32 kW on Maui and 270 kW on Oahu) have been operational for two years, with four additional phase 1 projects expected to become operational in 2023 (second quarter: Oahu: 3,000kW, Hawaii Island: 750kW and Molokai: 250kW; third quarter: Oahu: 1,720kW).

The second phase, which commenced on April 9, 2020 and subsequently expanded on July 27, 2021, allows over 250 MW across all Hawaiian Electric service territories in two tranches for small (under 250 kW), mid-tier and large system sizes to encourage a variety of system sizes. To provide opportunities for Low-to-Moderate Income (LMI) customers to participate in

the program, 23 MW of capacity for dedicated-LMI projects were awarded on November 15, 2022 through three island specific RFPs for Oahu, Maui and Hawaii Island. LMI projects do not have a size cap nor do they decrease the 250 MW capacity available to other projects. The dedicated-LMI projects are expected to become operational in 2025.

The Utilities issued the CBRE Tranche 1 RFPs for Oahu, Maui and Hawaii on April 14, 2022. The RFPs closed on August 17, 2022, and proposals were evaluated. Tranche 1 projects, which are greater than or equal to 250 kW, were awarded on February 22, 2023.

For Lanai, the Utilities combined the previously issued Variable Renewable Dispatchable Generation Paired with Energy Storage RFP and the CBRE RFP to optimize the benefits of procuring renewable energy, spur development and increase the likelihood of success of the CBRE Program on Lanai. See “Developments in renewable energy efforts—Requests for renewable proposals, expressions of interest, and information” for additional information.

One CBRE proposal for Lanai was selected but negotiations were terminated on June 15, 2022. With the concurrence of the Independent Observer, a replacement proposal was selected on July 1, 2022. On July 25, 2022, the Utilities announced the selection of a new developer for the Lanai CBRE RFP. On September 21, 2022, the Utilities were informed by Pulama Lanai of a project being planned on Lanai to remove the two large resorts from the grid, which represent approximately 40% of the load of the island and raises great uncertainty around the future energy needs for Lanai. On September 28, 2022, the Utilities notified the PUC that ongoing negotiations for the Lanai CBRE project will continue, but that the Utilities will not execute a PPA at this time given the uncertainty due to the Pulama Lanai notification. On Molokai, proposals were only received from a single community co-op group. After evaluation of these proposals and with concurrence of the independent observer, the Utilities filed a letter on September 9, 2022, proposing to close the Molokai CBRE RFP and to work with the lone bidder to improve certain aspects of its two proposed projects outside of the RFP process for the benefit of the residents of Molokai. Discussions are ongoing.

The Utilities CBRE Phase 2 Rule 29 became effective on March 10, 2022. The Utilities are currently accepting project applications for small CBRE projects less than 250 kW in size. The PUC reserved 45 MW as well as a small amount of unallocated capacity from Phase 1 for small projects in Phase 2 on Oahu, Maui and Hawaii Island. The Utilities have developed a CBRE Portal where Subscriber Organizations can apply for small project capacity and manage subscribers for all CBRE projects in the program. Customers can also use the CBRE Portal to solicit quotes, compare, and subscribe to a project once the Subscriber Organization has added their project to the portal.

Microgrid services tariff proceeding. In enacting Act 200 of 2018, the Hawaii legislature found that Hawaii’s residents and businesses were vulnerable to disruptions in the islands’ energy systems caused by extreme weather events or other disasters, and stated its belief that the use of microgrids would build energy resiliency into Hawaii’s communities, thereby increasing public safety and security. The purpose of Act 200 was therefore to encourage and facilitate the development and use of microgrids through the establishment of a standard microgrid services tariff. In July 2018, pursuant to Act 200, the PUC opened a proceeding to investigate the establishment of a microgrid services tariff. In August 2019, the PUC issued an order prioritizing items for resolution in the docket and directed the Parties to establish working groups (the Working Group) to address issues identified by the PUC.

On May 27, 2021, the Utilities filed the Microgrid Service Tariff. On September 21, 2021, the PUC provided guidance for Phase 2 of the Microgrid Tariff proceeding, specifically identifying the objective for Phase 2 to promote self-sufficiency and resilience among microgrid project operators, as well as to further streamline the Microgrid Services Tariff where applicable. Furthermore, the PUC instructed Parties to recommend priority topics, along with supporting rationale to better inform the topics that will be discussed during this phase of the proceeding, which the parties submitted by October 21, 2021.

On April 1, 2022, the PUC established its Prioritized Issues for Resolution for Phase 2 of the Microgrid proceeding, which includes the following: 1) Microgrid Compensation and Grid Services; 2) Utility Compensation; 3) Customer Protection and Related Considerations; 4) Interconnection; and 5) Working Group coordination with related microgrid and resilience Initiatives at Hawaiian Electric and government agencies. Furthermore, the PUC established a procedural schedule to consist of quarterly status conference meetings with the PUC, a Phase 2 Working Group Report, draft of a revised Microgrid Service Tariff, Party comments to the proposed Microgrid Service Tariff, followed by a PUC D&O.

On June 30, 2022, the PUC provided further guidance to the Working Group to prioritize discussion of the microgrid types in the following order: 1) Hybrid Microgrid - Third Party Developer using Utility lines/infrastructure; 2) Hybrid Microgrid - Utility Project with Partners; and 3) Customer Microgrid. Additionally, the PUC instructed the Working Group to discuss microgrid compensation and continue the involvement of microgrid developers in working group meetings.

The Working Group met from April 2022 through October 2022 to discuss the PUC’s objectives and respond to the Phase 2 priority issues. On October 31, 2022, the PUC issued a guidance letter and advised that the Working Group propose a new timeline for the Report. The Utilities and the Consumer Advocate filed a joint letter with a revised timeline on November 10,

2022. On November 21, 2022, the PUC issued an order to suspend the Phase 2 procedural schedule while it reviews the joint letter.

Decoupling. See “Decoupling” in Note 3 of the Consolidated Financial Statements for a discussion of decoupling.

Regulated returns. As part of the PBR Framework’s annual review cycle, the Utilities track their rate-making ROACEs as calculated under the earnings sharing mechanism, which includes only items considered in establishing rates. At year-end, each utility’s rate-making ROACE is compared against its ROACE allowed by the PUC to determine whether earnings sharing has been triggered. The D&O in the PBR proceeding modified the earnings sharing mechanism to a symmetric arrangement. Effective with annual earnings for 2021, the earnings sharing will be triggered for achieved rate-making ROACE outside of a 300 basis points dead band above and below the current authorized rate-making ROACE of 9.5% for each of the Utilities. Earnings sharing credits or recoveries will be included in the biannual report (formally known as annual decoupling filing) to be filed with the PUC in the spring of the following year. Results for 2022, 2021, and 2020 did not trigger the earnings sharing mechanism for the Utilities.

Actual and PUC-allowed returns, as of December 31, 2022, were as follows:

%	Rate-making Return on rate base (RORB)*			ROACE**			Rate-making ROACE***		
	Hawaiian Electric	Hawaii Electric Light	Maui Electric	Hawaiian Electric	Hawaii Electric Light	Maui Electric	Hawaiian Electric	Hawaii Electric Light	Maui Electric
Year ended December 31, 2022									
Utility returns	7.32	5.76	6.53	8.76	6.44	7.33	9.67	6.87	8.23
PUC-allowed returns	7.37	7.52	7.43	9.50	9.50	9.50	9.50	9.50	9.50
Difference	(0.05)	(1.76)	(0.90)	(0.74)	(3.06)	(2.17)	0.17	(2.63)	(1.27)

* Based on recorded operating income and average rate base, both adjusted for items not included in determining electric rates.

** Recorded net income divided by average common equity.

*** ROACE adjusted to remove items not included by the PUC in establishing rates, such as incentive compensation.

The gap between PUC-allowed ROACEs and the ROACEs achieved is primarily due to the exclusion of certain expenses from rates (for example, incentive compensation and charitable contributions), and depreciation, O&M expense and return on rate base that are in excess of what is currently being recovered through rates (the last rate case plus authorized RAM adjustments and ARA revenues).

Results of operations.

2022 vs. 2021

2022	2021	Increase (decrease)	(dollars in millions, except per barrel amounts)
\$ 3,409	\$ 2,540	\$ 869	Revenues. Net increase largely due to:
		\$ 683	higher fuel oil prices and higher kWh generated ¹
		135	higher purchased power energy prices, partially offset by lower kWh purchased and lower PPAC revenue ²
		37	higher revenue from ARA adjustments, which included the customer dividend delivered to customers
		6	revenue in 2022 related to ownership of and responsibility for the U.S. Army's electrical distribution system on Oahu starting March 1, 2022
		5	higher other fee revenue
		4	higher MPIR revenue
1,266	644	622	Fuel oil expense. ¹ Net increase largely due to higher fuel oil prices and higher kWh generated partially offset by lower penalties for better fuel efficiency due to reset of heat rate
794	670	124	Purchased power expense ^{1,2} . Increase largely due to higher purchased power energy prices, partially offset by lower kWh purchased and lower AES charges due to its closure on September 1, 2022
498	475	23	Operation and maintenance expense. Net increase largely due to:
		11	more generating facility overhauls and maintenance work performed
		4	expense in 2022 related to ownership of and responsibility for the U.S. Army's electrical distribution system on Oahu starting March 1, 2022
		4	higher bad debt expense
		3	higher transmission and distribution preventive and corrective maintenance expense
		2	higher outside services for Information and Technology and Services Support, Customer Interconnection/Installation, Demand Response Management System, and Battery Bonus program
		2	increase in workers' compensation reserve
		1	higher property damage and legal reserve for pending claims
		(1)	expense due to decommissioning of combined heat and power unit on Lanai in 2021
		(1)	higher Pearl Harbor environmental reserves in 2021
		(2)	Customer bill forgiveness and assistance in the fourth quarter of 2021
553	470	83	Other expenses. Increase due to higher revenue taxes, coupled with higher depreciation expense in 2022 for plant investments in 2021
299	280	19	Operating income. Increase largely due to higher ARA and MPIR revenue, offset in part by higher operation and maintenance expense and higher depreciation expense
241	224	17	Income before income taxes. Increase largely due to higher operating income and higher AFUDC, partially offset by higher interest expense due to higher rates and borrowings
189	178	11	Net income for common stock. Increase due to higher income before income taxes. See below for effective tax rate explanation
8.2%	8.1%	0.1%	Return on average common equity
\$141.49	\$ 80.06	\$ 61.43	Average fuel oil cost per barrel
\$ 8,354	\$ 8,261	\$ 93	Kilowatt-hour sales (millions) ³
2,511	2,469	42	Number of full-time employees (at December 31)

¹ The rate schedules of the electric utilities currently contain ECRCs through which changes in fuel oil prices and certain components of purchased energy costs are passed on to customers.

² The rate schedules of the electric utilities currently contain PPACs through which changes in purchase power expenses (except purchased energy costs) are passed on to customers.

³ kWh sales were higher when compared to prior year largely due to continued recovery from impacts of the COVID-19 pandemic. COVID-19 cases have continued to decrease in 2022 and, as a result, most restrictions have been lifted. U.S. visitor arrivals continued to increase above 2021 levels and surpassed pre-pandemic levels, but international arrivals remain lower than pre-pandemic levels. Economic recovery is expected to continue as international visitors return, although uncertainties and downward risks are present due to global economic factors, such as the continued effects of the invasion of Ukraine, high inflation, the risk of a global recession, and surging COVID-19 cases in China.

Hawaiian Electric's effective tax rate (combined federal and state income tax rates) in 2022 was slightly higher at 21%, compared to 20% at 2021, primarily due to federal research and development tax claims in 2021.

For a discussion of 2020 results, please refer to the "Results of operations" section in Item 7, "Management Discussion and Analysis of Financial Condition and Results of Operations—Electric utility," in the Company's 2021 Form 10-K.

The net book value (cost less accumulated depreciation) of utility property, plant and equipment (PPE) as of December 31, 2022 amounted to \$4.9 billion, of which approximately 24% related to generation PPE, 67% related to transmission and distribution PPE, and 9% related to other PPE. Approximately 8% of the total net book value relates to generation PPE that has been deactivated or that the Utilities plan to deactivate or decommission.

Regulatory proceedings. On December 23, 2020, the PBR D&O was issued, establishing the PBR Framework. The PBR Framework implemented a five-year multi-year rate period (MRP), during which there will be no general rate case applications. In the fourth year of the MRP, the PUC will comprehensively review the PBR Framework to determine if any modifications or revisions are appropriate. See also "Regulatory proceedings" in Note 3 of the Consolidated Financial Statements.

Developments in renewable energy efforts. Developments in the Utilities' efforts to further their renewable energy strategy include renewable energy projects discussed in Note 3 of the Consolidated Financial Statements and the following:

New renewable PPAs.

- On November 16, 2021, Hawaii Electric Light and Hawi Renewable Development, LLC (HRD) entered into an Amended and Restated Power Purchase Agreement (ARPPA). Under the ARPPA, HRD would make modifications to upgrade and repower the existing wind facility to enable it to continue to provide up to 10.56 MW of energy at a cost savings for customers. The ARPPA is delinked from the price of fossil fuel and extends the term of the existing PPA by 20 years following the commercial operations date. On December 17, 2021, Hawaii Electric Light filed an application for approval of the ARPPA, requesting a decision no later than June 15, 2022. On June 17, 2022, HRD notified the Utilities that the lead time for delivery and price of equipment needed for the repowering project had increased such that it would prevent HRD from achieving the required guaranteed commercial operation date. Additionally, HRD informed the Utilities that drastic changes in the market conditions had significantly impacted the financial viability of the project. On June 24, 2022, the Utilities requested that the PUC put the procedural schedule on hold to allow HRD time to re-evaluate its plans and determine what is needed to keep the project financially viable. On January 11, 2023, Hawaii Electric Light and HRD entered into a First Amendment to the ARPPA (First Amendment). The First Amendment includes an extension of the Guaranteed Commercial Operations Date (GCOD) by 26 months to accommodate the delayed delivery of components, and a temporary price increase until HRD recovers its estimated increased costs specified in the First Amendment. On January 27, 2023, Hawaii Electric Light requested the PUC to resume the docket and on February 3, 2023, Hawaii Electric Light and the Consumer Advocate submitted a proposed procedural schedule to accommodate additional steps to review the First Amendment.
- On December 31, 2019, Hawaii Electric Light and Puna Geothermal Ventures entered into an Amended and Restated Power Purchase Agreement (ARPPA). The ARPPA extends the term of the existing PPA by 25 years to 2052, expands the firm capacity of the facility to 46 MW and delinks the pricing for energy delivered from the facility from fossil fuel prices to reduce cost to customers. On March 31, 2021, the PUC suspended the docket pending the completion of a supplemental environmental review under the Hawaii Environmental Policy Act (HEPA). After the Office of Planning and Sustainable Development identified the Planning Department for the County of Hawaii to be the accepting agency and approving authority for any required HEPA review, the PUC lifted the suspension of the docket stating that the docket was ready for decision-making. On March 16, 2022, the PUC issued a D&O, approving the ARPPA, subject to conditions, that include requiring completion of the final environmental review prior to construction. On March 28, 2022, Puna Pono Alliance filed a Motion for Reconsideration seeking reconsideration, modification and/or vacation of the D&O. On June 6, the PUC denied Puna Pono's Motion for Reconsideration. PGV has notified the Utilities that changes in market conditions have transpired since the terms of the ARPPA were negotiated and has indicated its desire to negotiate an amendment to the ARPPA to mitigate the impacts. The Utilities are in discussions regarding an amendment.

- Under a request for proposal process governed by the PUC and monitored by independent observers, in February 2018, the Utilities issued Stage 1 Renewable RFPs for 220 MW of renewable generation on Oahu, 50 MW of renewable generation on Hawaii Island, and 60 MW of renewable generation on Maui. To date, summarized information for a total of eight PPAs is as follows:

Utilities	Number of contracts	Total photovoltaic size (MW)	BESS Size (MW/MWh)	Guaranteed commercial operation dates	Contract term (years)	Total projected annual payment (in millions)
Hawaiian Electric	4	139.5	139.5/558	7/31/22, 1/11/23, 1/20/23* & 8/31/23	20 & 25	\$ 32.0
Hawaii Electric Light	2	60	60/240	12/2/22* & 4/21/23	25	14.9
Maui Electric	2	75	75/300	4/28/23 & 10/27/23	25	17.6
Total	8	274.5	274.5/1,098			\$ 64.5

* Project delays have resulted in Guaranteed Commercial Operations Date being missed.

The Utilities have received PUC approvals to recover the total projected annual payment of \$64.5 million for the eight PPAs through the PPAC to the extent such costs are not included in base rates. To date, the Utilities filed six requests with the PUC for approval of amendments related to previously-approved PPAs for changes in pricing and/or guaranteed commercial operations dates to support completion of the projects while maintaining system reliability. The PUC has approved four amendments and two requests filed in February 2023 are pending PUC approval. On July 31, 2022, the first Stage 1 solar-plus-storage project was placed into service. On January 11, 2023, Waiawa Solar project on Oahu also reached commercial operations. See also “Stage 1 renewable PPAs” in Note 3 of the Consolidated Financial Statements.

- In continuation of their February 2018 request for proposal process, the Utilities issued their Stage 2 Renewable RFPs for Oahu, Maui and Hawaii Island and Grid Services RFP on August 22, 2019. Final awards for the renewable projects were made on May 8, 2020. Final awards for the grid services projects were made starting in January 2020. To date, the Utilities had filed 11 PPAs. Additionally, two GSPAs and two applications for commitments of funds for capital expenditures for approval of the utility self-build projects were filed with the PUC. The majority of these projects were approved by the PUC in 2021. On March 23, 2022, the PUC approved one solar-plus-storage project on Oahu for 15 MW of generation and 60 MWh of storage. Of the 11 filed PPAs, five PPAs were declared null and void by the independent power producers and one PPA was mutually terminated. On May 25, 2022, the PUC denied the one Utility Self-Build project on Hawaii Island. In response, the Utilities filed a motion for reconsideration with the PUC. On June 24, 2022 the Utilities filed Supplemental Request informing the PUC that the project might be eligible to receive funds under the federal Infrastructure Investment and Jobs Act (IIJA). On July 27, 2022 the PUC suspended the docket until after such time that the Utilities have received final disposition of its application for funding under the IIJA. The Utilities shall then properly request the PUC to lift the suspension and either issue a decision on the pending Motion, or take further action as appropriate. On February 23, 2023, the PUC lifted the suspension and reopened the docket to begin review of the application. On July 25, 2022, the PUC approved the final solar-plus-storage project on Oahu for 42 MW of generation and 168 MWh of storage. The Utility Self-Build project on Maui is still pending PUC approval. On October 21, 2022, the Utilities filed a letter with the PUC requesting approval of an amendment to increase price and to change the guaranteed commercial operation date of a previously-approved PPA for Stage 2 on Maui. The PUC conditionally approved the amendment on December 2, 2022. On November 17, 2022, an approved Stage 2 project on Oahu declared its PPA null and void; the Utilities filed a notice with the PUC on November 22, 2022. On December 23, 2022, the Utilities and developer of a Stage 2 project on Maui mutually terminated its PPA; the Utilities filed a noticed with the PUC on December 29, 2022.

A summary of the remaining five Stage 2 PPAs, is as follows:

Utilities	Number of contracts	Total photovoltaic size (MW)	BESS Size (MW/MWh)	Guaranteed commercial operation dates	Contract term (years)	Total projected annual payment (in millions)
Hawaiian Electric	3	79	79 / 443	5/17/23, 10/30/23 & 4/9/2024	20 & 25	\$ 28.8
Hawaiian Electric	1 *	N/A	185 / 565	12/30/22	20	24.0
Maui Electric	1	40	40 / 160	12/31/2024	25	19.1
Total	5	119	304 / 1,168			\$ 71.9

* See further discussion under “Review of Interconnection Process and Kapolei Energy Storage Power Purchase Agreement” below.

The total projected annual payment of \$71.9 million for these PPAs will be recovered through the PPAC to the extent such costs are not included in base rates.

A summary of the GSPAs that were approved by PUC in December 2020 is as follows:

Utilities	Fast Frequency Response - 1 (MW)	Fast Frequency Response - 2 (MW)	Capacity - Load Build (MW)	Capacity - Load Reduction (MW)
Hawaiian Electric	—	26.7	14.5	19.4
Hawaii Electric Light	6.0	—	3.2	4.0
Maui Electric	6.1	—	1.9	4.7
Total	12.1	26.7	19.6	28.1

A summary of the utility self-build projects that are pending PUC approval is as follows:

Utilities	Number of contracts	BESS Size (MW/MWh)	Guaranteed commercial operation dates
Hawaii Electric Light	1 *	12/12	12/30/22
Maui Electric	1	40/160	4/28/23
Total	2	52/172	

* The Utility Self-Build project was denied by the PUC on May 25, 2022 and the Utilities have filed a motion for reconsideration with the PUC.

- The Utilities’ renewable energy goals depend, in large part, on the success of renewable projects developed and operated by independent power producers. Beginning in 2017, the Utilities embarked on an ambitious procurement effort, selecting multiple solar plus storage efforts to help reach the Utilities renewable portfolio standards goals as well as to assist the Utilities in retiring fossil fuel generation. Several of the recently procured projects have experienced delays as a result of supply chain disruptions caused by impacts from the COVID-19 pandemic, solar product detentions at U.S. ports of entry ordered by the U.S. Customs and Border Protection agency, and unforeseen site conditions which resulted in unanticipated project costs or in some cases the inability to effectively use previously identified project sites. These impacts have resulted in five Stage 2 projects declared null and void by the independent power producers and one Stage 2 project mutually terminating its PPA with the Utilities. Projects have also indicated potential impacts from the investigation launched by the US Department of Commerce on March 28, 2022, in response to a request by Auxin Solar Inc. in regards to solar panel imports. On June 6, 2022, President Biden created a bridge to temporarily facilitate U.S. solar deployers’ ability to source certain imported solar modules and cells free of certain duties for 24 months in order to ensure the U.S. has access to a sufficient supply of solar modules to meet electricity generation needs. The Utilities are in discussions with several project developers regarding requests to increase previously approved prices and extend guaranteed commercial operations date for those projects in order to ensure their viability given the impact of these recent market conditions. The Inflation Reduction Act (IRA) was signed into law on August 16, 2022. The Utilities are working with the developers to determine if the IRA will provide any benefit for the issues currently being seen by projects. Significant project delays or failures of these projects increase the risk of the Utilities not meeting the renewable portfolio standards or other climate related goals, eligibility for performance incentive mechanisms associated with the speed of increasing renewable generation, and the ability to retire fossil fuel units.

Tariffed renewable resources.

- As of December 31, 2022, there were approximately 573 MW, 125 MW and 137 MW of installed distributed renewable energy technologies (mainly PV) at Hawaiian Electric, Hawaii Electric Light and Maui Electric, respectively, for tariff-based private customer generation programs, namely Standard Interconnection Agreement, Net Energy Metering, Net Energy Metering Plus, Customer Grid Supply, Customer Self Supply, Customer Grid Supply Plus and Interim Smart Export. As of December 31, 2022, an estimated 34% of single-family homes on the islands of Oahu, Hawaii and Maui have installed private rooftop solar systems, and approximately 20% of the Utilities’ total customers have solar systems.
- The Utilities began accepting energy from feed-in tariff projects in 2011. As of December 31, 2022, there were 43 MW, 2 MW and 6 MW of installed feed-in tariff capacity from renewable energy technologies at Hawaiian Electric, Hawaii Electric Light and Maui Electric, respectively.

Biofuel sources.

- In July 2018, the PUC approved Hawaiian Electric’s three-year biodiesel supply contract with Pacific Biodiesel Technologies, LLC (PBT) to supply 2 million to 4 million gallons of biodiesel at Hawaiian Electric’s Schofield

Generating Station and the Honolulu International Airport Emergency Power Facility (HIA Facility) and any other generating unit on Oahu, as necessary. The PBT contract became effective on November 1, 2018, and has been extended for one year through December 2022. Hawaiian Electric also has a spot buy contract with PBT to purchase additional quantities of biodiesel at or below the price of diesel. Some purchases of “at parity” biodiesel have been made under the spot purchase contract, which was extended through June 2023. On June 30, 2021, the Utilities issued an RFP for all fuels, including biodiesel, for supply commencing January 1, 2023. The Utilities and PBT signed an agreement on December 13, 2021 for supply of biodiesel on all islands commencing January 1, 2023, which was approved by the PUC on December 1, 2022.

- Hawaiian Electric has a contingency supply contract with REG Marketing & Logistics Group, LLC to also supply biodiesel to any generating unit on Oahu in the event PBT is not able to supply necessary quantities. This contingency contract has been extended to November 2024, and will continue with no volume purchase requirements.

Requests for renewable proposals, expressions of interest, and information.

- On November 22, 2021, CBRE RFPs for Molokai and Lanai were opened. The RFP for Lanai sought a single PV paired with storage project, which included a 3 MW portion, reserved for CBRE. The Lanai RFP closed on February 14, 2022 and the Molokai RFP closed on March 1, 2022. A project was selected in the Lanai RFP but negotiations were terminated. On July 1, 2022, a replacement project was selected and negotiations commenced. The RFP for Molokai sought 2.75 MW of new PV paired with storage projects for CBRE generation. No projects were selected in the Molokai RFP. However, with the concurrence of the independent observer, the Utilities are working with the lone bidder outside of the RFP process.
- On March 17, 2022, the CBRE LMI RFPs for Oahu, Maui and Hawaii were opened and proposals were received, Seven projects were selected consisting of one standalone PV project on Oahu, three paired PV with storage projects on Maui, and three paired PV with storage projects on Hawaii Island. The Utilities opened the CBRE Tranche 1 RFPs for Oahu, Maui and Hawaii on April 14, 2022 and proposals are currently being evaluated. See “Transition to a decarbonized and sustainable energy future—Community-based renewable energy” for additional information.
- The PUC issued a letter to the Utilities requesting development with a Stage 3 RFP on Hawaii Island on January 21, 2021. In accordance with guidance provided by the PUC in a subsequent letter on April 20, 2021, the Utilities filed the Hawaii Island Grid Needs Assessment on July 15, 2021 and the draft RFP, including model contracts for PV+BESS, wind+BESS, standalone storage, firm renewable generation, and DER aggregators on October 15, 2021. The requirements in the Stage 3 RFP are guided by the results of the Grid Needs Assessment. On March 18, 2022, the Utilities filed a second draft of the Stage 3 RFP for Hawaii Island, incorporating stakeholder and PUC feedback. On May 31, 2022, the Utilities filed its proposed final draft Stage 3 RFP for Hawaii Island. On June 30, 2022, the PUC issued an order approving with modifications the Stage 3 RFP for Hawaii Island and providing guidance on the Oahu and Maui Stage 3 RFPs. On July 11, 2022, the Utilities filed a motion for partial reconsideration and/or clarification of the PUC’s order. On July 20, 2022, the Utilities filed a Request for Extension to file the final Stage 3 RFP for Hawaii Island. On July 28, 2022, the PUC issued an order granting the Utilities’ motion for an enlargement of time to file the final Stage 3 RFP for Hawaii Island. The Utilities’ deadline to file the final Stage 3 RFP for Hawaii Island is 15 days from the filing date of the PUC’s decision on the Utilities’ Motion for Reconsideration. On October 17, 2022, the PUC issued an order in response to the Utilities’ Motion. The final Stage 3 RFP was filed on November 7, 2022 and the RFP was issued on November 21, 2022. Proposals were due by February 24, 2023.
- On February 18, 2022, the PUC sent a letter to the Utilities directing them to develop Stage 3 RFPs for Oahu and Maui. On March 10, 2022, the Utilities submitted its recommendations on plans to develop Stage 3 RFPs for Oahu and Maui, and on May 2, 2022, the Utilities filed draft RFPs for Oahu and Maui. Updated grid needs assessments for Oahu and Maui were filed on July 29, 2022. Thirty-three information requests were issued by the PUC for the near term grid needs assessments supporting the Oahu and Maui Stage 3 RFPs on September 28, 2022. On October 7, 2022, the Utilities requested an extension from October 19, 2022 to November 16, 2022 to respond. On October 17, 2022, the Utilities filed a letter in both the RFP and IGP dockets with updated schedules for the Stage 3 and IGP RFPs and requesting approval to issue the Stage 3 Hawaii RFP by October 31, 2022 and the Stage 3 Maui and Oahu RFPs by November 30, 2022. The October 17, 2022 Order also mandated a 30 day comment period on the grid needs assessments for Oahu and Maui, which started on October 20, 2022. Comments were received on November 21, 2022. The filing of the Utilities’ letter crossed with the filing of the PUC order. As a result of the updated near term grid needs assessments for Oahu and Maui as well as the subsequent withdrawals of one Stage 2 project each on Oahu and Maui, the Stage 3 RFP energy targets were increased. For Oahu, the Utilities are seeking 500 to 700 MW of renewable firm capacity, and at least 965 GWh of renewable dispatchable energy annually. For Maui, the Utilities are procuring at least 40 MW of renewable firm capacity, and at least 425 GWh of renewable dispatchable energy annually. On December 1, 2022, the PUC approved the Stage 3 RFPs for Oahu and Maui with modifications. On December 22,

2022, the final RFPs were filed, and were automatically approved by the PUC on January 17, 2023 and opened for bids on January 20, 2023.

- On November 17, 2021, the Utilities filed a request with the PUC to develop an RFP for firm renewable generation for Oahu. On December 22, 2021, the PUC issued guidance to the Utilities on proceeding with such RFP. The Utilities filed a draft RFP on February 28, 2022. Per the PUC's March 23, 2022 letter, the Utilities will pursue firm renewable generation as a part of the Stage 3 Oahu RFP.

Review of Interconnection Process and Kapolei Energy Storage Power Purchase Agreement.

- In February 2021, the PUC initiated a docket for the purposes of reviewing the status and interconnection progress of various utility-related renewable projects (i.e. Stage 1 and Stage 2 RFP PPAs and CBRE) and the Utilities' transition plans for the expiration of the AES power purchase agreement, the retirement of the Kahului Power Plant, and other fossil fuel power plant transition plans, as needed. The Utilities filed initial status updates on the project timelines, steps needed for each of the renewable projects to achieve commercial operation and steps the Utilities are taking to address projected extensions of GCODs for renewable projects under development, which are due to a variety of factors, including those outside of the control of the Utilities. The PUC subsequently held status conferences on the Utilities' updates. In April 2021, the PUC issued an Order directing the Utilities to establish regulatory liabilities for the difference between the on-peak avoided cost and the unit price included in the applications for approval of the renewable project PPAs, effective with the GCOD included in the applications (the earliest GCOD included in the applications is July 2021) or from the date of the Order for CBRE Phase 1 projects. The amount of regulatory liabilities to be recorded in future periods are not determinable at this time and would be affected by a number of factors, including the length of the GCOD extension period, the monthly on-peak avoided cost, as well as the factors described above. The Utilities filed a Motion for Reconsideration of the entire Order, or in the alternative to clarify that at most the PUC is directing the Utilities to track the information and not record the information at this time. The Utilities further requested a Stay of the Order pending resolution of the Motion. The Utilities maintain that extensions of GCODs are allowed under the PUC-approved contracts and that the Order has the unintended consequence of imposing penalties against the Utilities without due process. In May 2021, the PUC issued an order clarifying its Order and directed the Utilities to track costs to consumers caused by the perceived delay of renewable projects, and that the PUC does not intend to, at this time, impose any penalties on the Utilities. The Utilities report the tracked cost on a monthly basis. The full text of the Order, Motion for Reconsideration and request for a Stay of the Order, and clarification Order as well as the tracked costs can be found on the PUC website at dms.puc.hawaii.gov/dms (Docket No. 2021-0024).
- During the 2022 Legislative Session, the Hawaii State Legislature passed Senate Bill 2474 SD 2 HD 1 CD 1, which was signed into law on June 27, 2022 as Act 201. The law requires that the PUC contract with a qualified consultant to conduct a study on the accessibility of Hawaii's electric system and procedures for interconnection to Hawaii's electric system, including but not limited to the timeliness and costs of interconnection. The PUC contracted with PA Consulting to conduct the study as well as act as the Independent Engineer for the Stage 3 Request for Proposal procurement. The report was submitted to the PUC on December 28, 2022 and did not find any wrongdoing on the part of the utility. The report made minor recommendations for Hawaiian Electric to review interconnection related tariff/ rules and revise, if necessary, to provide technical clarity in terms of interconnection requirements, to establish a database for the purpose of centralizing all information related to all interconnection projects they manage, including their self-build and IPP-built projects, and to develop comparable interconnection cost metrics for self-build and IPP-built projects so that interconnection costs can be directly compared. The PUC stated its intent to address the recommendations that are directed to Hawaiian Electric through various proceedings related to the interconnection process. Hawaiian Electric will be working on these recommendations. The contracted consultant is also planning a second phase of the study, to be completed in 2023, which will include the assessment and recommendation of remaining issues listed in Act 201 that are not covered in Phase 1.
- Also in April 2021, the PUC approved the Kapolei Energy Storage (KES) PPA (one of the PPAs as a result of the Stage 2 Renewable RFP process) (KES Decision and Order), subject to nine conditions, including the Utilities forgoing the second portion of the PIM rewards amounting up to \$1.7 million for the Stage 1 RFP PPAs, removing grid constraints for the Utilities' CBRE Phase 2 projects and for existing and new distributed energy programs, financial retirement of Hawaiian Electric generating units by specified dates and adjusting target revenues at the retirement dates for such retirements, and a requirement to charge the batteries in the project using significant levels of renewable energy generation. The financial retirement of the generating units described in the KES Decision and Order is contrary to the intent of Hawaii Revised Statutes §269-6(d), which encourages the recovery of stranded costs for the retirement of fossil fuel generation, and contrary to the regulatory compact under which in return for agreeing to commit capital necessary to allow utilities to meet their obligation to serve, utilities are assured recovery of their

investment and a fair opportunity to earn a reasonable return on the capital prudently committed to the business. Hawaiian Electric filed a Motion for Reconsideration and Stay of the Decision and Order due to potentially significant financial and operational impacts. In May 2021, the PUC granted, in part, Hawaiian Electric's Motion for Reconsideration and Stay. In this Order, the PUC addressed a number of Hawaiian Electric's concerns, including removing the condition of the Utilities foregoing the PIM award from Stage 1 RFP projects, agreeing to address grid constraint concerns in respective DER and CBRE dockets and not in the KES docket, removing the minimum thresholds of charging energy coming from renewable energy generation and corresponding deadlines associated with these thresholds and modifying the condition on financial retirement of generating units. The PUC indicated the net book value of generating assets would be addressed at the time of retirement. The full text of the KES Decision and Order and the Motion for Reconsideration and Stay with respect thereto, and the Order granting, in part, Hawaiian Electric's Motion for Reconsideration can be found on the PUC website at dms.puc.hawaii.gov/dms (Docket No. 2020-0136).

Legislation and regulation. Congress and the Hawaii legislature periodically consider legislation that could have positive or negative effects on the Utilities and their customers. Also see "Environmental regulation" in "Item 1. Business" and Note 3 of the Consolidated Financial Statements.

Fuel contracts. The fuel contract entered into in January 2019, by the Utilities and PAR Hawaii Refining, LLC (PAR Hawaii), for the Utilities' low sulfur fuel oil (LSFO), high sulfur fuel oil (HSFO), No. 2 diesel, and ultra-low sulfur diesel (ULSD) requirements was approved by the PUC, and became effective on April 28, 2019 and terminated on December 31, 2022. This contract was a requirement contract with no minimum purchases. If PAR Hawaii is unable to provide LSFO, HSFO, diesel and/or ULSD the contract allows the Utilities to purchase LSFO, HSFO, diesel and/or ULSD from another supplier.

On June 9, 2020, the Utilities and PAR Hawaii entered into a First Amendment to the fuel contract. The First Amendment amends only the LSFO pricing to create a two-tiered structure based on volume, with all tier-1 LSFO up to the tier-1 maximum to be purchased exclusively from PAR Hawaii at the established pricing, and purchases in excess of that volume (tier-2) either from PAR Hawaii at the established pricing, or from an alternative supplier. On August 4, 2020, the PUC approved the First Amendment, which has an effective date of July 15, 2020, on an interim basis. The PUC's approval order allows the recovery of such costs associated with the First Amendment through the ECRC to the extent that the costs are not recovered in base rates. The PUC intends to review whether the First Amendment is reasonable and in the public interest in the final decision, but it will not subject the recovery of the costs between the interim decision and the final decision to retroactive disallowances. On July 6, 2021, the PUC issued a D&O, approving the First Amendment and requiring the Utilities to meet certain conditions of approval (COA). The Utilities are currently addressing the COAs as required in the D&O.

On June 30, 2021, the Utilities issued two RFPs for all fuels for supply commencing January 1, 2023. On February 1, 2022, the Utilities and PAR Hawaii entered into a fuel supply contract commencing January 1, 2023 and Second Amendment to the existing fuel contract to amend tier-1 volumes. On September 1, 2022, the fuel supply contract with PAR Hawaii was approved by the PUC on an interim basis and the Second Amendment to the existing fuel contract received final approval from the PUC.

On March 3, 2022, as part of economic sanctions amid the Russia-Ukraine war, Par Hawaii announced that it is suspending all purchases of Russian crude oil, which accounts for at least 25% of Hawaii's supply. The average fuel oil cost per barrel has increased 77% over prior year. The Utilities are taking additional measure to ensure adequate supply of fuel by entering into a backup fuel supply contract with Vitol Inc. (Vitol) commencing on December 1, 2022 through June 30, 2023 with annual extensions if mutually agreed by both parties. The PUC issued the final decision and order approving the both the PAR fuels contracts and the Vitol backup fuels supply contract on December 1, 2022. The costs incurred under the contract with PAR Hawaii and Vitol are recovered in the Utilities' respective ECRCs.

Proposed modification to the pension tracking mechanism. On June 9, 2022, the Utilities filed an application with the PUC for approval to modify the pension tracking mechanism. The existing pension tracking mechanisms allows the Utilities to record the difference between actual NPPC and NPPC in rates to regulatory asset or liability. The proposed modification would allow the Utilities to also record to regulatory asset or liability the difference between the actual cash contributions made to the defined contribution plans and the contribution amounts included in rates. The Utilities also proposed in the application the accelerated return of pension tracking regulatory liability to the ratepayers during the current MRP. The PUC issued a D&O on January 13, 2023, denying the Utilities' proposal to modify the pension tracking mechanism at this time. The PUC clarified that it is open to re-visiting this issue in a comprehensive examination of the pension tracker, with a more holistic review of potential impacts and benefits to the customers. The pension tracker will continue to operate as it has been since each of the Utilities' last general rate cases. The Utilities are required to file their annual actuarial report showing the NPPC and pension plan's financial position in their most recent respective rate case dockets.

Liquidity and capital resources. As of December 31, 2022, Hawaiian Electric had \$88 million of commercial paper outstanding, no amount outstanding on its revolving credit facility, and the total amount of available borrowing capacity under the Utilities' committed line of credit was \$200 million.

Hawaiian Electric expects that its liquidity will continue to be moderately impacted at the Utilities due to higher fuel prices and lingering COVID-19 impacts to the local economy. As of December 31, 2022, fuel inventories have increased by \$87 million compared to December 31, 2021. Elevated fuel prices billed to customers have also resulted in higher accounts receivable balances, which increased by \$101 million, compared to the accounts receivable balances as of December 31, 2021. Higher accounts receivable balances and bad debt expense may result in higher write-offs in the future. In addition to the cash flow impact from delayed collection of accounts receivable, lower kWh sales relative to the level of kWh sales approved in the last rate case generally result in delayed timing of cash flows, resulting in higher working capital requirements. However, the Utilities' liquidity and access to capital remains adequate and is expected to remain adequate. As of December 31, 2022, the total amount of available borrowing capacity (net of commercial paper outstanding) under the Utilities' committed lines of credit and cash and cash equivalents was approximately \$151 million.

The Utilities are continuing the disconnection process on a tiered basis, expanding the targeted balances, which is expected to further reduce delinquent accounts receivable balances and accelerate cash collections.

Hawaiian Electric's consolidated capital structure was as follows:

December 31	2022		2021	
(dollars in millions)				
Short-term borrowings, net	\$ 88	2%	\$ —	—%
Long-term debt, net	1,685	41	1,676	42
Preferred stock	34	1	34	1
Common stock equity	2,344	56	2,262	57
	\$ 4,151	100%	\$ 3,972	100%

Information about Hawaiian Electric's commercial paper borrowings, borrowings from HEI, and line of credit facility were as follows:

(in millions)	Year ended December 31, 2022		December 31, 2021
	Average balance	End-of-period balance	
Short-term borrowings ¹			
Commercial paper	\$ 47	\$ 88	\$ —
Borrowings from HEI	2	—	—
Line of credit draws on revolving credit facility	—	—	—

¹ The maximum amount of external short-term borrowings by Hawaiian Electric during 2022 was approximately \$106 million. At December 31, 2022, Hawaiian Electric had short-term borrowings from Hawaii Electric Light and Maui Electric of \$5 million and \$22 million, respectively, which intercompany borrowings are eliminated in consolidation.

Hawaiian Electric utilizes short-term debt, typically commercial paper, to support normal operations, to refinance short-term debt and for other temporary requirements. Hawaiian Electric also borrows short-term from HEI for itself and on behalf of Hawaii Electric Light and Maui Electric, and Hawaiian Electric may borrow from or loan to Hawaii Electric Light and Maui Electric on a short-term basis. The intercompany borrowings among the Utilities, but not the borrowings from HEI, are eliminated in the consolidation of Hawaiian Electric's financial statements. The Utilities periodically utilize long-term debt, borrowings of the proceeds of special purpose revenue bonds (SPRBs) issued by the State of Hawaii Department of Budget and Finance (DBF) and the issuance of privately placed unsecured senior notes bearing taxable interest, to finance the Utilities' capital improvement projects, or to repay short-term borrowings used to finance such projects. The PUC must approve issuances, if any, of equity and long-term debt securities by the Utilities.

Credit agreement. On February 18, 2022, the PUC approved Hawaiian Electric's request to extend the term of the \$200 million Hawaiian Electric revolving credit facility to May 14, 2026. In addition to extending the term, Hawaiian Electric received PUC approval to exercise its options of two one-year extensions of the commitment termination date and to increase its aggregate revolving commitment amount from \$200 million to \$275 million, should there be a need. Hawaiian Electric has a \$200 million line of credit facility with no amount outstanding at December 31, 2022.

Credit ratings. As of February 13, 2023, the Fitch, Moody's and S&P ratings of Hawaiian Electric were as follows:

	Fitch	Moody's	S&P
Long-term issuer default, long-term and issuer credit, respectively	BBB+	Baa1	BBB
Commercial paper	F2	P-2	A-2
Senior unsecured debt/special purpose revenue bonds	A-	Baa1	*
Cumulative preferred stock (selected series)	*	Baa3	*
Outlook	Positive	Stable	Stable

* Not rated.

Note: The above ratings reflect only the view, at the time the ratings are issued or affirmed, of the applicable rating agency, from whom an explanation of the significance of such ratings may be obtained. Such ratings are not recommendations to buy, sell or hold any securities; such ratings may be subject to revision or withdrawal at any time by the rating agencies; and each rating should be evaluated independently of any other rating.

SPRBs. SPRBs have been issued by the DBF to finance (and refinance) capital improvement projects of Hawaiian Electric and its subsidiaries, but the sources of their repayment are the non-collateralized obligations of Hawaiian Electric and its subsidiaries under loan agreements and notes issued to the DBF, including Hawaiian Electric's guarantees of its subsidiaries' obligations.

On May 24, 2019, the PUC approved the Utilities' request to issue SPRBs in the amounts of up to \$70 million, \$2.5 million and \$7.5 million for Hawaiian Electric, Hawaii Electric Light and Maui Electric, respectively, prior to June 30, 2020, to finance the Utilities' capital improvement programs. Pursuant to this approval, on October 10, 2019, the DBF issued, at par, Series 2019 SPRBs in the aggregate principal amount of \$80 million with a maturity of October 1, 2049. As of December 31, 2022, Hawaiian Electric, Hawaii Electric Light and Maui Electric had no undrawn funds.

On June 10, 2019, the Hawaii legislature authorized the issuance of up to \$700 million of SPRBs (\$400 million for Hawaiian Electric, \$150 million for Hawaii Electric Light and \$150 million for Maui Electric), with PUC approval, prior to June 30, 2024, to finance the Utilities' multi-project capital improvement programs (2019 Legislative Authorization).

On February 9, 2021, the PUC approved the Utilities' request to issue SPRBs (up to \$100 million, \$35 million and \$45 million for Hawaiian Electric, Hawaii Electric Light and Maui Electric, respectively) through 2022, with the proceeds to be used to finance the Utilities' multi-project capital improvement programs. The PUC also approved the use of the expedited approval procedure to request the issuance and sale of the remaining/unused amount of SPRBs authorized by the 2019 Legislative Authorization (i.e., total not to exceed up to \$400 million for Hawaiian Electric, up to \$150 million for Hawaii Electric Light, and up to \$150 million for Maui Electric) during the period January 1, 2023 through June 30, 2024. On January 31, 2023, the PUC approved the Utilities' requests to issue the remaining unused amounts of the SPRBs during the period January 1, 2023 through June 30, 2024, and the certification and approval of supplemental projects eligible to be financed by the SPRB proceeds.

Taxable debt. On January 31, 2019, the Utilities received PUC approval (January 2019 Approval) to issue the remaining authorized amounts under the PUC approval received in April 2018 (April 2018 Approval) in 2019 through 2020 (Hawaiian Electric up to \$205 million and Hawaii Electric Light up to \$15 million of taxable debt), as well as a supplemental increase to authorize the issuance of additional taxable debt to finance capital expenditures, repay long-term and/or short term debt used to finance or refinance capital expenditures, and/or to reimburse funds used for payment of capital expenditures, and to refinance the Utilities' 2004 junior subordinated deferrable interest debentures (QUIDS) prior to maturity. In addition, the January 2019 Approval authorized the Utilities to extend the period to issue additional taxable debt from December 31, 2021 to December 31, 2022. The new total "up to" amounts of taxable debt requested to be issued through December 31, 2022 are \$410 million, \$150 million and \$130 million for Hawaiian Electric, Hawaii Electric Light and Maui Electric, respectively.

On May 3, 2022, the Utilities received PUC approval through the expedited approval process to issue taxable debt (Hawaiian Electric up to \$50 million, Hawaii Electric Light up to \$30 million and Maui Electric up to \$35 million) prior to December 31, 2022. Pursuant to the approval, on June 15, 2022, the Utilities drew \$60 million of proceeds using a delayed draw feature under a private placement executed on May 11, 2022. The proceeds of the notes were used by the Utilities to finance their respective capital expenditures, repay short-term debt used to finance or refinance capital expenditures and/or reimburse funds used for the payment of capital expenditures. See Note 6 of the Consolidated Financial Statements.

As of December 31, 2022, Hawaiian Electric, Hawaii Electric Light, and Maui Electric had \$95 million, \$75 million, and \$35 million, respectively, of remaining unused taxable debt authorization. See summary table below.

(in millions)	Hawaiian Electric	Hawaii Electric Light	Maui Electric
Total “up to” amounts of taxable debt authorized through 2022	\$ 410	\$ 150	\$ 130
Less:			
Taxable debt authorized and issued in 2018 under April 2018 Approval	75	15	10
Taxable debt issuance to refinance the 2004 QUIDS in 2019	30	10	10
Taxable debt issuance in May 2020	110	10	40
Taxable debt executed in October 2020, but issued on January 14, 2021	60	30	25
Taxable debt executed in May 2022, but issued on June 15, 2022	40	10	10
Remaining unused authorized amounts that expired December 31, 2022	\$ 95	\$ 75	\$ 35

On December 20, 2022, the Utilities received PUC approval to issue, over a four-year period from January 1, 2023 to December 31, 2026, unsecured obligations bearing taxable interest (Hawaiian Electric up to \$230 million, Hawaii Electric Light up to \$65 million and Maui Electric up to \$105 million), to finance capital expenditures, repay long-term and/or short-term debt used to finance or refinance capital expenditures, and/or to reimburse funds used for payment of capital expenditures. Pursuant to the approval, on January 10, 2023, the Utilities executed through a private placement, \$150 million in unsecured senior notes. See Note 6 of the Consolidated Financial Statements. See summary table below for new authorized amounts.

(in millions)	Hawaiian Electric	Hawaii Electric Light	Maui Electric
Total “up to” amounts of taxable debt authorized from 2023 through 2026	\$ 230	\$ 65	\$ 105
Less:			
Taxable debt executed in January 2023, but issued on February 9, 2023	100	25	25
Remaining authorized amounts	\$ 130	\$ 40	\$ 80

Equity. In October 2018, the Utilities received PUC approval for the supplemental increase to issue and sell additional common stock in the amounts of up to \$280 million for Hawaiian Electric and up to \$100 million each for Hawaii Electric Light and Maui Electric, with the new total “up to” amounts of \$430 million for Hawaiian Electric and \$110 million each for Hawaii Electric Light and Maui Electric, and to extend the period authorized by the PUC to issue and sell common stock from December 31, 2021 to December 31, 2022. As of December 31, 2022, Hawaiian Electric, Hawaii Electric Light, and Maui Electric had \$208.3 million, \$87.7 million, and \$60.2 million, respectively, of unused common stock authorization. See summary table below.

(in millions)	Hawaiian Electric	Hawaii Electric Light	Maui Electric
Total “up to” amounts of common stock authorized to issue and sell through 2021	\$ 150.0	\$ 10.0	\$ 10.0
Supplemental increase authorized	280.0	100.0	100.0
Total “up to” amounts of common stock authorized to issue and sell through 2022	430.0	110.0	110.0
Less: Common stock authorized and issued from 2017 through 2021	208.6	16.3	46.8
Less: Common stock authorized and issued in 2022	13.1	6.0	3.0
Remaining unused authorized amounts that expired December 31, 2022	\$ 208.3	\$ 87.7	\$ 60.2

On December 20, 2022, the Utilities received PUC approval to issue and sell each utility’s common stock over a four-year period from January 1, 2023 through December 31, 2026 (Hawaiian Electric’s sale/s to HEI of up to \$75 million, Hawaii Electric Light sale/s to Hawaiian Electric of up to \$25 million, and Maui Electric sale/s to Hawaiian Electric of up to \$55 million) and the purchase of Hawaii Electric Light and Maui Electric common stock by Hawaiian Electric from 2023 through December 31, 2026.

Cash flows. The following table reflects the changes in cash flows for the year ended December 31, 2022 compared to the year ended December 31, 2021:

(in thousands)	Years ended December 31		
	2022	2021	Change
Net cash provided by operating activities	\$ 327,930	\$ 273,133	\$ 54,797
Net cash used in investing activities	(324,085)	(285,965)	(38,120)
Net cash provided by (used in) financing activities	(19,861)	4,764	(24,625)

Net cash provided by operating activities: The increase in net cash provided by operating activities was primarily driven by lower revenue taxes paid due to timing, and higher cash receipts due to increased disconnection efforts and receipts of payments on installment plans, partially offset by higher cash paid for fuel oil stock due to higher fuel oil prices and higher volume purchased, and increase in customer accounts receivable resulting from increase in fuel prices.

Net cash used in investing activities: The increase in net cash used in investing activities was primarily driven by an increase in capital expenditures related to construction activities.

Net cash provided by financing activities: The decrease in net cash provided by financing activities was driven by lower proceeds from issuance of long-term debts and common stock, and higher dividend payment, partially offset by net increase in short-term borrowing in 2022.

For a discussion of 2020 operating, investing and financing activities, please refer to the “Liquidity and capital resources” section in Item 7, “Management Discussion and Analysis of Financial Condition and Results of Operations—Electric utility,” in the Company’s 2021 Form 10-K.

Material cash requirements. Material cash requirements of the Utilities include O&M expenses, including labor and benefit costs, fuel and purchase power costs, repayment of debt and interest payments, operating lease obligations, its forecasted capital expenditures and investments, its expected retirement benefit plan contributions and other short-term and long-term material cash requirements. The cash requirements for O&M, fuel and purchase power costs, debt and interest payments, and operating lease obligations are generally funded through the collection of the Utilities’ revenue requirement established in the last rate case and other mechanisms established under the regulatory framework. The cash requirements for capital expenditures are generally funded through retained earnings, the issuance of debt, and contributions of equity from HEI and generally recovered through the Utilities’ revenue requirement or other capital recovery mechanisms over time. The Utilities believe that their ability to generate cash is adequate to maintain sufficient liquidity to fund their material cash requirements. However, the economic impact of higher fuel prices, inflation, higher interest rates, tightening of monetary policy, the ongoing COVID-19 pandemic and geopolitical situations, create significant uncertainty, and the Utilities cannot predict the extent or duration of these conditions, the future effects that it will have on the global, national or local economy, including the impacts on the Utilities’ ability, as well as the cost, to access additional capital, or the future impacts on the Utilities’ financial position, results of operations, and cash flows. See Item 1A. “Risk Factors” in Part I for further discussion of risks and uncertainties.

Forecast capital expenditures. For the five-year period 2023 through 2027, the Utilities forecast approximately \$2.2 billion of net capital expenditures, which could change over time based upon external factors such as the timing and scope of environmental regulations and/or unforeseen delays in permitting and timing of PUC decisions. Approximately \$1.6 billion is related to replacement and modernization of generation, transmission and distribution assets; approximately \$0.3 billion is related to climate-related projects to transition to renewable energy or mitigate climate impacts by increasing the resilience of the system, and approximately \$0.3 billion for targeted efforts to improve reliability. Proceeds from the issuance of equity and long-term debt, cash flows from operating activities, temporary increases in short-term borrowings and existing cash and cash equivalents are expected to provide the funds needed for the net capital expenditures, to pay down commercial paper or other short-term borrowings, as well as to fund any unanticipated expenditures not included in the 2023 to 2027 forecast (such as increases in the costs or acceleration of capital projects, or unanticipated capital expenditures that may be required by new environmental laws and regulations).

Management periodically reviews capital expenditure estimates and the timing of construction projects. These estimates may change significantly as a result of many considerations, including changes in economic conditions, changes in forecasts of kWh sales and peak load, the availability of purchased power and changes in expectations concerning the construction and ownership of future generation units, the availability of generating sites and transmission and distribution corridors, the need for fuel infrastructure investments, the ability to obtain adequate and timely rate increases, escalation in construction costs, the effects of opposition to proposed construction projects and requirements of environmental and other regulatory and permitting authorities.

Selected short-term and long-term contractual obligations and commitments. The following table presents aggregated information about total payments due from the Utilities during the indicated periods under the specified contractual obligations and commitments:

December 31, 2022 (in millions)	Payments due by period					Total
	Less than 1 year	1-3 years	3-5 years	More than 5 years		
Short-term borrowings	\$ 88	\$ —	\$ —	\$ —	\$ 88	
Long-term debt	\$ 100	\$ 47	\$ 225	\$ 1,320	\$ 1,692	
Interest on long-term debt	69	129	120	681	999	
Operating and finance leases						
PPAs classified as leases	11	22	22	104	159	
Other leases	18	27	18	25	88	
Open purchase order obligations ¹	178	65	12	—	255	
Fuel oil purchase obligations (estimate based on fuel oil price at December 31)	5	9	5	—	19	
Purchase power obligations—minimum fixed capacity charges not classified as leases	80	160	160	521	921	
Liabilities for uncertain tax positions	—	2	—	—	2	
Total (estimated)	\$ 549	\$ 461	\$ 562	\$ 2,651	\$ 4,223	

¹ Includes contractual obligations and commitments for capital expenditures and expense amounts.

The table above does not include other categories of obligations and commitments, such as deferred taxes, trade payables, amounts that will become payable in future periods under collective bargaining and other employment agreements and employee benefit plans and potential refunds of amounts collected from ratepayers (e.g., under the earnings sharing mechanism). As of December 31, 2022, the fair value of the assets held in trusts to satisfy the obligations of the Utilities' retirement benefit plans did not exceed the retirement benefit plans' benefit obligation. Minimum funding requirements for retirement benefit plans have not been included in the table above. See Note 10 of the Consolidated Financial Statements for retirement benefit plan obligations and estimated contributions for 2023.

See “Biofuel sources” in the “Developments in renewable energy efforts” section above for additional information for fuel oil purchase obligation. See Notes 3 and 8 of the Consolidated Financial Statements for a discussion of power purchase commitments and operating leases obligations, respectively.

Competition. Although competition in the generation sector in Hawaii is moderated by the scarcity of generation sites, various permitting processes and lack of interconnections to other electric utilities, the PUC has promoted a more competitive electric industry environment through its decisions concerning competitive bidding and distributed generation. An increasing amount of generation is provided by IPPs and customer distributed generation.

Competitive bidding. In December 2006, the PUC issued a decision that included a final competitive bidding framework, which became effective immediately. The final framework states, among other things, that: (1) a utility is required to use competitive bidding to acquire a future generation resource or a block of generation resources unless the PUC finds bidding to be unsuitable; (2) the framework does not apply in certain situations identified in the framework; (3) waivers from competitive bidding for certain circumstances will be considered; (4) the utility is required to select an independent observer from a list approved by the PUC whenever the utility or its affiliate seeks to advance a project proposal (i.e., in competition with those offered by bidders); (5) the utility may consider its own self-bid proposals in response to generation needs identified in its RFP; and (6) for any resource to which competitive bidding does not apply (due to waiver or exemption), the utility retains its traditional obligation to offer to purchase capacity and energy from a Qualifying Facility (QF) at avoided cost upon reasonable terms and conditions approved by the PUC.

Technological developments. New emerging and breakthrough technological developments (e.g., the commercial development of long-duration energy storage, grid-forming and black starting inverters in low inertia power systems, microgrids, distributed generation, grid modernization, electrification of transportation, implement predictive analytics using artificial intelligence machine learning algorithms to help assess the state of health of utility assets and prevent premature failure, and the diversification of generation from renewable sources) may impact the Utilities' future competitive position, results of operations, financial condition and liquidity. The Utilities continue to seek prudent opportunities to develop, test, pilot, and implement technologies that align with their technical and business plans and support clean energy and decarbonized goals, while ensuring reliability and resilience as the Utilities adapt to a changing climate.

Environmental matters. See “Electric utility—Regulation—Environmental regulation” under “Item 1. Business” and “Environmental regulation” in Note 3 of the Consolidated Financial Statements.

Commitments and contingencies. See Item 1A. Risk Factors, and Note 3 of the Consolidated Financial Statements for a discussion of important commitments and contingencies.

Off-balance sheet arrangements. See “Off-balance sheet arrangements” above in HEI Consolidated section.

Material estimates and critical accounting policies. Also see “Material estimates and critical accounting policies” above in HEI Consolidated section.

Regulatory assets and liabilities. The Utilities are regulated by the PUC. In accordance with accounting standards for regulatory operations, the Company’s and the Utilities’ financial statements reflect assets, liabilities, revenues and costs of the Utilities based on current cost-based rate-making regulations. The actions of regulators, including the PBR Framework, can affect the timing of recognition of revenues, expenses, assets and liabilities.

Regulatory liabilities represent amounts collected from customers for costs that are expected to be incurred in the future, or amounts collected in excess of costs incurred that are refundable to customers. Regulatory assets represent incurred costs that have been deferred because their recovery in future customer rates is probable. As of December 31, 2022, the consolidated regulatory liabilities and regulatory assets of the Utilities amounted to \$1,056 million and \$243 million, respectively, compared to \$997 million and \$566 million as of December 31, 2021, respectively. Regulatory liabilities and regulatory assets are itemized in Note 3 of the Consolidated Financial Statements. Management continually assesses whether the regulatory assets are probable of future recovery by considering factors such as changes in the applicable regulatory environment. Because current rates include the recovery of regulatory assets existing as of the last rate case and rates in effect allow the Utilities to earn a reasonable rate of return, management believes that the recovery of the regulatory assets as of December 31, 2022 is probable. This determination assumes continuation of the current political and regulatory climate in Hawaii and is subject to change in the future.

Management believes that the operations of the Utilities, including the impact of the approved PBR Framework, currently satisfy the criteria for regulatory accounting. If events or circumstances should change so that those criteria are no longer satisfied, the Utilities expect that their regulatory assets, net of regulatory liabilities, would be charged to the statement of income in the period of discontinuance, which may result in a material adverse effect on the Company’s and the Utilities’ results of operations, financial condition and liquidity.

Asset retirement obligations. The Utilities recognize AROs at present value of expected costs to retire long-lived assets from service, which is estimated using a discounted cash flow model that relies on significant estimates and assumptions about future decommissioning costs, inflationary rates, and the estimated date of decommissioning. The estimated future cash flows are discounted using a credit-adjusted risk-free rate to reflect the risk associated with decommissioning the assets. The Utilities have not recorded AROs for assets that are expected to operate indefinitely or where the Utilities cannot estimate a settlement date (or range of potential settlement dates.) As such, ARO liabilities are not recorded for certain asset retirement activities, including various Utility-owned generating facilities and certain electric transmission, distribution and telecommunication assets resulting from easements over property not owned by the Utilities.

Changes in estimated costs, timing of decommissioning or other assumptions used in the calculation could cause material revision on the recorded liabilities. As of December 31, 2022 and December 31, 2021, the Utilities’ AROs totaled \$11.5 million and \$11.1 million, respectively.

Bank

Executive overview and strategy. ASB, headquartered in Honolulu, Hawaii, is a full-service community bank serving both consumer and commercial customers. ASB is one of the largest financial institutions in Hawaii and ended 2022 with assets of \$9.5 billion and net income of \$80 million, compared to assets of \$9.2 billion and net income of \$101 million in 2021.

ASB provides a wide range of financial products and services, and in order to remain competitive and continue building core franchise value, ASB is focused on making banking easier for the customer and developing and introducing new products and services in order to meet market needs. Additionally, the banking industry is constantly changing and ASB is making the investments in people and technology necessary to adapt and remain competitive, facilitate process improvements in order to deliver a continuously better experience for its customers, and be a more efficient bank. ASB’s continued focus has been on efficient growth to maximize profitability and capital efficiency, as well as control expenses. Key strategies to drive organic growth include:

1. deepening customer relationships through the redesign of branch-centric approaches as transactions and engagement migrate to other channels;
2. building out product and service offerings to open new segments;

3. online and remotely-assisted account opening capabilities as there is a much more rapid and pervasive adoption of online and mobile banking by Hawaii banking customers; and
4. prioritizing efficiency actions to gain earnings leverage on organic growth.

The interest rate environment and the quality of ASB's assets will continue to influence its financial results. ASB has benefited from rising rates in the second half of 2022 as the Federal Reserve Bank raised short-term interest rates to combat inflation, which has been driven by supply chain issues, the reopening of the economy and government stimulus assistance. The Federal Reserve Bank's efforts to increase short-term rates to combat inflation could result in a recession and would compress ASB's net interest margin if interest rates reverse and decline to lower levels.

As part of its interest rate risk management process, ASB uses simulation analysis to measure net interest income sensitivity to changes in interest rates (see "Item 7A. Quantitative and Qualitative Disclosures about Market Risk"). ASB then employs strategies to limit the impact of changes in interest rates on net interest income. ASB's key strategies to manage interest rate risk include:

1. attracting and retaining low-cost deposits, particularly those in non-interest bearing transaction accounts;
2. diversifying the loan portfolio with higher-spread, shorter-maturity loans and/or variable rate loans;
3. focusing investment growth in securities that exhibit less extension risk (i.e., risk of longer average lives) as rates rise.

Recent Developments. See also Recent developments in HEI's MD&A.

The Hawaii economy continued to improve in 2022 as travel and other COVID-19 related business restrictions were lifted and as visitor arrivals increased, which have helped drive a growing labor market and tax collections. Domestic visitor arrivals exceeded pre-pandemic levels in 2022 due to pent up demand from leisure travelers. The state and county governments have also lifted all COVID-related travel restrictions for arriving domestic passengers. International visitor arrivals continued to lag significantly behind pre-pandemic levels but have gradually increased as certain Asian countries began loosening travel restrictions. COVID cases caused by the new variants remain relatively stable at low levels along with hospitalization rates.

Consistent with the improvement in the Hawaii economy in 2022, the bank's performance continued to improve in 2022, Net interest income before provision for credit losses improved to \$252.6 million for the year ended December 31, 2022, compared to net interest income before provision for credit losses of 237.2 for the year ended December 31, 2021, The increase in net interest income was primarily due to higher earning asset balances and yields, partly offset by higher other borrowings and higher cost of funds. Net interest margin decreased slightly to 2.89% for the year ended December 31, 2022, compared to 2.91% for the year ended December 31, 2021. The lower net interest margin was primarily driven by higher funding costs partially offset by higher yields on earning assets as strong loan growth outpaced deposit growth and required ASB to use higher costing other borrowings as a funding source for the loan growth. At December 31, 2022, ASB's funding sources consisted of 92% deposits and 8% other borrowings compared to 99% deposits and 1% other borrowings at December 31, 2021. Lower Paycheck Protection Program (PPP) loan income also contributed to the lower net interest margin 2022 compared to 2021. The increase in interest rates had a positive impact on the yield on earning assets as adjustable rate earning assets repriced up and new loan production interest rates in the fourth quarter of 2022 were higher than their portfolio rates.

In 2022 and into early 2023, the Federal Reserve raised the federal funds rate to a current target range of 4.50%-4.75% as of February 1, 2023, in response to surging inflationary pressures in the economy. The increase in interest rates have benefited ASB's net interest margin; however, the higher interest rates have also reduced mortgage refinance and purchase activity, negatively impacting mortgage banking income. Additionally, the tight labor market and inflationary pressures have increased compensation and benefit expenses, which have partially offset the benefit of a higher interest rate environment.

ASB experienced strong loan growth in 2022 as total loans increased \$784 million or 15% compared to 2021 total loans. There was demand for commercial real estate, home equity line of credit, consumer and commercial market loan products. Residential loan portfolio growth was primarily due to ASB's decision to portfolio a larger portion of its residential loan production and the portfolio had lower prepayments. The consumer loan portfolio growth also included purchases of solar and sustainable home improvement loans from a third party. The commercial markets loan portfolio growth was partly due to the Bank's purchase of national syndicated credits.

Deposit growth, which was used to fund loan growth and purchase investment securities, has slowed and required ASB to increase its other borrowings to fund the loan portfolio growth, thereby increasing the Bank's funding costs and reducing its balance sheet sensitivity. Additional federal funds rate increases may not further increase the Bank's net interest margin if core deposit growth ceases and funding is replaced with other borrowings.

ASB recorded a provision for credit losses of \$2.0 million, compared with a \$25.8 million negative provision for credit losses in 2021. The provision for credit losses in 2022 was for growth in the loan portfolio and also reflected the release of loss

reserves for improving credit trends. The negative provision for credit losses in 2021 was due to an improving economy and credit quality as the state of Hawaii was recovering from the economic impact of the 2020 COVID-19 pandemic year. The provision for credit losses in future quarters will be dependent on future economic conditions and changes to borrower credit quality at that time.

For the year ended December 31, 2022, the investment securities portfolio balance decreased approximately \$415 million, or 13%, as slowing deposit growth resulted in lower excess liquidity and the need for other sources to fund the strong loan growth. Investment securities portfolio repayments were used as funding source for the loan growth and investment security purchases were reduced. In addition, the rise in interest rates caused higher unrealized losses in the available-for-sale investment securities portfolio which reduced the investment portfolio balance.

In response to COVID-19, ASB made short-term loan modifications to borrowers who were generally payment current at the time of relief. As of December 31, 2022, no loans remained in their active deferral period. Approximately \$1.9 million of loans were not able to resume their contractual payments and were considered delinquent as of December 31, 2022.

Since 2020 through 2022, ASB reduced its branch network from 49 branches to 38 branches as it focuses on optimizing its branch network. In addition to a new digital branch, ASB had converted three existing branches to digital branches, which provide digital solutions such as full-service ATMs and access to expert bankers through videoconferencing tools while allowing the Bank to have a more efficient physical footprint. In 2022 \$1.6 million in branch termination costs were offset by \$1.8 million gain on sale of real estate for closed branches. The reduction in ASB's branch network should not have a significant impact to the bank's customers as there are other branches nearby and other channels such as online and mobile banking. ASB continues to evaluate its branch network to determine whether further changes may be appropriate given its customers' use of other banking channels.

The CARES Act was signed into law on March 27, 2020. The CARES Act provided over \$2 trillion in economic assistance for American workers, families, and small businesses, and job preservation for American industries. The PPP was established under the CARES Act and implemented by the United States Small Business Administration (SBA) to provide a direct incentive for small businesses to keep their workers on the payroll as a result of the COVID-19 crisis. ASB worked with a number of small businesses, both customers and non-customers, to complete the loan application forms so that these businesses could participate in the program. During the first round of PPP, the Bank secured more than \$370 million in PPP loans for approximately 4,100 small businesses that supported over 40,000 jobs, ASB received processing fees totaling approximately \$13 million and started recognizing these fees over the life of the loans. During the second round of PPP, ASB secured more than \$175 million for approximately 2,200 small businesses that supported more than 20,000 jobs; ASB received processing fees of approximately \$9 million. The Bank's ASB CARES loan program continued to paydown and most of the fees from the program have been recognized as of December 31, 2022. The remaining PPP loans outstanding as of December 31, 2022 was \$5 million.

Other provisions of the CARES Act provides that a financial institution may elect to suspend the requirements under accounting principles generally accepted in the United States of America (GAAP) for certain loan modifications that would otherwise be categorized as a TDR and any related impairment for accounting purposes. See Note 4 of the Consolidated Financial Statements and "Economic conditions" in the "HEI Consolidated" section above.

ASB continues to maintain its low-risk profile, strong balance sheet and straightforward community banking business model.

Results of operations.

• 2022 vs. 2021

(in millions)	2022	2021	Increase (decrease)	Primary reason(s)
Interest income	\$ 266	\$ 242	\$ 24	Higher average earning asset balances and yields.
				Average loan portfolio balances increased \$217 million - residential, commercial real estate and home equity lines of credit loan portfolio average balances increased \$164 million, \$137 million and \$33 million, respectively, primarily due to increased demand for these loan products. Average residential loan portfolio growth was also the result of ASB's decision to portfolio a larger portion of the residential loan production rather than sell them on the secondary market. Average consumer loans portfolio balance increased \$26 million primarily due to purchases of solar and sustainable home improvement loans. Average commercial loans portfolio balances decreased \$146 million due to repayments in the ASB Cares loan portfolio, which was the Bank's PPP loan product.
				Average loan portfolio yields 2 basis points higher - loan yields benefited from the rising interest rate environment. Current new loan production yields are now higher than the portfolio yields.
				Average investment securities portfolio balance increased \$394 million - excess liquidity from strong deposit growth was invested in agency securities.
				Average investment securities portfolio yield 24 basis points higher - investment security purchase yields benefited from lower premium amortization as the rising interest rate environment slowed prepayment rates.
Noninterest income	57	65	(8)	Lower mortgage banking income and lower bank owned life insurance income were partly offset by higher customer fee income and higher gain on sale of real estate.
				Lower mortgage banking income - lower residential loan sales volume primarily due to lower demand for residential loans and ASB's decision to portfolio a larger portion of its residential loan production in 2022. Loan sale profit margins were also lower in 2022 compared to 2021.
				Lower bank-owned life insurance income - lower returns from insurance policies in 2022 and 2021 bank-owned life insurance income included higher proceeds from life insurance policies.
				Higher customer fee income - higher fee income due to increased activity in customer accounts and higher fee income from investment and insurance services.
				Higher gain on sale of real estate - two closed branch properties were sold in 2022 with no similar sales in 2021.
Less: gain on sale of real estate	(2)	—	(2)	Gain on sale of real estate, which is included in Noninterest income above and in the Bank's statements of income and comprehensive income in Note 4 of the Consolidated Financial Statements, is included in Bank expenses in the consolidated statements of income, and accordingly, is reflected in operating expenses below as a separate line item and excluded from Revenues.
Less: gain on sale of investment securities, net	—	(1)	1	Gain on sale of investment securities, net, which is included in Noninterest income above and in the Bank's statements of income and comprehensive income in Note 4 of the Consolidated Financial Statements, is classified as gain on sale of investment securities, net in the consolidated statements of income, and accordingly, is reflected below following operating income as a separate line item and excluded from Revenues.
Revenues	321	306	15	The increase in revenues was primarily due to higher interest income partly offset by lower noninterest income.
Interest expense	13	5	8	Higher interest expense on deposits and other borrowings.
				Higher interest expense on deposits - higher deposit yields due to the rising interest rate environment, which increased the yield on interest bearing deposits.
				Average core deposit balances increased \$444 million; average term certificate balances decreased \$13 million.
				Average deposit yields increased from 6 basis points to 9 basis points.

(in millions)	2022	2021	Increase (decrease)	Primary reason(s)
				Higher interest expense on other borrowings - primarily due to higher other borrowing balances and yields.
				Average FHLB advance balances increased \$121 million as wholesale borrowings were used to fund the strong loan growth. The average yield on FHLB advances increased 318 basis points due to the rising interest rate environment.
				Average repurchase agreements balances increased \$39 million and the average yield increased 97 basis points.
Provision for credit losses	2	(26)	28	Increase in provision for credit losses was primarily due to a negative provision for credit losses being recorded in 2021.
				2022 provision for credit losses was primarily due to additional credit loss reserves for growth in the loan portfolio as ASB's loan portfolio grew \$784 million during 2022.
				Improvements in the credit trends for the commercial real estate, commercial markets, residential and consumer loan portfolios enabled ASB to release reserves in those loan portfolios to partially offset the additional reserves for loan portfolio growth.
				2021 negative provision for credit losses reflected favorable credit trends with continued improvement in the economic environment as the economy recovered from the effects of the COVID-19 pandemic.
				Negative provision for credit losses was also due to a shift in loan portfolio mix - a decrease in personal unsecured loan portfolio balances, which had higher credit loss rates replaced with higher residential and commercial real estate loan portfolio balances with lower credit loss rates. The personal unsecured loan portfolio also experienced improved net charge-off trends.
				Delinquency rates have decreased - from 0.33% at December 31, 2021 to 0.23% at December 31, 2022 due to lower residential 1-4 family loan delinquencies.
				Net charge-offs to average loans have decreased - from 0.07% at December 31, 2021 to 0.03% at December 31, 2022 due to lower personal unsecured loan portfolio net charge-offs.
Noninterest expense	205	197	8	Higher occupancy and higher other expenses.
				Compensation and benefit expenses - increase in base compensation, higher incentive compensation payout for commission based employees and higher performance-based compensation were offset by the fair value adjustment related to the deferred compensation plan in 2022 and the separation agreement for an executive officer that was paid in 2021 with no similar payment in 2022.
				Higher occupancy expenses - primarily due to the write-off of remaining leases for closed branches.
				Higher other expenses - 2021 expenses included a one-time credit adjustment for a change in accounting for the ASB retirement plan with no similar adjustment in 2022.
Gain on sale of real estate	(2)	—	(2)	
Expenses	218	176	42	The increase in expenses was primarily due to higher provision for credit losses, higher interest expense and an increase in noninterest expenses.
Operating income	103	130	(27)	Higher provision for credit losses, higher interest expense, higher noninterest expenses and lower noninterest income, partly offset by higher interest income.
Gain on sale of investment securities, net	—	1	(1)	
Net income	\$ 80	\$ 101	\$ (21)	The decrease in net income was the result of lower operating income partly offset by lower income tax expense and lower gain on sale of investment securities.
Return on average equity ¹	14.1%	13.8%	0.3%	

¹ Calculated using the average daily balance.

For a discussion of 2020 results, please refer to the “Results of operations” section in Item 7, “Management Discussion and Analysis of Financial Condition and Results of Operations—Bank,” in the Company’s 2021 Form 10-K.

See Note 4 of the Consolidated Financial Statements for further information about ASB.

Average balance sheet and net interest margin. The following table provides a summary of average balances, including major categories of interest-earning assets and interest-bearing liabilities:

(dollars in thousands)	2022			2021			2020		
	Average balance	Interest income/expense	Yield/rate (%)	Average balance	Interest income/expense	Yield/rate (%)	Average balance	Interest income/expense	Yield/rate (%)
Assets:									
Interest-earning deposits	\$ 59,277	\$ 500	0.84	\$ 69,930	\$ 93	0.13	\$ 153,879	\$ 241	0.16
FHLB stock	15,465	702	4.54	10,298	327	3.17	9,481	306	3.23
Investment securities									
Taxable	3,171,771	55,529	1.75	2,792,255	42,114	1.51	1,554,812	29,213	1.88
Non-taxable	69,099	1,662	2.40	54,646	1,177	2.15	32,080	974	3.04
Total investment securities	3,240,870	57,191	1.76	2,846,901	43,291	1.52	1,586,892	30,187	1.90
Loans									
Residential 1-4 family	2,353,764	83,016	3.53	2,189,680	78,672	3.59	2,180,013	85,769	3.93
Commercial real estate	1,294,777	49,152	3.80	1,157,987	38,255	3.30	954,836	34,596	3.62
Home equity line of credit	918,563	28,506	3.10	885,759	27,669	3.12	1,060,444	33,731	3.18
Residential land	21,442	1,309	6.10	18,227	924	5.07	13,799	754	5.46
Commercial	710,658	29,295	4.12	856,226	36,178	4.23	935,663	31,642	3.38
Consumer	161,722	16,898	10.45	135,609	17,284	12.75	215,994	27,728	12.84
Total loans ^{1,2}	5,460,926	208,176	3.81	5,243,488	198,982	3.79	5,360,749	214,220	4.00
Total interest-earning assets ³	8,776,538	266,569	3.04	8,170,617	242,693	2.97	7,111,001	244,954	3.44
Allowance for credit losses	(70,071)			(86,691)			(81,193)		
Noninterest-earning assets	567,106			742,174			762,746		
Total Assets	\$ 9,273,573			\$ 8,826,100			\$ 7,792,554		
Liabilities and Shareholder’s Equity:									
Savings	\$ 3,275,089	860	0.03	\$ 3,069,615	802	0.03	\$ 2,620,311	1,774	0.07
Interest-bearing checking	1,345,627	765	0.06	1,237,969	242	0.02	1,106,563	471	0.04
Money market	208,015	330	0.16	192,044	132	0.07	161,084	465	0.29
Time certificates	470,189	5,372	1.14	483,353	3,805	0.79	664,578	7,944	1.20
Total interest-bearing deposits	5,298,920	7,327	0.14	4,982,981	4,981	0.10	4,552,536	10,654	0.23
Advances from Federal Home Loan Bank	136,630	4,716	3.45	15,319	42	0.27	21,490	146	0.68
Securities sold under agreements to repurchase and federal funds purchased	127,170	1,258	0.99	88,405	17	0.02	76,360	314	0.41
Total interest-bearing liabilities	5,562,720	13,301	0.24	5,086,705	5,040	0.10	4,650,386	11,114	0.24
Noninterest bearing liabilities:									
Deposits	2,948,679			2,833,886			2,276,722		
Other	193,942			169,967			155,589		
Shareholder’s equity	568,232			735,542			709,857		
Total Liabilities and Shareholder’s Equity	\$ 9,273,573			\$ 8,826,100			\$ 7,792,554		
Net interest income		\$ 253,268			\$ 237,653			\$ 233,840	
Net interest margin (%) ⁴			2.89			2.91			3.29

¹ Includes loans held for sale, at lower of cost or fair value, of \$4.0 million, \$23.0 million and \$20.5 million as of December 31, 2022, 2021 and 2020, respectively.

² Includes recognition of net deferred loan fees of \$5.3 million, \$14.3 million and \$4.9 million for 2022, 2021 and 2020 respectively, together with interest accrued prior to suspension of interest accrual on nonaccrual loans.

³ For 2022, 2021 and 2020, the taxable-equivalent basis adjustments made to the table above were not material.

⁴ Defined as net interest income, on a fully taxable equivalent basis, as a percentage of average total interest-earning assets.

The following table shows the effect on net interest income of (1) changes in interest rates (change in weighted-average interest rate multiplied by prior year average balance) and (2) changes in volume (change in average balance multiplied by prior period weighted-average interest rate). Any remaining change is allocated to the above two categories on a pro rata basis.

(in thousands)	2022 vs. 2021			2021 vs. 2020		
	Rate	Volume	Total	Rate	Volume	Total
Interest income						
Interest-earning deposits	\$ 423	\$ (16)	\$ 407	\$ (38)	\$ (110)	\$ (148)
FHLB stock	174	201	375	(6)	27	21
Investment securities						
Taxable	7,260	6,155	13,415	(6,655)	19,556	12,901
Non-taxable	148	337	485	(343)	546	203
Total investment securities	7,408	6,492	13,900	(6,998)	20,102	13,104
Loans						
Residential 1-4 family	(1,357)	5,701	4,344	(7,473)	376	(7,097)
Commercial real estate	6,123	4,774	10,897	(3,243)	6,902	3,659
Home equity line of credit	(178)	1,015	837	(623)	(5,439)	(6,062)
Residential land	207	178	385	(57)	227	170
Commercial	13,111	(19,994)	(6,883)	7,118	(2,582)	4,536
Consumer	435	(821)	(386)	(193)	(10,251)	(10,444)
Total loans	18,341	(9,147)	9,194	(4,471)	(10,767)	(15,238)
Total increase (decrease) in interest income	26,346	(2,470)	23,876	(11,513)	9,252	(2,261)
Interest expense						
Savings	—	(58)	(58)	1,234	(262)	972
Interest-bearing checking	(501)	(22)	(523)	271	(42)	229
Money market	(186)	(12)	(198)	409	(76)	333
Time certificates	(1,672)	105	(1,567)	2,302	1,837	4,139
Advances from Federal Home Loan Bank	(2,793)	(1,881)	(4,674)	70	34	104
Securities sold under agreements to repurchase and federal funds purchased	(1,230)	(11)	(1,241)	339	(42)	297
Total decrease (increase) in interest expense	(6,382)	(1,879)	(8,261)	4,625	1,449	6,074
Increase (decrease) in net interest income	\$ 19,964	\$ (4,349)	\$ 15,615	\$ (6,888)	\$ 10,701	\$ 3,813

Earning assets, costing liabilities, contingencies and other factors. Earnings of ASB depend primarily on net interest income, which is the difference between interest earned on earning assets and interest paid on costing liabilities. The interest rate environment has been impacted by disruptions in the financial markets over a period of several years. In 2022, the Federal Open Market Committee increased its federal funds rate target range to 4.25% - 4.50% throughout the year to combat signs of inflation. ASB's net interest income and net interest margin has started to increase but still remains at lower levels. A return to the recent low interest rate environment may negatively impact ASB's net interest income and net interest margin.

Loans and mortgage-backed securities are ASB's primary earning assets.

Loan portfolio. ASB's loan volumes and yields are affected by market interest rates, competition, demand for financing, availability of funds and management's responses to these factors. See "Loans" in Note 4 of the Consolidated Financial Statements for a composition of ASB's loan portfolio.

The increase in the loan portfolio balance in 2022 was primarily due to growth in residential, commercial real estate, home equity line of credit and consumer loan portfolios. The growth in the residential loan portfolio was due to ASB's decision to portfolio a larger portion of the residential mortgage loan production and reduce the amount of residential loans sold in the secondary market. Higher interest rates also slowed refinance activity and prepayments in the residential mortgage loan portfolio. The growth in the commercial real estate, home equity line of credit and consumer loan portfolios was due to increased demand for these loan products. The decrease in the commercial loan portfolio was due to the continued paydown of the PPP loans which decreased from \$69 million at December 31, 2021 to \$5 million at December 31, 2022.

The increase in the loan portfolio balance in 2021 was primarily due to growth in the residential and commercial real estate loan portfolio balances. The growth in the residential loan portfolio balance was due to ASB's decision to portfolio a larger portion of the residential mortgage loan production and reduce the amount of residential loans sold in the secondary market. The growth in the commercial real estate loan portfolio was due to ASB's continued effort to diversify its loan portfolio with

higher-spread, shorter-maturity loans and/or variable rate loans. The decrease in the commercial loan portfolio was due to paydown of the PPP loans which decreased from \$300 million at December 31, 2020 to \$69 million at December 31, 2021.

The following table summarizes loans held for investment based upon contractually scheduled principal payments allocated to the indicated maturity categories:

December 31	2022				
	In 1 year or less	After 1 year through 5 years	After 5 years through 15 years	After 15 years	Total
(in millions)					
Residential 1-4 family – Fixed	\$ 75	\$ 314	\$ 822	\$ 1,049	\$ 2,260
Residential 1-4 family – Adjustable	14	53	128	24	219
Total residential 1-4 family	89	367	950	1,073	2,479
Commercial real estate – Fixed	92	208	525	1	826
Commercial real estate – Adjustable	94	247	191	—	532
Total commercial real estate	186	455	716	1	1,358
Home equity line of credit– Fixed	30	112	232	25	399
Home equity line of credit – Adjustable	3	13	136	452	604
Total home equity line of credit	33	125	368	477	1,003
Residential land– Fixed	4	17	—	—	21
Residential land – Adjustable	—	—	—	—	—
Total residential land	4	17	—	—	21
Commercial construction – Fixed	24	6	—	1	31
Commercial construction – Adjustable	7	8	—	42	57
Total commercial construction	31	14	—	43	88
Residential construction – Fixed	21	—	—	—	21
Residential construction – Adjustable	—	—	—	—	—
Total residential construction	21	—	—	—	21
Commercial – Fixed	75	187	50	1	313
Commercial – Adjustable	90	362	15	—	467
Total commercial	165	549	65	1	780
Consumer – Fixed	45	87	10	101	243
Consumer – Adjustable	3	8	1	—	12
Total consumer	48	95	11	101	255
Total loans – Fixed	366	931	1,639	1,178	4,114
Total loans – Adjustable	211	691	471	518	1,891
Total loans	\$ 577	\$ 1,622	\$ 2,110	\$ 1,696	\$ 6,005

Home equity lines of credit. The HELOC portfolio makes up 17% of the total loan portfolio and is generally an interest-only revolving loan for a 10-year period, after which time the HELOC outstanding balance converts to a fully amortizing variable-rate term loan with a 20-year amortization period. Borrowers also have a “Fixed Rate Loan Option” to convert a part of their available line of credit into a 5, 7 or 10-year fully amortizing fixed-rate loan with level principal and interest payments. As of December 31, 2022, approximately 39% of the portfolio balances were amortizing loans under the Fixed Rate Loan Option. A HELOC loan is typically in a subordinate lien position to a borrower’s first mortgage loan, however, approximately 56% of ASB’s HELOC loan portfolio is in a first lien position.

Loan portfolio risk elements. When a borrower fails to make a required payment on a loan and does not cure the delinquency promptly, the loan is classified as delinquent. If delinquencies are not cured promptly, ASB normally commences a collection action, including foreclosure proceedings in the case of real estate secured loans. In a foreclosure action, the property collateralizing the delinquent debt is sold at a public auction in which ASB may participate as a bidder to protect its interest. If ASB is the successful bidder, the property is classified as real estate owned until it is sold. As of December 31, 2022 and 2021, ASB had \$115,000 and nil, respectively, of real estate acquired in settlement of loans.

In addition to delinquent loans, other significant lending risk elements include: (1) loans which accrue interest and are 90 days or more past due as to principal or interest, (2) loans accounted for on a nonaccrual basis (nonaccrual loans), and (3) loans

on which various concessions are made with respect to interest rate, maturity, or other terms due to the inability of the borrower to service the obligation under the original terms of the agreement (troubled debt restructured loans). ASB loans that were 90 days or more past due on which interest was being accrued as of December 31, 2022 and 2021 were immaterial or nil. The following table sets forth certain information with respect to nonaccrual loans:

December 31	2022	2021
(dollars in thousands)		
Real estate:		
Residential 1-4 family	\$ 7,179	\$ 19,748
Commercial real estate	—	15,325
Home equity line of credit	5,096	5,521
Residential land	420	397
Commercial construction	—	—
Residential construction	—	—
Total real estate	12,695	40,991
Commercial	2,183	2,138
Consumer	1,588	1,845
Total nonaccrual loans	\$ 16,466	\$ 44,974
Loans receivable, net	\$ 5,978,906	\$ 5,211,114
Allowance for credit losses	\$ 72,216	\$ 71,130
Nonaccrual loans to loans receivable, net	0.28%	0.86%
Allowance for credit losses to nonaccrual loans	4.39x	1.58x

In 2022, nonaccrual loans decreased \$28.5 million primarily due to decreases in commercial real estate and residential 1-4 family nonaccrual loans of \$15.3 million and \$12.6 million, respectively. The decrease in commercial real estate nonaccrual loans was due to the reclassification of one commercial real estate loan to accrual status. The decrease in the residential nonaccrual loans was due to the reclassification of residential loans to accrual status based on payment performance.

In 2021, nonaccrual loans decreased \$2.4 million primarily due to decreases in commercial real estate, commercial, consumer and HELOC nonaccrual loans of \$3.4 million, \$3.0 million, \$2.1 million and \$1.8 million, respectively, partly offset by an increase in residential 1-4 family nonaccrual loans of \$7.9 million. The increase in residential nonaccrual loans was attributed to customers that could not resume contractual payments after their deferral period was completed.

See “Allowance for credit losses” in Note 4 of the Consolidated Financial Statements for information with respect to nonperforming assets.

Allowance for credit losses. See “Allowance for credit losses” in Note 4 of the Consolidated Financial Statements for the tables which sets forth the allocation of ASB’s allowance for credit losses. On January 1, 2020, ASB adopted *Accounting Standards Update (ASU) 2016-13, Financial Instruments - Measurement of Current Expected Credit Losses on Financial Instruments*, modifying the accounting for the allowance for credit losses from an incurred loss model to an expected loss model (see Note 1, “Summary of Significant Accounting Policies” of the Consolidated Financial Statements). With the adoption of ASU 2016-13, ASB added \$19.4 million to the allowance for credit losses on January 1, 2020.

During 2022, ASB recorded a provision for credit losses related to the allowance for credit losses of \$2.0 million primarily due to loan loss reserves for growth in the loan portfolio partly offset by the release loss reserves for improved credit trends.

ASB maintains a reserve for credit losses that consists of two components, the allowance for credit losses and an allowance for loan commitments (unfunded reserve). The level of the reserve for unfunded loan commitments is adjusted by recording an expense or recovery in provision for credit losses. With the adoption of ASU 2016-13, ASB added \$1.6 million to the reserve for unfunded loan commitments on January 1, 2020. For 2022, ASB recorded a negative provision for credit losses for unfunded commitments of \$0.5 million compared to a provision for credit losses for unfunded commitments of \$0.6 million for 2021. As of December 31, 2022 and December 31, 2021, the reserve for unfunded loan commitments was \$4.4 million and \$4.9 million, respectively.

The following table sets forth the allocation of ASB's allowance for credit losses and the percentage of loans in each category to total loans:

December 31	2022			2021		
(dollars in thousands)	Allowance balance	Allowance to loan receivable %	Loan receivable % of total	Allowance balance	Allowance to loan receivable %	Loan receivable % of total
Real estate:						
Residential 1-4 family	\$ 6,270	0.25	41.3	\$ 6,545	0.28	44.0
Commercial real estate	21,898	1.62	22.6	24,696	2.34	20.3
Home equity line of credit	6,125	0.61	16.7	5,657	0.68	16.0
Residential land	717	3.48	0.3	646	3.25	0.4
Commercial construction	1,195	1.36	1.5	2,186	2.40	1.7
Residential construction	46	0.22	0.4	18	0.16	0.2
Total real estate	36,251	0.73	82.8	39,748	0.92	82.6
Commercial	12,426	1.60	13.0	15,798	1.99	15.2
Consumer	23,539	9.92	4.2	15,584	13.67	2.2
Total allowance for credit losses	\$ 72,216	1.21	100.0	\$ 71,130	1.36	100.0

In 2022, ASB's allowance for credit losses increased by \$1.1 million primarily due to increases in the loan loss reserves for the consumer and home equity line of credit loan portfolios as a result of growth in those loan portfolios. The decreases in the allowance for credit losses for the commercial, commercial real estate and residential loan portfolios were primarily due to the release of reserves in those loan portfolios as a result of improved credit trends. Total delinquencies of \$13.9 million at December 31, 2022 was a decrease of \$3.3 million compared to total delinquencies of \$17.2 million at December 31, 2021 primarily due to a decrease in residential loan delinquencies, partly offset by increases in consumer and home equity line of credit loan portfolio delinquencies. The ratio of delinquent loans to total loans decreased from 0.33% of total outstanding loans at December 31, 2021 to 0.23% of total outstanding loans at December 31, 2022. Net charge-offs for 2022 were \$1.4 million, a decrease of \$2.2 million compared to \$3.6 million in 2021 primarily due to a decrease in consumer loan portfolio net charge-offs.

In 2021, ASB's allowance for credit losses decreased by \$30.1 million primarily due to decreases in loan loss reserves for the commercial real estate, commercial and consumer loan portfolios for improved credit quality. The decrease in the consumer loan portfolio was also due to the decrease in the personal unsecured loan portfolio outstanding balance. Total delinquencies of \$17.2 million at December 31, 2021 was a decrease of \$2.4 million compared to total delinquencies of \$19.6 million at December 31, 2020 primarily due to decreases in delinquent consumer, HELOC and residential land loans, partly offset by an increase in residential 1-4 family delinquent loans. The ratio of delinquent loans to total loans decreased from 0.37% of total outstanding loans at December 31, 2020 to 0.33% of total outstanding loans at December 31, 2021. Net charge-offs for 2021 were \$3.6 million, a decrease of \$17.8 million compared to \$21.4 million in 2020 primarily due to a decrease in consumer loan portfolio net charge-offs.

Investment securities. Currently, ASB's investment portfolio consists of U.S. Treasury and federal agency obligations, mortgage-backed securities, corporate bonds and mortgage revenue bonds. ASB owns mortgage-backed securities issued or guaranteed by the U.S. government agencies or sponsored agencies, including the Federal National Mortgage Association (FNMA), Federal Home Loan Mortgage Corporation (FHLMC), Government National Mortgage Association (GNMA) and Small Business Administration (SBA). The weighted-average yield on investments during 2022, 2021 and 2020 was 1.76%, 1.52% and 1.90%, respectively. ASB did not maintain a portfolio of securities held for trading during 2022 and 2021.

As of December 31, 2022 and 2021, ASB had \$1.3 billion and \$522.3 million, respectively, of investment securities that were purchased and classified as held-to-maturity. In October 2022, ASB transferred 66 available-for-sale investment securities with a fair value of \$755 million to the held-to-maturity category. The investment securities were classified as held-to-maturity

to enhance ASB's capital management in a rising rate environment. ASB considers the held-to-maturity classification of these investment securities to be appropriate as ASB has the positive intent and ability to hold these securities to maturity.

Principal and interest on mortgage-backed securities issued by FNMA, FHLMC, GNMA and SBA are guaranteed by the issuer and, in the case of GNMA and SBA, backed by the full faith and credit of the U.S. government. U.S. Treasury securities are also backed by the full faith of the U.S. government. The increase in the investment securities portfolio was primarily due to the purchase of agency mortgage-backed and credit securities with excess liquidity.

The net unrealized gains and losses on ASB's investment securities were primarily caused by movements in interest rates. All contractual cash flows of those investments are guaranteed by an agency of the U.S. government. Based upon ASB's evaluation at December 31, 2022 and 2021, there was no indicated impairment as ASB expects to collect the contractual cash flows for these investments. See "Investment securities" in Note 1 of the Consolidated Financial Statements for a discussion of securities impairment assessment.

As of December 31, 2022 and 2021, ASB did not have any private-issue mortgage-backed securities. ASB does not have any exposure to securities backed by subprime mortgages. See "Investment securities" in Note 4 of the Consolidated Financial Statements for a discussion of the allowance for credit losses for the investment securities portfolio.

The following table summarizes the current amortized cost of ASB's investment portfolio (excluding stock of the FHLB of Des Moines, which has no contractual maturity) and weighted average yields as of December 31, 2022. Mortgage-backed securities are shown separately because they are typically paid in monthly installments over a number of years.

(dollars in millions)	In 1 year or less	After 1 year through 5 years	After 5 years through 10 years	After 10 years	Mortgage- backed securities	Total ¹
U.S. Treasury and federal agency obligations	\$ 1	\$ 62	\$ 85	\$ —	\$ —	\$ 148
Mortgage-backed securities — issued or guaranteed by U.S. Government agencies or sponsored agencies	—	—	—	—	2,723	2,723
Corporate bonds	—	44	—	—	—	44
Mortgage revenue bonds ¹	—	—	15	—	—	15
	\$ 1	\$ 106	\$ 100	\$ —	\$ 2,723	\$ 2,930
Weighted average yield	1.64%	2.17%	1.91%	—%	1.72%	1.74%

¹ Weighted average yield on the mortgage revenue bonds is computed on a tax equivalent basis using a federal statutory tax rate of 21%.

Stock in FHLB. As of December 31, 2022 and 2021, ASB's stock in FHLB of Des Moines was \$26.6 million and \$10.0 million, respectively, was carried at cost because it can only be redeemed at par. The amount that ASB is required to invest in FHLB stock is determined by FHLB requirements. In 2022, 2021 and 2020, ASB received cash dividends of \$702,000, \$327,000 and \$306,000, respectively, on its FHLB Stock.

Deposits and other borrowings. Deposits continue to be the largest source of funds for ASB and are affected by market interest rates, competition and management's responses to these factors. In 2022, deposits decreased by \$2.5 million as an outflow of core deposits was replaced with time certificates. Core deposit retention and sustained growth will remain challenging in the current rising interest rate environment. Advances from the FHLB of Des Moines, securities sold under agreements to repurchase and federal funds purchased continue to be additional sources of funds. As of December 31, 2022, ASB's costing liabilities consisted of 92% deposits and 8% borrowings compared to costing liabilities of 99% deposits and 1% borrowings as of December 31, 2021.

ASB's deposits are obtained primarily from residents of Hawaii. Net deposit inflow or outflow, measured as the year-over-year difference in year-end deposits, was an outflow of \$2.5 million in 2022, compared to an inflow of \$785 million in 2021.

The following table presents the amount of time certificates of deposit of \$250,000 or more, segregated by time remaining until maturity:

(in thousands)	Amount
Three months or less	\$ 176,859
Greater than three months through six months	149,081
Greater than six months through twelve months	9,465
Greater than twelve months	11,518
	\$ 346,923

As of December 31, 2022 and 2021, ASB had approximately \$1.2 billion and \$1.4 billion, respectively, of deposits that were uninsured.

Other borrowings consist of advances from the FHLB and securities sold under agreements to repurchases. See “Other borrowings” in Note 4 of the Consolidated Financial Statements. ASB may obtain advances from the FHLB of Des Moines provided that certain standards related to creditworthiness have been met. Advances are collateralized by a blanket pledge of certain notes held by ASB and the mortgages securing them. To the extent that advances exceed the amount of mortgage loan collateral pledged to the FHLB of Des Moines, the excess must be covered by qualified marketable securities held under the control of and at the FHLB of Des Moines or at an approved third-party custodian. FHLB advances generally are available to meet seasonal and other withdrawals of deposit accounts, to expand lending and to assist in the effort to improve asset and liability management. FHLB advances are made pursuant to several different credit programs offered from time to time by the FHLB of Des Moines. Securities sold under agreements to repurchase are accounted for as financing transactions and the obligations to repurchase these securities are recorded as liabilities in the consolidated balance sheets. ASB pledges investment securities as collateral for securities sold under agreements to repurchase. All such agreements are subject to master netting arrangements, which provide for conditional right of set-off in case of default by either party; however, ASB presents securities sold under agreements to repurchase on a gross basis in the balance sheet.

The increase in other borrowings in 2022 was due to increases in FHLB advances and business retail repurchase agreements, which were sources of funding for the loan portfolio growth as deposit growth slowed in 2022. The decrease in other borrowings in 2021 was due to a decrease in business repurchase agreements.

As of December 31, 2022, the unused borrowing capacity with the FHLB of Des Moines was \$1.6 billion. The FHLB of Des Moines continues to be an important source of liquidity for ASB. See “Liquidity and capital resources” below for changes in the unused borrowing capacity with the FHLB of Des Moines.

Other factors. Interest rate risk is a significant risk of ASB’s operations and also represents a market risk factor affecting the fair value of ASB’s investment securities. Increases and decreases in prevailing interest rates generally translate into decreases and increases in the fair value of the investment securities, respectively. In addition, changes in credit spreads also impact the fair values of the investment securities.

As of December 31, 2022, ASB had an unrealized loss, net of taxes, on available-for-sale investment securities (including securities pledged for repurchase agreements) in accumulated other comprehensive income (AOCI) of \$181.9 million compared to an unrealized loss, net of taxes, of \$32.0 million as of December 31, 2021. See “Quantitative and Qualitative Disclosures About Market Risk.”

Legislation and regulation. ASB is subject to extensive regulation, principally by the OCC and the FDIC. Depending on ASB’s level of regulatory capital and other considerations, these regulations could restrict the ability of ASB to compete with other institutions and to pay dividends to its shareholder. See the discussion below under “Liquidity and capital resources.” Also see “Federal Deposit Insurance Corporation assessment” in Note 4 of the Consolidated Financial Statements.

Final Capital Rules. On July 2, 2013, the FRB finalized its rule implementing the Basel III regulatory capital framework. The final rules applied to banking organizations of all sizes and types regulated by the FRB and the OCC, except bank holding companies subject to the FRB’s Small Bank Holding Company Policy Statement and Savings & Loan Holding Companies (SLHCs) substantially engaged in insurance underwriting or commercial activities. HEI currently meets the requirements of the exemption as a top-tier grandfathered unitary SLHC that derived, as of June 30 of the previous calendar year, either 50% or more of its total consolidated assets or 50% or more of its total revenues on an enterprise-wide basis (calculated under GAAP) from activities that are not financial in nature pursuant to Section 4(k) of the Bank Holding Company Act. The FRB is temporarily excluding these SLHCs from the final rule while it considers a proposal relating to capital and other requirements for SLHC intermediate holding companies (such as ASB Hawaii). The FRB indicated that it would release a proposal on intermediate holding companies that would specify the criteria for establishing and transferring activities to intermediate holding companies and propose to apply the FRB’s capital requirements to such intermediate holding companies. The FRB has not yet issued such a proposal, or a proposal on how to apply the Basel III capital rules to SLHCs that are substantially engaged in commercial or insurance underwriting activities, such as grandfathered unitary SLHCs like HEI.

Pursuant to the final rule and consistent with the proposals, all banking organizations, including covered holding companies, would initially be subject to the following minimum regulatory capital requirements: a common equity Tier 1 capital ratio of 4.5%, a Tier 1 capital ratio of 6%, a total capital ratio of 8% of risk-weighted assets and a Tier 1 leverage ratio of 4%, and these requirements would increase in subsequent years. In order to avoid restrictions on capital distributions and discretionary bonus payments to executive officers, the final rule requires a banking organization to hold a buffer of common equity Tier 1 capital above its minimum capital requirements in an amount greater than 2.5% of total risk-weighted assets (capital conservation buffer).

Subject to the timing and final outcome of the FRB’s SLHC intermediate holding company proposal, HEI anticipates that the capital requirements in the final rule will eventually be effective for HEI or ASB Hawaii as well. If the capital

requirements were currently applicable to HEI, management believes HEI would satisfy the capital requirements, including the capital conservation buffer. Management cannot predict what final rule the FRB may adopt concerning intermediate holding companies or their impact on ASB Hawaii, if any.

With Tier 1 leverage, common equity, Tier 1 capital and total capital ratios of 7.8%, 12.2%, 12.2% and 13.1%, respectively as of December 31, 2022, ASB's regulatory capital ratios exceeded the minimum regulatory capital requirements of 4.0%, 4.5%, 6.0% and 8.0%, respectively. See Bank - Regulation in HEI's "Item 1. Business" for a description of the changes to the community bank leverage ratio framework.

Liquidity and capital resources.

December 31	2022	% change	2021	% change
(dollars in millions)				
Total assets	\$ 9,546	4	\$ 9,182	9
Investment securities	2,681	(13)	3,097	41
Loans held for investment, net	5,907	15	5,140	(2)
Deposit liabilities	8,170	—	8,172	11
Other bank borrowings	695	687	88	(2)

As of December 31, 2022, ASB was one of Hawaii's largest financial institutions based on assets of \$9.5 billion and deposits of \$8.2 billion.

ASB's principal sources of liquidity are customer deposits, other borrowings and the maturity and repayment of portfolio loans and securities. The Bank's liquidity remains at satisfactory levels as deposits decreased slightly. ASB used investment security portfolio repayments and other borrowings to fund its strong loan production. ASB's deposits as of December 31, 2022 were \$3 million lower than December 31, 2021. ASB's sources of borrowings include advances from the FHLB and securities sold under agreements to repurchase from broker/dealers and commercial account holders. As of December 31, 2022, ASB had \$414 million of FHLB borrowings outstanding. ASB is approved to borrow from the FHLB up to 45% of ASB's assets to the extent it provides qualifying collateral and holds sufficient FHLB stock. As of December 31, 2022, ASB's unused FHLB borrowing capacity was approximately \$1.6 billion.

As of December 31, 2022, securities sold under agreements to repurchase totaled \$281 million, representing 2.9% of assets.

As of December 31, 2022, ASB had commitments to borrowers for loans and unused lines and letters of credit of \$2.1 billion, of which, commitments to lend to borrowers whose loan terms have been modified in troubled debt restructurings were nil. Management believes ASB's current sources of funds will enable it to meet these obligations while maintaining liquidity at satisfactory levels.

As of December 31, 2022 and 2021, ASB had \$16.5 million and \$45.0 million of loans on nonaccrual status, respectively, or 0.3% and 0.9%, respectively, of net loans outstanding. As of December 31, 2022 and 2021, ASB had \$0.1 million and nil, respectively, of real estate acquired in settlement of loans.

In 2022, operating activities provided cash of \$121 million. Net cash of \$778 million was used by investing activities primarily due to a net increase in loans receivable of \$661 million, purchases of available-for-sale investment securities of \$366 million, purchases of loans held for investment of \$103 million, net purchases of stock from the FHLB of \$17 million, purchases of bank-owned life insurance of \$5 million and additions to premises and equipment of \$5 million, partly offset by receipt of repayments from available-for-sale investment securities of \$342 million, repayments from held-to-maturity investment securities of \$29 million, proceeds from the sale of real estate of \$4 million, proceeds from the redemption of bank-owned life insurance of \$2 million and proceeds from the sale of premises and equipment of \$1 million. Financing activities provided net cash of \$562 million primarily due to a net increase in short-term borrowings of \$414 million and a net increase in repurchase agreements of \$193 million, partly offset by a net decrease in deposit liabilities of \$3 million and common stock dividends to HEI (through ASB Hawaii) of \$42 million.

ASB believes that maintaining a satisfactory regulatory capital position provides a basis for public confidence, affords protection to depositors, helps to ensure continued access to capital markets on favorable terms and provides a foundation for growth. FDIC regulations restrict the ability of financial institutions that are not well-capitalized to compete on the same terms as well-capitalized institutions, such as by offering interest rates on deposits that are significantly higher than the rates offered by competing institutions. As of December 31, 2022, ASB was well-capitalized (see Note 4 of the Consolidated Financial Statements for ASB's capital ratios).

For a discussion of ASB dividends, see "Common stock equity" in Note 4 of the Consolidated Financial Statements.

See “Commitments” in Note 4 of the Consolidated Financial Statements for a discussion of commitments and contingencies and off-balance sheet arrangements.

Material estimates and critical accounting policies. Also see “Material estimates and critical accounting policies” for Consolidated HEI above.

Allowance for credit losses. The Company considers the policies related to the allowance for credit losses as critical to the financial statement presentation. The allowance for credit losses applies to financial assets subject to credit losses and measured at amortized cost and certain off-balance sheet credit exposures. This includes, but is not limited to loans, loan commitments and held-to-maturity securities. In addition, the accounting for credit losses on available-for-sale (AFS) debt securities and purchased financial assets with credit deterioration were amended. The other-than-temporary impairment model of accounting for credit losses on AFS debt securities was replaced with an estimate of expected credit losses only when the fair value is below the amortized cost of the asset. The credit loss models use a probability-of-default, loss given default and exposure at default methodology to estimate the expected credit losses. Within each model or calculation, loans are further segregated based on additional risk characteristics specific to that loan type, such as risk rating, Fair Isaac Corporation (FICO) score, bankruptcy score, age of loan and collateral. The Company uses both internal and external historical data, as appropriate, and a blend of economic forecasts to estimate credit losses over a reasonable and supportable forecast period and then reverts to a longer-term historical loss experience to arrive at lifetime expected credit losses. The reversion period incorporates forward-looking expectations about repayments (including prepayments) as determined by the Company’s asset liability management system. See “Recent Accounting Pronouncements” in Note 1 of the Consolidated Financial Statements for further discussion of the Company’s allowance for credit losses.

ASB disaggregates the loan portfolio into loan segments for purposes of determining the allowance for credit losses. Commercial, commercial real estate, and commercial construction loans are defined as non-homogeneous loans. ASB utilizes a risk rating system for evaluating the credit quality of such loans. Loans are rated based on the degree of risk at origination and periodically thereafter, as appropriate. Values are applied separately to the probability of default (borrower risk) and loss given default (transaction risk). ASB utilizes a numerical-based, risk rating “PD Model” that takes into consideration fiscal year-end financial information of the borrower and identified financial attributes including retained earnings, operating cash flows, interest coverage, liquidity and leverage that demonstrate a strong correlation with default to assign default probabilities at the borrower level. In addition, a loss given default value is assigned to each loan to measure loss in the event of default based on loan specific features such as collateral that mitigates the amount of loss in the event of default. Together the PD Model and loss given default construct provide a quantitative, data driven and consistent framework for measuring risk within the portfolio, on a loan by loan basis and for the ultimate collectability of each loan.

Residential, consumer and credit scored business loans are considered homogeneous loans, which are typically underwritten based on common, uniform standards. For the homogeneous portfolio, the quality of the loan is best indicated by the repayment performance of an individual borrower. ASB supplements performance data with external credit bureau data and credit scores such as the FICO score on a quarterly basis. ASB has built portfolio loss models for each major segment based on the combination of internal and external data to predict the probability of default at the loan level.

ASB also considers qualitative factors in determining the allowance for credit losses. These include but are not limited to adjustments for changes in policies and procedures in underwriting, monitoring or collections, economic conditions, portfolio mix, lending and risk management personnel, results of internal audit and quality control reviews, collateral values and any concentrations of credit.

The reserve for unfunded commitments is maintained at a level believed by management to be sufficient to cover expected losses related to unfunded credit facilities and is included in accounts payable and other liabilities in the consolidated balance sheets. The determination of the adequacy of the reserve is based upon an evaluation of the unfunded credit facilities, including an assessment of historical commitment utilization experience, credit risk grading and historical loss rates. This process takes into consideration the same risk elements that are analyzed in the determination of the adequacy of the allowance for credit losses, as discussed above. Net adjustments to the reserve for unfunded commitments are included in the provision for credit losses in the consolidated statements of income.

Management believes its allowance for credit losses is adequate to cover expected credit losses in the loan portfolio. However, such estimates are based on currently available information and historical experience, and future adjustments may be required from time to time to the allowance for credit losses based on new information and changes that occur (e.g., due to changes in economic conditions, particularly in Hawaii). Actual losses could differ from management’s estimates, and these differences and subsequent adjustments could be material.

Fair value. Fair value estimates are based on the price that would be received to sell an asset, or paid upon the transfer of a liability, in an orderly transaction between market participants at the measurement date. The fair value estimates are generally

determined based on assumptions that market participants would use in pricing the asset or liability and are based on market data obtained from independent third party sources. However, in certain cases, ASB uses its own assumptions based on the best information available in certain circumstances. These valuations are estimates at a specific point in time, based on relevant market information, information about the financial instrument and judgments regarding future expected loss experience, economic conditions, risk characteristics of various financial instruments and other factors. These estimates do not reflect any premium or discount that could result if ASB were to sell its entire holdings of a particular financial instrument at one time. Because no active trading market exists for a portion of its financial instruments, fair value estimates cannot be determined with precision. Changes in the underlying assumptions used, including discount rates and estimates of future cash flows, could significantly affect the estimates. In addition, the tax ramifications related to the realization of the unrealized gains and losses could have a significant effect on fair value estimates, but have not been considered in making such estimates.

ASB classifies its financial assets and liabilities that are measured at fair value in accordance with the three-level valuation hierarchy. Level 1 valuations are based on quoted prices, unadjusted for identical instruments traded in active markets. Level 2 valuations are based on quoted prices for similar instruments in active markets, quoted prices for identical or similar instruments in markets that are not active or model-based techniques for which all significant assumptions are observable in the market. Level 3 valuations are based on model-based techniques that use at least one significant assumption not observable in the market or significant management judgment or estimation. See “Fair value measurements” in Note 1 of the Consolidated Financial Statements).

Significant assets measured at fair value on a recurring basis include ASB’s mortgage-backed securities available for sale. These instruments are priced using an external pricing service and are classified as Level 2 within the fair value hierarchy. The third-party pricing services use a variety of methods to determine fair value including quoted prices for similar securities in an active market, yield spreads for similar trades, adjustments for liquidity, size, collateral characteristics, historic and generic prepayment speeds and other observable market factors. To enhance the robustness of the pricing process, ASB compares its standard third-party vendor’s price with that of another third-party vendor. If the prices are within an acceptable tolerance range, the price of the standard vendor will be accepted. If the variance is beyond the tolerance range, an evaluation will be conducted by the investment manager and a challenge to the price may be made. Fair value in such cases will be based on the value that best reflects the data and observable characteristics of the security. In all cases, the fair value used will have been independently determined by a third-party pricing vendor or non-affiliated broker.

Fair value is also used on a nonrecurring basis to evaluate certain assets for impairment or for disclosure purposes. Examples of nonrecurring uses of fair value include mortgage servicing rights accounted for by the amortization method, loan impairments for certain loans, real estate acquired in settlement of loans and goodwill.

See “Investment securities” and “Derivative financial instruments” in Note 4 and Note 16 of the Consolidated Financial Statements for additional information regarding ASB’s fair value measurements.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

HEI and Hawaiian Electric (in the case of Hawaiian Electric, only the information related to Hawaiian Electric and its subsidiaries is applicable):

The Company manages various market risks in the ordinary course of business, including credit risk and liquidity risk. The Company believes the electric utility and the “other” segment’s exposures to these two risks were not material as of December 31, 2022.

Credit risk for ASB is the risk that borrowers or issuers of securities will not be able to repay their obligations to the Bank. Credit risk associated with ASB’s lending portfolios is controlled through its underwriting standards, loan rating of commercial and commercial real estate loans, on-going monitoring by loan officers, credit review and quality control functions in these lending areas and adequate allowance for credit losses. Credit risk associated with the securities portfolio is mitigated through investment portfolio limits, experienced staff working with analytical tools, monthly fair value analysis and on-going monitoring and reporting such as investment watch reports and loss sensitivity analysis. See “Allowance for credit losses” in Item 7 above and in Note 4 of the Consolidated Financial Statements.

Liquidity risk for ASB is the risk that the Bank will not meet its obligations when they become due. Liquidity risk is mitigated by ASB’s asset/liability management process, on-going analytical analysis, monitoring and reporting information such as weekly cash-flow analyses and maintenance of liquidity contingency plans.

The Utilities are exposed to some commodity price risk primarily related to their fuel supply and IPP contracts. The Utilities’ commodity price risk is substantially mitigated so long as they have their current ECRCs in their rate schedules, but have limited exposure through the fuel cost risk sharing mechanism, which apportions 2% of the fuel cost risk to the utilities

(and 98% to ratepayers) and has a maximum exposure (or benefit) of \$3.7 million. The Utilities currently have no hedges against its commodity price risk.

The Company currently has no direct exposure to market risk from trading activities nor foreign currency exchange rate risk.

The Company considers interest rate risk to be a very significant market risk as it could potentially have a significant effect on the Company's results of operations, financial condition and liquidity, especially as it relates to ASB, but also as it may affect the discount rate used to determine retirement benefit liabilities and minimum contributions, the market value of retirement benefit plans' assets, borrowing costs and the Utilities' allowed rates of return. Interest rate risk can be defined as the exposure of the Company's earnings to adverse movements in interest rates.

Bank interest rate risk

The Company's success is dependent, in part, upon ASB's ability to manage interest rate risk. ASB's interest-rate risk profile is strongly influenced by its primary business of making fixed-rate residential mortgage loans and taking in retail deposits. Large mismatches in the amounts or timing between the maturity or repricing of interest sensitive assets or liabilities could adversely affect ASB's earnings and the market value of its interest-sensitive assets and liabilities in the event of significant changes in the level of interest rates. Many other factors also affect ASB's exposure to changes in interest rates, such as general economic and financial conditions, customer preferences and competition for loans or deposits.

ASB's Asset/Liability Management Committee (ALCO), whose voting members are officers and employees of ASB, is responsible for managing interest rate risk and carrying out the overall asset/liability management objectives and activities of ASB as approved by the ASB Board of Directors. ALCO establishes policies under which management monitors and coordinates ASB's assets and liabilities.

See Note 4 of the Consolidated Financial Statements for a discussion of the use of rate lock commitments on loans held for sale and forward sale contracts to manage some interest rate risk associated with ASB's residential loan sale program.

Management of ASB measures interest-rate risk using simulation analysis with an emphasis on measuring changes in net interest income (NII) and the market value of interest-sensitive assets and liabilities in different interest-rate environments. The simulation analysis is performed using a dedicated asset/liability management software system enhanced with a mortgage prepayment model and a collateralized mortgage obligation database. The simulation software is capable of generating scenario-specific cash flows for all instruments using the specified contractual information for each instrument and product specific prepayment assumptions for mortgage loans and mortgage-backed securities.

NII sensitivity analysis measures the change in ASB's twelve-month, pretax NII in alternate interest rate scenarios. NII sensitivity is measured as the change in NII in the alternate interest-rate scenarios as a percentage of the base case NII. The base case interest-rate scenario is established using the current yield curve and assumes interest rates remain constant over the next twelve months. The alternate scenarios are created by assuming "rate ramps" or gradual interest changes and accomplished by moving the yield curve in a parallel fashion, over the next twelve-month period, in increments of +/- 100 basis points. The simulation model forecasts scenario-specific principal and interest cash flows for the interest-bearing assets and liabilities, and the NII is calculated for each scenario. Key balance sheet modeling assumptions used in the NII sensitivity analysis include: the size of the balance sheet remains relatively constant over the simulation horizon and maturing assets or liabilities are reinvested in similar instruments in order to maintain the current mix of the balance sheet. In addition, assumptions are made about the prepayment behavior of mortgage-backed assets, future pricing spreads for new assets and liabilities and the speed and magnitude with which deposit rates change in response to changes in the overall level of interest rates. Other NII sensitivity analysis may include scenarios such as yield curve twists or non-static balance sheet changes (such as changes to key balance sheet drivers).

Consistent with OCC guidelines, the market value or economic capitalization of ASB is measured as economic value of equity (EVE). EVE represents the theoretical market value of ASB's net worth and is defined as the present value of expected net cash flows from existing assets minus the present value of expected cash flows from existing liabilities plus the present value of expected net cash flows from existing off-balance sheet contracts. Key assumptions used in the calculation of ASB's EVE include the prepayment behavior of loans and investments, the possible distribution of future interest rates, pricing spreads for assets and liabilities in the alternate scenarios and the rate and balance behavior of deposit accounts with indeterminate maturities. EVE is calculated in multiple scenarios. As with the NII simulation, the base case is represented by the current yield curve. Alternate scenarios are created by assuming immediate parallel shifts in the yield curve in increments of +/- 100 basis points (bp) up to + 300 bp. The change in EVE is measured as the change in EVE in a given rate scenario from the base case and expressed as a percentage. To gain further insight into the interest rate risk profile, additional analysis is periodically performed in alternate scenarios including rate shifts of greater magnitude and changes in key balance sheet drivers.

ASB’s interest-rate risk sensitivity measures as of December 31, 2022 and 2021 constitute “forward-looking statements” and were as follows:

Change in interest rates (basis points)	Change in NII (gradual change in interest rates)		Change in EVE (instantaneous change in interest rates)	
	December 31, 2022	December 31, 2021	December 31, 2022	December 31, 2021
+300	(0.1)%	5.6 %	5.1 %	15.5 %
+200	0.0	4.0	3.8	11.7
+100	0.0	2.3	2.1	7.0
-100	(0.3)	(2.5)	(3.4)	(12.6)

ASB’s NII sensitivity profile became neutral as of December 31, 2022 compared to December 31, 2021, primarily driven by the shift in liability mix and the increase in market rates. The bank’s liability mix shifted with increased short-term borrowings due to temporary funding needs, driving lower NII sensitivity. In addition, the significant increase in market rates lowered prepayment expectations in the bank’s fixed-rate mortgage and mortgage-backed investment portfolios, further reducing asset sensitivity.

EVE sensitivity decreased as of December 31, 2022 compared to December 31, 2021 as the duration of liabilities shortened while the duration of assets lengthened. The bank’s liability mix shifted with increased short-term borrowings due to temporary funding needs, shortening the duration of liabilities and decreasing EVE sensitivity. In addition, the significant increase in market rates led to lower prepayment expectations and lengthened the duration of the fixed-rate mortgage and mortgage-backed investment portfolios, further reducing asset sensitivity.

The computation of the prospective effects of hypothetical interest rate changes on the NII sensitivity and the percentage change in EVE is based on numerous assumptions, including relative levels of market interest rates, loan prepayments, balance changes and pricing strategies, and should not be relied upon as indications of actual results. To the extent market conditions and other factors vary from the assumptions used in the simulation analysis, actual results may differ materially from the simulation results. NII sensitivity analysis measures the change in ASB’s twelve-month, pretax NII in alternate interest rate scenarios, and is intended to help management identify potential exposures in ASB’s current balance sheet and formulate appropriate strategies for managing interest rate risk. The simulation does not contemplate any actions that ASB management might undertake in response to changes in interest rates. Further, the changes in NII vary in the twelve-month simulation period and are not necessarily evenly distributed over the period. These analyses are for analytical purposes only and do not represent management’s views of future market movements, the level of future earnings, or the timing of any changes in earnings within the twelve-month analysis horizon. The actual impact of changes in interest rates on NII will depend on the magnitude and speed with which rates change, actual changes in ASB’s balance sheet, and management’s responses to the changes in interest rates.

Other than bank interest rate risk

The Company’s general policy is to manage “other than bank” interest rate risk through use of a combination of short-term debt, long-term debt and preferred securities. As of December 31, 2022, the Company was exposed to “other than bank” interest rate risk because of its periodic borrowing requirements, the impact of interest rates on the discount rate and the market value of plan assets used to determine retirement benefits expenses and obligations (see “Pension and other postretirement benefits obligations” in HEI’s MD&A and “Retirement benefits” in Notes 1 and 10 of the Consolidated Financial Statements) and the possible effect of interest rates on the electric utilities’ allowed rates of return. Other than these exposures, management believes its exposure to “other than bank” interest rate risk is not material. The Company’s long-term debt, in the form of borrowings of proceeds of revenue bonds, privately-placed senior notes and bank term loans, is predominately at fixed rates (see Note 16 of the Consolidated Financial Statements for the fair value of long-term debt, net-other than bank).

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

HEI and Hawaiian Electric:

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Report of Independent Registered Public Accounting Firm

To the shareholders and the Board of Directors of Hawaiian Electric Industries, Inc.

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Hawaiian Electric Industries, Inc. and subsidiaries (the "Company") as of December 31, 2022 and 2021, the related consolidated statements of income, comprehensive income, changes in shareholders' equity, and cash flows, for each of the three years in the period ended December 31, 2022, and the related notes and the schedules listed in the Index at Item 15(a)(2) (collectively referred to as the "financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2022, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2022 and 2021, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2022, in conformity with accounting principles generally accepted in the United States of America. Also, in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2022, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by COSO.

Basis for Opinions

The Company's management is responsible for these financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Annual Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on these financial statements and an opinion on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the financial statements included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures to respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current-period audit of the financial statements that were communicated or required to be communicated to the audit committee and that (1) relate to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Electric Utility Segment - Regulatory Assets and Liabilities - Refer to Notes 1 and 3 to the financial statements

Critical Audit Matter Description

Hawaiian Electric Company, Inc. (“Hawaiian Electric” or the “Utility”) is subject to rate regulation by the Hawaii Public Utility Commission (the “PUC”) and accounts for the effects of regulation under Financial Accounting Standards Board (“FASB”) Accounting Standards Codification (“ASC”) Topic 980, “Regulated Operations,” as management believes that the operations of the Utility currently satisfy the criteria for regulatory accounting. Accounting for the economics of rate regulation impacts multiple financial statement line items and disclosures, such as property, plant, and equipment; regulatory assets and liabilities; operating revenues; operation and maintenance expense; and depreciation expense. As of December 31, 2022, regulatory assets and liabilities amounted to \$242.5 million and \$1,055.7 million, respectively. The Company’s continued accounting under ASC Topic 980 generally requires that rates are established by an independent, third-party regulator; rates are designed to recover the costs of providing service; and it is reasonable to assume that rates can be charged to, and collected from, customers.

Hawaiian Electric’s rates are subject to regulatory rate-setting processes and earnings oversight. Rates are determined and approved in regulatory proceedings based on an analysis of the Utility’s costs to provide utility service and a return on, and recovery of, Hawaiian Electric’s investment in the utility business. Any decision by the PUC could (1) impact the recovery in future rates of costs incurred as property, plant, and equipment and deferred as regulatory assets and (2) necessitate a refund in rates that should be reported as regulatory liabilities.

We identified the impact of rate regulation as a critical audit matter due to the significant judgments made by management to support its assertions about the applicability of applying the specialized rules and the impacted account balances, including disclosures. Management judgments include assessing the applicability of the specialized rules and the likelihood of (1) recovery in future rates of incurred costs and (2) a refund to customers.

Given that management’s accounting judgments are based on assumptions about the outcome of future decisions by the PUC, auditing these judgments required specialized knowledge of accounting for rate regulation and the rate-setting process due to its inherent complexities.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the application of specialized rules to account for the effects of cost-based rate regulation and the uncertainty of future decisions by the rate regulators included the following, among others:

- We tested the effectiveness of management’s controls over (1) the evaluation of the application of specialized rules to account for the effects of cost-based rate regulation and (2) the evaluation of the likelihood of (a) the recovery in future rates of costs incurred as property, plant, and equipment and deferred as regulatory assets and (b) a refund that should be reported as regulatory liabilities. Such controls include the monitoring and evaluation of regulatory developments that may affect the likelihood of recovering costs in future rates or refunding amounts in rates.
- We evaluated the Company’s conclusion that it should apply the specialized rules to account for the effects of cost-based rate regulation.
- We evaluated the Company’s disclosures related to the impacts of rate regulation, including the balances recorded and regulatory developments.
- We read relevant regulatory orders issued by the PUC for the Utility, regulatory statutes, filings made by intervenors, and other publicly available information to assess the likelihood of recovery in future rates or of a future reduction in rates based on precedents of the PUC’s treatment of similar costs under similar circumstances. We evaluated the external information and compared to management’s recorded regulatory asset and liability balances for completeness.
- For regulatory matters in process, we inspected the Utility’s filings with the PUC and the filings with the PUC by intervenors that may impact the Utility’s future rates, for any evidence that might contradict management’s assertions.
- We obtained analyses from management as appropriate regarding probability of recovery for regulatory assets or refund in rates for regulatory liabilities not yet addressed in a regulatory order to assess management’s assertion that amounts are probable of recovery, or refundable in rates.

Allowance for Credit Losses - Refer to Notes 1 and 4 to the financial statements

Critical Audit Matter Description

The allowance for credit losses is a material estimate of the Company and as of December 31, 2022, the total balance was \$72.2 million. The allowance for credit losses is based on the composition, characteristics, and quality of the loans, as well as the prevailing economic conditions and reasonable and supportable forecasts. The credit loss models use a probability-of-default, loss given default and exposure at default methodology to estimate the expected credit losses.

The Company also incorporates qualitative factors to adjust the historical loss rates or other static sources as these rates may not be an accurate indicator of expected losses in the current portfolio. These qualitative factors include, but are not limited to, adjustments for changes in policies and procedures in underwriting, monitoring or collections, economic conditions, portfolio mix, lending and risk management personnel, results of internal audit and quality control reviews, collateral values, and any concentrations of credit.

The selection of relevant and appropriate qualitative factors in calculating the allowance for credit losses requires significant management judgment. Given the magnitude of the qualitative factors and significant amount of judgment required by management in developing the qualitative component of the overall allowance, performing audit procedures to evaluate the reasonableness of the allowance for credit losses required a high degree of auditor judgment, an increased level of effort, and the need to involve more experienced audit professionals.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the qualitative factors utilized within the allowance for credit losses included the following, among others:

- We tested the effectiveness of controls over the allowance for credit losses, including management's controls over the respective qualitative factors.
- We evaluated the reasonableness and conceptual soundness of the allowance for credit losses modeling framework, including the use of qualitative factors.
- We tested the mathematical accuracy of the calculation of the qualitative allowance for credit losses as well as the accuracy and completeness of data used as inputs to the determination of qualitative factors.
- We evaluated the qualitative factors applied to the historical loss rates, including assessing the basis for the factors and the reasonableness of the qualitative factors used in the allowance for credit losses.
- We evaluated the directional consistency and magnitude of the qualitative adjustments, as well as the absolute value of the allowance for credit losses attributable to the qualitative adjustments.
- In order to identify potential bias in the determination of the allowance for credit losses, we performed analytical analysis, including retrospective review, where we compared the estimate of losses to actual losses, analyzed ratios of the allowance for credit losses to loans and other relevant metrics, such as losses and nonperforming loans, and performed peer analysis where we compared relevant metrics to comparable financial institutions, and evaluated the relevance of the underlying data used to determine qualitative factors, to identify potential bias in the determination of the allowance for credit losses.

/s/ Deloitte & Touche LLP

Honolulu, Hawaii
February 27, 2023

We have served as the Company's auditor since 2017.

Report of Independent Registered Public Accounting Firm

To the shareholder and the Board of Directors of Hawaiian Electric Company, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets and statements of capitalization of Hawaiian Electric Company, Inc. and subsidiaries (the "Company") as of December 31, 2022 and 2021, the related consolidated statements of income, comprehensive income, changes in common stock equity, and cash flows, for each of the three years in the period ended December 31, 2022, and the related notes and the schedule listed in the Index at Item 15(a)(2) (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2022 and 2021, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2022, in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current-period audit of the financial statements that was communicated or required to be communicated to the audit committee and that (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Electric Utility Segment – Regulatory Assets and Liabilities - Refer to Notes 1 and 3 to the financial statements

Critical Audit Matter Description

Hawaiian Electric Company, Inc. ("Hawaiian Electric" or the "Utility") is subject to rate regulation by the Hawaii Public Utility Commission (the "PUC") and accounts for the effects of regulation under Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") Topic 980, "Regulated Operations," as management believes that the operations of the Utility currently satisfy the criteria for regulatory accounting. Accounting for the economics of rate regulation impacts multiple financial statement line items and disclosures, such as property, plant, and equipment; regulatory assets and liabilities; operating revenues; operation and maintenance expense; and depreciation expense. As of December 31, 2022, regulatory assets and liabilities amounted to \$242.5 million and \$1,055.7 million, respectively. The Company's continued accounting under ASC Topic 980 generally requires that rates are established by an independent, third-party regulator; rates are designed to recover the costs of providing service; and it is reasonable to assume that rates can be charged to, and collected from, customers.

Hawaiian Electric's rates are subject to regulatory rate-setting processes and earnings oversight. Rates are determined and approved in regulatory proceedings based on an analysis of the Utility's costs to provide utility service and a return on, and recovery of, Hawaiian Electric's investment in the utility business. Any decision by the PUC could (1) impact the recovery in future rates of costs incurred as property, plant, and equipment and deferred as regulatory assets and (2) necessitate a refund in rates that should be reported as regulatory liabilities.

We identified the impact of rate regulation as a critical audit matter due to the significant judgments made by management to support its assertions about the applicability of applying the specialized rules and the impacted account balances, including disclosures. Management judgments include assessing the applicability of the specialized rules and the likelihood of (1) recovery in future rates of incurred costs and (2) a refund to customers.

Given that management's accounting judgments are based on assumptions about the outcome of future decisions by the PUC, auditing these judgments required specialized knowledge of accounting for rate regulation and the rate-setting process due to its inherent complexities.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the application of specialized rules to account for the effects of cost-based rate regulation and the uncertainty of future decisions by the rate regulators included the following, among others:

- We tested the effectiveness of management's controls over (1) the evaluation of the application of specialized rules to account for the effects of cost-based rate regulation and (2) the evaluation of the likelihood of (a) the recovery in future rates of costs incurred as property, plant, and equipment and deferred as regulatory assets and (b) a refund that should be reported as regulatory liabilities. Such controls include the monitoring and evaluation of regulatory developments that may affect the likelihood of recovering costs in future rates or refunding amounts in rates.
- We evaluated the Company's conclusion that it should apply the specialized rules to account for the effects of cost-based rate regulation.
- We evaluated the Company's disclosures related to the impacts of rate regulation, including the balances recorded and regulatory developments.
- We read relevant regulatory orders issued by the PUC for the Utility, regulatory statutes, filings made by intervenors, and other publicly available information to assess the likelihood of recovery in future rates or of a future reduction in rates based on precedents of the PUC's treatment of similar costs under similar circumstances. We evaluated the external information and compared to management's recorded regulatory asset and liability balances for completeness.
- For regulatory matters in process, we inspected the Utility's filings with the PUC and the filings with the PUC by intervenors that may impact the Utility's future rates, for any evidence that might contradict management's assertions.
- We obtained analyses from management as appropriate regarding probability of recovery for regulatory assets or refund in rates for regulatory liabilities not yet addressed in a regulatory order to assess management's assertion that amounts are probable of recovery, or refundable in rates.

/s/ Deloitte & Touche LLP
Honolulu, Hawaii
February 27, 2023

We have served as the Company's auditor since 2017.

Consolidated Statements of Income

Hawaiian Electric Industries, Inc. and Subsidiaries

Years ended December 31	2022	2021	2020
(in thousands, except per share amounts)			
Revenues			
Electric utility	\$ 3,408,587	\$ 2,539,636	\$ 2,265,320
Bank	321,068	306,398	313,511
Other	12,330	4,345	944
Total revenues	3,741,985	2,850,379	2,579,775
Expenses			
Electric utility	3,109,396	2,260,078	1,996,770
Bank	219,550	178,195	251,702
Other	31,966	26,040	19,810
Total expenses	3,360,912	2,464,313	2,268,282
Operating income (loss)			
Electric utility	299,191	279,558	268,550
Bank	101,518	128,203	61,809
Other	(19,636)	(21,695)	(18,866)
Total operating income	381,073	386,066	311,493
Retirement defined benefits credit (expense)—other than service costs	4,411	5,848	(3,210)
Interest expense, net – other than on deposit liabilities and other bank borrowings	(103,402)	(94,363)	(88,694)
Allowance for borrowed funds used during construction	3,416	3,250	2,992
Allowance for equity funds used during construction	10,574	9,534	8,768
Gain on sales of investment securities, net and equity-method investment	8,123	528	9,275
Income before income taxes	304,195	310,863	240,624
Income taxes	61,167	62,807	40,910
Net income	243,028	248,056	199,714
Preferred stock dividends of subsidiaries	1,890	1,890	1,890
Net income for common stock	\$ 241,138	\$ 246,166	\$ 197,824
Basic earnings per common share	\$ 2.20	\$ 2.25	\$ 1.81
Diluted earnings per common share	\$ 2.20	\$ 2.25	\$ 1.81
Weighted-average number of common shares outstanding	109,434	109,282	109,140
Net effect of potentially dilutive shares (share-based compensation programs)	344	298	216
Weighted-average shares assuming dilution	109,778	109,580	109,356

The accompanying notes are an integral part of these consolidated financial statements.

Consolidated Statements of Comprehensive Income

Hawaiian Electric Industries, Inc. and Subsidiaries

Years ended December 31	2022	2021	2020
(in thousands)			
Net income for common stock	\$ 241,138	\$ 246,166	\$ 197,824
Other comprehensive income (loss), net of taxes:			
Net unrealized gains (losses) on available-for sale investment securities:			
Net unrealized gains (losses) on available-for sale investment securities arising during the period, net of taxes of \$(110,140), \$(18,903) and \$7,008 for 2022, 2021 and 2020, respectively	(300,860)	(51,636)	19,143
Reclassification adjustment for net realized gains included in net income, net of taxes of nil, \$(142) and \$(599) for 2022, 2021 and 2020, respectively	—	(387)	(1,638)
Amortization of unrealized holding losses on held-to-maturity securities, net of taxes of \$1,462, nil and nil for 2022, 2021 and 2020, respectively	3,993	—	—
Derivatives qualified as cash flow hedges:			
Unrealized interest rate hedging gains (losses), net of taxes of \$1,892, \$(108) and \$(607) for 2022, 2021 and 2020, respectively	5,457	(312)	(1,750)
Reclassification adjustment to net income, net of taxes of \$60, \$13 and nil for 2022, 2021 and 2020, respectively	172	37	—
Retirement benefit plans:			
Net gains (losses) arising during the period, net of taxes of \$65,174, \$53,068 and \$(20,907) for 2022, 2021 and 2020, respectively	188,020	153,121	(60,529)
Adjustment for amortization of prior service credit and net losses recognized during the period in net periodic benefit cost, net of taxes of \$6,820, \$6,665 and \$8,247 for 2022, 2021 and 2020, respectively	19,659	19,253	23,689
Reclassification adjustment for impact of D&Os of the PUC included in regulatory assets, net of taxes of \$(69,345), \$(59,429) and \$13,825 for 2022, 2021 and 2020, respectively	(199,936)	(171,345)	39,860
Other comprehensive income (loss), net of taxes	(283,495)	(51,269)	18,775
Comprehensive income attributable to Hawaiian Electric Industries, Inc.	\$ (42,357)	\$ 194,897	\$ 216,599

The accompanying notes are an integral part of these consolidated financial statements.

Consolidated Balance Sheets

Hawaiian Electric Industries, Inc. and Subsidiaries

December 31	2022		2021	
(dollars in thousands)				
ASSETS				
Cash and cash equivalents	\$	199,877	\$	305,551
Restricted cash		5,050		5,911
Accounts receivable and unbilled revenues, net		511,903		344,213
Available-for-sale investment securities, at fair value		1,429,667		2,574,618
Held-to-maturity investment securities, at amortized cost		1,251,747		522,270
Stock in Federal Home Loan Bank, at cost		26,560		10,000
Loans held for investment, net		5,906,690		5,139,984
Loans held for sale, at lower of cost or fair value		824		10,404
Property, plant and equipment, net				
Land	\$	109,381	\$	102,910
Plant and equipment		8,427,748		8,085,793
Right-of-use assets - finance lease		49,370		—
Construction in progress		293,048		231,495
		<u>8,879,547</u>		<u>8,420,198</u>
Less – accumulated depreciation		<u>(3,192,545)</u>	5,687,003	<u>(3,028,130)</u>
Operating lease right-of-use assets		115,684		122,416
Regulatory assets		242,513		565,543
Other		824,536		747,469
Goodwill		82,190		82,190
Total assets	\$	16,284,244	\$	15,822,637
LIABILITIES AND SHAREHOLDERS' EQUITY				
Liabilities				
Accounts payable	\$	251,460	\$	205,544
Interest and dividends payable		21,333		19,889
Deposit liabilities		8,169,696		8,172,212
Short-term borrowings—other than bank		172,568		53,998
Other bank borrowings		695,120		88,305
Long-term debt, net—other than bank		2,384,980		2,321,937
Deferred income taxes		262,462		384,760
Operating lease liabilities		126,604		136,760
Finance lease liabilities		48,709		—
Regulatory liabilities		1,055,650		996,768
Defined benefit pension and other postretirement benefit plans liability		71,813		348,072
Other		787,057		669,215
Total liabilities		14,047,452		13,397,460
Preferred stock of subsidiaries - not subject to mandatory redemption		34,293		34,293
Commitments and contingencies (Notes 3 and 4)				
Shareholders' equity				
Preferred stock, no par value, authorized 10,000,000 shares; issued: none		—		—
Common stock, no par value, authorized 200,000,000 shares; issued and outstanding: 109,470,795 shares and 109,311,785 shares at December 31, 2022 and 2021, respectively		1,692,697		1,685,496
Retained earnings		845,830		757,921
Accumulated other comprehensive income (loss), net of taxes				
Net unrealized losses on securities	\$	(328,904)	\$	(32,037)
Unrealized gains (losses) on derivatives		1,991		(3,638)
Retirement benefit plans		(9,115)	(336,028)	(16,858)
		<u>(52,533)</u>		<u>(52,533)</u>
Total shareholders' equity		2,202,499		2,390,884
Total liabilities and shareholders' equity	\$	16,284,244	\$	15,822,637

The accompanying notes are an integral part of these consolidated financial statements.

Consolidated Statements of Changes in Shareholders' Equity

Hawaiian Electric Industries, Inc. and Subsidiaries

(in thousands, except per share amounts)	Common stock		Retained earnings	Accumulated other comprehensive income (loss)	Total
	Shares	Amount			
Balance, December 31, 2019	108,973	\$1,678,257	\$ 622,042	\$ (20,039)	\$ 2,280,260
Impact of adoption of ASU No. 2016-13	—	—	(15,372)	—	(15,372)
Balance, January 1, 2020 after adoption of ASU No. 2016-13	108,973	1,678,257	606,670	(20,039)	2,264,888
Net income for common stock	—	—	197,824	—	197,824
Other comprehensive income, net of taxes	—	—	—	18,775	18,775
Issuance of common stock:					
Share-based plans	208	3,973	—	—	3,973
Share-based expenses and other, net	—	(3,862)	—	—	(3,862)
Common stock dividends (\$1.32 per share)	—	—	(144,096)	—	(144,096)
Balance, December 31, 2020	109,181	1,678,368	660,398	(1,264)	2,337,502
Net income for common stock	—	—	246,166	—	246,166
Other comprehensive loss, net of tax benefits	—	—	—	(51,269)	(51,269)
Issuance of common stock:					
Share-based plans	131	5,027	—	—	5,027
Share-based expenses and other, net	—	2,101	—	—	2,101
Common stock dividends (\$1.36 per share)	—	—	(148,643)	—	(148,643)
Balance, December 31, 2021	109,312	1,685,496	757,921	(52,533)	2,390,884
Net income for common stock	—	—	241,138	—	241,138
Other comprehensive loss, net of tax benefits	—	—	—	(283,495)	(283,495)
Issuance of common stock:					
Share-based plans	159	5,831	—	—	5,831
Share-based expenses and other, net	—	1,370	—	—	1,370
Common stock dividends (\$1.40 per share)	—	—	(153,229)	—	(153,229)
Balance, December 31, 2022	109,471	\$1,692,697	\$ 845,830	\$ (336,028)	\$ 2,202,499

The accompanying notes are an integral part of these consolidated financial statements.

Consolidated Statements of Cash Flows

Hawaiian Electric Industries, Inc. and Subsidiaries

Years ended December 31	2022	2021	2020
(in thousands)			
Cash flows from operating activities			
Net income	\$ 243,028	\$ 248,056	\$ 199,714
Adjustments to reconcile net income to net cash provided by operating activities			
Depreciation of property, plant and equipment	256,069	246,158	238,114
Other amortization	38,772	32,544	52,664
Provision for credit losses	2,037	(25,825)	50,811
Loans originated, held for sale	(128,195)	(340,986)	(564,525)
Proceeds from sale of loans, held for sale	136,504	364,848	567,652
Gain on sale of investment securities, net	(8,123)	(528)	(9,275)
Gain on sale of loans	(1,692)	(9,305)	(23,734)
Deferred income taxes	(32,502)	(5,398)	(1,706)
Share-based compensation expense	10,366	9,135	5,810
Allowance for equity funds used during construction	(10,574)	(9,534)	(8,768)
Other	(7,580)	(7,060)	1,366
Changes in assets and liabilities			
Decrease (increase) in accounts receivable and unbilled revenues, net	(151,551)	(73,811)	2,533
Decrease (increase) in fuel oil stock	(87,569)	(45,819)	34,202
Decrease (increase) in regulatory assets	34,600	(13,874)	1,007
Increase (decrease) in regulatory liabilities	44,888	15,358	(16,562)
Increase (decrease) in accounts, interest and dividends payable	28,169	9,925	(20,068)
Change in prepaid and accrued income taxes, tax credits and utility revenue taxes	121,636	41,331	(35,610)
Decrease in defined benefit pension and other postretirement benefit plans liability	(5,191)	(6,660)	(2,029)
Change in other assets and liabilities, net	(28,616)	(52,882)	(42,189)
Net cash provided by operating activities	454,476	375,673	429,407
Cash flows from investing activities			
Available-for-sale investment securities purchased	(366,177)	(1,464,644)	(1,361,594)
Principal repayments on available-for-sale investment securities	342,354	583,238	478,351
Proceeds from sale of available-for-sale investment securities	—	197,354	169,157
Purchases of held-to-maturity investment securities	—	(349,579)	(146,738)
Proceeds from repayments or maturities of held-to-maturity investment securities	29,432	53,654	59,894
Purchase of stock from Federal Home Loan Bank	(173,768)	(33,022)	(27,350)
Redemption of stock from Federal Home Loan Bank	157,208	31,702	27,104
Net decrease (increase) in loans held for investment	(661,492)	72,489	(229,311)
Proceeds from sale of residential loans	—	59,844	—
Purchase of loans held for investment	(102,504)	—	—
Proceeds from sale of real estate held for sale	3,806	—	—
Capital expenditures	(344,037)	(314,524)	(383,895)
Proceeds from sale of low income housing investments	—	—	6,725
Contributions to low income housing investments	(844)	(16,131)	(9,403)
Acquisition of business	(25,706)	—	—
Other, net	13,046	27	3,412
Net cash used in investing activities	(1,128,682)	(1,179,592)	(1,413,648)

(continued)

Consolidated Statements of Cash Flows (continued)

Hawaiian Electric Industries, Inc. and Subsidiaries

Years ended December 31	2022	2021	2020
Cash flows from financing activities			
Net increase (decrease) in deposit liabilities	(2,516)	785,255	1,115,055
Net increase (decrease) in short-term borrowings with original maturities of three months or less	83,652	(10,493)	(71,219)
Proceeds from issuance of short-term debt	35,000	—	165,000
Repayment of short-term debt	—	(65,000)	(150,000)
Net increase (decrease) in other bank borrowings with original maturities of three months or less	606,815	(1,365)	(25,440)
Proceeds from issuance of other bank borrowings	—	—	30,000
Repayment of other bank borrowings	—	—	(30,000)
Proceeds from issuance of long-term debt	227,312	285,886	415,997
Repayment of long-term debt and funds transferred for repayment of long-term debt	(221,910)	(82,262)	(178,969)
Withheld shares for employee taxes on vested share-based compensation	(3,165)	(2,006)	(5,700)
Common stock dividends	(153,229)	(148,643)	(144,096)
Preferred stock dividends of subsidiaries	(1,890)	(1,890)	(1,890)
Other	(2,398)	(3,080)	(3,203)
Net cash provided by financing activities	567,671	756,402	1,115,535
Net increase (decrease) in cash, cash equivalents and restricted cash	(106,535)	(47,517)	131,294
Cash, cash equivalents and restricted cash, January 1	311,462	358,979	227,685
Cash, cash equivalents and restricted cash, December 31	204,927	311,462	358,979
Less: Restricted cash	(5,050)	(5,911)	(17,558)
Cash and cash equivalents, December 31	\$ 199,877	\$ 305,551	\$ 341,421

The accompanying notes are an integral part of these consolidated financial statements.

Consolidated Statements of Income

Hawaiian Electric Company, Inc. and Subsidiaries

Years ended December 31	2022	2021	2020
(in thousands)			
Revenues	\$ 3,408,587	\$ 2,539,636	\$ 2,265,320
Expenses			
Fuel oil	1,265,614	644,349	515,274
Purchased power	793,584	670,494	568,749
Other operation and maintenance	497,601	475,412	474,192
Depreciation	235,424	229,469	222,733
Taxes, other than income taxes	317,173	240,354	215,822
Total expenses	3,109,396	2,260,078	1,996,770
Operating income	299,191	279,558	268,550
Allowance for equity funds used during construction	10,574	9,534	8,768
Retirement defined benefits credit (expense)—other than service costs	3,835	3,890	(763)
Interest expense and other charges, net	(76,416)	(72,447)	(67,794)
Allowance for borrowed funds used during construction	3,416	3,250	2,992
Income before income taxes	240,600	223,785	211,753
Income taxes	49,676	44,148	40,418
Net income	190,924	179,637	171,335
Preferred stock dividends of subsidiaries	915	915	915
Net income attributable to Hawaiian Electric	190,009	178,722	170,420
Preferred stock dividends of Hawaiian Electric	1,080	1,080	1,080
Net income for common stock	\$ 188,929	\$ 177,642	\$ 169,340

The accompanying notes are an integral part of these consolidated financial statements.

Consolidated Statements of Comprehensive Income

Hawaiian Electric Company, Inc. and Subsidiaries

Years ended December 31	2022	2021	2020
(in thousands)			
Net income for common stock	\$ 188,929	\$ 177,642	\$ 169,340
Other comprehensive income (loss), net of taxes:			
Retirement benefit plans:			
Net gains (losses) arising during the period, net of taxes of \$64,925, \$52,554 and \$(21,868) for 2022, 2021 and 2020, respectively	187,193	151,523	(63,050)
Adjustment for amortization of prior service credit and net losses recognized during the period in net periodic benefit cost, net of taxes of \$6,550, \$6,750 and \$7,474 for 2022, 2021 and 2020, respectively	18,884	19,461	21,550
Reclassification adjustment for impact of D&Os of the PUC included in regulatory assets, net of taxes of \$(69,345), \$(59,429), and \$13,825 for 2022, 2021 and 2020, respectively	(199,936)	(171,345)	39,860
Other comprehensive income (loss), net of taxes	6,141	(361)	(1,640)
Comprehensive income attributable to Hawaiian Electric Company, Inc.	\$ 195,070	\$ 177,281	\$ 167,700

The accompanying notes are an integral part of these consolidated financial statements.

Consolidated Balance Sheets

Hawaiian Electric Company, Inc. and Subsidiaries

December 31	2022	2021
(in thousands)		
Assets		
Property, plant and equipment		
Utility property, plant and equipment		
Land	\$ 52,060	\$ 51,937
Plant and equipment	7,979,510	7,735,983
Right-of-use assets - finance lease	48,371	—
Less accumulated depreciation	(3,086,499)	(2,940,517)
Construction in progress	275,353	204,569
Utility property, plant and equipment, net	5,268,795	5,051,972
Nonutility property, plant and equipment, less accumulated depreciation of \$63 and \$59 as of December 31, 2022 and 2021, respectively	6,945	6,949
Total property, plant and equipment, net	5,275,740	5,058,921
Current assets		
Cash and cash equivalents	39,242	52,169
Restricted cash	—	3,089
Customer accounts receivable, net	288,338	186,859
Accrued unbilled revenues, net	183,280	129,155
Other accounts receivable, net	13,567	7,267
Fuel oil stock, at average cost	191,530	104,078
Materials and supplies, at average cost	79,568	71,877
Prepayments and other	33,482	46,031
Regulatory assets	52,273	66,664
Total current assets	881,280	667,189
Other long-term assets		
Operating lease right-of-use-assets	89,318	101,470
Regulatory assets	190,240	498,879
Other	160,889	165,166
Total other long-term assets	440,447	765,515
Total assets	\$ 6,597,467	\$ 6,491,625

(Continued)

Consolidated Balance Sheets (continued)

Hawaiian Electric Company, Inc. and Subsidiaries

December 31	2022	2021
(in thousands)		
Capitalization and liabilities		
Capitalization (see Consolidated Statements of Capitalization)		
Common stock equity	\$ 2,344,170	\$ 2,261,899
Cumulative preferred stock – not subject to mandatory redemption	34,293	34,293
Commitments and contingencies (Note 3)		
Long-term debt, net	1,584,854	1,624,427
Total capitalization	3,963,317	3,920,619
Current liabilities		
Current portion of operating lease liabilities	19,095	49,368
Current portion of long-term debt, net	99,962	51,975
Short-term borrowings from non-affiliate	87,967	—
Accounts payable	202,492	160,007
Interest and preferred dividends payable	17,176	17,325
Taxes accrued, including revenue taxes	289,902	208,280
Regulatory liabilities	31,475	29,760
Other	85,596	71,569
Total current liabilities	833,665	588,284
Deferred credits and other liabilities		
Operating lease liabilities	78,715	65,780
Finance lease liabilities	46,048	—
Deferred income taxes	384,430	408,634
Regulatory liabilities	1,024,175	967,008
Unamortized tax credits	95,300	103,945
Defined benefit pension and other postretirement benefit plans liability	49,748	321,780
Other	122,069	115,575
Total deferred credits and other liabilities	1,800,485	1,982,722
Total capitalization and liabilities	\$ 6,597,467	\$ 6,491,625

The accompanying notes are an integral part of these consolidated financial statements.

Consolidated Statements of Capitalization

Hawaiian Electric Company, Inc. and Subsidiaries

December 31	2022	2021
(dollars in thousands, except par value)		
Common stock equity		
Common stock of \$6 2/3 par value		
Authorized: 50,000,000 shares. Outstanding: 17,854,278 shares and		
17,753,533 shares at December 31, 2022 and 2021, respectively	\$ 119,048	\$ 118,376
Premium on capital stock	810,955	798,526
Retained earnings	1,411,306	1,348,277
Accumulated other comprehensive income (loss), net of taxes-retirement benefit plans	2,861	(3,280)
Common stock equity	2,344,170	2,261,899

Cumulative preferred stock not subject to mandatory redemption

Authorized: 5,000,000 shares of \$20 par value and 7,000,000 shares of \$100 par value.

Series	Par Value	Shares outstanding December 31, 2022 and 2021	2022	2021
(dollars in thousands, except par value and shares outstanding)				
C-4.25%	\$ 20 (Hawaiian Electric)	150,000	\$ 3,000	\$ 3,000
D-5.00%	20 (Hawaiian Electric)	50,000	1,000	1,000
E-5.00%	20 (Hawaiian Electric)	150,000	3,000	3,000
H-5.25%	20 (Hawaiian Electric)	250,000	5,000	5,000
I-5.00%	20 (Hawaiian Electric)	89,657	1,793	1,793
J-4.75%	20 (Hawaiian Electric)	250,000	5,000	5,000
K-4.65%	20 (Hawaiian Electric)	175,000	3,500	3,500
G-7.625%	100 (Hawaii Electric Light)	70,000	7,000	7,000
H-7.625%	100 (Maui Electric)	50,000	5,000	5,000
		1,234,657	34,293	34,293

(continued)

Consolidated Statements of Capitalization (continued)

Hawaiian Electric Company, Inc. and Subsidiaries

December 31	2022	2021
(in thousands)		
Long-term debt		
Obligations to the State of Hawaii for the repayment of Special Purpose Revenue Bonds (subsidiary obligations unconditionally guaranteed by Hawaiian Electric):		
3.50%, Series 2019, due 2049	\$ 80,000	\$ 80,000
3.20%, Refunding series 2019, due 2039	150,000	150,000
3.10%, Refunding series 2017A, due 2026	125,000	125,000
4.00%, Refunding series 2017B, due 2037	140,000	140,000
3.25%, Refunding series 2015, due 2025	47,000	47,000
Total obligations to the State of Hawaii	\$ 542,000	\$ 542,000
Other long-term debt – unsecured:		
Taxable senior notes:		
3.70%, Series 2022A, due 2032	\$ 60,000	\$ —
3.51%, Series 2020C and 2020E, due 2050	70,000	70,000
3.28%, Series 2020B and 2020D, due 2040	45,000	45,000
3.96%, Series 2020A, 2020B and 2020C, due 2050	50,000	50,000
3.31%, Series 2020A and 2020B, due 2030	110,000	110,000
4.21%, Series 2019A, due 2034	50,000	50,000
4.38%, Series 2018A, due 2028	67,500	67,500
4.53%, Series 2018B, due 2033	17,500	17,500
4.72%, Series 2018C, due 2048	15,000	15,000
4.31%, Series 2017A, due 2047	50,000	50,000
4.54%, Series 2016A, due 2046	40,000	40,000
5.23%, Series 2015A, due 2045	80,000	80,000
4.45%, Series 2013A and 2013B, due 2022	—	52,000
4.84%, Series 2013A, 2013B and 2013C, due 2027	100,000	100,000
5.65%, Series 2013B and 2013C, due 2043	70,000	70,000
4.55%, Series 2012B and 2012C, due 2023	100,000	100,000
4.72%, Series 2012D, due 2029	35,000	35,000
5.39%, Series 2012E, due 2042	150,000	150,000
4.53%, Series 2012F, due 2032	40,000	40,000
Total taxable senior notes	1,150,000	1,142,000
Total long-term debt	1,692,000	1,684,000
Less unamortized debt issuance costs	7,184	7,598
Less current portion long-term debt, net of unamortized debt issuance costs	99,962	51,975
Long-term debt, net	1,584,854	1,624,427
Total capitalization	\$ 3,963,317	\$ 3,920,619

The accompanying notes are an integral part of these consolidated financial statements.

Consolidated Statements of Changes in Common Stock Equity

Hawaiian Electric Company, Inc. and Subsidiaries

(in thousands)	Common stock		Premium on capital stock	Retained earnings	Accumulated other comprehensive income (loss)	Total
	Shares	Amount				
Balance, December 31, 2019	17,048	\$ 113,678	\$ 714,824	\$ 1,220,129	\$ (1,279)	\$ 2,047,352
Net income for common stock	—	—	—	169,340	—	169,340
Other comprehensive loss, net of taxes	—	—	—	—	(1,640)	(1,640)
Issuance of common stock, net of expenses	276	1,837	32,163	—	—	34,000
Common stock dividends	—	—	—	(107,134)	—	(107,134)
Balance, December 31, 2020	17,324	115,515	746,987	1,282,335	(2,919)	2,141,918
Net income for common stock	—	—	—	177,642	—	177,642
Other comprehensive loss, net of taxes	—	—	—	—	(361)	(361)
Issuance of common stock, net of expenses	429	2,861	51,539	—	—	54,400
Common stock dividends	—	—	—	(111,700)	—	(111,700)
Balance, December 31, 2021	17,753	118,376	798,526	1,348,277	(3,280)	2,261,899
Net income for common stock	—	—	—	188,929	—	188,929
Other comprehensive income, net of taxes	—	—	—	—	6,141	6,141
Issuance of common stock, net of expenses	101	672	12,429	—	—	13,101
Common stock dividends	—	—	—	(125,900)	—	(125,900)
Balance, December 31, 2022	17,854	\$ 119,048	\$ 810,955	\$ 1,411,306	\$ 2,861	\$ 2,344,170

The accompanying notes are an integral part of these consolidated financial statements.

Consolidated Statements of Cash Flows

Hawaiian Electric Company, Inc. and Subsidiaries

Years ended December 31	2022	2021	2020
(in thousands)			
Cash flows from operating activities			
Net income	\$ 190,924	\$ 179,637	\$ 171,335
Adjustments to reconcile net income to net cash provided by operating activities			
Depreciation of property, plant and equipment	235,424	229,469	222,733
Other amortization	25,320	21,737	33,746
Deferred income taxes	(41,415)	(3,829)	3,151
State refundable credit	(10,999)	(10,582)	(9,961)
Bad debt expense	6,027	2,183	2,115
Allowance for equity funds used during construction	(10,574)	(9,534)	(8,768)
Bill credits	—	2,000	—
Accrued environmental reserve	—	—	6,556
Other	(139)	1,350	2,610
Changes in assets and liabilities			
Increase in accounts receivable	(91,742)	(50,090)	(7,286)
Decrease (increase) in accrued unbilled revenues	(54,023)	(27,464)	15,285
Decrease (increase) in fuel oil stock	(87,452)	(45,840)	33,699
Increase in materials and supplies	(7,691)	(4,533)	(6,642)
Decrease (increase) in regulatory assets	34,600	(13,874)	1,007
Increase (decrease) in regulatory liabilities	44,888	15,358	(16,562)
Increase (decrease) in accounts payable	22,355	17,671	(33,129)
Change in prepaid and accrued income taxes, tax credits and revenue taxes	103,198	26,930	(37,180)
Decrease in defined benefit pension and other postretirement benefit plans liability	(4,828)	(5,154)	(4,306)
Change in other assets and liabilities	(25,943)	(52,302)	(31,852)
Net cash provided by operating activities	327,930	273,133	336,551
Cash flows from investing activities			
Capital expenditures	(329,457)	(292,000)	(350,864)
Other	5,372	6,035	6,070
Net cash used in investing activities	(324,085)	(285,965)	(344,794)
Cash flows from financing activities			
Common stock dividends	(125,900)	(111,700)	(107,134)
Preferred stock dividends of Hawaiian Electric and subsidiaries	(1,995)	(1,995)	(1,995)
Proceeds from issuance of common stock	13,101	54,400	34,000
Proceeds from issuance of long-term debt	60,000	115,000	255,000
Repayment of long-term debt and funds transferred for repayment of long-term debt	(52,000)	—	(109,000)
Net increase (decrease) in short-term borrowings from non-affiliates and affiliate with original maturities of three months or less	87,967	—	(38,987)
Proceeds from issuance of short-term debt	—	—	100,000
Repayment of short-term debt	—	(50,000)	(100,000)
Payments of obligations under finance leases	(670)	—	—
Other	(364)	(941)	(2,209)
Net cash provided by (used in) financing activities	(19,861)	4,764	29,675
Net increase (decrease) in cash, cash equivalents and restricted cash	(16,016)	(8,068)	21,432
Cash, cash equivalents and restricted cash, January 1	55,258	63,326	41,894
Cash, cash equivalents and restricted cash, December 31	39,242	55,258	63,326
Less: Restricted cash	—	(3,089)	(15,966)
Cash and cash equivalents, December 31	\$ 39,242	\$ 52,169	\$ 47,360

The accompanying notes are an integral part of these consolidated financial statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 1 · Summary of significant accounting policies

General

Hawaiian Electric Industries, Inc. (HEI) is a holding company with direct and indirect subsidiaries principally engaged in electric utility, banking, and non-regulated renewable/sustainable infrastructure businesses operating in the State of Hawaii. HEI owns Hawaiian Electric Company, Inc. (Hawaiian Electric), ASB Hawaii, Inc. (ASB Hawaii), an intermediate holding company that owns American Savings Bank, F.S.B. (ASB), and Pacific Current, LLC (Pacific Current).

Hawaiian Electric and its wholly owned operating subsidiaries, Hawaii Electric Light Company, Inc. (Hawaii Electric Light) and Maui Electric Company, Limited (Maui Electric), are regulated public electric utilities (collectively, the Utilities) in the business of generating, purchasing, transmitting, distributing and selling electric energy on all major islands in Hawaii other than Kauai. See Note 2.

ASB is a federally chartered, full-service community bank providing a wide range of banking services to individual and business customers through its 38 branches on Oahu (27), Maui (5), Hawaii (3), Kauai (2) and Molokai (1).

Pacific Current's significant subsidiaries include Hamakua Energy, LLC (Hamakua Energy), Mauo, LLC (Mauo) and Ka'ie'ie Waho Company, LLC (Ka'ie'ie Waho) and Mahipapa, LLC (Mahipapa). See Note 2.

Basis of presentation. In preparing the consolidated financial statements in conformity with accounting principles generally accepted in the United States of America (GAAP), management is required to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities and the reported amounts of revenues and expenses. Actual results could differ significantly from those estimates.

Material estimates that are particularly susceptible to significant change for HEI and its subsidiaries (collectively, the Company) include the amounts reported as fair value for investment securities (ASB only); pension and other postretirement benefit obligations; contingencies and litigation; income taxes; regulatory assets and liabilities (Utilities only); asset retirement obligations (Utilities only); and allowance for credit losses (ASB only).

Consolidation. The HEI consolidated financial statements include the accounts of HEI and its subsidiaries. The Hawaiian Electric consolidated financial statements include the accounts of Hawaiian Electric and its subsidiaries. When HEI or Hawaiian Electric has a controlling financial interest in another entity (usually, majority voting interest), that entity is consolidated. Investments in companies over which the Company or the Utilities have the ability to exercise significant influence, but not control, are accounted for using the equity method. The consolidated financial statements exclude variable interest entities (VIEs) when the Company or the Utilities are not the primary beneficiaries. Significant intercompany amounts are eliminated in consolidation (see Note 2 for limited exceptions).

Cash and cash equivalents. The Utilities consider cash on hand, deposits in banks, money market accounts, certificates of deposit, short-term commercial paper of non-affiliates and liquid investments (with original maturities of three months or less) to be cash and cash equivalents. The Company considers the same items to be cash and cash equivalents as well as ASB's deposits with the Federal Home Loan Bank (FHLB), federal funds sold (excess funds that ASB loans to other banks overnight at the federal funds rate) and securities purchased under resale agreements with original maturities of three months or less.

Restricted cash. The Utilities consider funds on deposit with trustees, which represent the undrawn proceeds from the issuance of special purpose revenue bonds, to be restricted cash because these funds are available only to finance (or reimburse payment of) approved capital expenditures. In addition to the Utilities' funds on deposit with trustees, the Company considers cash held by trustees, related to non-recourse loans at Pacific Current subsidiaries, to be restricted cash. At December 31, 2022 and 2021, total restricted cash of the Company was \$5.1 million and \$5.9 million, respectively, and for the Utilities was nil and \$3.1 million, respectively.

Property, plant and equipment. Property, plant and equipment are reported at cost. Self-constructed electric utility plant includes engineering, supervision, administrative and general costs and an allowance for the cost of funds used during the construction period. These costs are recorded in construction in progress and are transferred to utility plant when construction is completed and the facilities are either placed in service or become useful for public utility purposes. Costs for betterments that make utility plant more useful, more efficient, of greater durability or of greater capacity are also capitalized. Upon the retirement or sale of electric utility plant, generally no gain or loss is recognized. The cost of the plant retired is charged to accumulated depreciation. Amounts collected from customers for cost of removal are included in regulatory liabilities. See discussion regarding "Utility projects" in Note 3.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

Depreciation. Depreciation is computed primarily using the straight-line method over the estimated lives of the assets being depreciated. Electric utility plant additions in the current year are depreciated beginning January 1 of the following year in accordance with rate-making. Electric utility plant and Pacific Current generation assets have lives ranging from 16 to 51 years for production plant, from 10 to 79 years for transmission and distribution plant, and from 5 to 50 years for general plant. The Utilities' composite annual depreciation rate, which includes a component for cost of removal, was 3.2% in 2022, 2021 and 2020.

Retirement benefits. Pension and other postretirement benefit costs are charged primarily to expense and electric utility plant (in the case of the Utilities). Funding for the Company's qualified pension plans (Plans) is based on actuarial assumptions adopted by the Pension Investment Committee administering the Plans. The participating employers contribute amounts to pension trusts for the Plans in accordance with the funding requirements of the Employee Retirement Income Security Act of 1974, as amended (ERISA), including changes promulgated by the Pension Protection Act of 2006, and considering the deductibility of contributions under the Internal Revenue Code. The Company generally funds at least the net periodic pension cost during the year, subject to ERISA minimum and Internal Revenue Code limits and targeted funded status.

Certain health care and/or life insurance benefits are provided to eligible retired employees and the employees' beneficiaries and covered dependents. The Company generally funds the net periodic postretirement benefit costs other than pensions (except for executive life) for postretirement benefits other than pensions (OPEB), while maximizing the use of the most tax-advantaged funding vehicles, subject to cash flow requirements and reviews of the funded status with the consulting actuary.

Environmental expenditures. The Company and the Utilities are subject to numerous federal and state environmental statutes and regulations. In general, environmental contamination treatment costs are charged to expense. Environmental costs are capitalized if the costs extend the life, increase the capacity, or improve the safety or efficiency of property; the costs mitigate or prevent future environmental contamination; or the costs are incurred in preparing the property for sale. Environmental costs are either capitalized or charged to expense when environmental assessments and/or remedial efforts are probable and the cost can be reasonably estimated. The Utilities review their sites and measure the liability quarterly by assessing a range of reasonably likely costs of each identified site using currently available information, including existing technology, presently enacted laws and regulations, experience gained at similar sites, and the probable level of involvement and financial condition of other potentially responsible parties.

Income taxes. Deferred income tax assets and liabilities are established for the temporary differences between the financial reporting bases and the tax bases of the Company's and the Utilities' assets and liabilities at federal and state tax rates expected to be in effect when such deferred tax assets or liabilities are realized or settled. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences become deductible. Valuation allowances are established when necessary to reduce deferred income tax assets to the amount expected to be realized.

HEI and the Utilities' investment tax credits are deferred and amortized over the estimated useful lives of the properties to which the credits relate (and for the Utilities, this treatment is in accordance with Accounting Standards Codification (ASC) Topic 980, "Regulated Operations").

The Utilities are included in the consolidated income tax returns of HEI. However, income tax expense has been computed for financial statement purposes as if each utility filed a separate income tax return and Hawaiian Electric filed a consolidated Hawaiian Electric income tax return.

Governmental tax authorities could challenge a tax return position taken by the Company. The Company and the Utilities use a "more-likely-than-not" recognition threshold and measurement standard for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return.

Fair value measurements. Fair value estimates are estimates of the price that would be received to sell an asset, or paid upon the transfer of a liability, in an orderly transaction between market participants at the measurement date. The fair value estimates are generally determined based on assumptions that market participants would use in pricing the asset or liability and are based on market data obtained from independent sources. However, in certain cases, the Company and the Utilities use their own assumptions about market participant assumptions based on the best information available in the circumstances. These valuations are estimates at a specific point in time, based on relevant market information, information about the financial instrument and judgments regarding future expected loss experience, economic conditions, risk characteristics of various financial instruments and other factors. These estimates do not reflect any premium or discount that could result if the Company or the Utilities were to sell its entire holdings of a particular financial instrument at one time. Because no active trading market exists for a portion of the Company's and the Utilities' financial instruments, fair value estimates cannot be determined with

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

precision. Changes in the underlying assumptions used, including discount rates and estimates of future cash flows, could significantly affect the estimates. In addition, the tax ramifications related to the realization of the unrealized gains and losses could have a significant effect on fair value estimates, but have not been considered in making such estimates.

The Company and the Utilities group their financial assets measured at fair value in three levels outlined as follows:

Level 1: Inputs to the valuation methodology are quoted prices, unadjusted, for identical assets or liabilities in active markets. A quoted price in an active market provides the most reliable evidence of fair value and is used to measure fair value whenever available.

Level 2: Inputs to the valuation methodology include quoted prices for similar assets or liabilities in active markets; inputs to the valuation methodology include quoted prices for identical or similar assets or liabilities in markets that are not active; or inputs to the valuation methodology that are derived principally from or can be corroborated by observable market data by correlation or other means.

Level 3: Inputs to the valuation methodology are unobservable and significant to the fair value measurement. Level 3 assets and liabilities include financial instruments whose value is determined using discounted cash flow methodologies, as well as instruments for which the determination of fair value requires significant management judgment or estimation.

Classification in the hierarchy is based upon the lowest level input that is significant to the fair value measurement of the asset or liability. For instruments classified in Level 1 and 2 where inputs are primarily based upon observable market data, there is less judgment applied in arriving at the fair value. For instruments classified in Level 3, management judgment is more significant due to the lack of observable market data.

The Company reviews and updates the fair value hierarchy classifications on a quarterly basis. Changes from one quarter to the next related to the observability of inputs in fair value measurements may result in a reclassification between the fair value hierarchy levels and are recognized based on period-end balances.

Fair value is also used on a nonrecurring basis to evaluate certain assets for impairment or for disclosure purposes. Examples of nonrecurring uses of fair value include mortgage servicing rights accounted for by the amortization method, loan impairments for certain loans, real estate acquired in settlement of loans, goodwill and asset retirement obligations (AROs).

Earnings per share (HEI only). Basic earnings per share (EPS) is computed by dividing net income for common stock by the weighted-average number of common shares outstanding for the period. Diluted EPS is computed similarly, except that dilutive common shares for stock compensation is added to the denominator. There were no shares of antidilutive securities outstanding during the years ended December 31, 2022, 2021 and 2020.

Impairment of long-lived assets and long-lived assets to be disposed of. The Company and the Utilities review long-lived assets and certain identifiable intangibles for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to future undiscounted net cash flows expected to be generated by the asset. If such assets are considered to be impaired, the impairment to be recognized is measured by the amount by which the carrying amount of the assets exceeds the fair value of the assets. Assets to be disposed of are reported at the lower of the carrying amount or fair value, less costs to sell.

Recent accounting pronouncements.

Credit Losses. In March 2022, Financial Accounting Standards Board issued Accounting Standards Update (ASU) No. 2022-02, "Financial Instruments-Credit Losses (ASC Topic 326): Troubled Debt Restructurings and Vintage Disclosures," which eliminates the accounting guidance for Troubled Debt Restructurings (TDRs) by creditors in Subtopic 310-40, Receivables-Troubled Debt Restructurings by Creditors, while enhancing disclosure requirements for certain loan refinancings and restructurings by creditors when a borrower is experiencing financial difficulty. Specifically, rather than applying the recognition and measurement guidance for TDRs, an entity must apply the loan refinancing and restructuring guidance in paragraphs 310-20-35-9 through 35-11 to determine whether a modification results in a new loan or a continuation of an existing loan. The amendments in this update also require that an entity disclose current-period gross write-offs by year of origination for financing receivables and net investments in leases within the scope of Subtopic 326-20, "Financial Instruments-Credit Losses-Measured at Amortized Cost." Gross write-off information must be included in the vintage disclosures required for public business entities in accordance with paragraph 325-20-50-6, which requires that an entity disclose the amortized cost basis of financing receivables by credit-quality indicator and class of financing receivable by year of origination. The amendments in this update are effective for fiscal years beginning after December 15, 2022, including interim periods within

those fiscal years. The amendments in this ASU will not have a material financial impact but will require additional disclosures in the first quarter of 2023.

Electric utility

Regulation by the Public Utilities Commission of the State of Hawaii (PUC). The Utilities are regulated by the PUC and account for the effects of regulation under FASB ASC Topic 980, “Regulated Operations.” As a result, the Utilities’ financial statements reflect assets, liabilities, revenues and expenses based on current cost-based rate-making regulations (see Note 3 —“Regulatory assets and liabilities”). Their continued accounting under ASC Topic 980 generally requires that rates are established by an independent, third-party regulator; rates are designed to recover the costs of providing service; and it is reasonable to assume that rates can be charged to, and collected from, customers. Management believes that the operations of the Utilities, including the impact of the approved PBR Framework, currently satisfy the criteria under ASC Topic 980.

The rate schedules of the Utilities include energy costs recovery clauses (ECRCs) under which electric rates are adjusted for changes in the weighted-average price paid for fuel oil and certain components of purchased power, and the relative amounts of company-generated power and purchased power. The rate schedules also include purchased power adjustment clauses (PPACs) under which the remaining purchase power expenses are recovered through surcharge mechanisms. The amounts collected through the ECRCs and PPACs are required to be reconciled quarterly.

Accounts receivable. Accounts receivable are recorded at the invoiced amount. The Utilities generally assess a late payment charge on balances unpaid from the previous month. The allowance for doubtful accounts is the Utilities’ best estimate of the amount of expected credit losses in the Utilities’ existing accounts receivable. Due to the economic impact of COVID-19 on customers and the moratorium on electric service disconnections through May 31, 2021, the allowance for doubtful accounts increased in 2020 and 2021. At December 31, 2022 and 2021, the allowance for customer accounts receivable, accrued unbilled revenues and other accounts receivable was \$6.1 million and \$26.1 million, respectively.

Electric utility revenues. Revenues related to electric service are generally recorded when service is rendered and include revenues applicable to energy consumed in the accounting period but not yet billed to the customers. The Utilities also record revenue under a decoupling mechanism. See “Decoupling” discussion in Note 3.

Repairs and maintenance costs. Repairs and maintenance costs for overhauls of generating units are generally expensed as they are incurred.

Allowance for funds used during construction (AFUDC). AFUDC represents the estimated costs of debt (i.e., interest) and equity funds used to finance plant construction. AFUDC is credited on the statement of income and charged to construction in progress on the balance sheet. If a project under construction is delayed for an extended period of time, AFUDC on the delayed project may be stopped after assessing the causes of the delay and probability of recovery. The tax gross up of the allowance for equity funds used during construction is credited to income taxes on the statement of income and charged to a regulatory asset. This gross up, net of amortization of the regulatory asset, is reflected in income tax expense.

The weighted-average AFUDC rate was 7.1% in 2022, 2021 and 2020, and reflected quarterly compounding.

Asset retirement obligations. AROs are accounted for in accordance with *ASC 410-20, Asset Retirement Obligations*. AROs are recognized at present value of expected costs to retire long-lived assets from service, provided a legal obligation exists and a reasonable estimate of the fair value and the settlement date can be made. In the subsequent period, the liability is accreted to its future value while the asset retirement cost is depreciated over the estimated useful life of the underlying asset. The Utilities’ recognition of AROs have no impact on earnings, as the cost of the AROs are recovered over the life of the asset through depreciation. AROs recognized by the Utilities relate to legal obligations with the retirement of plant and equipment, including removal of asbestos and other hazardous materials. See “Asset retirement obligations” in Note 3.

Bank (HEI only)

Investment securities. Investments in debt securities are classified as held-to-maturity (HTM), trading or available-for-sale (AFS). ASB determines the appropriate classification at the time of purchase. Debt securities that ASB intends to and has the ability to hold to maturity are classified as HTM securities and reported at amortized cost. Marketable debt securities that are bought and held principally for the purpose of selling them in the near term are classified as trading securities and reported at fair value, with unrealized gains and losses included in earnings. Marketable debt securities not classified as either HTM or trading securities are classified as AFS and reported at fair value. Unrealized gains and losses for AFS securities are excluded from earnings and reported on a net basis in accumulated other comprehensive income (AOCI) until realized. Transfers of debt securities from the available-for-sale classification to the held-to-maturity classification are made at fair value at the date of

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

transfer. The unrealized holding gain or loss at the date of transfer remains in AOCI and in the carrying value of the held-to-maturity investment security. Unrealized holding gains or losses that remain in AOCI are amortized or accreted over the expected life of the security as an adjustment of yield, offsetting the related amortization of the premium or accretion of the discount.

Interest income is recorded on an accrual basis. Discounts and premiums on securities are accreted or amortized into interest income using the interest method over the remaining contractual lives of the agency obligation securities and the estimated lives of the mortgage-backed securities adjusted for anticipated prepayments. ASB uses actual prepayment experience and estimates of future prepayments to determine the constant effective yield necessary to apply the interest method of income recognition. The discounts and premiums on the agency obligations portfolio are accreted or amortized on a prospective basis using expected contractual cash flows. The discounts and premiums on the mortgage-backed securities portfolio are accreted or amortized on a retrospective basis using changes in anticipated prepayments. This method requires a retrospective adjustment of the effective yield each time ASB changes the estimated life as if the new estimate had been known since the original acquisition date of the securities. Estimates of future prepayments are based on the underlying collateral characteristics and historic or projected prepayment behavior of each security. The specific identification method is used in determining realized gains and losses on the sales of securities.

AFS debt securities with unrealized losses are reviewed quarterly. ASB will first assess whether it intends to sell, or it is more likely than not that it will be required to sell the security before recovery of its amortized cost basis. If either criteria is met, the security's amortized cost basis is written down to fair value through income. For AFS securities that do not meet the aforementioned criteria, ASB evaluates whether the decline in fair value is the result of a credit loss or other factors. The determination of whether or not a credit loss exists is based on consideration of the cash flows expected to be collected from the debt security. ASB develops these expectations after considering various factors such as agency ratings, the financial condition of the issuer, payment history, payment structure of the security, industry and market conditions, underlying collateral and other factors which may be relevant based on the facts and circumstances pertaining to individual securities. If this assessment indicates that a credit loss exists, the present value of cash flows expected to be collected from the security are compared to the amortized cost basis of the security. If the present value of cash flows expected to be collected is less than the amortized cost basis, a credit loss exists and an allowance for credit losses is recorded for the credit loss, limited by the amount that the fair value is less than the amortized cost basis. Any impairment that has not been recorded through an allowance for credit losses is recognized in other comprehensive income. Changes in the allowance for credit losses are recorded as a provision for (or reversal of) credit losses. Losses are charged against the allowance when management believes the uncollectibility of an AFS security is confirmed or when either of the criteria regarding intent or requirement to sell is met. As of December 31, 2022, 2021 and 2020, there was no indicated impairment as ASB expects to collect the contractual cash flows for these investments.

Held-to-maturity debt securities are assessed periodically to determine if a valuation allowance is necessary to absorb credit losses expected to occur over the remaining contractual life of the securities. The carrying amount of held-to-maturity debt securities is presented net of the valuation allowance for credit losses when such an allowance is deemed necessary.

Stock in FHLB is carried at cost and is reviewed at least quarterly for impairment, with valuation adjustments recognized in noninterest income.

Loans. ASB carries loans at amortized cost less the allowance for credit losses, loan origination fees (net of direct loan origination costs), commitment fees and purchase premiums and discounts. Interest on loans is credited to income as it is earned. Discounts and premiums are accreted or amortized over the life of the loans using the interest method.

Loan origination fees (net of direct loan origination costs) are deferred and recognized as an adjustment in yield over periods not exceeding the contractual life of the loan using the interest method or taken into income when the loan is paid off or sold. Nonrefundable commitment fees (net of direct loan origination costs, if applicable) received for commitments to originate or purchase loans are deferred and, if the commitment is exercised, recognized as an adjustment of yield over the life of the loan using the interest method. Nonrefundable commitment fees received for which the commitment expires unexercised are recognized as income upon expiration of the commitment.

Loans held for sale are stated at the lower of cost or estimated fair value on an aggregate basis. Premiums, discounts and net deferred loan fees are not amortized while a loan is classified as held for sale. A sale is recognized only when the consideration received is other than beneficial interests in the assets sold and control over the assets is transferred irrevocably to the buyer. Gains or losses on sales of loans are recognized at the time of sale and are determined by the difference between the net sales proceeds and the allocated basis of the loans sold.

Allowance for credit losses. The allowance for credit losses (ACL) represents management's estimate of expected credit losses over the expected contractual life of the related loans as of the balance sheet date. Contractual terms are adjusted for

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

expected prepayments but are not extended for expected extensions, renewals or modifications except in circumstances where ASB reasonably expects to execute a troubled debt restructuring with the borrower or where certain extension or renewal options are embedded in the original contract and not unconditionally cancellable by the Bank.

Accrued interest receivables on loans are presented in the Consolidated Financial Statements as a component of other assets. When accrued interest is deemed to be uncollectible (typically when a loan is placed on nonaccrual status), interest income is reversed against interest income on loans. ASB follows established policies for placing loans on nonaccrual status, so uncollectible accrued interest receivable is reversed in a timely manner. As a result, the Bank has elected not to measure an allowance for credit losses for accrued interest receivables.

Credit losses are charged and recoveries are credited to the ACL. The ACL is maintained at a level the Bank considers to be adequate and is based on ongoing assessments and evaluations of the collectability of loans. The Bank's expected credit loss models consider historical credit loss experience, current market and economic conditions, and forecasted changes in market and economic conditions if such forecasts are considered reasonable and supportable. Generally, the Bank considers its forecasts to be reasonable and supportable for a period of up to a year from the estimation date. For periods beyond the reasonable and supportable forecast period, expected credit losses are estimated by reverting to historical loss information without adjustment for changes in economic conditions. The Bank evaluates the length of its reasonable and supportable forecast period, its reversion period and reversion methodology at least annually, or more often if warranted by economic conditions or other circumstances.

The Bank's methodology for determining the ACL includes an estimate of expected credit losses on a collective basis for groups of loans with similar risk characteristics and specific allowances for loans which are individually evaluated.

ASB disaggregates its portfolio loans into portfolio segments for purposes of determining the allowance for credit losses. Commercial, commercial real estate, and commercial construction loans are defined as non-homogeneous loans and ASB utilizes a risk rating system for evaluating the credit quality of the loans. Non-homogeneous loans are also categorized into the regulatory asset quality classifications—Pass, Special Mention, Substandard, Doubtful, and Loss based on credit quality. ASB utilizes a numerical-based, risk rating "PD Model" that takes into consideration fiscal year-end financial information of the borrower and identified financial attributes including retained earnings, operating cash flows, interest coverage, liquidity and leverage that demonstrate a strong correlation with default to assign default probabilities at the borrower level. In addition, a loss given default (LGD) value is assigned to each loan to measure loss in the event of default based on loan specific features such as collateral that mitigates the amount of loss in the event of default.

Residential, consumer and credit scored business loans are considered homogeneous loans, which are typically underwritten based on common, uniform standards. For the homogeneous portfolio, the quality of the loan is best indicated by the repayment performance of an individual borrower. ASB supplements performance data with external credit bureau data and credit scores such as the Fair Isaac Corporation (FICO) score on a quarterly basis. ASB has built portfolio loss models for each major segment based on the combination of internal and external data to predict the probability of default at the loan level.

The Bank also considers qualitative factors in determining the ACL. Qualitative factors are used to capture characteristics in the portfolio that impact expected credit losses but that are not fully captured within the Bank's expected credit loss models. These include but are not limited to adjustments for changes in policies or procedures in underwriting, monitoring or collections, economic conditions, portfolio mix, lending and risk management personnel, results of internal audit and quality control reviews, collateral values and any concentrations of credit.

The reserve for unfunded commitments is maintained at a level believed by management to cover expected losses related to unfunded credit facilities and is included in accounts payable and other liabilities in the consolidated balance sheets. The determination of the adequacy of the reserve is based upon an evaluation of the unfunded credit facilities, including an assessment of historical commitment utilization experience, credit risk grading and historical loss rates. This process takes into consideration the same risk elements that are analyzed in the determination of the adequacy of the allowance for credit losses, as discussed above. Net adjustments to the reserve for unfunded commitments are included in the provision for credit losses in the consolidated statements of income.

The allowance for credit losses is based on currently available information and historical experience, and future adjustments may be required from time to time to the allowance for credit losses based on new information and changes that occur (e.g., due to changes in economic conditions, particularly in Hawaii). Actual losses could differ from management's estimates, and these differences and subsequent adjustments could be material.

Nonperforming loans. Loans are generally placed on nonaccrual status when contractually past due 90 days or more, or earlier if the probability of collection is insufficient to warrant further accrual. All interest that is accrued but not collected is

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

reversed. A loan may be returned to accrual status if (i) principal and interest payments have been brought current and repayment of the remaining contractual principal and interest is expected to be made, (ii) the loan has otherwise become well-secured and in the process of collection, or (iii) the borrower has been making regularly scheduled payments in full for the prior six months and it is reasonably assured that the loan will be brought fully current within a reasonable period. Cash receipts on nonaccruing loans are generally applied to reduce the unpaid principal balance.

Loans considered to be uncollectible are charged-off against the allowance for credit losses. The amount and timing of charge-offs on loans includes consideration of the loan type, length of delinquency, insufficiency of collateral value, lien priority and the overall financial condition of the borrower. Recoveries on loans previously charged-off are credited back to the allowance for credit losses. Loans that have been charged-off against the allowance for credit losses are periodically monitored to evaluate whether further adjustments to the allowance are necessary.

Loans in the commercial and commercial real estate portfolio are charged-off when the loan is risk rated “Doubtful” or “Loss.” The loan or a portion thereof is determined to be uncollectible after considering the borrower’s overall financial condition and collateral deficiency. A commercial or commercial real estate loan is considered uncollectible when: (a) the borrower is delinquent in principal or interest 90 days or more; (b) significant improvement in the borrower’s repayment capacity is doubtful; and/or (c) collateral value is insufficient to cover outstanding indebtedness and no other viable assets or repayment sources exist.

Loans in the residential mortgage and home equity portfolios are charged-off when the loan or a portion thereof is determined to be uncollectible after considering the borrower’s overall financial condition and collateral deficiency. Such loan is considered uncollectible when: (a) the borrower is delinquent in principal or interest 180 days or more; (b) it is probable that collateral value is insufficient to cover outstanding indebtedness and no other viable assets or repayment sources exist; (c) notification of the borrower’s bankruptcy is received or the borrower’s debt is discharged in bankruptcy and the loan is not reaffirmed; or (d) in cases where ASB is in a subordinate position to other debt, the senior lien holder has foreclosed and ASB’s junior lien is extinguished.

Other consumer loans are generally charged-off when the balance becomes 120 days delinquent.

Loans modified in a troubled debt restructuring. Loans are considered to have been modified in a troubled debt restructuring (TDR) when, due to a borrower’s financial difficulties, ASB makes concessions to the borrower that it would not otherwise consider for a non-troubled borrower. Modifications may include interest rate reductions, interest only payments for an extended period of time, protracted terms such as amortization and maturity beyond the customary length of time found in the normal market place, and other actions intended to minimize economic loss and to provide alternatives to foreclosure or repossession of collateral. Generally, a nonaccrual loan that has been modified in a TDR remains on nonaccrual status until the borrower has demonstrated sustained repayment performance for a period of six consecutive months. However, performance prior to the modification, or significant events that coincide with the modification, are included in assessing whether the borrower can meet the new terms and may result in the loan being returned to accrual status at the time of loan modification or after a shorter performance period. If the borrower’s ability to meet the revised payment schedule is uncertain, or there is reasonable doubt over the full collectability of principal and interest, the loan remains on nonaccrual status.

Real estate acquired in settlement of loans. ASB records real estate acquired in settlement of loans at fair value, less estimated selling expenses. ASB obtains appraisals based on recent comparable sales to assist management in estimating the fair value of real estate acquired in settlement of loans. Subsequent declines in value are charged to expense through a valuation allowance. Costs related to holding real estate are charged to operations as incurred.

Goodwill. Goodwill is initially recorded as the excess of the purchase price over the fair value of the net assets acquired in a business combination and is subsequently evaluated at least annually for impairment during the fourth quarter. At December 31, 2022 and 2021, the amount of goodwill was \$82.2 million. The goodwill relates to ASB and is the Company’s only intangible asset with an indefinite useful life.

To determine if there was an impairment to the book value of goodwill pertaining to ASB, the fair value of ASB was estimated using a valuation method based on the market and income approaches. The market approach considers publicly traded financial institutions and measures the institutions’ market values as a multiple to (1) net income and (2) tangible book equity. The market approach also looks at sale transactions to determine the fair value under this approach. The income approach uses a discounted cash flow method to value a company on a going concern basis and is based on the concept that the future benefits derived from a particular company can be measured by its sustainable after-tax cash flows in the future. ASB used its forecasted net income and estimated cost savings if the Bank were acquired and applied a discount rate to calculate its discounted cash flows. A capitalization of earnings method was used to calculate a terminal value for the discounted cash flow method. The income approach was weighted 75%, the publicly traded company valuation method was weighted 20% and the

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

sale transaction valuation method was weighted 5%. More weight was given to the income approach as this approach uses the projected performance of ASB in the stressed environment and would be more indicative of the current fair value of the Bank. For the three years ended December 31, 2022, there has been no impairment of goodwill.

Mortgage banking. Mortgage loans held for sale are stated at the lower of cost or estimated fair value on an aggregate basis. Premiums, discounts and net deferred loan fees are not amortized while a loan is classified as held-for-sale. A sale is recognized only when the consideration received is other than beneficial interests in the assets sold and control over the assets is transferred irrevocably to the buyer. Gains or losses on sales of loans are recognized at the time of sale and are determined by the difference between the net sales proceeds and the allocated basis of the loans sold. ASB is obligated to subsequently repurchase a loan if the purchaser discovers a standard representation or warranty violation such as noncompliance with eligibility requirements, customer fraud or servicing violations. This primarily occurs during a loan file review. ASB considers and records a reserve for loan repurchases if appropriate.

ASB recognizes a mortgage servicing asset when a mortgage loan is sold with servicing rights retained. This mortgage servicing right (MSR) is initially capitalized at its presumed fair value based on market data at the time of sale and accounted for in subsequent periods at the lower of amortized cost or fair value. Mortgage servicing assets or liabilities are included as a component of gain on sale of loans. Under ASC Topic 860, "Transfers and Servicing," ASB amortizes the MSRs in proportion to and over the period of estimated net servicing income and assess for impairment at each reporting date.

ASB's MSRs are stratified based on predominant risk characteristics of the underlying loans including loan type such as fixed-rate 15- and 30-year mortgages and note rate in bands primarily of 50 to 100 basis points. For each stratum, fair value is calculated by discounting expected net income streams using discount rates that reflect industry pricing for similar assets. Expected net income streams are estimated based on industry assumptions regarding prepayment expectations and income and expenses associated with servicing residential mortgage loans for others.

ASB uses a present value cash flow model using techniques described above to estimate the fair value of MSRs. Because observable market prices with exact terms and conditions may not be readily available, ASB compares the fair value of MSRs to an estimated value calculated by an independent third-party on a semi-annual basis. The third-party relies on both published and unpublished sources of market related assumptions and its own experience and expertise to arrive at a value. ASB uses the third-party value only to assess the reasonableness of fair value generated by the valuation model.

Impairment is recognized through a valuation allowance for each stratum when the carrying amount exceeds fair value, with any associated provision recorded as a component of loan servicing fees included in "Revenues - bank" in the consolidated statements of income. A direct write-down is recorded when the recoverability of the valuation allowance is deemed to be unrecoverable.

Loan servicing fee income represents income earned for servicing mortgage loans owned by investors. It includes mortgage servicing fees and other ancillary servicing income, net of guaranty fees. Servicing fees are generally calculated on the outstanding principal balances of the loans serviced and are recorded as income when earned.

Tax credit investments. ASB invests in limited liability entities formed to operate qualifying affordable housing projects.

The affordable housing investments provide tax benefits to investors in the form of tax deductions from operating losses and tax credits. As a limited partner, ASB has no significant influence over the operations. These investments are initially recorded at the initial capital contribution with a liability recognized for the commitment to contribute additional capital over the term of the investment.

ASB uses the proportional amortization method of accounting for its investments. Under the proportional amortization method, ASB amortizes the cost of its investments in proportion to the tax credits and other tax benefits it receives. The amortization, tax credits and tax benefits are reported as a component of income tax expense.

For these limited liability entities, ASB assesses whether it is the primary beneficiary of the limited liability entity, which is a variable interest entity (VIE). The primary beneficiary of a VIE is determined to be the party that meets both of the following criteria: (i) has the power to make decisions that most significantly affect the economic performance of the VIE; and (ii) has the obligation to absorb losses or the right to receive benefits that in either case could potentially be significant to the VIE. Generally, ASB, as a limited partner, is not deemed to be the primary beneficiary as it does not meet the power criterion, i.e., no power to direct the activities of a VIE that most significantly impact the VIE's economic performance and no direct ability to unilaterally remove the general partner.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

All tax credit investments are evaluated for potential impairment at least annually, or more frequently, when events or conditions indicate that it is deemed probable that ASB will not recover its investment. If an investment is determined to be impaired, it is written down to its estimated fair value and the new cost basis of the investment is not adjusted for subsequent recoveries in value. As of December 31, 2022, ASB did not have any impairment losses resulting from forfeiture or ineligibility of tax credits or other circumstances related to its low-income housing tax credit (LIHTC) investments.

At December 31, 2022 and 2021, the carrying amount of LIHTC investments was \$107.0 million and \$111.0 million, respectively, and included in other assets in the consolidated balance sheets.

ASB's unfunded commitments to fund its LIHTC investment partnerships were \$70.1 million and \$62.8 million as of December 31, 2022 and 2021, respectively. These unfunded commitments are unconditional and legally binding and are recorded in other liabilities with a corresponding increase in other assets.

The table below summarizes the amounts in income tax expense related to ASB's LIHTC investments:

Years ended December 31	2022	2021	2020
(in millions)			
Amounts in income taxes related to low-income housing tax credit investments			
Amortization recognized in the provision for income taxes	\$ (12.0)	\$ (10.3)	\$ (9.6)
Tax credits and other tax benefits recognized in the provision for income taxes	16.3	13.9	13.7
Net benefit to income tax expense	\$ 4.3	\$ 3.6	\$ 4.1

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 2 · Segment financial information

The electric utility and bank segments are strategic business units of the Company that offer different products and services and operate in different regulatory environments. The accounting policies of the segments are the same as those described for the Company in the summary of significant accounting policies, except as otherwise indicated and except that federal and state income taxes for each segment are calculated on a “stand-alone” basis. HEI evaluates segment performance based on net income. Each segment accounts for intersegment sales and transfers as if the sales and transfers were to third parties (i.e., at current market prices). Intersegment revenues consist primarily of Hamakua Energy electricity revenues, interest, rent and preferred stock dividends.

Electric utility

Hawaiian Electric and its wholly owned operating subsidiaries, Hawaii Electric Light and Maui Electric, are public electric utilities in the business of generating, purchasing, transmitting, distributing and selling electric energy on all major islands in Hawaii other than Kauai, and are regulated by the PUC. The utility subsidiaries are aggregated within the electric utility segment because they: (1) are involved in the business of supplying electric energy in the same geographical location (i.e., the State of Hawaii), (2) have similar production processes that comprise electric generation, (3) serve similar customers within their franchise territories (e.g., residential, commercial and industrial customers), (4) use similar electric grids to distribute the energy to their customers, (5) are regulated by the PUC and undergo similar rate-making processes, (6) have similar economic characteristics and (7) perform financial reporting oversight and management of the business at the consolidated level.

Bank

ASB is a federally chartered savings bank that provides a full range of banking services to individual and business customers through its branch system in Hawaii. ASB is subject to examination and comprehensive regulation by the Office of the Comptroller of the Currency (OCC) and the Federal Deposit Insurance Corporation (FDIC), and is subject to reserve requirements established by the Board of Governors of the Federal Reserve System.

Other

“Other” includes amounts for the holding companies (HEI and ASB Hawaii), Pacific Current and its subsidiaries, and other inactive subsidiaries not qualifying as reportable segments, and intercompany eliminations.

Pacific Current. Pacific Current was formed in 2017 to focus on investing in non-regulated renewable energy and sustainable infrastructure in the State of Hawaii to help achieve the state’s sustainability goals. Significant investments of Pacific Current made through its subsidiaries, Hamakua Energy, Mauo, Ka‘ie‘ie Waho, and Mahipapa include:

Hamakua power plant. In 2017, Hamakua Energy acquired Hamakua Energy Partners, L.P.’s 60-MW combined cycle power plant and other assets from affiliates of ArcLight Capital Partners, a private equity firm. The plant sells all the power it produces to Hawaii Electric Light under an existing power purchase agreement (PPA) that expires in 2030.

Solar-plus-storage power purchase agreement. In 2018, Mauo executed definitive agreements to acquire a solar-plus-storage PPA for a multi-site, commercial-scale project that provides 8.1 MW of solar capacity and 42.6 megawatt-hours (MWh) of storage capacity on the islands of Maui and Oahu. The PPA has a 15-year term with a customer option to extend for an additional five years.

6-MW photovoltaic system. In September 2020, Ka‘ie‘ie Waho acquired a 6-MW photovoltaic system situated on 20 acres of land on the island of Kauai. Kauai Island Utility Cooperative purchases all of the power generated by the system under a PPA that expires in 2033.

7.5-MW renewable, firm dispatchable closed-loop biomass-to-energy facility. In July 2022, Mahipapa acquired a 7.5-MW renewable, firm dispatchable closed-loop biomass-to-energy facility on Kauai. Kauai Island Utility Cooperative purchases all of the power generated by the system under a PPA that expires in 2035.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Segment financial information was as follows:

(in thousands)	Electric utility		Bank		Other		Total
2022							
Revenues from external customers	\$	3,408,583	\$	321,068	\$	12,334	\$ 3,741,985
Intersegment revenues (eliminations)		4		—		(4)	—
Revenues		3,408,587		321,068		12,330	3,741,985
Depreciation and amortization		260,744		24,436		9,661	294,841
Interest expense, net		76,416		13,301		26,986	116,703
Income (loss) before income taxes		240,600		102,241		(38,646)	304,195
Income taxes (benefit)		49,676		22,252		(10,761)	61,167
Net income (loss)		190,924		79,989		(27,885)	243,028
Preferred stock dividends of subsidiaries		1,995		—		(105)	1,890
Net income (loss) for common stock		188,929		79,989		(27,780)	241,138
Capital expenditures ¹		329,457		4,704		9,876	344,037
Assets (at December 31, 2022)		6,597,467		9,545,970		140,807	16,284,244
2021							
Revenues from external customers	\$	2,539,589	\$	306,398	\$	4,392	\$ 2,850,379
Intersegment revenues (eliminations)		47		—		(47)	—
Revenues		2,539,636		306,398		4,345	2,850,379
Depreciation and amortization		251,206		21,124		6,372	278,702
Interest expense, net		72,447		5,040		21,916	99,403
Income (loss) before income taxes		223,785		130,559		(43,481)	310,863
Income taxes (benefit)		44,148		29,325		(10,666)	62,807
Net income (loss)		179,637		101,234		(32,815)	248,056
Preferred stock dividends of subsidiaries		1,995		—		(105)	1,890
Net income (loss) for common stock		177,642		101,234		(32,710)	246,166
Capital expenditures ¹		292,000		11,131		11,393	314,524
Assets (at December 31, 2021)		6,491,625		9,181,603		149,409	15,822,637
2020							
Revenues from external customers	\$	2,265,281	\$	313,511	\$	983	\$ 2,579,775
Intersegment revenues (eliminations)		39		—		(39)	—
Revenues		2,265,320		313,511		944	2,579,775
Depreciation and amortization		256,479		29,349		4,950	290,778
Interest expense, net		67,794		11,114		20,900	99,808
Income (loss) before income taxes		211,753		69,271		(40,400)	240,624
Income taxes (benefit)		40,418		11,688		(11,196)	40,910
Net income (loss)		171,335		57,583		(29,204)	199,714
Preferred stock dividends of subsidiaries		1,995		—		(105)	1,890
Net income (loss) for common stock		169,340		57,583		(29,099)	197,824
Capital expenditures ¹		350,864		12,203		20,828	383,895
Assets (at December 31, 2020)		6,457,373		8,396,533		150,101	15,004,007

¹ Contributions in aid of construction balances are included in capital expenditures.

Intercompany electricity sales of the Utilities to ASB and “other” segments are not eliminated because those segments would need to purchase electricity from another source if it were not provided by the Utilities and the profit on such sales is nominal.

Hamakua Energy’s sales to Hawaii Electric Light (a regulated affiliate) are eliminated in consolidation.

Note 3 · Electric utility segment

Regulatory assets and liabilities. Regulatory assets represent deferred costs and accrued decoupling revenues which are expected to be recovered through rates over PUC-authorized periods. Generally, the Utilities do not earn a return on their regulatory assets; however, they have been allowed to recover interest on certain regulatory assets and to include certain regulatory assets in rate base. Regulatory liabilities represent amounts included in rates and collected from ratepayers for costs expected to be incurred in the future, or amounts collected in excess of costs incurred that are refundable to customers. For example, the regulatory liability for cost of removal in excess of salvage value represents amounts that have been collected from ratepayers for costs that are expected to be incurred in the future to retire utility plant. Generally, the Utilities include regulatory liabilities in rate base or are required to apply interest to certain regulatory liabilities. In the table below, noted in parentheses are the original PUC authorized amortization or recovery periods and, if different, the remaining amortization or recovery periods as of December 31, 2022 are noted.

Regulatory assets were as follows:

December 31	2022	2021
(in thousands)		
Retirement benefit plans (balance primarily varies with plans' funded statuses)	\$ 69,919	\$ 351,070
Income taxes (3-37 years)	82,583	88,087
Decoupling revenue balancing account and RAM (1-2 years)	14,290	31,607
Unamortized expense and premiums on retired debt and equity issuances (1-28 years; 1-28 years remaining)	5,967	7,300
Vacation earned, but not yet taken (1 year)	14,109	14,255
COVID-19 related costs (to be determined by PUC)	11,403	27,839
ECRC/PPAC (1 year)	20,369	21,386
Other (1-37 years remaining)	23,873	23,999
Total regulatory assets	\$ 242,513	\$ 565,543
Included in:		
Current assets	\$ 52,273	\$ 66,664
Long-term assets	190,240	498,879
Total regulatory assets	\$ 242,513	\$ 565,543

Regulatory liabilities were as follows:

December 31	2022	2021
(in thousands)		
Cost of removal in excess of salvage value (1-79 years)	\$ 577,985	\$ 562,514
Income taxes (3-37 years)	316,947	337,304
Decoupling revenue balancing account and RAM (1-2 years)	10,426	251
Retirement benefit plans (balance primarily varies with plans' funded statuses)	81,950	51,734
Solar tax credits (1-19 years)	50,240	27,123
Other (1-3 years remaining)	18,102	17,842
Total regulatory liabilities	\$ 1,055,650	\$ 996,768
Included in:		
Current liabilities	\$ 31,475	\$ 29,760
Long-term liabilities	1,024,175	967,008
Total regulatory liabilities	\$ 1,055,650	\$ 996,768

The regulatory asset and liability relating to retirement benefit plans was recorded as a result of pension and OPEB tracking mechanisms adopted by the PUC in rate case decisions for the Utilities in 2007 (see Note 10).

Major customers. The Utilities received 12% (\$393 million), 11% (\$267 million) and 11% (\$249 million) of their operating revenues from the sale of electricity to various federal government agencies in 2022, 2021 and 2020, respectively.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

Cumulative preferred stock. The following series of cumulative preferred stock are redeemable only at the option of the respective company at the following prices in the event of voluntary liquidation or redemption:

December 31, 2022	Voluntary liquidation price	Redemption price
Series		
C, D, E, H, J and K (Hawaiian Electric)	\$ 20	\$ 21
I (Hawaiian Electric)	20	20
G (Hawaii Electric Light)	100	100
H (Maui Electric)	100	100

Hawaiian Electric is obligated to make dividend, redemption and liquidation payments on the preferred stock of each of its subsidiaries if the respective subsidiary is unable to make such payments, but this obligation is subordinated to Hawaiian Electric's obligation to make payments on its own preferred stock.

Related-party transactions. HEI charged the Utilities \$5.6 million, \$5.2 million and \$5.6 million for general management and administrative services in 2022, 2021 and 2020, respectively. The amounts charged by HEI to its subsidiaries for services provided by HEI employees are allocated primarily on the basis of time expended in providing such services.

In 2022, 2021 and 2020, Hamakua Energy (an indirect subsidiary of HEI) sold energy and capacity to Hawaii Electric Light (subsidiary of Hawaiian Electric and indirect subsidiary of HEI) under a PPA in the amount of \$66 million, \$53 million and \$50 million, respectively.

Hawaiian Electric's short-term borrowings from HEI totaled nil at December 31, 2022 and 2021. Borrowings among the Utilities are eliminated in consolidation. Interest charged by HEI to Hawaiian Electric was not material for the years ended December 31, 2022 and 2021.

Unconsolidated variable interest entities.

Power purchase agreements. As of December 31, 2022, the Utilities had four PPAs for firm capacity and other PPAs with independent power producers (IPPs) and Schedule Q providers (i.e., customers with cogeneration and/or power production facilities who buy power from or sell power to the Utilities), none of which are currently required to be consolidated as VIEs.

Pursuant to the current accounting standards for VIEs, the Utilities are deemed to have a variable interest in Kalaeloa Partners, L.P. (Kalaeloa) and Hamakua Energy by reason of the provisions of the PPA that the Utilities have with the two IPPs. However, management has concluded that the Utilities are not the primary beneficiary of Kalaeloa and Hamakua Energy because the Utilities do not have the power to direct the activities that most significantly impact the two IPPs' economic performance nor the obligation to absorb their expected losses, if any, that could potentially be significant to the IPPs. Thus, the Utilities have not consolidated Kalaeloa and Hamakua Energy in its consolidated financial statements. However, Hamakua Energy is an indirect subsidiary of Pacific Current, and is consolidated in HEI's consolidated financial statements.

For the other PPAs with IPPs, the Utilities have concluded that the consolidation of the IPPs was not required because either the Utilities do not have variable interests in the IPPs due to the absence of an obligation in the PPAs for the Utilities to absorb any variability of the IPPs, or the IPP was considered a "governmental organization," and thus excluded from the scope of accounting standards for VIEs. The consolidation of any significant IPP could have a material effect on the consolidated financial statements, including the recognition of a significant amount of assets and liabilities and, if such a consolidated IPP were operating at a loss and had insufficient equity, the potential recognition of such losses. If the Utilities determine they are required to consolidate the financial statements of such an IPP and the consolidation has a material effect, the Utilities would retrospectively apply accounting standards for VIEs to the IPP.

Commitments and contingencies.

Contingencies. The Utilities are subject in the normal course of business to legal, regulatory and environmental proceedings. Management does not anticipate that the aggregate ultimate liability arising out of these pending or threatened legal proceedings will be material to its financial position. However, the Utilities cannot rule out the possibility that such outcomes could have a material effect on the results of operations or liquidity for a particular reporting period in the future. The Utilities record loss contingencies when the outcome of such proceedings is probable and when the amount of the loss is reasonably estimable. The Utilities also evaluate, on a continuous basis, whether developments in such proceedings could cause these assessments or estimates to change. Assessment regarding future events is required when evaluating whether a loss is probable or reasonably possible, and as to whether such loss or a range of such loss is estimable. Management is often unable to estimate a reasonably possible loss, or a range of loss, particularly in cases in which: (i) the damages sought are indeterminate or the basis for the damages claimed is not clear; (ii) proceedings are in early stages; (iii) discovery is not complete; (iv) the matters involve novel or unsettled legal theories; (v) significant facts are in dispute; (vi) a large number of parties are

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

represented (including circumstances in which it is uncertain how liability, if any, would be shared among multiple defendants); (vii) a lower court or administrative agency’s decision or ruling has been appealed, and/or (vii) a wide range of potential outcomes exist. In such cases, there may be considerable uncertainty regarding the timing or ultimate resolution, including any possible loss, fine, penalty, or business impact.

Power purchase agreements. Purchases from all IPPs were as follows:

Years ended December 31	2022	2021	2020
(in millions)			
Kalaeloa	\$ 342	\$ 204	\$ 149
AES Hawaii	82	130	133
HPOWER	73	70	70
Hamakua Energy	66	53	50
Puna Geothermal Venture	48	29	1
Wind IPPs	119	124	105
Solar IPPs	57	50	57
Other IPPs ¹	7	10	4
Total IPPs	\$ 794	\$ 670	\$ 569

¹ Includes hydro power and other PPAs

As of December 31, 2022, the Utilities had four firm capacity PPAs for a total of 362.2 megawatts (MW) of firm capacity. The PGV facility with 34.6 MW of firm capacity went offline in May 2018 due to lava flow on Hawaii Island, but returned to service with firm capacity in the first quarter of 2021, ramped up to 25.7 MW in the second quarter of 2022 and continued to provide 25.7 MW for the remainder of 2022. The PUC allows rate recovery for energy and firm capacity payments to IPPs under these agreements. Assuming that each of the agreements remains in place for its current term (and as amended) and the minimum availability criteria in the PPAs are met, aggregate minimum fixed capacity charges are expected to be approximately \$74 million each year in 2023 through 2027, and \$365 million from 2028 through 2033.

In general, the Utilities base their payments under the PPAs upon available capacity and actual energy supplied and they are generally not required to make payments for capacity if the contracted capacity is not available, and payments are reduced, under certain conditions, if available capacity drops below contracted levels. In general, the payment rates for capacity have been predetermined for the terms of the agreements. Energy payments will vary over the terms of the agreements. The Utilities pass on changes in the fuel component of the energy charges to customers through the ECRC in their rate schedules. The Utilities do not operate, or participate in the operation of, any of the facilities that provide power under the agreements. Title to the facilities does not pass to Hawaiian Electric or its subsidiaries upon expiration of the agreements, and the agreements do not contain bargain purchase options for the facilities.

Purchase power adjustment clause. The PUC has approved PPACs for the Utilities. Purchased power capacity, operation and maintenance (O&M) and other non-energy costs previously recovered through base rates are now recovered in the PPACs and, subject to approval by the PUC, such costs resulting from new purchased power agreements can be added to the PPACs outside of a rate case. Purchased energy costs continue to be recovered through the ECRC.

Kalaeloa Partners, L.P. Under a 1988 PPA, as amended, Hawaiian Electric is committed to purchase 208 MW of firm capacity from Kalaeloa. In October 2021, Hawaiian Electric and Kalaeloa signed the Amended and Restated Power Purchase Agreement for Firm Dispatchable Capacity and Energy (Amended and Restated PPA) to extend the PPA for an additional term of 10 years. The Amended and Restated PPA was approved by the PUC on November 23, 2022, and took effect on January 1, 2023. The price of purchases from Kalaeloa in 2022 have increased 68% over 2021, primarily due to increased fuel oil cost.

AES Hawaii, Inc. Under a PPA entered into in March 1988, as amended (through Amended and Restated Amendment No. 4) for a period of 30 years ending September 2022, Hawaiian Electric agreed to purchase 180 MW of firm capacity from AES Hawaii. The term of the PPA expired on September 1, 2022 and the AES Hawaii coal plant ceased operations.

Stage 1 Renewable PPAs. In February 2018, the Utilities issued their Stage 1 renewable request for proposals and have procured eight renewable PPAs with a total of 274.5 MW capacity. The total annual payments to be made by the Utilities under the eight renewable PPAs are estimated at \$64.7 million. The Utilities have received PUC approvals to recover the total projected annual payments under the eight renewable PPAs through the PPAC to the extent such costs are not included in base rates. On July 31, 2022, Mililani I Solar, the first utility-scale solar-plus-storage project on Oahu, reached commercial operations. On January 11, 2023, Waiawa Solar project on Oahu also reached commercial operations. The two projects are 75MW, including 300 MWh batteries, and the both PPA for the project have a 20-year term. The Utilities have accounted for the battery portion of the PPAs as finance leases. (See Note 8 for lease discussions.)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

Hu Honua Bioenergy, LLC (Hu Honua). In May 2012, Hawaii Electric Light signed a PPA, which the PUC approved in December 2013, with Hu Honua for 21.5 MW of renewable, dispatchable firm capacity fueled by locally grown biomass from a facility on the island of Hawaii. Under the terms of the PPA, the Hu Honua plant was scheduled to be in service in 2016. However, Hu Honua encountered construction and litigation delays, which resulted in an amended and restated PPA between Hawaii Electric Light and Hu Honua dated May 9, 2017. In July 2017, the PUC approved the amended and restated PPA, which becomes effective once the PUC's order is final and non-appealable. In August 2017, the PUC's approval was appealed by a third party. On May 10, 2019, the Hawaii Supreme Court issued a decision remanding the matter to the PUC for further proceedings consistent with the court's decision, which must include express consideration of greenhouse gas (GHG) emissions that would result from approving the PPA, whether the cost of energy under the PPA is reasonable in light of the potential for GHG emissions, and whether the terms of the PPA are prudent and in the public interest, in light of its potential hidden and long-term consequences. As a result, the PUC reopened the docket for further proceedings, including re-examining all of the issues in the proceedings. On July 9, 2020, the PUC issued an order denying Hawaii Electric Light's request to waive the amended and restated PPA from the PUC's competitive bidding requirements and therefore, dismissed the request for approval of the amended and restated PPA without prejudice to possible participation in any future competitive bidding process. On September 9, 2020, the PUC denied Hu Honua's motion for reconsideration of the PUC's order. Hu Honua filed its notice of appeal to the Hawaii Supreme Court of the PUC's order denying Hu Honua's motion for reconsideration. On May 24, 2021, the Hawaii Supreme Court vacated the PUC's decision and remanded the matter back to the PUC for further proceedings. On June 30, 2021, the PUC issued an order reopening the docket consistent with the Hawaii Supreme Court's order. A contested case hearing was held in March 2022. On May 23, 2022, the PUC issued a decision and order denying the amended and restated PPA, based on, among other things, findings that: (1) the project will result in significant GHG emissions, (2) Hu Honua's proposed carbon commitment to sequester more GHG emissions than produced by the project are speculative and unsupported, (3) the amended and restated PPA is likely to result in high costs to customers through its relatively high cost of electricity and through potential displacement of other, lower cost, renewable resources, and (4) based on the foregoing, approving the amended and restated PPA is not prudent or in the public interest. On June 2, 2022, Hawaii Electric Light and Hu Honua filed their separate motions for reconsideration. On June 24, 2022, the PUC issued an order denying Hawaii Electric Light and Hu Honua's respective motions for reconsideration. On June 29, 2022, Hu Honua filed its notice of appeal to the Hawaii Supreme Court of the PUC's May 23, 2022 decision and order denying the amended and restated PPA, and the PUC's June 24, 2022 order denying Hawaii Electric Light and Hu Honua's motions for reconsideration. Opening briefs were filed with the Supreme Court on October 5, 2022. Answering briefs were filed on December 5, 2022, and reply briefs were filed on December 28, 2022. The Supreme Court heard oral arguments on January 31, 2023.

Molokai New Energy Partners (MNEP). In July 2018, the PUC approved Maui Electric's PPA with MNEP to purchase solar energy from a photovoltaic (PV) plus battery storage project. The 4.88 MW PV and 3 MW Battery Energy Storage System project was to deliver no more than 2.64 MW at any time to the Molokai system. On March 25, 2020, MNEP filed a complaint in the United States District Court for the District of Hawaii against Maui Electric claiming breach of contract. On June 3, 2020, Maui Electric provided a Notice of Default and Termination of the PPA to MNEP terminating the PPA with an effective date of July 10, 2020. Thereafter, MNEP filed an amended complaint to include claims relating to the termination and Hawaiian Electric filed its answer to the amended complaint on September 11, 2020, disputing the facts presented by MNEP and all claims within the original and amended complaint. Currently, the discovery phase is ongoing.

Fuels barging contract. On August 23, 2021, the Utilities entered into a five-year inter-island fuel transportation contract with Sause Bros., Inc., which commenced in January 2022. On September 22, 2022, the PUC issued a decision and order (D&O) approving the inter-island fuels transportation contract and recovery of associated costs through ECRC.

Utility projects. Many public utility projects require PUC approval and various permits from other governmental agencies. Difficulties in obtaining, or the inability to obtain, the necessary approvals or permits or community support can result in significantly increased project costs or even cancellation of projects. In the event a project does not proceed, or if it becomes probable the PUC will disallow cost recovery for all or part of a project, or if PUC-imposed caps on project costs are expected to be exceeded, project costs may need to be written off in amounts that could result in significant reductions in Hawaiian Electric's consolidated net income.

Enterprise Resource Planning/Enterprise Asset Management (ERP/EAM) implementation project. The ERP/EAM Implementation Project went live in October 2018. Hawaii Electric Light and Hawaiian Electric began to incorporate their portion of the deferred project costs in rate base and started the amortization over a 12-year period in January 2020 and November 2020, respectively. The PUC required a minimum of \$246 million ERP/EAM project-related benefit to be delivered to customers over the system's 12-year service life.

In February 2019, the PUC approved a methodology for passing the future cost saving benefits of the new ERP/EAM system to customers developed by the Utilities in collaboration with the Consumer Advocate. The Utilities filed a benefits clarification document on June 10, 2019, reflecting \$150 million in future net O&M expense reductions and cost avoidance, and \$96 million in capital cost reductions and tax savings over the 12-year service life. To the extent the reduction in O&M expense

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

relates to amounts reflected in electric rates, the Utilities would reduce future rates for such amounts. In October 2019, the PUC approved the Utilities and the Consumer Advocate's Stipulated Performance Metrics and Tracking Mechanism. As of December 31, 2022, the Utilities' regulatory liability was \$10.5 million (\$4.0 million for Hawaiian Electric, \$2.6 million for Hawaii Electric Light and \$3.9 million for Maui Electric) for the O&M expense savings that are being amortized or to be included in future rates. As part of the settlement agreement approved in the Hawaiian Electric 2020 test year rate case, the regulatory liability for Hawaiian Electric will be amortized over five years, beginning in November 2020, and the O&M benefits for Hawaiian Electric was considered flowed through to customers.

On July 7, 2021, the PUC issued an order modifying the reporting frequency of the Semi-Annual Enterprise System Benefits (SAESB) reports to an Annual Enterprise System Benefits (AESB) report on the achieved benefits savings. The most recent AESB report was filed on February 14, 2023 for the period January 1 through December 31, 2022.

West Loch PV Project. In November 2019, Hawaiian Electric placed into service a 20-MW (ac) utility-owned and operated renewable and dispatchable solar facility on property owned by the Department of the Navy. PUC orders resulted in a project cost cap of \$67 million (including a cap of \$4.7 million for the in-kind work performed in exchange for use of the Navy property) with capital cost recovery approved under Major Project Interim Recovery (MPIR) (See "Performance-based regulation framework" section below for MPIR guidelines and cost recovery discussion.) Project costs incurred as of December 31, 2022 amounted to \$60.5 million and generated \$14.7 million and \$14.0 million in federal and state nonrefundable tax credits, respectively. For book and regulatory purposes, the tax credits are being deferred and amortized, starting in 2020, over 25 years and 10 years for federal and state credits, respectively. In June 2022, the in-kind consideration services were completed and fully accepted by the Navy as partial consideration in lieu of rent payment. Satisfaction of the full-term rent requires on-going compliance with all terms of the lease, which, among other things, includes provision of contingent power upon written notice of the Department of the Navy. Hawaiian Electric accounted for the arrangement as a lease, recording \$6.4 million as right-of-use asset with no lease liability and will amortize the right-of-use asset over the remaining term of the lease ending June 30, 2054.

Waena Switchyard/Synchronous Condenser Project. In October 2020, to support efforts to increase renewable energy generation and reduce fossil fuel consumption by deactivating current generating units, Maui Electric filed a PUC application to construct a switchyard, which includes the extension of two 69 kV transmission lines and the relocation of another 69 kV transmission line; and the conversion of two generating units to synchronous condensers at Kahului Power Plant in central Maui. In November 2021, the PUC approved Maui Electric's request to commit funds estimated at \$38.8 million for the project, and to recover capital expenditures for the project under Exceptional Project Recovery Mechanism (EPRM) not to exceed \$38.8 million, which shall be further reduced to reflect the total project cost exclusive of overhead costs not directly attributable to the project. The Waena Switchyard project is expected to be placed in service in the third quarter of 2023, while the conversion of the two generating units will be performed after the retirement of Kahului Power Plant Units 3 and 4.

In approving the project, the PUC recognized that the project will facilitate the ability to accommodate increased renewable energy, as contemplated under the EPRM guidelines. As of December 31, 2022, \$13.2 million has been incurred for the project.

Environmental regulation. The Utilities are subject to environmental laws and regulations that regulate the operation of existing facilities, the construction and operation of new facilities and the proper cleanup and disposal of hazardous waste and toxic substances.

Hawaiian Electric, Hawaii Electric Light and Maui Electric, like other utilities, periodically encounter petroleum or other chemical releases associated with current or previous operations. The Utilities report and take action on these releases when and as required by applicable law and regulations. The Utilities believe the costs of responding to such releases identified to date will not have a material effect, individually or in the aggregate, on Hawaiian Electric's consolidated results of operations, financial condition or liquidity.

Former Molokai Electric Company generation site. In 1989, Maui Electric acquired Molokai Electric Company. Molokai Electric Company had sold its former generation site (Site) in 1983 but continued to operate at the Site under a lease until 1985 and left the property in 1987. The federal Environmental Protection Agency (EPA) has since identified environmental impacts in the subsurface soil at the Site. In cooperation with the DOH and EPA, Maui Electric further investigated the Site and the adjacent parcel to determine the extent of impacts of polychlorinated biphenyls (PCBs), residual fuel oils and other subsurface contaminants. Maui Electric has a reserve balance of \$2.6 million as of December 31, 2022, representing the probable and reasonably estimable undiscounted cost for remediation of the Site and the adjacent parcel based on presently available information; however, final costs of remediation will depend on the cleanup approach implemented.

Additionally, on November 24, 2021, the current landowners of the Site, Misaki's, Inc., filed a lawsuit against Hawaiian Electric (as alleged successor in interest to Molokai Electric, the prior owner of the Site) in the Circuit Court of the Second Circuit of the State of Hawaii (removed to the U.S. District Court for the District of Hawaii). The complaint which was subsequently amended to include Maui Electric, alleges that Hawaiian Electric is responsible for remediation of the Site based

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

on the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), and the Hawaii Environmental Response Law under Hawaii Revised Statutes Chapter 128D, as well as being liable on contractual claims related to a short leaseback period during the transition of ownership from Molokai Electric. The amended complaint was dismissed and a new complaint may be filed subject to the parties attempt to enter into settlement negotiations, but the Utilities intend to vigorously defend the action if necessary. At this time, the Utilities are unable to determine the ultimate outcome of the lawsuit or the amount of any possible loss. As of December 31, 2022, the reserve balance recorded by the Utilities to address the lawsuit was not material.

Pearl Harbor sediment study. In July 2014, the U.S. Navy notified Hawaiian Electric of the Navy’s determination that Hawaiian Electric is a Potentially Responsible Party under CERCLA responsible for the costs of investigation and cleanup of PCB contamination in sediment in the area offshore of the Waiiau Power Plant as part of the Pearl Harbor Superfund Site. Hawaiian Electric was also required by the EPA to assess potential sources and extent of PCB contamination onshore at Waiiau Power Plant.

As of December 31, 2022, the reserve account balance recorded by Hawaiian Electric to address the PCB contamination was \$9.9 million. The reserve balance represents the probable and reasonably estimable undiscounted cost for the onshore and offshore investigation and remediation. The final remediation costs will depend on the actual onshore and offshore cleanup costs.

Asset retirement obligations. Asset retirement obligations (AROs) represent legal obligations associated with the retirement of certain tangible long-lived assets, are measured as the present value of the projected costs for the future retirement of specific assets and are recognized in the period in which the liability is incurred if a reasonable estimate of fair value can be made. The Utilities’ recognition of AROs have no impact on their earnings. The cost of the AROs is recovered over the life of the asset through depreciation. AROs recognized by the Utilities relate to legal obligations associated with the retirement of plant and equipment, including removal of asbestos and other hazardous materials.

The Utilities recorded AROs related to: 1) the removal of retired generating units, certain types of transformers and underground storage tanks; 2) the abandonment of fuel pipelines, underground injection and supply wells; and 3) the removal of equipment and restoration of leased land used in connection with Utility-owned renewable and dispatchable generation facilities.

Changes to the ARO liability included in “Other liabilities” on Hawaiian Electric’s balance sheet were as follows:

(in thousands)	2022	2021
Balance, January 1	\$ 11,110	\$ 10,692
Accretion expense	442	423
Liabilities incurred	—	—
Liabilities settled	(4)	(5)
Balance, December 31	\$ 11,548	\$ 11,110

The Utilities have not recorded AROs for assets that are expected to operate indefinitely or where the Utilities cannot estimate a settlement date (or range of potential settlement dates). As such, ARO liabilities are not recorded for certain asset retirement activities, including various Utilities-owned generating facilities and certain electric transmission, distribution and telecommunications assets resulting from easements over property not owned by the Utilities.

Regulatory proceedings.

Decoupling. Decoupling is a regulatory model that is intended to provide the Utilities with financial stability and facilitate meeting the State of Hawaii’s goals to transition to a clean energy economy and achieve an aggressive renewable portfolio standard. Decoupling delinks the utility’s revenues from the utility’s sales, removing the disincentive to promote energy efficiency and accept more renewable energy. Decoupling continues under the PBR Framework.

Performance-based regulation framework. On December 23, 2020, the PUC issued a decision and order (PBR D&O) establishing the PBR Framework to govern the Utilities. The PBR Framework incorporates an annual revenue adjustment (ARA) and a suite of new regulatory mechanisms in addition to previously established regulatory mechanisms. Under the PBR Framework, the decoupling mechanism (i.e., the Revenue Balancing Account (RBA)) established by the previous regulatory framework will continue. The existing cost recovery mechanisms will continue as currently implemented (e.g., the Energy Cost Recovery Clause, Purchased Power Adjustment Clause (PPAC), Demand-Side Management surcharge, Renewable Energy Infrastructure Program, Demand Response Adjustment Clause, Pension and Other Post-Employment Benefits (OPEB) tracking mechanisms). In addition to annual revenues provided by the ARA, the Utilities may seek relief for extraordinary projects or programs through the Exceptional Project Recovery Mechanism (EPRM) (formerly known as the Major Project Interim Recovery adjustment mechanism) and earn financial rewards for exemplary performance as provided through a portfolio of

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

Performance Incentive Mechanisms (PIMs) and Shared Savings Mechanisms (SSMs). The PBR Framework incorporates a variety of additional performance mechanisms, including Scorecards, Reported Metrics, and an expedited Pilot Process. The PBR Framework also contains a number of safeguards, including a symmetric Earnings Sharing Mechanism (ESM) which protects the Utilities and customers from excessive earnings or losses, as measured by the Utilities' achieved rate-making ROACE and a Re-Opener mechanism, under which the PUC will open an examination, at its discretion, to determine if adjustments or modifications to specific PBR mechanisms are appropriate. The PBR Framework became fully effective on June 1, 2021.

On June 17, 2022, the PUC issued a decision and order (June 2022 D&O) establishing additional PIMs under the PBR Framework for the Utilities. In 2021, the PUC Staff originally proposed consideration of 11 PIMs and other mechanisms to address identified areas of concern. Seven of the staff proposed PIMs were designed as penalty-only. The June 2022 D&O approved two new PIMs, a new SSM, and extended the timeframe for an existing PIM. Of the new PIMs, only one is penalty-only. Specifically, the PUC approved (1) a new (penalty-only) generation-caused interruption reliability PIM, (2) a new (penalty/reward) interconnection requirements study (IRS) PIM, (3) a new (reward-only) Collective Shared Savings Mechanism (CSSM), and (4) a modification and extension of the existing interim (reward-only) Grid Services PIM. On November 23, 2022, the PUC approved the Utilities' proposed tariffs to implement the aforementioned PIMs with an effective date of January 1, 2023.

In addition, the June 2022 D&O instructed the Utilities to prepare and submit: a detailed fossil fuel retirement report (FF Retirement Report) outlining necessary steps to safely and reliably retire certain existing fossil fuel power plants during the first multi-year rate period (MRP); and a functional integration plan (FIP) for distributed energy resources (DER) to increase transparency into the Utilities' plans and progress for utilizing cost-effective grid services from DERs and ensure that the necessary functionalities and requisite technologies are in place to do so. The PUC also instructed the PBR Working Group to continue its ongoing collaborative efforts to consider other potential new incentive mechanisms and to address other issues raised during the proceeding. On November 29, 2022, the PUC held a PBR Working Group Meeting to discuss next steps supporting future efforts.

In accordance with the June 2022 D&O, the Utilities filed their FIP and FF Retirement Report with the PUC on September 30, 2022 and October 14, 2022, respectively.

Revenue adjustment mechanism. Prior to the implementation of the PBR Framework, the revenue adjustment mechanism (RAM) was a major component of the previously established regulatory framework. The RAM was based on the lesser of: a) an inflationary adjustment for certain O&M expenses and return on investment for certain rate base changes, or b) cumulative annual compounded increase in Gross Domestic Product Price Index applied to annualized target revenues (the RAM Cap). Under the PBR Framework, the ARA mechanism replaced the RAM, and became effective on June 1, 2021. RAM revenue adjustments approved by the PUC in 2020 will continue to be included in the RBA provision's target revenue and RBA rate adjustment unless modified with PUC approval.

Annual revenue adjustment mechanism. The PBR Framework established a five-year MRP during which there will be no general rate cases. Target revenues will be adjusted according to an index-driven ARA based on (i) an inflation factor, (ii) a predetermined X-factor to encompass productivity, which is set at zero, (iii) a Z-factor to account for exceptional circumstances not in the Utilities' control and (iv) a customer dividend consisting of a negative adjustment of 0.22% of adjusted revenue requirements compounded annually and a flow through of the "pre-PBR" savings commitment from the management audit recommendations developed in a prior docket at a rate of \$6.6 million per year from 2021 to 2025. The implementation of the ARA occurred on June 1, 2021.

Earnings sharing mechanism. The PBR Framework established a symmetrical ESM for achieved rate-making ROACE outside of a 300 basis points dead band above or below the current authorized ROACE of 9.5% for each of each of the Utilities. There is a 50/50 sharing between customers and Utilities for the achieved rate-making ROACE falling within 150 basis points outside of the dead band in either direction, and a 90/10 sharing for any further difference. A reopening or review of the PBR terms will be triggered if the Utilities credit rating outlook indicates a potential credit downgrade below investment grade status, or if its achieved rate-making ROACE enters the outer most tier of the ESM.

Exceptional project recovery mechanism. Prior to the implementation of the PBR Framework, the PUC established the Major Project Interim Recovery (MPIR) adjustment mechanism and MPIR Guidelines. The MPIR mechanism provides the opportunity to recover revenues for net costs of approved eligible projects placed in service between general rate cases. In establishing the PBR Framework, the MPIR Guidelines were terminated and replaced with the EPRM Guidelines. Although the MPIR Guidelines were terminated and replaced by the EPRM Guidelines, the MPIR mechanism will continue within the PBR Framework to provide recovery of project costs previously approved for recovery under the MPIR. The established EPRM Guidelines permit the Utilities to include the full amount of approved costs in the EPRM for recovery in the first year the project goes into service, pro-rated for the portion of the year the project is in service. Deferred and O&M expense projects are

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

also eligible for EPRM recovery under the EPRM Guidelines. EPRM recoverable costs will be limited to the lesser of actual incurred project costs or PUC-approved amounts, net of savings.

As of December 31, 2022, the Utilities annualized MPIR and EPRM revenue amounts totaled \$26.2 million, including revenue taxes, for the Schofield Generating Station (\$16.5 million), West Loch PV Project (\$3.5 million), Grid Modernization Strategy (GMS) Phase 1 project (\$6.1 million for all three utilities) and Waiawa UFLS project (\$0.1 million) that included the 2022 return on project amount (based on approved amounts) in rate base, depreciation and incremental O&M expenses. The PUC approved the Utilities' recovery of the annualized 2022 MPIR amounts for the Schofield Generating Station, West Loch PV, and GMS Phase 1 projects effective June 1, 2022 through the RBA rate adjustment. Recovery of the incremental change to the West Loch PV project and Waiawa UFLS project were approved on December 7, 2022 and December 5, 2022, respectively.

As of December 31, 2022, the PUC approved two EPRM applications for projects totaling \$41 million to the extent that the project costs are not included in rates. Currently, the Utilities have outstanding applications seeking EPRM recovery for six projects with total project costs of \$472 million, subject to PUC approval.

Pilot process. As part of the PBR Framework, the PUC approved a Pilot Process to foster innovation by establishing an expedited implementation process for pilots that test new technologies, programs, business models, and other arrangements. Under the Pilot Process, the Utilities submit specific pilot proposals (Pilot Notices) that are within the scope of the approved Workplan to the PUC for their expedited review. The PUC will strive to issue an order addressing a proposed pilot within 45 days of the filing date of a Pilot Notice. If the PUC does not take affirmative action on a Pilot Notice by the end of the 45-day period, the Pilot Notice shall be considered approved as submitted. The PUC may modify the pilot as originally proposed, and the Utilities shall have 15 days to notify the PUC whether the Utilities accept the modification, propose further modification, or withdraw the Pilot Notice. The PUC may also, where necessary, suspend the Pilot Notice for further investigation.

The approved Pilot Process includes a cost recovery process that generally allows the Utilities to defer and recover total annual expenditures of approved pilot projects, subject to an annual cap of \$10 million, over twelve months beginning June 1 of the year following pilot implementation through the RBA rate adjustment, although the PUC may determine on a case-by-case basis that a particular project's deferred costs should be amortized over a period greater than twelve months.

On February 28, 2022, the Utilities filed their first annual Pilot Update report covering pilot projects that were approved and initiated prior to the commencement of the newly instituted Pilot Process. The Pilot Update reported on approximately \$0.1 million of 2021 deferred costs which was incorporated in the Utilities' adjustments to target revenue in the 2022 spring revenue report. The PUC approved the Utilities' recovery of the 2021 Pilot amounts effective June 1, 2022 through the RBA rate adjustment.

On October 26, 2022, the Utilities filed a Pilot Notice to commence a Clearinghouse Pilot project in January 2023, to establish a cloud-based data analytics clearinghouse repository. On December 8, 2022, the PUC approved the Utilities Clearinghouse Pilot project.

Performance incentive mechanisms. The PUC has established the following PIMs and SSMs: (1) Service Quality performance incentives, (2) Phase 1 Request for proposal (RFP) PIM for procurement of low-cost renewable energy, (3) Phase 2 RFP PIMs for generation and generation plus storage project, and Grid Services and standalone storage, (4) new PIMs established in the PBR D&O and (5) new PIMs and a SSM established in the June 2022 D&O.

- Service Quality performance incentives (ongoing). Service Quality performance incentives are measured on a calendar-year basis. The PIM tariff requires the performance targets, deadbands and the amount of maximum financial incentives used to determine the PIM financial incentive levels for each of the PIMs to remain constant in interim periods, unless otherwise amended by order of the PUC.
- Service Reliability Performance measured by Transmission and Distribution-caused System Average Interruption Duration and Frequency Indexes (penalties only). Target performance is based on each utility's historical 10-year average performance with a deadband of one standard deviation. The maximum penalty for each performance index is 20 basis points applied to the common equity share of each respective utility's approved rate base (or maximum penalties of approximately \$6.8 million - for both indices in total for the three utilities). For the 2022 evaluation period, the Utilities accrued \$0.1 million in estimated penalties.
- Call Center Performance measured by the percentage of calls answered within 30 seconds. Target performance is based on the annual average performance for each utility for the most recent 8 quarters with a deadband of 3% above and below the target. The maximum penalty or reward is 8 basis points applied to the common equity share of each respective utility's approved rate base (or maximum penalties or rewards of approximately \$1.4 million - in total for the three utilities).

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

- Phase 1 RFP PIM. Procurement of low-cost variable renewable resources through the RFP process in 2018 is measured by comparison of the procurement price to target prices. The first portion of the incentive was earned upon PUC approval of the PPAs. Based on the seven PPAs approved in 2019, the Utilities recognized \$1.7 million in 2019 with the remaining award to be recognized in the year following the in-service date of the projects, which is estimated to occur from 2023 to 2025.
- Phase 2 RFP PIMs. The PUC order issued on October 9, 2019 establishes pricing thresholds, timelines to complete contracting, and other performance criteria for the performance incentive eligibility. The PIMs provide incentives only without penalties. On July 9, 2020, the Utilities filed two Grid Services Purchase Agreements (GSPA) for the Grid Service RFP that potentially qualify for a demand response PIM; however, details of the incentive metrics will be determined by the PUC. On September 15, 2020, the Utilities filed one PPA that qualified for a PIM incentive and on February 16, 2021, the Utilities filed one additional PPA that qualified for a declining PIM incentive. The PUC approved two PPAs in September 2021 and November 2021, and two GSAs on December 31, 2020. Based on the two approved PPAs, the Utilities recognized \$0.1 million in rewards in 2021.
- The PUC previously established the following two PIMs in its PBR D&O, which were approved in an order issued on March 23, 2021 and became effective on June 1, 2021. In its June 2022 D&O, the PUC modified and extended the Grid Services PIM.
 - Renewable portfolio standard (RPS)-A PIM that provides a financial reward for accelerating the achievement of RPS goals. The Utilities may earn a reward for the amount of system generation above the interpolated statutory RPS goal at \$20/MWh in 2021 and 2022, \$15/MWh in 2023, and \$10/MWh for the remainder of the MRP. Penalties are already prescribed in the RPS as \$20/MWh for failing to meet RPS targets in 2030, 2040 and 2045. The evaluation period commenced on January 1, 2021.
 - Grid Services PIM that provides financial rewards on a \$/kW basis for the acquisition of eligible grid services. The eligibility period for this PIM initially commenced on January 1, 2021 and was scheduled to end on December 31, 2022. However, the June 2022 D&O extended the eligibility period for this PIM through December 31, 2023. The June 2022 D&O also increased the incentive rate for the acquisition of load reduction grid services. During the PIM performance period, newly acquired committed capacity in the Oahu Scheduled Dispatch Program (SDP), the Oahu Fast DR program (up to the 7 MW cap), and the Maui SDP program shall qualify for the incentive. The Utilities can earn a maximum reward of \$1.5 million from 2021 through 2023. In 2022, the Utilities accrued \$0.04 million in estimated rewards.
- The PUC also previously established the following three PIMs in its PBR D&O, which were approved by the PUC on May 17, 2021 and became effective on June 1, 2021.
 - Interconnection Approval PIM that provides financial rewards and penalties for interconnection times for DER systems <100 kW in size. The Utilities can earn a total annual maximum reward of \$3.0 million or a total annual maximum penalty of \$0.9 million. In 2022, the Utilities accrued \$3.0 million in estimated rewards.
 - Low-to-Moderate Income (LMI) Energy Efficiency PIM that provides financial rewards for collaboration between the Utilities and the third-party Public Benefits Fee Administrator to deliver energy savings for low- and moderate-income customers. The Utilities can earn a total annual maximum reward of \$2.0 million. The PIM will initially have a duration of three years and be subject to an annual review. The evaluation period is based on Hawaii Energy's program year with the initial evaluation year being the period of July 1, 2021 through June 30, 2022. The Utilities accrued \$0.4 million in estimated rewards for the program period ending June 30, 2022.
 - Advanced Metering Infrastructure Utilization PIM that provides financial rewards for leveraging grid modernization investments and engaging customers beyond what is already planned in the Phase 1 Grid Modernization program. The Utilities can earn a total annual maximum reward of \$2.0 million. The PIM will initially have a duration of three years after which it will be re-evaluated. The evaluation period commenced on January 1, 2021.
- The PUC established the following new PIMs and SSM in its June 2022 D&O, which became effective on January 1, 2023.
 - Generation-caused System Average Interruption Duration and Frequency Indexes PIMs to incentivize achievement of generation-based reliability targets, measured by Generation System Average Interruption Duration and Frequency Indexes (penalties only). Target performance is based on each utility's historical 10-year average performance with a deadband of one standard deviation. The maximum penalty for each performance index is 3 basis points applied to the common equity share of each respective utility's approved rate base (or maximum penalties of approximately \$1 million - for both indices in total for the three utilities).

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

- An IRS PIM to incentivize the timely completion of the IRS process for large-scale renewable energy projects (rewards and penalties) measured by the number of months between final model checkout and delivery of IRS results to the developer. Target performance is ten months with an asymmetrical deadband of two-months for penalties and no deadband for rewards. The maximum penalty and reward will depend on the specifics of the upcoming procurement.
- A CSSM to incentivize cost control over the Utilities’ fuel, purchased power, and EPRM/MPIR costs (collectively, non-ARA costs). This is a reward only incentive where the Utilities retain 20% share of savings when non-ARA costs in a performance year are lower than target year non-ARA costs, which are adjusted for changes in fuel prices, inflation, and system generation from a base year (calendar year 2021). The CSSM does not have a potential penalty and does not have a cap for maximum reward.

For the 2022 evaluation period, the Utilities accrued \$3.4 million (\$2.4 million for Hawaiian Electric, \$0.5 million for Hawaii Electric Light and \$0.5 million for Maui Electric) in estimated rewards net of penalties. The net rewards related to 2022 will be reflected in the 2023 PIMs annual report and 2023 spring revenue report filings with the exception of the LMI Energy Efficiency PIM that is pending verification of data by the PUC’s third-party evaluator.

Annual review cycle. PBR D&O established an annual review cycle for revenue adjustments under the PBR Framework, including the biannual submission of the revenue reports. The Utilities fall revenue report filed on October 31, 2022 was approved by the PUC on December 16, 2022. The filing reflected ARA revenues for 2023 to be collected from January 1 through December 31, 2023, as follows:

(in millions)	Hawaiian Electric	Hawaii Electric Light	Maui Electric	Total
2023 ARA revenues	\$ 27.0	\$ 6.6	\$ 6.5	\$ 40.1
Management Audit savings commitment	(4.6)	(1.0)	(1.0)	(6.6)
Net 2023 ARA revenues	\$ 22.4	\$ 5.6	\$ 5.5	\$ 33.5

The net incremental amounts between the 2022 spring and fall revenue reports are shown in the following table. The amounts are to be collected (refunded) from January 1 through December 31, 2023 under the RBA rate tariffs, which were included in the 2022 fall revenue report filing.

(in millions)	Hawaiian Electric	Hawaii Electric Light	Maui Electric	Total
Incremental ARA revenues	\$ 27.0	\$ 6.6	\$ 6.5	\$ 40.1
Annual change in accrued RBA balance through September 30, 2022 (and associated revenue taxes)	(3.6)	(6.7)	(3.2)	(13.5)
Incremental Performance Incentive Mechanisms (net)	—	—	(0.1)	(0.1)
Incremental EPRM/MPIR Revenue Adjustment	0.3	—	—	0.3
Net incremental amount to be collected under the RBA rate tariffs	\$ 23.6	\$ (0.1)	\$ 3.3	\$ 26.8

Note: Columns may not foot due to rounding.

Regulatory assets for COVID-19 related costs. On May 4, 2020, the PUC issued an order, authorizing all utilities, including the Utilities, to establish regulatory assets to record costs resulting from the suspension of disconnections of service during the pendency of the Governor’s Emergency Proclamation and until otherwise ordered by the PUC. In future proceedings, the PUC will consider the reasonableness of the costs, the appropriate period of recovery, any amount of carrying costs thereon, and any savings directly attributable to suspension of disconnects, and other related matters. As part of the order, the PUC prohibits the Utilities from charging late payment fees on past due payments. As the moratorium on customer disconnections ended on May 31, 2021, the Utilities have resumed charging late payment fees in July 2021. Pursuant to PUC orders, the deferral of COVID-19 related costs by the Utilities ended on December 31, 2020. On October 1, 2021, the PUC approved the Utilities’ request to extend the deferral period to December 31, 2021. In December 2021, to keep customers connected and provide some relief to customers experiencing financial difficulty during the pandemic, the Utilities committed to issuing \$2 million in bill credits to qualified customers. The Utilities will not seek recovery for the issued bill credits resulting in a reduction to the cumulative deferred costs. On June 9, 2022, the Utilities filed an application with the PUC, requesting recovery of a portion of the COVID-19 related deferral costs, net of cost savings realized, not to exceed the amount of \$27.8 million over three years, from June 2023 through May 2026. Annual requests will be limited to actual costs incurred. As of December 31, 2022, the Utilities have recorded \$11.4 million in regulatory assets for deferral of COVID-19 related costs. The updated amounts have been reflected in the Utilities’ Supplemental Response to the PUC filed on January 12, 2023. On January 25, 2023, the PUC issued an order to modify the procedural schedule to allow more time for more discovery and consideration of the application.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

Army privatization. On October 30, 2020, the PUC approved Hawaiian Electric's 50-year contract with the U.S. Army to own, operate and maintain the electric distribution system serving the U.S. Army's 12 installations on Oahu, including Schofield Barracks, Wheeler Army Airfield, Tripler Army Medical Center, Fort Shafter, and Army housing areas. On March 1, 2022, Hawaiian Electric acquired the Army's existing distribution system for a purchase price of \$14.5 million, and will pay the Army in the form of a monthly credit against the monthly utility services charge over the 50-year term of the contract. The acquisition of additional assets contemplated in the contract, with an estimated value of \$4 million, is planned for 2024.

Hawaiian Electric took ownership and all responsibilities for operation and maintenance of the system on March 1, 2022 for a 50-year term after a one-year transition period. Under the contract, Hawaiian Electric will make initial capital upgrades over the first six years of the contract and replace aging infrastructure over the 50-year term. In addition to its regular monthly electricity bill, the Army will pay Hawaiian Electric a monthly utility services charge to cover operations and maintenance expenses and provide recovery for capital upgrades, capital replacements, and the existing distribution system based on a rate of return determined by the PUC for regulated utility investments, as well as depreciation expense. The PUC requires Hawaiian Electric to file regular periodic reports on the activities and investments in fulfillment of the contract and will review the major projects planned on behalf of the Army. The annual impact on Hawaiian Electric's earnings is not expected to be material and will depend on a number of factors, including the amount and timing of capital upgrades and capital replacement.

Consolidating financial information. Consolidating financial information for Hawaiian Electric and its subsidiaries are presented for the years ended December 31, 2022, 2021 and 2020, and as of December 31, 2022 and 2021.

Hawaiian Electric unconditionally guarantees Hawaii Electric Light's and Maui Electric's obligations (a) to the State of Hawaii for the repayment of principal and interest on Special Purpose Revenue Bonds issued for the benefit of Hawaii Electric Light and Maui Electric and (b) under their respective private placement note agreements and the Hawaii Electric Light notes and Maui Electric notes issued thereunder. Hawaiian Electric is also obligated, after the satisfaction of its obligations on its own preferred stock, to make dividend, redemption and liquidation payments on Hawaii Electric Light's and Maui Electric's preferred stock if the respective subsidiary is unable to make such payments.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

Consolidating statement of income

Year ended December 31, 2022

(in thousands)	Hawaiian Electric	Hawaii Electric Light	Maui Electric	Consolidating adjustments	Hawaiian Electric Consolidated
Revenues	\$ 2,452,969	485,590	470,355	(327) [1]	\$ 3,408,587
Expenses					
Fuel oil	917,801	133,238	214,575	—	1,265,614
Purchased power	601,235	143,636	48,713	—	793,584
Other operation and maintenance	326,785	85,110	85,706	—	497,601
Depreciation	158,725	41,404	35,295	—	235,424
Taxes, other than income taxes	228,843	44,685	43,645	—	317,173
Total expenses	2,233,389	448,073	427,934	—	3,109,396
Operating income	219,580	37,517	42,421	(327)	299,191
Allowance for equity funds used during construction	8,464	898	1,212	—	10,574
Equity in earnings of subsidiaries	47,493	—	—	(47,493) [2]	—
Retirement defined benefits credit (expense)—other than service costs	3,296	666	(127)	—	3,835
Interest expense and other charges, net	(55,260)	(10,659)	(10,824)	327 [1]	(76,416)
Allowance for borrowed funds used during construction	2,769	277	370	—	3,416
Income before income taxes	226,342	28,699	33,052	(47,493)	240,600
Income taxes	36,333	6,349	6,994	—	49,676
Net income	190,009	22,350	26,058	(47,493)	190,924
Preferred stock dividends of subsidiaries	—	534	381	—	915
Net income attributable to Hawaiian Electric	190,009	21,816	25,677	(47,493)	190,009
Preferred stock dividends of Hawaiian Electric	1,080	—	—	—	1,080
Net income for common stock	\$ 188,929	21,816	25,677	(47,493)	\$ 188,929

Consolidating statement of comprehensive income

Year ended December 31, 2022

(in thousands)	Hawaiian Electric	Hawaii Electric Light	Maui Electric	Consolidating adjustments	Hawaiian Electric Consolidated
Net income for common stock	\$ 188,929	21,816	25,677	(47,493)	\$ 188,929
Other comprehensive income (loss), net of taxes:					
Retirement benefit plans:					
Net gains arising during the period, net of taxes	187,193	44,411	44,386	(88,797) [1]	187,193
Adjustment for amortization of prior service credit and net losses recognized during the period in net periodic benefit cost, net of taxes	18,884	2,811	2,584	(5,395) [1]	18,884
Reclassification adjustment for impact of D&Os of the PUC included in regulatory assets, net of taxes	(199,936)	(46,841)	(46,694)	93,535 [1]	(199,936)
Other comprehensive income, net of taxes	6,141	381	276	(657)	6,141
Comprehensive income attributable to common shareholder	\$ 195,070	22,197	25,953	(48,150)	\$ 195,070

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

Consolidating statement of income

Year ended December 31, 2021

(in thousands)	Hawaiian Electric	Hawaii Electric Light	Maui Electric	Consolidating adjustments	Hawaiian Electric Consolidated
Revenues	\$ 1,793,372	381,033	365,256	(25) [1]	\$ 2,539,636
Expenses					
Fuel oil	442,818	80,086	121,445	—	644,349
Purchased power	508,642	108,997	52,855	—	670,494
Other operation and maintenance	313,009	79,390	83,013	—	475,412
Depreciation	155,607	40,201	33,661	—	229,469
Taxes, other than income taxes	170,604	35,499	34,251	—	240,354
Total expenses	1,590,680	344,173	325,225	—	2,260,078
Operating income	202,692	36,860	40,031	(25)	279,558
Allowance for equity funds used during construction	7,734	586	1,214	—	9,534
Equity in earnings of subsidiaries	45,353	—	—	(45,353) [2]	—
Retirement defined benefits credit (expense)—other than service costs	3,348	670	(128)	—	3,890
Interest expense and other charges, net	(51,680)	(10,353)	(10,439)	25 [1]	(72,447)
Allowance for borrowed funds used during construction	2,617	197	436	—	3,250
Income before income taxes	210,064	27,960	31,114	(45,353)	223,785
Income taxes	31,342	6,246	6,560	—	44,148
Net income	178,722	21,714	24,554	(45,353)	179,637
Preferred stock dividends of subsidiaries	—	534	381	—	915
Net income attributable to Hawaiian Electric	178,722	21,180	24,173	(45,353)	178,722
Preferred stock dividends of Hawaiian Electric	1,080	—	—	—	1,080
Net income for common stock	\$ 177,642	21,180	24,173	(45,353)	\$ 177,642

Consolidating statement of comprehensive income

Year ended December 31, 2021

(in thousands)	Hawaiian Electric	Hawaii Electric Light	Maui Electric	Consolidating adjustments	Hawaiian Electric Consolidated
Net income for common stock	\$ 177,642	21,180	24,173	(45,353)	\$ 177,642
Other comprehensive income (loss), net of taxes:					
Retirement benefit plans:					
Net losses arising during the period, net of tax benefits	151,523	17,902	16,572	(34,474) [1]	151,523
Adjustment for amortization of prior service credit and net losses recognized during the period in net periodic benefit cost, net of taxes	19,461	2,749	2,553	(5,302) [1]	19,461
Reclassification adjustment for impact of D&Os of the PUC included in regulatory assets, net of taxes	(171,345)	(20,585)	(18,898)	39,483 [1]	(171,345)
Other comprehensive income (loss), net of tax benefits	(361)	66	227	(293)	(361)
Comprehensive income attributable to common shareholder	\$ 177,281	21,246	24,400	(45,646)	\$ 177,281

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

Consolidating statement of income

Year ended December 31, 2020

(in thousands)	Hawaiian Electric	Hawaii Electric Light	Maui Electric	Consolidating adjustments		Hawaiian Electric Consolidated
Revenues	\$ 1,608,305	334,221	323,430	(636)	[1]	\$ 2,265,320
Expenses						
Fuel oil	354,087	72,202	88,985	—		515,274
Purchased power	446,672	73,120	48,957	—		568,749
Other operation and maintenance	311,781	73,746	88,665	—		474,192
Depreciation	151,387	39,041	32,305	—		222,733
Taxes, other than income taxes	154,191	31,181	30,450	—		215,822
Total expenses	1,418,118	289,290	289,362	—		1,996,770
Operating income	190,187	44,931	34,068	(636)		268,550
Allowance for equity funds used during construction	7,335	543	890	—		8,768
Equity in earnings of subsidiaries	47,504	—	—	(47,504)	[2]	—
Retirement defined benefits credit (expense)—other than service costs	(1,294)	672	(141)	—		(763)
Interest expense and other charges, net	(48,775)	(10,004)	(9,651)	636	[1]	(67,794)
Allowance for borrowed funds used during construction	2,540	160	292	—		2,992
Income before income taxes	197,497	36,302	25,458	(47,504)		211,753
Income taxes	27,077	8,275	5,066	—		40,418
Net income	170,420	28,027	20,392	(47,504)		171,335
Preferred stock dividends of subsidiaries	—	534	381	—		915
Net income attributable to Hawaiian Electric	170,420	27,493	20,011	(47,504)		170,420
Preferred stock dividends of Hawaiian Electric	1,080	—	—	—		1,080
Net income for common stock	\$ 169,340	27,493	20,011	(47,504)		\$ 169,340

Consolidating statement of comprehensive income

Year ended December 31, 2020

(in thousands)	Hawaiian Electric	Hawaii Electric Light	Maui Electric	Consolidating adjustments		Hawaiian Electric Consolidated
Net income for common stock	\$ 169,340	27,493	20,011	(47,504)		\$ 169,340
Other comprehensive income (loss), net of taxes:						
Retirement benefit plans:						
Net gains (losses) arising during the period, net of taxes	(63,050)	(9,424)	(10,897)	20,321	[1]	(63,050)
Adjustment for amortization of prior service credit and net losses recognized during the period in net periodic benefit cost, net of taxes	21,550	3,179	2,763	(5,942)	[1]	21,550
Reclassification adjustment for impact of D&Os of the PUC included in regulatory assets, net of taxes	39,860	6,025	8,000	(14,025)	[1]	39,860
Other comprehensive loss, net of tax benefits	(1,640)	(220)	(134)	354		(1,640)
Comprehensive income attributable to common shareholder	\$ 167,700	27,273	19,877	(47,150)		\$ 167,700

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

Consolidating balance sheet

December 31, 2022

(in thousands)	Hawaiian Electric	Hawaii Electric Light	Maui Electric	Other subsidiaries	Consolidating adjustments	Hawaiian Electric Consolidated
Assets						
Property, plant and equipment						
Utility property, plant and equipment						
Land	\$ 42,860	5,606	3,594	—	—	52,060
Plant and equipment	5,260,685	1,425,442	1,293,383	—	—	7,979,510
Finance lease right-of-use assets	48,371	—	—	—	—	48,371
Less accumulated depreciation	(1,855,150)	(644,457)	(586,892)	—	—	(3,086,499)
Construction in progress	215,560	23,989	35,804	—	—	275,353
Utility property, plant and equipment, net	3,712,326	810,580	745,889	—	—	5,268,795
Nonutility property, plant and equipment, less accumulated depreciation	5,298	115	1,532	—	—	6,945
Total property, plant and equipment, net	3,717,624	810,695	747,421	—	—	5,275,740
Investment in wholly-owned subsidiaries, at equity	701,833	—	—	—	(701,833) [2]	—
Current assets						
Cash and cash equivalents	27,579	5,092	6,494	77	—	39,242
Advances to affiliates	—	4,500	21,700	—	(26,200) [1]	—
Customer accounts receivable, net	216,802	39,339	32,197	—	—	288,338
Accrued unbilled revenues, net	136,508	23,839	22,933	—	—	183,280
Other accounts receivable, net	23,746	5,519	6,686	—	(22,384) [1]	13,567
Fuel oil stock, at average cost	153,342	16,964	21,224	—	—	191,530
Materials and supplies, at average cost	48,130	9,783	21,655	—	—	79,568
Prepayments and other	24,040	6,346	4,137	—	(1,041) [1]	33,482
Regulatory assets	46,504	2,435	3,334	—	—	52,273
Total current assets	676,651	113,817	140,360	77	(49,625)	881,280
Other long-term assets						
Operating lease right-of-use assets	42,752	34,283	12,283	—	—	89,318
Regulatory assets	154,040	21,816	14,384	—	—	190,240
Other	115,028	32,654	29,495	—	(16,288) [1]	160,889
Total other long-term assets	311,820	88,753	56,162	—	(16,288)	440,447
Total assets	\$ 5,407,928	1,013,265	943,943	77	(767,746)	\$ 6,597,467
Capitalization and liabilities						
Capitalization						
Common stock equity	\$ 2,344,170	344,720	357,036	77	(701,833) [2]	\$ 2,344,170
Cumulative preferred stock—not subject to mandatory redemption	22,293	7,000	5,000	—	—	34,293
Long-term debt, net	1,126,915	224,439	233,500	—	—	1,584,854
Total capitalization	3,493,378	576,159	595,536	77	(701,833)	3,963,317
Current liabilities						
Current portion of operating lease liabilities	9,775	6,690	2,630	—	—	19,095
Current portion of long-term debt, net	49,981	19,992	29,989	—	—	99,962
Short-term borrowings-non-affiliate	87,967	—	—	—	—	87,967
Short-term borrowings-affiliate	26,200	—	—	—	(26,200) [1]	—
Accounts payable	143,253	32,113	27,126	—	—	202,492
Interest and preferred dividends payable	12,398	2,576	2,282	—	(80) [1]	17,176
Taxes accrued, including revenue taxes	207,798	42,436	40,709	—	(1,041) [1]	289,902
Regulatory liabilities	13,145	8,553	9,777	—	—	31,475
Other	64,659	20,856	22,385	—	(22,304) [1]	85,596
Total current liabilities	615,176	133,216	134,898	—	(49,625)	833,665
Deferred credits and other liabilities						
Operating lease liabilities	41,049	27,817	9,849	—	—	78,715
Finance lease liabilities	46,048	—	—	—	—	46,048
Deferred income taxes	271,234	50,615	62,581	—	—	384,430
Regulatory liabilities	729,683	194,222	100,270	—	—	1,024,175
Unamortized tax credits	69,614	13,150	12,536	—	—	95,300
Defined benefit pension and other postretirement benefit plans liability	65,907	129	—	—	(16,288) [1]	49,748
Other	75,839	17,957	28,273	—	—	122,069
Total deferred credits and other liabilities	1,299,374	303,890	213,509	—	(16,288)	1,800,485
Total capitalization and liabilities	\$ 5,407,928	1,013,265	943,943	77	(767,746)	\$ 6,597,467

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

Consolidating balance sheet

December 31, 2021

(in thousands)	Hawaiian Electric	Hawaii Electric Light	Maui Electric	Other subsidiaries	Consolidating adjustments	Hawaiian Electric Consolidated
Assets						
Property, plant and equipment						
Utility property, plant and equipment						
Land	\$ 42,737	5,606	3,594	—	—	\$ 51,937
Plant and equipment	5,097,033	1,390,361	1,248,589	—	—	7,735,983
Less accumulated depreciation	(1,757,096)	(619,991)	(563,430)	—	—	(2,940,517)
Construction in progress	159,854	17,129	27,586	—	—	204,569
Utility property, plant and equipment, net	3,542,528	793,105	716,339	—	—	5,051,972
Nonutility property, plant and equipment, less accumulated depreciation	5,302	115	1,532	—	—	6,949
Total property, plant and equipment, net	3,547,830	793,220	717,871	—	—	5,058,921
Investment in wholly-owned subsidiaries, at equity	676,237	—	—	—	(676,237) [2]	—
Current assets						
Cash and cash equivalents	23,344	5,326	23,422	77	—	52,169
Restricted cash	3,089	—	—	—	—	3,089
Advances to affiliates	1,000	—	—	—	(1,000) [1]	—
Customer accounts receivable, net	135,949	28,469	22,441	—	—	186,859
Accrued unbilled revenues, net	92,469	19,529	17,157	—	—	129,155
Other accounts receivable, net	18,624	3,347	3,031	—	(17,735) [1]	7,267
Fuel oil stock, at average cost	71,184	12,814	20,080	—	—	104,078
Materials and supplies, at average cost	42,006	9,727	20,144	—	—	71,877
Prepayments and other	32,140	6,052	7,114	—	725 [1]	46,031
Regulatory assets	58,695	3,051	4,918	—	—	66,664
Total current assets	478,500	88,315	118,307	77	(18,010)	667,189
Other long-term assets						
Operating lease right-of-use assets	78,710	22,442	318	—	—	101,470
Regulatory assets	337,903	81,645	79,331	—	—	498,879
Other	130,546	17,124	18,510	—	(1,014) [1]	165,166
Total other long-term assets	547,159	121,211	98,159	—	(1,014)	765,515
Total assets	\$ 5,249,726	1,002,746	934,337	77	(695,261)	\$ 6,491,625
Capitalization and liabilities						
Capitalization						
Common stock equity	\$ 2,261,899	332,900	343,260	77	(676,237) [2]	\$ 2,261,899
Cumulative preferred stock—not subject to mandatory redemption	22,293	7,000	5,000	—	—	34,293
Long-term debt, net	1,136,620	234,390	253,417	—	—	1,624,427
Total capitalization	3,420,812	574,290	601,677	77	(676,237)	3,920,619
Current liabilities						
Current portion of operating lease liabilities	45,955	3,378	35	—	—	49,368
Current portion of long-term debt	39,981	11,994	—	—	—	51,975
Short-term borrowings-affiliate	—	1,000	—	—	(1,000) [1]	—
Accounts payable	111,024	26,139	22,844	—	—	160,007
Interest and preferred dividends payable	12,442	2,617	2,269	—	(3) [1]	17,325
Taxes accrued, including revenue taxes	143,723	33,153	30,679	—	725 [1]	208,280
Regulatory liabilities	22,240	3,247	4,273	—	—	29,760
Other	56,752	14,158	18,540	—	(17,881) [1]	71,569
Total current liabilities	432,117	95,686	78,640	—	(18,159)	588,284
Deferred credits and other liabilities						
Operating lease liabilities	46,426	19,063	291	—	—	65,780
Deferred income taxes	291,027	53,298	64,309	—	—	408,634
Regulatory liabilities	695,152	179,267	92,589	—	—	967,008
Unamortized tax credits	76,201	14,212	13,532	—	—	103,945
Defined benefit pension and other postretirement benefit plans liability	220,480	48,900	53,257	—	(857) [1]	321,780
Other	67,511	18,030	30,042	—	(8)	115,575
Total deferred credits and other liabilities	1,396,797	332,770	254,020	—	(865)	1,982,722
Total capitalization and liabilities	\$ 5,249,726	1,002,746	934,337	77	(695,261)	\$ 6,491,625

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

Consolidating statements of changes in common stock equity

(in thousands)	Hawaiian Electric	Hawaii Electric Light	Maui Electric	Other subsidiaries	Consolidating adjustments	Hawaiian Electric Consolidated
Balance, December 31, 2019	\$ 2,047,352	298,998	292,870	101	(591,969)	\$ 2,047,352
Net income for common stock	169,340	27,493	20,011	—	(47,504)	169,340
Other comprehensive loss, net of taxes	(1,640)	(220)	(134)	—	354	(1,640)
Issuance of common stock, net of expenses	34,000	7,500	11,000	—	(18,500)	34,000
Common stock dividends	(107,134)	(16,320)	(14,384)	—	30,704	(107,134)
Dissolution of subsidiary	—	—	—	(24)	24	—
Balance, December 31, 2020	2,141,918	317,451	309,363	77	(626,891)	2,141,918
Net income for common stock	177,642	21,180	24,173	—	(45,353)	177,642
Other comprehensive income (loss), net of taxes	(361)	66	227	—	(293)	(361)
Issuance of common stock, net of expenses	54,400	8,803	24,597	—	(33,400)	54,400
Common stock dividends	(111,700)	(14,600)	(15,100)	—	29,700	(111,700)
Balance, December 31, 2021	2,261,899	332,900	343,260	77	(676,237)	2,261,899
Net income for common stock	188,929	21,816	25,677	—	(47,493)	188,929
Other comprehensive income, net of taxes	6,141	381	276	—	(657)	6,141
Issuance of common stock, net of expenses	13,101	6,023	3,023	—	(9,046)	13,101
Common stock dividends	(125,900)	(16,400)	(15,200)	—	31,600	(125,900)
Balance, December 31, 2022	2,344,170	344,720	357,036	77	(701,833)	2,344,170

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

Consolidating statement of cash flows

Year ended December 31, 2022

(in thousands)	Hawaiian Electric	Hawaii Electric Light	Maui Electric	Other subsidiaries	Consolidating adjustments	Hawaiian Electric Consolidated
Cash flows from operating activities						
Net income	\$ 190,009	22,350	26,058	—	(47,493) [2]	\$ 190,924
Adjustments to reconcile net income to net cash provided by operating activities						
Equity in earnings of subsidiaries	(47,493)	—	—	—	47,493 [2]	—
Common stock dividends received from subsidiaries	31,600	—	—	—	(31,600) [2]	—
Depreciation of property, plant and equipment	158,725	41,404	35,295	—	—	235,424
Other amortization	16,708	4,996	3,616	—	—	25,320
Deferred income taxes	(33,648)	(4,040)	(3,727)	—	—	(41,415)
State refundable credit	(7,375)	(1,734)	(1,890)	—	—	(10,999)
Bad debt expense	4,175	1,073	779	—	—	6,027
Allowance for equity funds used during construction	(8,464)	(898)	(1,212)	—	—	(10,574)
Other	(65)	(50)	(24)	—	—	(139)
Changes in assets and liabilities:						
Increase in accounts receivable	(74,067)	(11,644)	(10,680)	—	4,649 [1]	(91,742)
Increase in accrued unbilled revenues	(43,972)	(4,289)	(5,762)	—	—	(54,023)
Increase in fuel oil stock	(82,158)	(4,150)	(1,144)	—	—	(87,452)
Increase in materials and supplies	(6,124)	(56)	(1,511)	—	—	(7,691)
Decrease in regulatory assets	28,076	1,546	4,978	—	—	34,600
Increase in regulatory liabilities	28,621	7,977	8,290	—	—	44,888
Increase in accounts payable	18,657	3,294	404	—	—	22,355
Change in prepaid and accrued income taxes, tax credits and revenue taxes	77,903	11,117	14,178	—	—	103,198
Decrease in defined benefit pension and other postretirement benefit plans liability	(3,545)	(626)	(657)	—	—	(4,828)
Change in other assets and liabilities	(17,884)	213	(3,623)	—	(4,649) [1]	(25,943)
Net cash provided by operating activities	229,679	66,483	63,368	—	(31,600)	327,930
Cash flows from investing activities						
Capital expenditures	(223,223)	(49,004)	(57,230)	—	—	(329,457)
Advances from affiliates	1,000	(4,500)	(21,700)	—	25,200 [1]	—
Other	(5,687)	760	1,253	—	9,046 [1],[2]	5,372
Net cash used in investing activities	(227,910)	(52,744)	(77,677)	—	34,246	(324,085)
Cash flows from financing activities						
Common stock dividends	(125,900)	(16,400)	(15,200)	—	31,600 [2]	(125,900)
Preferred stock dividends of Hawaiian Electric and subsidiaries	(1,080)	(534)	(381)	—	—	(1,995)
Proceeds from issuance of common stock	13,101	6,023	3,023	—	(9,046) [2]	13,101
Proceeds from issuance of long-term debt	40,000	10,000	10,000	—	—	60,000
Repayment of long-term debt	(40,000)	(12,000)	—	—	—	(52,000)
Net increase (decrease) in short-term borrowings from non-affiliates and affiliate with original maturities of three months or less	114,167	(1,000)	—	—	(25,200) [1]	87,967
Payments of obligations under finance leases	(670)	—	—	—	—	(670)
Other	(241)	(62)	(61)	—	—	(364)
Net cash provided by (used in) financing activities	(623)	(13,973)	(2,619)	—	(2,646)	(19,861)
Net increase (decrease) in cash, cash equivalents and restricted cash	1,146	(234)	(16,928)	—	—	(16,016)
Cash, cash equivalents and restricted cash, January 1	26,433	5,326	23,422	77	—	55,258
Cash, cash equivalents and restricted cash, December 31	27,579	5,092	6,494	77	—	39,242
Less: Restricted cash	—	—	—	—	—	—
Cash and cash equivalents, December 31	\$ 27,579	5,092	6,494	77	—	\$ 39,242

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

Consolidating statement of cash flows

Year ended December 31, 2021

(in thousands)	Hawaiian Electric	Hawaii Electric Light	Maui Electric	Other subsidiaries	Consolidating adjustments	Hawaiian Electric Consolidated
Cash flows from operating activities						
Net income	\$ 178,722	21,714	24,554	—	(45,353) [2]	\$ 179,637
Adjustments to reconcile net income to net cash provided by operating activities						
Equity in earnings of subsidiaries	(45,353)	—	—	—	45,353 [2]	—
Common stock dividends received from subsidiaries	29,700	—	—	—	(29,700) [2]	—
Depreciation of property, plant and equipment	155,607	40,201	33,661	—	—	229,469
Other amortization	16,688	3,532	1,517	—	—	21,737
Deferred income taxes	(3,191)	(1,955)	1,317	—	—	(3,829)
State refundable credit	(7,120)	(1,672)	(1,790)	—	—	(10,582)
Bad debt expense	1,159	509	515	—	—	2,183
Allowance for equity funds used during construction	(7,734)	(586)	(1,214)	—	—	(9,534)
Bill credits	1,400	300	300	—	—	2,000
Other	366	(41)	1,025	—	—	1,350
Changes in assets and liabilities:						
Increase in accounts receivable	(41,727)	(6,832)	(3,071)	—	1,540 [1]	(50,090)
Increase in accrued unbilled revenues	(18,345)	(5,816)	(3,303)	—	—	(27,464)
Increase in fuel oil stock	(32,407)	(4,343)	(9,090)	—	—	(45,840)
Decrease (increase) in materials and supplies	(3,220)	169	(1,482)	—	—	(4,533)
Decrease (increase) in regulatory assets	(15,422)	24	1,524	—	—	(13,874)
Increase (decrease) in regulatory liabilities	16,269	(1,031)	120	—	—	15,358
Decrease in accounts payable	9,828	4,723	3,120	—	—	17,671
Change in prepaid and accrued income taxes, tax credits and revenue taxes	21,217	3,861	1,938	—	(86) [1]	26,930
Decrease in defined benefit pension and other postretirement benefit plans liability	(3,480)	(950)	(724)	—	—	(5,154)
Change in other assets and liabilities	(36,733)	(5,833)	(8,196)	—	(1,540) [1]	(52,302)
Net cash provided by operating activities	216,224	45,974	40,721	—	(29,786)	273,133
Cash flows from investing activities						
Capital expenditures	(194,984)	(50,516)	(46,500)	—	—	(292,000)
Advances from affiliates	25,700	—	—	—	(25,700) [1]	—
Other	(29,596)	1,072	1,073	—	33,486 [1],[2]	6,035
Net cash used in investing activities	(198,880)	(49,444)	(45,427)	—	7,786	(285,965)
Cash flows from financing activities						
Common stock dividends	(111,700)	(14,600)	(15,100)	—	29,700 [2]	(111,700)
Preferred stock dividends of Hawaiian Electric and subsidiaries	(1,080)	(534)	(381)	—	—	(1,995)
Proceeds from the issuance of common stock	54,400	8,803	24,597	—	(33,400) [2]	54,400
Proceeds from the issuance of long-term debt	60,000	30,000	25,000	—	—	115,000
Net increase (decrease) in short-term borrowings from non-affiliates and affiliate with original maturities of three months or less	—	(17,800)	(7,900)	—	25,700 [1]	—
Repayment of short-term debt	(50,000)	—	—	—	—	(50,000)
Other	(702)	(119)	(120)	—	—	(941)
Net cash provided by (used in) financing activities	(49,082)	5,750	26,096	—	22,000	4,764
Net increase (decrease) in cash, cash equivalents and restricted cash	(31,738)	2,280	21,390	—	—	(8,068)
Cash, cash equivalents and restricted cash, January 1	58,171	3,046	2,032	77	—	63,326
Cash, cash equivalents and restricted cash, December 31	26,433	5,326	23,422	77	—	55,258
Less: Restricted cash	(3,089)	—	—	—	—	(3,089)
Cash and cash equivalents, December 31	\$ 23,344	5,326	23,422	77	—	\$ 52,169

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

Consolidating statement of cash flows

Year ended December 31, 2020

(in thousands)	Hawaiian Electric	Hawaii Electric Light	Maui Electric	Other subsidiaries	Consolidating adjustments	Hawaiian Electric Consolidated
Cash flows from operating activities						
Net income	\$ 170,420	28,027	20,392	—	(47,504) [2]	\$ 171,335
Adjustments to reconcile net income to net cash provided by operating activities						
Equity in earnings of subsidiaries	(47,504)	—	—	—	47,504 [2]	—
Common stock dividends received from subsidiaries	30,704	—	—	—	(30,704) [2]	—
Depreciation of property, plant and equipment	151,387	39,041	32,305	—	—	222,733
Other amortization	24,511	5,090	4,145	—	—	33,746
Deferred income taxes	2,130	(463)	1,484	—	—	3,151
State refundable credit	(6,668)	(1,593)	(1,700)	—	—	(9,961)
Bad debt expense	1,042	620	453	—	—	2,115
Allowance for equity funds used during construction	(7,335)	(543)	(890)	—	—	(8,768)
Accrued environmental reserve	6,556	—	—	—	—	6,556
Other	1,201	1,322	87	—	—	2,610
Changes in assets and liabilities:						
Increase in accounts receivable	(8,093)	(3,349)	(1,343)	—	5,499 [1]	(7,286)
Decrease in accrued unbilled revenues	8,832	3,327	3,126	—	—	15,285
Decrease (increase) in fuel oil stock	30,226	430	3,043	—	—	33,699
Increase in materials and supplies	(3,910)	(1,583)	(1,149)	—	—	(6,642)
Decrease (increase) in regulatory assets	8,526	(2,908)	(4,611)	—	—	1,007
Decrease in regulatory liabilities	(5,490)	(4,489)	(6,583)	—	—	(16,562)
Decrease in accounts payable	(26,093)	(1,819)	(5,217)	—	—	(33,129)
Change in prepaid and accrued income taxes, tax credits and revenue taxes	(25,757)	(5,483)	(5,998)	—	58 [1]	(37,180)
Decrease in defined benefit pension and other postretirement benefit plans liability	(3,092)	(643)	(571)	—	—	(4,306)
Change in other assets and liabilities	(21,124)	(8,864)	3,635	—	(5,499) [1]	(31,852)
Net cash provided by operating activities	280,469	46,120	40,608	—	(30,646)	336,551
Cash flows from investing activities						
Capital expenditures	(229,127)	(64,346)	(57,391)	—	—	(350,864)
Advances to affiliates	1,000	8,000	—	—	(9,000) [1]	—
Other	(14,340)	1,032	960	(24)	18,442 [1][2]	6,070
Net cash used in investing activities	(242,467)	(55,314)	(56,431)	(24)	9,442	(344,794)
Cash flows from financing activities						
Common stock dividends	(107,134)	(16,320)	(14,384)	—	30,704 [2]	(107,134)
Preferred stock dividends of Hawaiian Electric and subsidiaries	(1,080)	(534)	(381)	—	—	(1,995)
Proceeds from the issuance of common stock	34,000	7,500	11,000	—	(18,500) [2]	34,000
Proceeds from the issuance of long-term debt	205,000	10,000	40,000	—	—	255,000
Repayment of long-term debt and funds transferred for repayment of long-term debt	(95,000)	(14,000)	—	—	—	(109,000)
Net increase (decrease) in short-term borrowings from non-affiliates and affiliate with original maturities of three months or less	(46,987)	18,800	(19,800)	—	9,000 [1]	(38,987)
Proceeds from issuance of short-term debt	100,000	—	—	—	—	100,000
Repayment of short-term debt	(100,000)	—	—	—	—	(100,000)
Other	(1,618)	(214)	(377)	—	—	(2,209)
Net cash provided by (used in) financing activities	(12,819)	5,232	16,058	—	21,204	29,675
Net increase (decrease) in cash, cash equivalents and restricted cash	25,183	(3,962)	235	(24)	—	21,432
Cash, cash equivalents and restricted cash, January 1	32,988	7,008	1,797	101	—	41,894
Cash, cash equivalents and restricted cash, December 31	58,171	3,046	2,032	77	—	63,326
Less: Restricted cash	(15,966)	—	—	—	—	(15,966)
Cash and cash equivalents, December 31	\$ 42,205	3,046	2,032	77	—	\$ 47,360

Explanation of consolidating adjustments on consolidating schedules:

[1] Eliminations of intercompany receivables and payables and other intercompany transactions

[2] Elimination of investment in subsidiaries, carried at equity

Note 4 · Bank segment (HEI only)

Selected financial information

American Savings Bank, F.S.B.

Statements of Income and Comprehensive Income Data

Years ended December 31	2022	2021	2020
(in thousands)			
Interest and dividend income			
Interest and fees on loans	\$ 207,830	\$ 198,802	\$ 214,134
Interest and dividends on investment securities	58,044	43,464	30,529
Total interest and dividend income	265,874	242,266	244,663
Interest expense			
Interest on deposit liabilities	7,327	4,981	10,654
Interest on other borrowings	5,974	59	460
Total interest expense	13,301	5,040	11,114
Net interest income	252,573	237,226	233,549
Provision for credit losses	2,037	(25,825)	50,811
Net interest income after provision for credit losses	250,536	263,051	182,738
Noninterest income			
Fees from other financial services	19,830	21,225	16,447
Fee income on deposit liabilities	18,762	16,663	16,059
Fee income on other financial products	10,291	8,770	6,381
Bank-owned life insurance	2,533	7,318	6,483
Mortgage banking income	1,692	9,305	23,734
Gain on sale of real estate	1,778	—	—
Gain on sale of investment securities, net	—	528	9,275
Other income, net	2,086	851	(256)
Total noninterest income	56,972	64,660	78,123
Noninterest expense			
Compensation and employee benefits	113,839	113,970	104,443
Occupancy	24,026	20,584	21,573
Data processing	17,681	17,634	14,769
Services	10,679	10,327	11,121
Equipment	10,100	9,510	9,001
Office supplies, printing and postage	4,398	4,239	4,623
Marketing	3,968	3,870	3,435
FDIC insurance	3,591	3,235	2,342
Other expense ¹	16,985	13,783	20,283
Total noninterest expense	205,267	197,152	191,590
Income before income taxes	102,241	130,559	69,271
Income taxes	22,252	29,325	11,688
Net income	79,989	101,234	57,583
Other comprehensive income (loss), net of taxes	(298,833)	(52,728)	23,608
Comprehensive income (loss)	\$ (218,844)	\$ 48,506	\$ 81,191

¹ 2020, included approximately \$5.1 million of certain direct and incremental COVID-19 related costs, including \$2.5 million of compensation expense and \$2.0 million of enhanced cleaning and sanitation costs.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

Reconciliation to amounts per HEI Consolidated Statements of Income*:

Years ended December 31	2022	2021	2020
(in thousands)			
Interest and dividend income	\$ 265,874	\$ 242,266	\$ 244,663
Noninterest income	56,972	64,660	78,123
Less: Gain on sale of real estate	1,778	—	—
Less: Gain on sale of investment securities, net	—	528	9,275
*Revenues-Bank	321,068	306,398	313,511
Total interest expense	13,301	5,040	11,114
Provision for credit losses	2,037	(25,825)	50,811
Noninterest expense	205,267	197,152	191,590
Less: Retirement defined benefits expense (credit)—other than service costs	(723)	(1,828)	1,813
Add: Gain on sale of real estate	1,778	—	—
*Expenses-Bank	219,550	178,195	251,702
*Operating income-Bank	101,518	128,203	61,809
Add back: Retirement defined benefits expense (credit)—other than service costs	(723)	(1,828)	1,813
Add back: Gain on sale of investment securities, net	—	528	9,275
Income before income taxes	\$ 102,241	\$ 130,559	\$ 69,271

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

Balance Sheets Data

December 31	2022	2021
(in thousands)		
Assets		
Cash and due from banks	\$ 153,042	\$ 100,051
Interest-bearing deposits	3,107	151,189
Cash and cash equivalents	156,149	251,240
Investment securities		
Available-for-sale, at fair value	1,429,667	2,574,618
Held-to-maturity, at amortized cost (fair value of \$1,150,971 and \$510,474 at December 31, 2022 and 2021, respectively)	1,251,747	522,270
Stock in Federal Home Loan Bank, at cost	26,560	10,000
Loans held for investment	5,978,906	5,211,114
Allowance for credit losses	(72,216)	(71,130)
Net loans	5,906,690	5,139,984
Loans held for sale, at lower of cost or fair value	824	10,404
Other	692,143	590,897
Goodwill	82,190	82,190
Total assets	\$ 9,545,970	\$ 9,181,603
Liabilities and shareholder's equity		
Deposit liabilities—noninterest-bearing	\$ 2,811,077	\$ 2,976,632
Deposit liabilities—interest-bearing	5,358,619	5,195,580
Other borrowings	695,120	88,305
Other	212,269	193,268
Total liabilities	9,077,085	8,453,785
Commitments and contingencies		
Common stock	1	1
Additional paid in capital	355,806	353,895
Retained earnings	449,693	411,704
Accumulated other comprehensive loss, net of tax benefits		
Net unrealized losses on securities	\$ (328,904)	\$ (32,037)
Retirement benefit plans	(7,711) (336,615)	(5,745) (37,782)
Total shareholder's equity	468,885	727,818
Total liabilities and shareholder's equity	\$ 9,545,970	\$ 9,181,603

December 31	2022	2021
(in thousands)		
Other assets		
Bank-owned life insurance	\$ 182,986	\$ 177,566
Premises and equipment, net	195,324	202,299
Accrued interest receivable	25,077	20,854
Mortgage servicing rights	9,047	9,950
Low-income housing investments	106,978	110,989
Deferred tax asset	116,441	7,699
Real estate acquired in settlement of loans, net	115	—
Other	56,175	61,540
	\$ 692,143	\$ 590,897
Other liabilities		
Accrued expenses	\$ 97,295	\$ 87,905
Federal income taxes payable	863	—
Cashier's checks	36,401	33,675
Advance payments by borrowers	9,637	9,994
Other	68,073	61,694
	\$ 212,269	\$ 193,268

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

Bank-owned life insurance is life insurance purchased by ASB on the lives of certain key employees, with ASB as the beneficiary. The insurance is used to fund employee benefits through tax-free income from increases in the cash value of the policies and insurance proceeds paid to ASB upon an insured's death.

Investment securities. The major components of investment securities were as follows:

(dollars in thousands)	Amortized cost	Gross unrealized gains	Gross unrealized losses	Estimated fair value	Gross unrealized losses					
					Less than 12 months			12 months or longer		
					Number of issues	Fair value	Amount	Number of issues	Fair value	Amount
December 31, 2022										
Available-for-sale										
U.S. Treasury and federal agency obligations	\$ 88,344	\$ —	\$ (7,281)	\$ 81,063	12	\$ 41,201	\$ (2,120)	4	\$ 39,862	\$ (5,161)
Mortgage-backed securities*	1,530,582	—	(237,614)	1,292,968	113	455,836	(56,999)	70	837,132	(180,615)
Corporate bonds	44,377	—	(3,643)	40,734	4	29,644	(2,028)	1	11,090	(1,615)
Mortgage revenue bonds	14,902	—	—	14,902	—	—	—	—	—	—
	\$1,678,205	\$ —	\$ (248,538)	\$ 1,429,667	129	\$ 526,681	\$ (61,147)	75	\$ 888,084	\$ (187,391)
Held-to-maturity										
U.S. Treasury and federal agency obligations	\$ 59,894	\$ —	\$ (8,478)	\$ 51,416	1	\$ 16,874	\$ (3,222)	2	\$ 34,542	\$ (5,256)
Mortgage-backed securities*	1,191,853	2,670	(94,968)	1,099,555	22	183,629	(10,593)	51	567,250	(84,375)
	\$1,251,747	\$ 2,670	\$ (103,446)	\$ 1,150,971	23	\$ 200,503	\$ (13,815)	53	\$ 601,792	\$ (89,631)
December 31, 2021										
Available-for-sale										
U.S. Treasury and federal agency obligations	\$ 89,714	\$ 803	\$ (427)	\$ 90,090	4	\$ 44,827	\$ (427)	—	\$ —	\$ —
Mortgage-backed securities*	2,482,618	6,511	(51,206)	2,437,923	120	1,845,243	(38,321)	18	271,012	(12,885)
Corporate bonds	30,625	655	(102)	31,178	1	12,780	(102)	—	—	—
Mortgage revenue bonds	15,427	—	—	15,427	—	—	—	—	—	—
	\$2,618,384	\$ 7,969	\$ (51,735)	\$ 2,574,618	125	\$ 1,902,850	\$ (38,850)	18	\$ 271,012	\$ (12,885)
Held-to-maturity										
U.S. Treasury and federal agency obligations	\$ 59,871	\$ 168	\$ (170)	\$ 59,869	2	\$ 39,594	\$ (170)	—	\$ —	\$ —
Mortgage-backed securities*	462,399	1,480	(13,274)	450,605	22	290,883	(7,665)	7	106,483	(5,609)
	\$ 522,270	\$ 1,648	\$ (13,444)	\$ 510,474	24	\$ 330,477	\$ (7,835)	7	\$ 106,483	\$ (5,609)

* Issued or guaranteed by U.S. Government agencies or sponsored agencies

ASB does not believe that the investment securities that were in an unrealized loss position as of December 31, 2022, represent a credit loss. Total gross unrealized losses were primarily attributable to change in market conditions. On a quarterly basis the investment securities are evaluated for changes in financial condition of the issuer. Based upon ASB's evaluation, all securities held within the investment portfolio continue to be rated investment grade by one or more agencies. The contractual cash flows of the U.S. Treasury, federal agency obligations and agency mortgage-backed securities are backed by the full faith and credit guaranty of the United States government or an agency of the government. ASB does not intend to sell the securities before the recovery of its amortized cost basis and there have been no adverse changes in the timing of the contractual cash flows for the securities. ASB's investment securities portfolio did not require an allowance for credit losses as of December 31, 2022.

U.S. Treasury, federal agency obligations, corporate bonds, and mortgage revenue bonds have contractual terms to maturity. Mortgage-backed securities have contractual terms to maturity, but require periodic payments to reduce principal. In addition, expected maturities will differ from contractual maturities because borrowers have the right to prepay the underlying mortgages.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

The contractual maturities of investment securities were as follows:

	Amortized	Fair
	Cost	value
December 31, 2022		
(in thousands)		
Available-for-sale		
Due in one year or less	\$ 1,193	\$ 1,171
Due after one year through five years	106,628	98,871
Due after five years through ten years	39,802	36,657
Due after ten years	—	—
	147,623	136,699
Mortgage-backed securities — issued or guaranteed by U.S. Government agencies or sponsored agencies	1,530,582	1,292,968
Total available-for-sale securities	\$ 1,678,205	\$ 1,429,667
Held-to-maturity		
Due in one year or less	\$ —	\$ —
Due after one year through five years	—	—
Due after five years through ten years	59,894	51,416
Due after ten years	—	—
	59,894	51,416
Mortgage-backed securities — issued or guaranteed by U.S. Government agencies or sponsored agencies	1,191,853	1,099,555
Total held-to-maturity securities	\$ 1,251,747	\$ 1,150,971

The proceeds, gross gains and losses from sales of available-for-sale securities were as follows:

Years ended December 31	2022	2021	2020
(in thousands)			
Proceeds	\$ —	\$ 197,354	\$ 169,157
Gross gains	—	975	9,275
Gross losses	—	(447)	—
Tax expense on realized gains	—	142	2,486

Interest income from taxable and non-taxable investment securities were as follows:

Years ended December 31	2022	2021	2020
(in thousands)			
Taxable	\$ 56,731	\$ 42,534	\$ 29,760
Non-taxable	1,313	930	769
	\$ 58,044	\$ 43,464	\$ 30,529

ASB pledged securities with a market value of approximately \$929 million and \$416 million as of December 31, 2022 and 2021, respectively, as collateral for public funds and other deposits, mortgage pipeline hedge margin, automated clearinghouse transactions, the Federal Reserve Bank of San Francisco discount window and bankruptcy account, and the Federal Home Loan Bank of Des Moines advance line. In addition, ASB pledged securities with a market value of \$327 million and \$161 million as of December 31, 2022 and 2021, respectively, as collateral for securities sold under agreements to repurchase.

Transfer of available-for-sale securities to held-to-maturity. In October 2022, ASB transferred 66 available-for-sale investment securities with a fair value of \$755 million to the held-to-maturity category. On the date of transfer, these securities had a total unrealized loss of \$206 million. There was no impact to net income as a result of the transfer.

These transfers were executed to mitigate the potential future impact to capital through accumulated other comprehensive loss and the impact of rising rates on the market value of the investment securities. ASB believes that it maintains sufficient liquidity for future business needs and it has the positive intent and ability to hold these securities to maturity.

Stock in FHLB. As of December 31, 2022 and 2021, ASB's stock in FHLB was carried at cost (\$26.6 million and \$10.0 million, respectively) because it can only be redeemed at par and it is a required investment based on measurements of ASB's capital, assets and borrowing levels.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

Quarterly and as conditions warrant, ASB reviews its investment in the stock of the FHLB for impairment. ASB evaluated its investment in FHLB stock for credit losses as of December 31, 2022, consistent with its accounting policy. ASB did not recognize any credit losses for 2022, 2021 and 2020 based on its evaluation of the underlying investment.

Future deterioration in the FHLB's financial position and/or negative developments in any of the factors considered in ASB's impairment evaluation may result in future impairment losses.

Loans. The components of loans were summarized as follows:

December 31	2022	2021
(in thousands)		
Real estate:		
Residential 1-4 family	\$ 2,479,637	\$ 2,299,212
Commercial real estate	1,358,123	1,056,982
Home equity line of credit	1,002,905	835,663
Residential land	20,679	19,859
Commercial construction	88,489	91,080
Residential construction	20,788	11,138
Total real estate	4,970,621	4,313,934
Commercial	779,691	793,304
Consumer	254,709	113,966
Total loans	6,005,021	5,221,204
Less: Deferred fees and discounts	(26,115)	(10,090)
Allowance for credit losses	(72,216)	(71,130)
Total loans, net	\$ 5,906,690	\$ 5,139,984

ASB's policy is to require private mortgage insurance on all real estate loans when the loan-to-value ratio of the property exceeds 80% of the lower of the appraised value or purchase price at origination. For non-owner occupied residential property purchases, the loan-to-value ratio may not exceed 75% of the lower of the appraised value or purchase price at origination.

ASB services real estate loans for investors (principal balance of \$1.5 billion, \$1.5 billion and \$1.5 billion as of December 31, 2022, 2021 and 2020, respectively), which are not included in the accompanying balance sheets data. ASB reports fees earned for servicing such loans as income when the related mortgage loan payments are collected and charges loan servicing cost to expense as incurred.

As of December 31, 2022 and 2021, ASB had pledged loans with an amortized cost of approximately \$3.0 billion and \$2.8 billion, respectively, as collateral to secure advances from the FHLB.

As of December 31, 2022 and 2021, the aggregate amount of loans to directors and executive officers of ASB and its affiliates and any related interests (as defined in Federal Reserve Board (FRB) Regulation O) of such individuals, was \$10.7 million and \$13.1 million, respectively. As of December 31, 2022 and 2021, there was a loan to a related interest of a director of ASB for \$10.0 million. The loan was made at ASB's normal credit terms.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

Allowance for credit losses. As discussed in Note 1, ASB must maintain an allowance for credit losses that is adequate to absorb estimated expected credit losses associated with its loan portfolio.

The allowance for credit losses (balances and changes) and financing receivables by portfolio segment were as follows:

(in thousands)	Residential 1-4 family	Commercial real estate	Home equity line of credit	Residential land	Commercial construction	Residential construction	Commercial	Consumer	Total
December 31, 2022									
Allowance for credit losses:									
Beginning balance	\$ 6,545	\$ 24,696	\$ 5,657	\$ 646	\$ 2,186	\$ 18	\$ 15,798	\$ 15,584	\$ 71,130
Charge-offs	(13)	—	—	—	—	—	(563)	(6,254)	(6,830)
Recoveries	79	—	71	104	—	—	1,288	3,837	5,379
Net (charge-offs) recoveries	66	—	71	104	—	—	725	(2,417)	(1,451)
Provision	(341)	(2,798)	397	(33)	(991)	28	(4,097)	10,372	2,537
Ending balance	\$ 6,270	\$ 21,898	\$ 6,125	\$ 717	\$ 1,195	\$ 46	\$ 12,426	\$ 23,539	\$ 72,216
Average loans outstanding	\$2,331,473	\$1,204,756	\$ 918,563	\$ 21,442	\$ 90,021	\$ 18,317	\$ 710,658	\$ 161,722	\$5,456,952
Net charge-offs (recoveries) to average loans	— %	—%	(0.01%)	(0.49%)	—%	—%	(0.10%)	1.49%	0.03%
December 31, 2021									
Allowance for credit losses:									
Beginning balance	\$ 4,600	\$ 35,607	\$ 6,813	\$ 609	\$ 4,149	\$ 11	\$ 25,462	\$ 23,950	\$ 101,201
Charge-offs	(67)	—	(45)	—	—	—	(1,561)	(8,027)	(9,700)
Recoveries	92	—	113	61	—	—	1,468	4,320	6,054
Net (charge-offs) recoveries	25	—	68	61	—	—	(93)	(3,707)	(3,646)
Provision	1,920	(10,911)	(1,224)	(24)	(1,963)	7	(9,571)	(4,659)	(26,425)
Ending balance	\$ 6,545	\$ 24,696	\$ 5,657	\$ 646	\$ 2,186	\$ 18	\$ 15,798	\$ 15,584	\$ 71,130
Average loans outstanding	\$2,155,322	\$1,046,276	\$ 885,759	\$ 18,227	\$ 111,711	\$ 11,361	\$ 856,226	\$ 135,609	\$5,220,491
Net charge-offs (recoveries) to average loans	— %	—%	(0.01%)	(0.33%)	—%	—%	0.01%	2.73%	0.07%
December 31, 2020									
Allowance for credit losses:									
Beginning balance, prior to adoption of ASU No. 2016-13	\$ 2,380	\$ 15,053	\$ 6,922	\$ 449	\$ 2,097	\$ 3	\$ 10,245	\$ 16,206	\$ 53,355
Impact of adopting ASU No. 2016-13	2,150	208	(541)	(64)	289	14	922	16,463	19,441
Charge-offs	(7)	—	(77)	(351)	—	—	(5,819)	(19,900)	(26,154)
Recoveries	394	—	63	38	—	—	872	3,381	4,748
Net (charge-offs) recoveries	387	—	(14)	(313)	—	—	(4,947)	(16,519)	(21,406)
Provision	(317)	20,346	446	537	1,763	(6)	19,242	7,800	49,811
Ending balance	\$ 4,600	\$ 35,607	\$ 6,813	\$ 609	\$ 4,149	\$ 11	\$ 25,462	\$ 23,950	\$ 101,201
Average loans outstanding	\$2,148,848	\$ 861,096	\$1,060,444	\$ 13,799	\$ 93,740	\$ 10,703	\$ 935,663	\$ 215,994	\$5,340,287
Net charge-offs (recoveries) to average loans	(0.02)%	—%	—%	2.27%	—%	—%	0.53%	7.65%	0.40%

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

Allowance for loan commitments. The allowance for loan commitments by portfolio segment were as follows:

(in thousands)	Home equity line of credit	Commercial construction	Commercial loans	Total
Year ended December 31, 2022				
Allowance for loan commitments:				
Beginning balance	\$ 400	\$ 3,700	\$ 800	\$ 4,900
Provision	—	(1,100)	600	(500)
Ending balance	\$ 400	\$ 2,600	\$ 1,400	\$ 4,400
Year ended December 31, 2021				
Allowance for loan commitments:				
Beginning balance	\$ 300	\$ 3,000	\$ 1,000	\$ 4,300
Provision	100	700	(200)	600
Ending balance	\$ 400	\$ 3,700	\$ 800	\$ 4,900
Year ended December 31, 2020				
Allowance for loan commitments:				
Beginning balance, prior to adoption of ASU No. 2016-13	\$ 392	\$ 931	\$ 418	\$ 1,741
Impact of adopting ASU No. 2016-13	(92)	1,745	(94)	1,559
Provision	—	324	676	1,000
Ending balance	\$ 300	\$ 3,000	\$ 1,000	\$ 4,300

Credit quality. ASB performs an internal loan review and grading on an ongoing basis. The review provides management with periodic information as to the quality of the loan portfolio and effectiveness of its lending policies and procedures. The objectives of the loan review and grading procedures are to identify, in a timely manner, existing or emerging credit trends so that appropriate steps can be initiated to manage risk and avoid or minimize future losses. Loans subject to grading include commercial, commercial real estate and commercial construction loans.

Each commercial and commercial real estate loan is assigned an Asset Quality Rating (AQR) reflecting the likelihood of repayment or orderly liquidation of that loan transaction pursuant to regulatory credit classifications: Pass, Special Mention, Substandard, Doubtful, and Loss. The AQR is a function of the probability of default model rating, the loss given default, and possible non-model factors which impact the ultimate collectability of the loan such as character of the business owner/guarantor, interim period performance, litigation, tax liens and major changes in business and economic conditions. Pass exposures generally are well protected by the current net worth and paying capacity of the obligor or by the value of the asset or underlying collateral. Special Mention loans have potential weaknesses that, if left uncorrected, could jeopardize the liquidation of the debt. Substandard loans have well-defined weaknesses that jeopardize the liquidation of the debt and are characterized by the distinct possibility that ASB may sustain some loss. An asset classified Doubtful has the weaknesses of those classified Substandard, with the added characteristic that the weaknesses make collection or liquidation in full, on the basis of currently existing facts, conditions, and values, highly questionable and improbable. An asset classified Loss is considered uncollectible and has such little value that its continuance as a bankable asset is not warranted.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

The credit risk profile by vintage date based on payment activity or internally assigned grade for loans was as follows:

(in thousands)	Term loans by origination year						Revolving loans		Total
	2022	2021	2020	2019	2018	Prior	Revolving loans	Converted to term loans	
December 31, 2022									
Residential 1-4 family									
Current	\$ 432,707	\$ 755,056	\$ 423,455	\$ 113,096	\$ 51,860	\$ 698,354	\$ —	\$ —	\$ 2,474,528
30-59 days past due	—	—	—	—	448	1,098	—	—	1,546
60-89 days past due	—	—	268	—	—	90	—	—	358
Greater than 89 days past due	—	—	—	—	809	2,396	—	—	3,205
	432,707	755,056	423,723	113,096	53,117	701,938	—	—	2,479,637
Home equity line of credit									
Current	—	—	—	—	—	—	959,131	40,814	999,945
30-59 days past due	—	—	—	—	—	—	1,103	209	1,312
60-89 days past due	—	—	—	—	—	—	209	226	435
Greater than 89 days past due	—	—	—	—	—	—	587	626	1,213
	—	—	—	—	—	—	961,030	41,875	1,002,905
Residential land									
Current	5,245	9,010	5,222	203	522	477	—	—	20,679
30-59 days past due	—	—	—	—	—	—	—	—	—
60-89 days past due	—	—	—	—	—	—	—	—	—
Greater than 89 days past due	—	—	—	—	—	—	—	—	—
	5,245	9,010	5,222	203	522	477	—	—	20,679
Residential construction									
Current	7,986	11,624	1,178	—	—	—	—	—	20,788
30-59 days past due	—	—	—	—	—	—	—	—	—
60-89 days past due	—	—	—	—	—	—	—	—	—
Greater than 89 days past due	—	—	—	—	—	—	—	—	—
	7,986	11,624	1,178	—	—	—	—	—	20,788
Consumer									
Current	199,574	21,330	5,543	7,580	527	140	10,810	4,782	250,286
30-59 days past due	1,110	287	65	239	30	—	81	167	1,979
60-89 days past due	756	163	88	137	19	—	45	107	1,315
Greater than 89 days past due	621	105	37	176	28	—	20	142	1,129
	202,061	21,885	5,733	8,132	604	140	10,956	5,198	254,709
Commercial real estate									
Pass	390,206	177,130	283,321	51,542	63,084	278,280	8,235	—	1,251,798
Special Mention	—	11,250	3,446	40,423	—	24,466	—	—	79,585
Substandard	—	—	665	11,357	—	14,718	—	—	26,740
Doubtful	—	—	—	—	—	—	—	—	—
	390,206	188,380	287,432	103,322	63,084	317,464	8,235	—	1,358,123
Commercial construction									
Pass	15,094	47,478	44	—	—	—	25,873	—	88,489
Special Mention	—	—	—	—	—	—	—	—	—
Substandard	—	—	—	—	—	—	—	—	—
Doubtful	—	—	—	—	—	—	—	—	—
	15,094	47,478	44	—	—	—	25,873	—	88,489
Commercial									
Pass	239,852	185,013	85,220	68,161	46,142	53,192	60,871	13,964	752,415
Special Mention	—	—	—	2,374	—	645	9,005	8	12,032
Substandard	3,322	2,305	401	1,304	1,346	3,849	1,664	1,053	15,244
Doubtful	—	—	—	—	—	—	—	—	—
	243,174	187,318	85,621	71,839	47,488	57,686	71,540	15,025	779,691
Total loans	\$1,296,473	\$1,220,751	\$ 808,953	\$ 296,592	\$ 164,815	\$1,077,705	\$1,077,634	\$ 62,098	\$ 6,005,021

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

(in thousands)	Term loans by origination year						Revolving loans		Total
	2021	2020	2019	2018	2017	Prior	Revolving loans	Converted to term loans	
December 31, 2021									
Residential 1-4 family									
Current	\$ 791,758	\$ 461,683	\$ 133,345	\$ 64,421	\$ 124,994	\$ 712,452	\$ —	\$ —	\$ 2,288,653
30-59 days past due	—	—	—	809	—	2,210	—	—	3,019
60-89 days past due	—	—	—	—	—	1,468	—	—	1,468
Greater than 89 days past due	—	—	2,987	—	—	3,085	—	—	6,072
	791,758	461,683	136,332	65,230	124,994	719,215	—	—	2,299,212
Home equity line of credit									
Current	—	—	—	—	—	—	794,518	39,116	833,634
30-59 days past due	—	—	—	—	—	—	296	313	609
60-89 days past due	—	—	—	—	—	—	16	70	86
Greater than 89 days past due	—	—	—	—	—	—	838	496	1,334
	—	—	—	—	—	—	795,668	39,995	835,663
Residential land									
Current	10,572	6,794	1,116	532	267	181	—	—	19,462
30-59 days past due	—	—	—	—	—	—	—	—	—
60-89 days past due	—	—	—	—	—	—	—	—	—
Greater than 89 days past due	—	—	—	—	—	397	—	—	397
	10,572	6,794	1,116	532	267	578	—	—	19,859
Residential construction									
Current	7,856	3,019	—	—	263	—	—	—	11,138
30-59 days past due	—	—	—	—	—	—	—	—	—
60-89 days past due	—	—	—	—	—	—	—	—	—
Greater than 89 days past due	—	—	—	—	—	—	—	—	—
	7,856	3,019	—	—	263	—	—	—	11,138
Consumer									
Current	37,563	15,488	29,383	10,897	302	238	12,740	4,157	110,768
30-59 days past due	202	181	517	234	15	—	156	70	1,375
60-89 days past due	59	127	392	183	8	—	7	106	882
Greater than 89 days past due	14	93	387	192	27	—	141	87	941
	37,838	15,889	30,679	11,506	352	238	13,044	4,420	113,966
Commercial real estate									
Pass	173,794	275,242	49,317	56,490	33,581	259,583	11,602	—	859,609
Special Mention	19,600	3,529	42,935	30,870	20,788	32,824	—	—	150,546
Substandard	—	684	13,936	1,859	1,805	28,543	—	—	46,827
Doubtful	—	—	—	—	—	—	—	—	—
	193,394	279,455	106,188	89,219	56,174	320,950	11,602	—	1,056,982
Commercial construction									
Pass	17,140	43,261	—	11,342	—	—	19,337	—	91,080
Special Mention	—	—	—	—	—	—	—	—	—
Substandard	—	—	—	—	—	—	—	—	—
Doubtful	—	—	—	—	—	—	—	—	—
	17,140	43,261	—	11,342	—	—	19,337	—	91,080
Commercial									
Pass	266,087	96,963	79,329	56,497	31,019	66,570	96,673	15,510	708,648
Special Mention	40	27,336	10,071	202	439	8,966	15,303	18	62,375
Substandard	427	184	3,737	1,777	4,457	2,961	7,083	1,655	22,281
Doubtful	—	—	—	—	—	—	—	—	—
	266,554	124,483	93,137	58,476	35,915	78,497	119,059	17,183	793,304
Total loans	\$ 1,325,112	\$ 934,584	\$ 367,452	\$ 236,305	\$ 217,965	\$ 1,119,478	\$ 958,710	\$ 61,598	\$ 5,221,204

Revolving loans converted to term loans during 2022 in the commercial, home equity line of credit and consumer portfolios were \$1.9 million, \$15.6 million and \$3.5 million, respectively.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

The credit risk profile based on loans whose terms have been modified and accruing interest were as follows:

(in thousands)	December 31, 2022		December 31, 2021	
Real estate:				
Residential 1-4 family	\$	8,821	\$	6,949
Commercial real estate		9,477		3,055
Home equity line of credit		4,404		6,021
Residential land		782		980
Commercial construction		—		—
Residential construction		—		—
Commercial		6,596		7,860
Consumer		50		52
Total troubled debt restructured loans accruing interest	\$	30,130	\$	24,917

ASB did not recognize interest on nonaccrual loans for 2022, 2021 and 2020.

Troubled debt restructurings. A loan modification is deemed to be a TDR when the borrower is determined to be experiencing financial difficulties and ASB grants a concession it would not otherwise consider. When a borrower experiencing financial difficulty fails to make a required payment on a loan or is in imminent default, ASB takes a number of steps to improve the collectability of the loan and maximize the likelihood of full repayment. At times, ASB may modify or restructure a loan to help a distressed borrower improve its financial position to eventually be able to fully repay the loan, provided the borrower has demonstrated both the willingness and the ability to fulfill the modified terms. TDR loans are considered an alternative to foreclosure or liquidation with the goal of minimizing losses to ASB and maximizing recovery.

ASB may consider various types of concessions in granting a TDR including maturity date extensions, extended amortization of principal, temporary deferral of principal payments, and temporary interest rate reductions. ASB rarely grants principal forgiveness in its TDR modifications. Residential loan modifications generally involve interest rate reduction, extending the amortization period, or capitalizing certain delinquent amounts owed not to exceed the original loan balance. Land loans at origination are typically structured as a three-year term, interest-only monthly payment with a balloon payment due at maturity. Land loan TDR modifications typically involve extending the maturity date up to three years and converting the payments from interest-only to principal and interest monthly, at the same or higher interest rate. Commercial loan modifications generally involve extensions of maturity dates, extending the interest only or amortization period, and temporary deferral or reduction of principal payments. ASB generally does not reduce the interest rate on commercial loan TDR modifications. Occasionally, additional collateral and/or guaranties are obtained.

The allowance for credit losses on TDR loans that do not share risk characteristics are individually evaluated based on the present value of expected future cash flows discounted at the loan's effective original contractual rate or based on the fair value of collateral less cost to sell. The financial impact of the estimated loss is an increase to the allowance associated with the modified loan. When available information confirms that specific loans or portions thereof are uncollectible (confirmed losses), these amounts are charged off against the allowance for credit losses.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

Loan modifications that occurred during 2022, 2021, and 2020 were as follows:

(dollars in thousands)	Number of contracts	Outstanding recorded investment (as of period end)¹	Related allowance (as of period end)
Year ended December 31, 2022			
Real estate:			
Residential 1-4 family	5	\$ 1,475	\$ 164
Commercial real estate	—	—	—
Home equity line of credit	—	—	—
Residential land	1	203	42
Commercial construction	—	—	—
Residential construction	—	—	—
Commercial	3	2,634	497
Consumer	—	—	—
	9	\$ 4,312	\$ 703
Year ended December 31, 2021			
Real estate:			
Residential 1-4 family	14	\$ 8,379	\$ 442
Commercial real estate	—	—	—
Home equity line of credit	—	—	—
Residential land	3	799	38
Commercial construction	—	—	—
Residential construction	—	—	—
Commercial	7	2,931	205
Consumer	—	—	—
	24	\$ 12,109	\$ 685
Year ended December 31, 2020			
Real estate:			
Residential 1-4 family	1	\$ 144	\$ 6
Commercial real estate	6	20,714	4,439
Home equity line of credit	3	85	11
Residential land	4	668	54
Commercial construction	—	—	—
Residential construction	—	—	—
Commercial	54	5,380	869
Consumer	—	—	—
	68	\$ 26,991	\$ 5,379

¹ The period end balances reflect all paydowns and charge-offs since the modification period. TDRs fully paid off, charged-off, or foreclosed upon by period end are not included.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

Loans modified in TDRs that experienced a payment default of 90 days or more in 2022, 2021, and 2020 and for which the payment default occurred within one year of the modification, were as follows:

Years ended December 31	2022		2021		2020	
(dollars in thousands)	Number of contracts	Recorded investment	Number of contracts	Recorded investment	Number of contracts	Recorded investment
Troubled debt restructurings that subsequently defaulted						
Real estate:						
Residential 1-4 family	—	\$ —	1	\$ 474	—	\$ —
Commercial real estate	—	—	—	—	—	—
Home equity line of credit	—	—	—	—	—	—
Residential land	—	—	—	—	—	—
Commercial construction	—	—	—	—	—	—
Residential construction	—	—	—	—	—	—
Commercial	—	—	1	9	—	—
Consumer	—	—	—	—	—	—
	—	\$ —	2	\$ 483	—	\$ —

If a loan modified in a TDR subsequently defaults, ASB evaluates the loan for further impairment. Based on its evaluation, adjustments may be made in the allocation of the allowance or partial charge-offs may be taken to further write-down the carrying value of the loan. Commitments to lend additional funds to borrowers whose loan terms have been modified in a TDR totaled nil at December 31, 2022 and 2021.

The Coronavirus Aid, Relief, and Economic Security Act (CARES Act) provides that a financial institution may elect to suspend the requirements under GAAP for certain loan modifications that would otherwise be categorized as a TDR and any related impairment for accounting purposes.

In response to the COVID-19 pandemic, the Board of Governors of the FRB, the FDIC, the National Credit Union Administration, the OCC, and the Consumer Financial Protection Bureau, in consultation with the state financial regulators (collectively, the “agencies”) issued a joint interagency statement (issued March 22, 2020; revised statement issued April 7, 2020). Some of the provisions applicable to the Company include, but are not limited to accounting for loan modifications, past due reporting and nonaccrual status and charge-offs.

Loan modifications that do not meet the conditions of the CARES Act may still qualify as a modification that does not need to be accounted for as a TDR. The agencies confirmed with the FASB staff that short-term modifications made on a good faith basis in response to COVID-19 to borrowers who were current prior to any relief are not TDRs. This includes short-term (e.g., six months) modifications such as payment deferrals, fee waivers, extensions of repayment terms, or insignificant delays in payment. Financial institutions are not expected to designate loans with deferrals granted due to COVID-19 as past due because of the deferral. A loan’s payment date is governed by the due date stipulated in the legal agreement. If a financial institution agrees to a payment deferral, these loans would not be considered past due during the period of the deferral. Lastly, during short-term COVID-19 modifications, these loans generally should not be reported as nonaccrual or as classified.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

Collateral-dependent loans. A loan is considered collateral-dependent when the borrower is experiencing financial difficulty and repayment of the loan is expected to be provided substantially through the operation or sale of the collateral.

Loans considered collateral-dependent were as follows:

	<u>December 31, 2022</u>		<u>December 31, 2021</u>	
	<u>Amortized cost</u>	<u>Collateral type</u>	<u>Amortized cost</u>	<u>Collateral type</u>
(in thousands)				
Real estate:				
Residential 1-4 family	\$ 3,959	Residential real estate property	\$ 3,493	Residential real estate property
Commercial real estate	—		1,221	Commercial real estate property
Home equity line of credit	1,425	Residential real estate property	1,294	Residential real estate property
Residential land	—		300	Residential real estate property
Total real estate	5,384		6,308	
Commercial	—		692	Business assets
Total	\$ 5,384		\$ 7,000	

ASB had \$4.2 million and \$3.4 million of consumer mortgage loans collateralized by residential real estate property that were in the process of foreclosure at December 31, 2022 and 2021, respectively.

Mortgage servicing rights (MSRs). In its mortgage banking business, ASB sells residential mortgage loans to government-sponsored entities and other parties, who may issue securities backed by pools of such loans. ASB retains no beneficial interests in these loans other than the servicing rights of certain loans sold.

ASB received \$136.5 million, \$364.8 million and \$567.7 million of proceeds from the sale of residential mortgages in 2022, 2021, and 2020, respectively, and recognized gains on such sales of \$1.7 million, \$9.3 million, and \$23.7 million in 2022, 2021, and 2020, respectively.

There was one repurchased mortgage loan for 2022 and no repurchased mortgage loans for 2021 and 2020. The repurchase reserve was \$0.1 million as of December 31, 2022 and 2021.

Mortgage servicing fees, a component of other income, net, were \$3.7 million, \$3.8 million and \$3.4 million for the years ended December 31, 2022, 2021, and 2020, respectively.

Changes in the carrying value of MSRs were as follows:

<u>(in thousands)</u>	<u>Gross carrying amount</u>	<u>Accumulated amortization</u>	<u>Valuation allowance</u>	<u>Net carrying amount</u>
December 31, 2022	\$ 19,544	\$ (10,497)	\$ —	\$ 9,047
December 31, 2021	\$ 18,674	\$ (8,724)	\$ —	\$ 9,950

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

Changes related to MSR were as follows:

(in thousands)	2022	2021	2020
Mortgage servicing rights			
Balance, January 1	\$ 9,950	\$ 10,280	\$ 9,101
Amount capitalized	1,130	3,404	5,096
Amortization	(2,033)	(3,734)	(3,917)
Sale of mortgage servicing rights	—	—	—
Other-than-temporary impairment	—	—	—
Carrying amount before valuation allowance, December 31	9,047	9,950	10,280
Valuation allowance for mortgage servicing rights			
Balance, January 1	—	260	—
Provision	—	(260)	260
Other-than-temporary impairment	—	—	—
Balance, December 31	—	—	260
Net carrying value of mortgage servicing rights	\$ 9,047	\$ 9,950	\$ 10,020

The estimated aggregate amortization expenses of MSR for 2023, 2024, 2025, 2026 and 2027 are \$1.2 million, \$1.1 million, \$1.0 million, \$0.9 million and \$0.8 million, respectively.

ASB capitalizes MSR acquired upon the sale of mortgage loans with servicing rights retained. On a monthly basis, ASB compares the net carrying value of the MSR to its fair value to determine if there are any changes to the valuation allowance and/or other-than-temporary impairment for the MSR.

ASB uses a present value cash flow model to estimate the fair value of MSR. Impairment is recognized through a valuation allowance for each stratum when the carrying amount exceeds fair value, with any associated provision recorded as a component of loan servicing fees included in "Revenues - bank" in the consolidated statements of income. A direct write-down is recorded when the recoverability of the valuation allowance is deemed to be unrecoverable.

Key assumptions used in estimating the fair value of ASB's MSR used in the impairment analysis were as follows:

December 31	2022	2021
(dollars in thousands)		
Unpaid principal balance	\$ 1,451,322	\$ 1,481,899
Weighted average note rate	3.38%	3.38%
Weighted average discount rate	10.00%	9.25%
Weighted average prepayment speed	6.56%	9.77%

The sensitivity analysis of fair value of MSR to hypothetical adverse changes of 25 and 50 basis points in certain key assumptions was as follows:

December 31	2022	2021
(in thousands)		
Prepayment rate:		
25 basis points adverse rate change	\$ (92)	\$ (714)
50 basis points adverse rate change	(214)	(1,608)
Discount rate:		
25 basis points adverse rate change	(182)	(129)
50 basis points adverse rate change	(361)	(256)

The effect of a variation in certain assumptions on fair value is calculated without changing any other assumptions. This analysis typically cannot be extrapolated because the relationship of a change in one key assumption to the changes in the fair value of MSR typically is not linear.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

Deposit liabilities. The summarized components of deposit liabilities were as follows:

December 31 (dollars in thousands)	2022		2021	
	Weighted- average stated rate	Amount	Weighted- average stated rate	Amount
Savings	0.03%	\$ 3,198,329	0.03%	\$ 3,234,646
Checking				
Interest-bearing	0.17	1,359,519	0.02	1,344,049
Noninterest-bearing	—	1,453,937	—	1,472,727
Commercial checking	—	1,357,140	—	1,503,905
Money market	0.82	189,053	0.06	192,909
Time certificates	2.39	611,718	0.67	423,976
	0.24%	\$ 8,169,696	0.05%	\$ 8,172,212

As of December 31, 2022 and 2021, time certificates of \$250,000 or more totaled \$346.9 million and \$87.6 million, respectively.

The approximate scheduled maturities of time certificates outstanding at December 31, 2022 were as follows:

(in thousands)	
2023	\$ 495,577
2024	59,493
2025	34,360
2026	11,224
2027	8,327
Thereafter	2,737
	\$ 611,718

Overdrawn deposit accounts are classified as loans and totaled \$1.5 million and \$1.3 million at December 31, 2022 and 2021, respectively.

Interest expense on deposit liabilities by type of deposit was as follows:

Years ended December 31 (in thousands)	2022	2021	2020
Time certificates	\$ 5,372	\$ 3,805	\$ 7,944
Savings	860	802	1,774
Money market	330	132	465
Interest-bearing checking	765	242	471
	\$ 7,327	\$ 4,981	\$ 10,654

Other borrowings.

Securities sold under agreements to repurchase. Securities sold under agreements to repurchase are accounted for as financing transactions and the obligations to repurchase these securities are recorded as liabilities in the consolidated balance sheets. ASB pledges investment securities as collateral for securities sold under agreements to repurchase. All such agreements are subject to master netting arrangements, which provide for conditional right of set-off in case of default by either party; however, ASB presents securities sold under agreements to repurchase on a gross basis in the balance sheet. The following tables present information about the securities sold under agreements to repurchase, including the related collateral received from or pledged to counterparties:

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

(in millions)	Gross amount of recognized liabilities	Gross amount offset in the Balance Sheets	Net amount of liabilities presented in the Balance Sheets
Repurchase agreements			
December 31, 2022	\$ 281	\$ —	\$ 281
December 31, 2021	88	—	88

(in millions)	Gross amount not offset in the Balance Sheets		
	Net amount of liabilities presented in the Balance Sheets	Financial instruments	Cash collateral pledged
Commercial account holders			
December 31, 2022	\$ 281	\$ 327	\$ —
December 31, 2021	88	161	—

The securities underlying the agreements to repurchase are book-entry securities and were delivered by appropriate entry into the counterparties' accounts or into segregated tri-party custodial accounts at the FHLB. The securities underlying the agreements to repurchase continue to be reflected in ASB's asset accounts. The counterparties or tri-parties may determine that additional collateral is required based on movements in the fair value of the collateral. Typically, a five percent discount is taken from the fair value of the investment securities to determine the value of the collateral pledged for the repurchase agreements.

Information concerning securities sold under agreements to repurchase, which provided for the repurchase of identical securities, was as follows:

(dollars in thousands)	2022	2021	2020
Amount outstanding as of December 31	\$ 281,120	\$ 88,305	\$ 89,670
Average amount outstanding during the year	127,170	88,405	73,738
Maximum amount outstanding as of any month-end	284,040	129,665	100,580
Weighted-average interest rate as of December 31	3.02%	0.02%	0.02%
Weighted-average interest rate during the year	0.99%	0.02%	0.42%
Weighted-average remaining days to maturity as of December 31	1	1	1

Securities sold under agreements to repurchase were summarized as follows:

December 31	2022			2021		
Maturity	Repurchase liability	Weighted- average interest rate	Collateralized by mortgage-backed securities and federal agency obligations at fair value plus accrued interest	Repurchase liability	Weighted- average interest rate	Collateralized by mortgage-backed securities and federal agency obligations at fair value plus accrued interest
(dollars in thousands)						
Overnight	\$ 281,120	3.02%	\$ 326,841	\$ 88,305	0.02%	\$ 160,847
1 to 29 days	—	—%	—	—	—%	—
30 to 90 days	—	—%	—	—	—%	—
Over 90 days	—	—%	—	—	—%	—
	\$ 281,120	3.02%	\$ 326,841	\$ 88,305	0.02%	\$ 160,847

Advances from Federal Home Loan Bank. Outstanding FHLB advances were \$414 million and nil as of December 31, 2022 and 2021, respectively. ASB and the FHLB are parties to an Advances, Pledge and Security Agreement (Advances Agreement), which applies to currently outstanding and future advances, and governs the terms and conditions under which ASB borrows and the FHLB makes loans or advances from time to time. Under the Advances Agreement, ASB agrees to abide by the FHLB's credit policies, and makes certain warranties and representations to the FHLB. Upon the occurrence of and during the continuation of an "Event of Default" (which term includes any event of nonpayment of interest or principal of any advance when due or failure to perform any promise or obligation under the Advances Agreement or other credit arrangements between the parties), the FHLB may, at its option, declare all indebtedness and accrued interest thereon, including any

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

prepayment fees or charges, to be immediately due and payable. Advances from the FHLB are collateralized by loans, investment securities and stock in the FHLB. As of December 31, 2022 and 2021, ASB’s available FHLB borrowing capacity was \$1.6 billion, and \$2.0 billion, respectively. In February 2020, the FHLB of Des Moines notified its members that certain assets, which included high-quality home equity lines of credit that were priced off a variable index with a fixed rate option, would no longer qualify as collateral for FHLB Advances and effective October 1, 2020, the FHLB of Des Moines no longer accepted the fixed rate portion of any home equity lines of credit as collateral. In addition, effective July 13, 2020, the FHLB of Des Moines lowered their Loan to Value (LTV), a system-wide percentage applied to eligible pledged collateral to determine borrowing capacity, to reflect ongoing risks in the market due to COVID-19. The lower LTV reduced ASB’s collateral value of the existing pledged loans and the borrowing capacity. To increase the borrowing capacity at the FHLB of Des Moines, ASB pledged commercial real estate loans and is evaluating other assets to pledge as collateral to increase its reserve borrowing capacity with the FHLB.

ASB is required to obtain and hold a specific number of shares of capital stock of the FHLB. ASB was in compliance with all Advances Agreement requirements as of December 31, 2022 and 2021.

Common stock equity. ASB is regulated and supervised by the OCC. Failure to meet minimum capital requirements can initiate certain mandatory and possibly additional discretionary actions by regulators that, if undertaken, could have a direct material effect on ASB’s financial statements. Under capital adequacy guidelines and the regulatory framework for prompt corrective action, ASB must meet specific capital guidelines that involve quantitative measures of ASB’s assets, liabilities, and certain off-balance sheet items as calculated under regulatory accounting practices. The capital amounts and classification are also subject to qualitative judgments by the regulators about components, risk weightings, and other factors.

The prompt corrective action provisions impose certain restrictions on institutions that are undercapitalized. The restrictions imposed become increasingly more severe as an institution’s capital category declines from “undercapitalized” to “critically undercapitalized.” The regulators have substantial discretion in the corrective actions they might direct and could include restrictions on dividends and other distributions that ASB may make to ASB Hawaii and the requirement that ASB develop and implement a plan to restore its capital. In 1988, HEI agreed with the OTS predecessor regulatory agency at the time, to contribute additional capital to ASB up to a maximum aggregate amount of approximately \$65.1 million (Capital Maintenance Agreement). As of December 31, 2022, as a result of capital contributions in prior years, HEI’s maximum obligation to contribute additional capital under the Capital Maintenance Agreement has been reduced to approximately \$28.3 million. In addition to OCC oversight, federal law and Federal Reserve Board policy require that HEI, as a savings and loan holding company, serve as a source of financial and managerial strength for any FDIC-insured depository institution that it controls. Accordingly, if ASB were to be in financial distress or to otherwise be viewed by the regulators as in unsatisfactory condition, HEI could be required to provide additional capital or liquidity support or take other action, in support of ASB.

To be categorized as “well capitalized,” ASB must maintain minimum total capital, Tier 1 capital, and Tier 1 leverage ratios as set forth in the table below. As of December 31, 2022, and 2021 ASB was in compliance with the minimum capital requirements under OCC regulations, and was categorized as “well capitalized” under the regulatory framework for prompt corrective action. There are no conditions or events that management believes have changed the institution’s category under the capital guidelines.

The tables below set forth actual and minimum required capital amounts and ratios:

(dollars in thousands)	Actual		Minimum required		Required to be well capitalized	
	Capital	Ratio	Capital	Ratio	Capital	Ratio
December 31, 2022						
Tier 1 leverage	\$ 750,851	7.78%	\$ 386,265	4.00%	\$ 482,831	5.00%
Common equity tier 1	750,851	12.15%	278,076	4.50%	401,665	6.50%
Tier 1 capital	750,851	12.15%	370,767	6.00%	494,356	8.00%
Total capital	811,729	13.14%	494,356	8.00%	617,946	10.00%
December 31, 2021						
Tier 1 leverage	714,789	7.86%	363,630	4.00%	454,538	5.00%
Common equity tier 1	714,789	13.29%	242,072	4.50%	349,659	6.50%
Tier 1 capital	714,789	13.29%	322,762	6.00%	430,350	8.00%
Total capital	769,836	14.31%	430,350	8.00%	537,937	10.00%

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

In 2022, ASB paid cash dividends of \$42.0 million to HEI, compared to cash dividends of \$59.0 million in 2021. The FRB and OCC approved the dividends.

Related-party transactions. HEI charged ASB \$1.9 million, \$2.1 million and \$2.3 million for general management and administrative services in 2022, 2021 and 2020, respectively. The amounts charged by HEI for services performed by HEI employees to its subsidiaries are allocated primarily on the basis of time expended in providing such services. All amounts charged to ASB were settled as a capital contribution by HEI to ASB.

Derivative financial instruments. ASB enters into interest rate lock commitments (IRLCs) with borrowers, and forward commitments to sell loans or to-be-announced mortgage-backed securities to investors to hedge against the inherent interest rate and pricing risks associated with selling loans.

ASB enters into IRLCs for residential mortgage loans, which commit ASB to lend funds to a potential borrower at a specific interest rate and within a specified period of time. IRLCs that relate to the origination of mortgage loans that will be held for sale are considered derivative financial instruments under applicable accounting guidance. Outstanding IRLCs expose ASB to the risk that the price of the mortgage loans underlying the commitments may decline due to increases in mortgage interest rates from inception of the rate lock to the funding of the loan. The IRLCs are free-standing derivatives which are carried at fair value with changes recorded in mortgage banking income.

ASB enters into forward commitments to hedge the interest rate risk for rate locked mortgage applications in process and closed mortgage loans held for sale. These commitments are primarily forward sales of to-be-announced mortgage backed securities. Generally, when mortgage loans are closed, the forward commitment is liquidated and replaced with a mandatory delivery forward sale of the mortgage to a secondary market investor. In some cases, a best-efforts forward sale agreement is utilized as the forward commitment. These commitments are free-standing derivatives which are carried at fair value with changes recorded in mortgage banking income.

Changes in the fair value of IRLCs and forward commitments subsequent to inception are based on changes in the fair value of the underlying loan resulting from the fulfillment of the commitment and changes in the probability that the loan will fund within the terms of the commitment, which is affected primarily by changes in interest rates and the passage of time.

The notional amount and fair value of ASB's derivative financial instruments were as follows:

December 31 (in thousands)	2022		2021	
	Notional amount	Fair value	Notional amount	Fair value
Interest rate lock commitments	\$ 1,720	\$ 9	\$ 39,377	\$ 638
Forward commitments	1,500	18	38,000	(11)

ASB's derivative financial instruments, their fair values, and balance sheet location were as follows:

Derivative Financial Instruments Not Designated as Hedging Instruments ¹

December 31 (in thousands)	2022		2021	
	Asset derivatives	Liability derivatives	Asset derivatives	Liability derivatives
Interest rate lock commitments	\$ 9	\$ —	\$ 638	\$ —
Forward commitments	18	—	—	11
	\$ 27	\$ —	\$ 638	\$ 11

¹ Asset derivatives are included in other assets and liability derivatives are included in other liabilities in the balance sheets.

The following table presents ASB's derivative financial instruments and the amount and location of the net gains or losses recognized in ASB's statements of income:

Derivative Financial Instruments Not Designated as Hedging Instruments (in thousands)	Location of net gains (losses) recognized in the Statements of Income	Years ended December 31		
		2022	2021	2020
		Interest rate lock commitments	Mortgage banking income	\$ (629)
Forward commitments	Mortgage banking income	29	489	(458)
		\$ (600)	\$ (3,409)	\$ 3,781

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

Commitments. Commitments to extend credit are agreements to lend to a customer as long as there is no violation of any condition established in the commitments. Commitments generally have fixed expiration dates or other termination clauses and may require payment of a fee. Since certain commitments are expected to expire without being drawn upon, the total commitment amounts do not necessarily represent future cash requirements. ASB minimizes its exposure to loss under these commitments by requiring that customers meet certain conditions prior to disbursing funds. The amount of collateral, if any, is based on a credit evaluation of the borrower and may include residential real estate, accounts receivable, inventory and property, plant and equipment.

Letters of credit are conditional commitments issued by ASB to guarantee payment and performance of a customer to a third party. The credit risk involved in issuing letters of credit is essentially the same as that involved in extending loan facilities to customers. ASB holds collateral supporting those commitments for which collateral is deemed necessary.

The following is a summary of outstanding off-balance sheet arrangements:

December 31	2022	2021
(in thousands)		
Unfunded commitments to extend credit:		
Home equity line of credit	\$ 1,264,320	\$ 1,181,496
Commercial and commercial real estate	692,989	612,158
Consumer	85,768	62,090
Residential 1-4 family	20,546	44,262
Commercial and financial standby letters of credit	15,521	11,723
Total	\$ 2,079,144	\$ 1,911,729

Federal Deposit Insurance Corporation assessment. The Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act) raised the minimum reserve ratio for the Deposit Insurance Fund to 1.35 percent but required the Federal Deposit Insurance Corporation (FDIC) to offset the effect of the increase in the minimum reserve ratio on small institutions (generally insured depository institutions with total consolidated assets of \$10 billion or less) when setting assessments. In September 2018, the reserve ratio reached 1.36 percent and the FDIC awarded the small institutions an assessment credit, which was applied to a portion of the 2019 and 2020 assessments for these banks. For the years ended December 31, 2022, 2021 and 2020 ASB's FDIC insurance expenses were \$3.6 million, \$3.2 million and \$2.3 million, respectively.

Note 5 • Short-term borrowings

Commercial paper and bank term loan. As of December 31, 2022 and 2021, HEI had \$50 million and \$54 million of commercial paper outstanding, respectively. The weighted-average interest rate of HEI's outstanding commercial paper, as of December 31, 2022 and 2021 was 5.19% and 0.55%, respectively.

As of December 31, 2022 and 2021, Hawaiian Electric had \$88 million and no commercial paper outstanding, respectively. The weighted-average interest rate of Hawaiian Electric's outstanding commercial paper as of December 31, 2022 was 4.8%.

As of December 31, 2022, HEI had five letters of credit outstanding in the aggregate amount of \$8 million on behalf of Mauo and Hamakua Energy. As of December 31, 2021, HEI had five letters of credit outstanding in the aggregate amount of \$10 million, on behalf of Mauo and Hamakua Energy.

HEI Term Loan. On October 20, 2022, HEI executed a \$100 million term loan credit agreement with two financial institutions. The term loan facility allows HEI to draw down proceeds on a delayed basis through March 31, 2023, at which time the term loan commitment expires. Borrowings under the facility bear interest at Term Secured Overnight Financing Rate (SOFR), as defined in the agreement, plus an applicable margin and a SOFR spread adjustment. On December 28, 2022, HEI drew an initial \$35 million SOFR term loan at an initial interest of 5.32% for an initial one month interest period. Any borrowings under the facility mature on November 30, 2023. The term loan facility contains certain restrictive financial covenants that are substantially the same as the financial covenants contained in HEI's revolving unsecured credit facility, as amended.

Credit agreements. On May 14, 2021, HEI and Hawaiian Electric each entered into a separate agreement with a syndicate of nine financial institutions (the HEI Facility and Hawaiian Electric Facility, respectively, and together, the Credit Facilities) to amend and restate their respective previously existing revolving unsecured credit agreements. The \$175 million HEI Facility and the \$200 million Hawaiian Electric Facility both terminate on May 14, 2026. On February 18, 2022, the PUC approved Hawaiian Electric's request to extend the term of the \$200 million Hawaiian Electric Facility to May 14, 2026. In

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

addition to extending the term, Hawaiian Electric also received PUC approval to exercise its options of two one-year extensions of the commitment termination date and to increase its aggregate revolving commitment amount from \$200 million to \$275 million, should there be a need.

None of the facilities are collateralized. As of December 31, 2022 and 2021, no amounts were outstanding under the Credit Facilities.

The Credit Facilities will be maintained to support each company's respective short-term commercial paper program, but may be drawn on to meet each company's respective working capital needs and general corporate purposes.

Under the Credit Facilities, draws generally bear interest, based on each company's respective current long-term credit ratings, at the "Adjusted LIBO Rate," as defined in the Credit Facilities, plus 137.5 and 125.0 basis points for HEI and Hawaiian Electric, respectively, and incur annual fees on undrawn commitments, excluding swingline borrowings, at the rate of 20.0 and 17.5 basis points for HEI and Hawaiian Electric, respectively. The Credit Facilities also include provisions to accommodate a transition from the London Interbank Offered Rate (LIBOR) to an alternative reference rate, based on the secured overnight financing rate administered by the Federal Reserve Bank of New York, upon the phase out of LIBOR as a reference rate.

Additionally, the Credit Facilities contain provisions for pricing adjustments in the event of a long-term ratings change based on the respective Facility's ratings-based pricing grid, which includes the ratings by Fitch, Moody's and S&P. The Credit Facilities do not contain clauses that would affect access to the Credit Facilities by reason of a ratings downgrade, nor do they have broad "material adverse change" clauses. In addition, the Credit Facilities contain provisions for potential annual pricing adjustments to the Eurodollar or Alternate Base Rate margin on draws and fees on undrawn commitments of up to +/-5 basis points and +/-1 basis point, respectively, based on performance against certain sustainability-linked metrics. The sustainability-linked metrics include achievement of renewable portfolio standards in excess of statutory requirements and increasing cumulative penetration of installed MWs of photovoltaic systems on residential rooftops.

The Credit Facilities also include updated terms and conditions customary for facilities of this type and contain customary conditions that must be met in order to draw on them, including compliance with covenants (such as covenants preventing HEI's and Hawaiian Electric's respective subsidiaries from entering into agreements that restrict the ability of such subsidiaries to pay dividends to, or to repay borrowings from, HEI or Hawaiian Electric, as applicable; and a covenant in Hawaiian Electric's facility restricting Hawaiian Electric's ability, as well as the ability of any of its subsidiaries, to guarantee additional indebtedness of the subsidiaries if such additional debt would cause the subsidiary's "Consolidated Subsidiary Funded Debt to Capitalization Ratio" (as defined in the Hawaiian Electric Facility) to exceed 65%).

Under the HEI Facility, it is an event of default if HEI fails to maintain an unconsolidated "Capitalization Ratio" (funded debt) (as defined in the HEI Facility) of 50% or less or if HEI no longer owns Hawaiian Electric or ASB. Under the Hawaiian Electric Facility, it is an event of default if Hawaiian Electric fails to maintain a "Consolidated Capitalization Ratio" (equity) (as defined in the Hawaiian Electric Facility) of at least 35%, or if Hawaiian Electric is no longer owned by HEI.

Note 6 · Long-term debt

December 31	2022	2021
(dollars in thousands)		
Long-term debt of Utilities, net of unamortized debt issuance costs ¹	\$ 1,684,816	\$ 1,676,402
HEI 2.99% term loan, paid in 2022	—	150,000
HEI 3.99% senior notes, due 2023	50,000	50,000
HEI 4.58% senior notes, due 2025	50,000	50,000
HEI 4.72% senior notes, due 2028	100,000	100,000
HEI 2.82% senior notes, due 2028	24,000	24,000
HEI 2.48% senior notes, due 2028	30,000	30,000
HEI 2.98% senior notes, due 2030	50,000	50,000
HEI 3.15% senior notes, due 2031	51,000	51,000
HEI 2.78% senior notes, due 2031	25,000	25,000
HEI 2.98% senior notes, due 2032	30,000	—
HEI 5.43% senior notes, due 2032	75,000	—
HEI 5.43% senior notes, due 2034	35,000	—
HEI 3.74% senior notes, due 2051	20,000	20,000
HEI 3.94% senior notes, due 2052	20,000	—
Hamakua Energy 4.02% non-recourse notes, due 2030 ²	49,048	52,166
Mauo LIBOR + 1.375% loan, due 2023 ³	11,060	21,702
Mauo 4.90% non-recourse term loan, due 2034 ²	17,692	12,686
Ka‘ie‘ie Waho 2.79% non-recourse loan, due 2031 ²	10,936	12,145
Mahipapa 1.90% non-recourse loan, due 2034 to 2036 ²	58,869	—
Mahipapa 5.25% non-recourse loan, due 2027 ²	724	—
Less unamortized debt issuance costs and debt discount	(8,165)	(3,164)
	<u>\$ 2,384,980</u>	<u>\$ 2,321,937</u>

¹ See components of “Total long-term debt” and unamortized debt issuance costs in Hawaiian Electric and subsidiaries’ Consolidated Statements of Capitalization.

² Secured by real and personal property of the respective entity, including various land parcels, a 60MW combined cycle facility, photovoltaic and battery storage infrastructure, and a biomass plant. The aggregate net book value of the collateralized property, plant & equipment is approximately \$198 million as of December 31, 2022.

³ In December 2021, the loan was amended to allow advances through October 5, 2022, in the maximum aggregate principal amount of up to \$50.5 million and in December 2022, extended the required paydown of the loan balance to the lesser of (i) \$7 million or (ii) the amount of state renewable tax credits not received by March 5, 2023.

As of December 31, 2022, the aggregate principal payments required on the Company’s long-term debt for 2023 through 2027 are \$172 million in 2023, \$13 million in 2024, \$109 million in 2025, \$136 million in 2026 and \$112 million in 2027. As of December 31, 2022, the aggregate payments of principal required on the Utilities’ long-term debt for 2023 through 2027 are \$100 million in 2023, nil in 2024, \$47 million in 2025, \$125 million in 2026 and \$100 million in 2027.

The HEI term loans and senior notes contain customary representation and warranties, affirmative and negative covenants and events of default (the occurrence of which may result in some or all of the notes then outstanding becoming immediately due and payable). The HEI term loans and senior notes also contain provisions requiring the maintenance by HEI of certain financial ratios generally consistent with those in HEI’s revolving unsecured credit facility, as amended. Upon a change of control or certain dispositions of assets (as defined in the note purchase agreements of the senior notes), HEI is required to offer to prepay the senior notes.

The Utilities’ senior notes contain customary representations and warranties, affirmative and negative covenants, and events of default (the occurrence of which may result in some or all of the notes of each and all of the utilities then outstanding becoming immediately due and payable) and provisions requiring the maintenance by Hawaiian Electric, and each of Hawaii Electric Light and Maui Electric, of certain financial ratios generally consistent with those in Hawaiian Electric’s existing, amended revolving unsecured credit agreement.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

Changes in long-term debt.

HEI private placement. On September 29, 2022, HEI entered into a note purchase agreement (HEI NPA) under which HEI has authorized the issue and sale of \$110 million of unsecured senior notes that were drawn on November 1, 2022.

Proceeds from the Series 2022C tranche were used for general corporate purposes, including refinancing a portion of \$150 million of debt that matured in November 2022 and the repayment of a portion of HEI commercial paper outstanding. Proceeds from the Green Series 2022D tranche are expected to be used to finance and/or refinance Green Investments, as defined in the HEI NPA, provided, however, that pending the full allocation of an amount equal to the proceeds from the Green Series 2022D to eligible Green Investments, the proceeds of the Green Series 2022D tranche will be managed in accordance with the Company’s normal treasury practices, including the repayment of existing indebtedness and/or used for working capital purposes.

Once drawn, interest on the notes is paid semiannually on June 15th and December 15th. The HEI NPA contains certain restrictive financial covenants that are substantially the same as the financial covenants contained in HEI’s revolving unsecured credit facility, as amended. The HEI notes may be prepaid in whole or in part at any time at the prepayment price of the principal amount, together with interest accrued to the date of prepayment plus a “Make-Whole Amount,” as defined in the agreements.

On September 29, 2021, HEI executed a \$125 million private placement, utilizing a delayed draw feature with two tranches. The first tranche of \$75 million was drawn on December 29, 2021 and the proceeds were primarily used to invest in the Utilities’ equity to support its capital expenditure program and maintain the Utilities’ equity capitalization ratio of approximately 58%. The second and final tranche of \$50 million was drawn on October 26, 2022, to refinance a portion of \$150 million of debt that matured on November 20, 2022.

The following table displays HEI private placements drawn in 2022.

	HEI Series 2022A	HEI Series 2022B	HEI Series 2022C	HEI Green Series 2022D
Aggregate principal amount	\$30 million	\$20 million	\$75 million	\$35 million
Fixed coupon interest rate	2.98%	3.94%	5.43%	5.43%
Maturity date	10/26/2032	10/26/2052	11/1/2032	11/1/2034

Utilities private placement. On May 11, 2022, the Utilities executed, through a private placement pursuant to separate Note Purchase Agreements (the NPAs), the following unsecured senior notes bearing taxable interest (2022 Notes). The 2022 Notes had a delayed draw feature and the Utilities drew down all the proceeds on June 15, 2022.

	Series 2022A
Aggregate principal amount	\$60 million
Fixed coupon interest rate	3.7%
Maturity date	6/15/2032
Principal amount by company:	
Hawaiian Electric	\$40 million
Hawaii Electric Light	\$10 million
Maui Electric	\$10 million

The 2022 Notes include substantially the same financial covenants and customary conditions as Hawaiian Electric’s credit agreement. Hawaiian Electric is also a party as guarantor under the NPAs entered into by Hawaii Electric Light and Maui Electric. The Utilities did not obtain any of the proceeds at execution and instead drew down all the proceeds on June 15, 2022. The proceeds were used to finance their respective capital expenditures, repay short-term debt used to finance or refinance capital expenditures and/or reimburse funds used for the payment of capital expenditures. The 2022 Notes may be prepaid in whole or in part at any time at the prepayment price of the principal amount plus a “Make-Whole Amount” as defined in the NPAs.

On January 10, 2023, the Utilities executed through a private placement pursuant to separate NPAs, the following unsecured senior notes bearing taxable interest (2023 Notes). The 2023 Notes had a delayed draw feature and the Utilities drew down all the proceeds on February 9, 2023.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

	Series 2023A	Series 2023B	Series 2023C
Aggregate principal amount	\$90 million	\$40 million	\$20 million
Fixed coupon interest rate			
Hawaiian Electric	6.11%	6.25%	6.70%
Hawaii Electric Light	6.25%	—	—
Maui Electric	6.25%	—	—
Maturity date			
Hawaiian Electric	2/9/2030	2/9/2033	2/9/2053
Hawaii Electric Light	2/9/2033	—	—
Maui Electric	2/9/2033	—	—
Principal amount by company:			
Hawaiian Electric	\$40 million	\$40 million	\$20 million
Hawaii Electric Light	\$25 million	—	—
Maui Electric	\$25 million	—	—

The 2023 Notes include substantially the same financial covenants and customary conditions as Hawaiian Electric’s credit agreement. Hawaiian Electric is also a party as guarantor under the NPAs entered into by Hawaii Electric Light and Maui Electric. The Utilities did not obtain any of the proceeds at execution and instead drew down all the proceeds on February 9, 2023. The proceeds were used to finance their respective capital expenditures, repay short-term debt used to finance or refinance capital expenditures and/or reimburse funds used for the payment of capital expenditures. The 2023 Notes may be prepaid in whole or in part at any time at the prepayment price of the principal amount plus a “Make-Whole Amount” as defined in the NPAs.

Mahipapa loan. On July 1, 2022, Mahipapa, a wholly owned subsidiary of Pacific Current, acquired Green Energy Team, LLC’s 7.5 MW renewable, firm dispatchable closed-loop biomass-to-energy facility on Kauai. In connection with the acquisition, Mahipapa assumed approximately \$61 million of long-term debt in various tranches that mature on various dates through 2036. Principal and interest total approximately \$1.6 million per quarter. The loan is secured by all of the assets of Mahipapa and all equity ownership interests in Mahipapa, excluding certain mobile equipment.

Note 7 · Shareholders’ equity

Reserved shares. As of December 31, 2022, HEI had reserved a total of 15.3 million shares of common stock for future issuance under the HEI Dividend Reinvestment and Stock Purchase Plan (DRIP), the Hawaiian Electric Industries Retirement Savings Plan (HEIRSP), the ASB 401(k) Plan, the HEI 2011 Nonemployee Director Stock Plan, and the 2010 Equity and Incentive Plan, as amended.’

Accumulated other comprehensive income/(loss). Changes in the balances of each component of AOCI were as follows:

(in thousands)	HEI Consolidated				Hawaiian Electric Consolidated
	Net unrealized gains (losses) on securities	Unrealized gains (losses) on derivatives	Retirement benefit plans	AOCI	AOCI-Retirement benefit plans
Balance, December 31, 2019	\$ 2,481	\$ (1,613)	\$ (20,907)	\$ (20,039)	\$ (1,279)
Current period other comprehensive income (loss) and reclassifications, net of taxes	17,505	(1,750)	3,020	18,775	(1,640)
Balance, December 31, 2020	19,986	(3,363)	(17,887)	(1,264)	(2,919)
Current period other comprehensive income (loss) and reclassifications, net of taxes	(52,023)	(275)	1,029	(51,269)	(361)
Balance, December 31, 2021	(32,037)	(3,638)	(16,858)	(52,533)	(3,280)
Current period other comprehensive income (loss) and reclassifications, net of taxes	(296,867)	5,629	7,743	(283,495)	6,141
Balance, December 31, 2022	\$ (328,904)	\$ 1,991	\$ (9,115)	\$ (336,028)	\$ 2,861

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

Reclassifications out of AOCI were as follows:

Years ended December 31 (in thousands)	Amount reclassified from AOCI			Affected line item in the Statement of Income/Balance Sheet
	2022	2021	2020	
HEI consolidated				
Net unrealized gains (losses) on available-for sale investment securities:				
Net realized gains on securities included in net income	\$ —	\$ (387)	\$ (1,638)	Gain on sale of investment securities, net
Amortization of unrealized holding losses on held-to-maturity securities	3,993	—	—	Bank revenues
Net realized losses on derivatives qualifying as cash flow hedges	172	37	—	Interest expense
Retirement benefit plans:				
Amortization of prior service credit and net losses recognized during the period in net periodic benefit cost	19,659	19,253	23,689	See Note 10 for additional details
Impact of D&Os of the PUC included in regulatory assets	(199,936)	(171,345)	39,860	See Note 10 for additional details
Total reclassifications	\$ (176,112)	\$ (152,442)	\$ 61,911	
Hawaiian Electric consolidated				
Retirement benefit plans:				
Amortization of prior service credit and net losses recognized during the period in net periodic benefit cost	\$ 18,884	\$ 19,461	\$ 21,550	See Note 10 for additional details
Impact of D&Os of the PUC included in regulatory assets	(199,936)	(171,345)	39,860	See Note 10 for additional details
Total reclassifications	\$ (181,052)	\$ (151,884)	\$ 61,410	

Note 8 · Leases

expire at various dates through 2054 and provide for renewal options up to 10 years. The periods associated with the renewal options are excluded for the purpose of determining the lease term unless the exercise of the renewal option is reasonably certain. In the normal course of business, it is expected that many of these agreements will be replaced by similar agreements. Certain real estate leases require the Company to pay for operating expenses such as common area maintenance, real estate taxes and insurance, which are recognized as variable lease expense when incurred and are not included in the measurement of the lease liability.

and equipment and fossil fuel and renewable energy PPAs and to separate lease components from non-lease components for renewable energy plus battery storage PPAs.

The Utilities contract with independent power producers to supply energy under long-term power purchase agreements. Certain PPAs are treated as operating leases under the lease standard because the Company elected the practical expedient package under which prior conclusions about lease identification were not reassessed. The fixed capacity payments under the PPAs are included in the lease liability, while the variable lease payments (e.g., payments based on kWh) are excluded from the lease liability. Several as-available PPAs have variable-only payment terms based on production. For PPAs with no minimum lease payments, the Utilities do not recognize any lease liabilities or ROU assets, and the related costs are reported as variable lease costs. In the first quarter of 2021, PGV returned to service with firm capacity of 13 MW and ramped up to 25.7 MW in the second quarter of 2022. Hawaii Electric Light is required to make fixed capacity payments based on 25.7 MW. As of December 31, 2022, Hawaii Electric Light has a total of \$19 million in lease liability with a corresponding ROU asset for the PGV PPA.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

The Utilities' lease payments for each operating lease agreement were discounted using its estimated unsecured borrowing rates for the appropriate term, reduced for the estimated impact of collateral, which is a reduction of approximately 20 basis points. ASB's lease payments for each operating lease agreement were discounted using Federal Home Loan Bank of Des Moines (FHLB) fixed rate advance rates, which are collateralized, for the appropriate term. The FHLB is ASB's primary wholesale funding source and can provide collateralized borrowing rates for various terms starting at overnight borrowings to 30-year borrowing terms.

In December 2020, Hawaiian Electric entered into an agreement with an unrelated party to sublease out approximately 64,000 square feet of the downtown Honolulu office space commencing in January 2021. The sublease is an operating lease for six and a half years with an option to extend the term for an additional two years. Estimated base rent revenue is approximately \$8.3 million for the entire lease term. In addition to the base rent, Hawaiian Electric will also collect from the sublessee its proportionate share of all operating expenses, utilities, and taxes, which will be recognized as an additional rent revenue.

In August 2021, the Utilities entered into an agreement with an unrelated party for exclusive use of a barge and tug to transport fuels between islands, commencing in January 2022. The contract is an operating lease with a term of five years with an option to extend the term for an additional five years. Annual base rent expense is approximately \$6.2 million and the operating lease liability recorded upon commencement was \$32 million. In addition to the annual base payment, there are additional payments for operating expenses, such as inspection expense, wharfage and pipeline tolls, which are recognized as variable lease cost when incurred.

On July 31, 2022, Mililani I Solar, the first utility-scale solar-plus-storage project reached commercial operations on Oahu. The project is for a 20-year term and generates 39 MW, including a 156 MWh battery. The Utilities have accounted for battery portion of the project as a finance lease and recorded a lease liability with a corresponding right-of-use asset of \$48 million. The timing of the Utilities' recognition of the lease expense conforms to ratemaking treatment for the Utilities' recovery of the cost of electricity and is included in purchased power for the interest and amortization of financing leases related to PPAs. Any material differences between expense recognition and timing of payments is deferred as a regulatory asset or liability in order to match what is being recovered for ratemaking purposes.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

Year ended December 31, 2022	HEI consolidated			Hawaiian Electric consolidated		
	Other leases	PPAs classified as leases	Total	Other leases	PPAs classified as leases	Total
(dollars in thousands)						
Operating lease cost	\$ 20,811	\$ 46,160	\$ 66,971	\$ 15,030	\$ 46,160	\$ 61,190
Variable lease cost	8,931	241,199	250,130	6,152	241,199	247,351
Sublease income	(2,675)	—	(2,675)	(2,675)	—	(2,675)
Total operating lease cost	\$ 27,067	\$ 287,359	\$ 314,426	\$ 18,507	\$ 287,359	\$ 305,866
Finance lease costs:						
Amortization of right-of-use assets	\$ 188	\$ 1,008	\$ 1,196	\$ —	\$ 1,008	\$ 1,008
Interest on lease liabilities	20	786	806	—	786	786
Total finance lease cost	\$ 208	\$ 1,794	\$ 2,002	\$ —	\$ 1,794	\$ 1,794

Other information

Cash paid for amounts included in the measurement of lease liabilities:

Operating cash flows from operating leases	\$ 19,143	\$ 40,050	\$ 59,193	\$ 14,068	\$ 40,050	\$ 54,118
Operating cash flows from financing leases	\$ 20	\$ 786	\$ 806	\$ —	\$ 786	\$ 786
Financing cash flows from financing leases	\$ 179	\$ 670	\$ 849	\$ —	\$ 670	\$ 670

Weighted-average remaining lease term (in years):

Operating leases	8.1	5.0	7.7	7.3	5.0	6.8
Finance leases	2.4	19.6	19.2	—	19.6	19.6

Weighted-average discount rate:

Operating leases	2.96%	3.50%	3.04%	2.94%	3.50%	3.05%
Finance leases	3.77%	3.92%	3.92%	—	3.92%	3.92%

Year ended December 31, 2021	HEI consolidated			Hawaiian Electric consolidated		
	Other leases	PPAs classified as leases	Total	Other leases	PPAs classified as leases	Total
(dollars in thousands)						
Operating lease cost	\$ 14,184	\$ 66,070	\$ 80,254	\$ 8,578	\$ 66,070	\$ 74,648
Variable lease cost	14,360	257,472	271,832	11,586	257,472	269,058
Sublease income	(2,515)	—	(2,515)	(2,515)	—	(2,515)
Total lease cost	\$ 26,029	\$ 323,542	\$ 349,571	\$ 17,649	\$ 323,542	\$ 341,191

Other information

Cash paid for amounts included in the measurement of lease liabilities—Operating cash flows from operating leases

Operating cash flows from operating leases	\$ 11,239	\$ 62,136	\$ 73,375	\$ 6,168	\$ 62,136	\$ 68,304
Weighted-average remaining lease term—operating leases (in years)	9.1	2.5	6.1	10.0	2.5	5.9
Weighted-average discount rate—operating leases	2.84%	3.63%	3.18%	2.98%	3.63%	3.31%

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

The following table summarizes the maturity of our operating lease liabilities as of December 31, 2022:

(in millions)	HEI consolidated			Hawaiian Electric consolidated		
	Other leases	PPAs classified as leases	Total	Other leases	PPAs classified as leases	Total
2023	\$ 24	\$ 4	\$ 28	\$ 18	\$ 4	\$ 22
2024	21	4	25	15	4	19
2025	16	4	20	12	4	16
2026	15	4	19	12	4	16
2027	9	4	13	6	4	10
Thereafter	38	—	38	25	—	25
Total lease payments	123	20	143	88	20	108
Less: Imputed interest	(15)	(1)	(16)	(9)	(1)	(10)
Total present value of lease payments ¹	\$ 108	\$ 19	\$ 127	\$ 79	\$ 19	\$ 98

¹ The fixed capacity payment related to the existing PPA with PGV, which will expire on December 31, 2027, is included as a lease liability as of December 31, 2021. The PGV facility returned to service with firm capacity in the first quarter of 2021. The annual capacity payment based on the most recent accepted output is approximately \$4 million. The lease liability will be remeasured when PGV ramps back up to the original contracted firm capacity.

The following table summarizes the maturity of our finance lease liabilities for PPAs as of December 31, 2022:

(in millions)	HEI consolidated	Hawaiian Electric consolidated
	PPAs classified as leases	PPAs classified as leases
2023	3	\$ 3
2024	3	3
2025	3	3
2026	4	4
2027	4	4
Thereafter	52	52
Total lease payments	69	69
Less: Imputed interest	(21)	(21)
Total present value of lease payments	\$ 48	\$ 48

Note: Other finance leases are not material.

Note 9 • Revenues

Revenue from contracts with customers. The revenues subject to ASC Topic 606 include the Utilities' electric energy sales revenue and the ASB's transaction fees, as further described below.

Electric Utilities.

Electric energy sales. Electric energy sales represent revenues from the generation and transmission of electricity to customers under tariffs approved by the PUC. Transaction pricing for electricity is determined and approved by the PUC for each rate class and includes revenues from the base electric charges, which are composed of (1) the customer, demand, energy, and minimum charges, and (2) the power factor, service voltage, and other adjustments as provided in each rate and rate rider schedule. Electric energy sales also represent contract rate charge from the generation and transmission of electricity to the Army. The monthly pricing is recalculated on an annual basis based on actual costs, approved by the Army.

The Utilities satisfy performance obligations of electric energy sales over time, i.e., the Utilities generate and transfer control of the electricity over time as the customer simultaneously receives and consumes the benefits provided by the Utilities' performance. Payments from customers are generally due within 30 days from the end of the billing period. As electric bills to customers reflect the amount that corresponds directly with the value of the Utilities' performance to date, the Utilities have elected to use the right to invoice practical expedient, which entitles them to recognize revenue in the amount they have the right to invoice.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

The Utilities' revenues include amounts for recovery of various Hawaii state revenue taxes. Revenue taxes are generally recorded as an expense in the year the related revenues are recognized. For 2022, 2021 and 2020, the Utilities' revenues include recovery of revenue taxes of approximately \$303 million, \$226 million and \$202 million, respectively, which amounts are in "Taxes, other than income taxes" expense. However, the Utilities pay revenue taxes to the taxing authorities based on (1) the prior year's billed revenues (in the case of public service company taxes and PUC fees) in the current year or (2) the current year's cash collections from electric sales (in the case of franchise taxes) after year end. As of December 31, 2022 and 2021, the Utilities had recorded \$188 million and \$128 million, respectively, in "Taxes accrued, including revenue taxes" on the Utilities' consolidated balance sheet for amounts previously collected from customers or accrued for public service company taxes and PUC fees, net of amounts paid to the taxing authorities. Such amounts will be used to pay public service company taxes and PUC fees owed for the following year.

Bank.

Bank fees. Bank fees are primarily transaction-based and are recognized when the transaction has occurred and the performance obligation satisfied. From time to time, customers will request a fee waiver and ASB may grant reversals of fees. Revenues are not recorded for the estimated amount of fee reversals for each period.

Fee from other financial services - These fees primarily include debit card interchange income and fees, automated teller machine fees, credit card interchange income and fees, check ordering fees, wire fees, safe deposit rental fees, corporate/business fees, merchant income, online banking fees and international banking fees. Amounts paid to third parties for payment network expenses are included in this financial statement caption in ASB's Statements of Income and Comprehensive Income Data (in Revenues—Bank financial statement caption of HEI's Consolidated Statements of Income).

Fee income on deposit liabilities - These fees primarily include "not sufficient funds" fees, monthly deposit account service charge fees, commercial account analysis fees and other deposit fees.

Fee income on other financial products - These fees primarily include commission income from the sales of annuity, mutual fund, and life insurance products. ASB also offers a fee-based, managed account product in which income is based on a percentage of assets under management.

Other Segment.

Other sales. Other sales primarily consist of revenues from the generation and sale of renewable energy at fixed contractual prices per kWh to customers under power purchase agreements by Pacific Current subsidiaries. The performance obligation is satisfied over time as renewable energy is generated and control is transferred to the customer that simultaneously receives and consumes the benefits provided. Payments from customers are generally due within 30 days from the end of the billing period. The bill to customers reflect the amount that corresponds directly with the value of performance to date. Pacific Current has elected to use the right to invoice practical expedient, which entitles it to recognize revenue in the amount they have the right to invoice.

Revenues from other sources. Revenues from other sources not subject to ASC Topic 606 are accounted for as follows:

Electric Utilities.

Regulatory revenues. Regulatory revenues primarily consist of revenues from the decoupling mechanism and cost recovery surcharges.

Decoupling mechanism - Under the current decoupling mechanism, the Utilities are allowed to recover or obligated to refund the difference between actual revenue and the target revenue as determined by the PUC, collect annual revenue adjustment mechanism (ARA) and exceptional project recovery mechanism revenues, and recover or refund performance incentive mechanism penalties or rewards. These adjustments will be reflected in tariffs in future periods. Under the PBR framework, the accrued RBA revenues as of the preceding September 30 balance and the annual ARA amount are billed from January 1 through December 31 of each year, which is within 24 months following the end of the year in which they are recorded as required by the accounting standard for alternative revenue programs (see "Regulatory proceedings" in Note 3).

Cost recovery surcharges - For the timely recovery of additional costs incurred, and reconciliation of costs and expenses included in tariffed rates, the Utilities recognize revenues under surcharge mechanisms approved by the PUC. These will be reflected in tariffs in future periods (e.g., ECRC and PPAC).

Since revenue adjustments discussed above resulted from either agreements with the PUC or change in tax law, rather than contracts with customers, they are not subject to the scope of ASC Topic 606. Also, see Notes 1, 3 and 12 of the Consolidated Financial Statements. The Utilities have elected to present these revenue adjustments on a gross basis, which results in the

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

amounts being billed to customers presented in revenues from contracts with customers and the amortization of the related regulatory asset/liability as revenues from other sources. Depending on whether the previous deferral balance being amortized was a regulatory asset or regulatory liability, and depending on the size and direction of the current year deferral of surcharges and/or refunds to customers, it could result in negative regulatory revenue during the year.

Utility pole attachment fees. These fees primarily represent revenues from third-party companies for their access to and shared use of Utilities-owned poles through licensing agreements. As the shared portion of the utility pole is functionally dependent on the rest of the structure, no distinct goods appear to exist. Therefore, these fees are not subject to the scope of ASC Topic 606, but recognized in accordance with ASC Topic 610, *Other Income*.

Army privatization extraordinary O&M (EOM) fees. The monthly EOM fee provides the recovery of the incremental extraordinary O&M costs not covered under the standard utility services. The nature of the work related to transitional period revenue and monthly EOM fees do not represent the Utilities' ongoing major or central operations (i.e., generating, and transmission and distribution of electricity) and is provided specifically for the arrangement between the Utilities and the Army. Therefore, these revenues are not subject to the scope of ASC Topic 606, but recognized in accordance with ASC Topic 610, *Other Income*.

Bank.

Interest and dividend income. Interest and fees on loans are recognized in accordance with ASC Topic 310, *Receivables*, including the related allowance for credit losses. Interest and dividends on investment securities are recognized in accordance with ASC Topic 320, *Investments-Debt and Equity Securities*. See Notes 1 and 4 of the Consolidated Financial Statements.

Other bank noninterest income. Other bank noninterest income primarily consists of mortgage banking income and bank-owned life insurance income.

Mortgage banking income - Mortgage banking income consists primarily of realized and unrealized gains on sale of loans accounted for pursuant to ASC Topic 860, *Transfers and Servicing*. Interest rate lock commitments and forward loan sales are considered derivatives and are accounted pursuant to ASC Topic 815, *Derivatives and Hedging*.

Bank-Owned Life Insurance (BOLI) - The recognition of BOLI cash surrender value does not represent a contract with a customer and is accounted for in accordance with Emerging Issues Task Force Issue 06-05, *Accounting for Purchases of Life Insurance-Determining the Amount that Could be Realized in Accordance with FASB Technical Bulletin No. 85-4, Accounting for Purchases of Life Insurance*.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

Revenue disaggregation. The following tables disaggregate revenues by major source, timing of revenue recognition, and segment:

(in thousands)	Year ended December 31, 2022				Year ended December 31, 2021			
	Electric utility	Bank	Other	Total	Electric utility	Bank	Other	Total
Revenues from contracts with customers								
Electric energy sales - residential	\$ 1,078,372	\$ —	\$ —	\$ 1,078,372	\$ 830,653	\$ —	\$ —	\$ 830,653
Electric energy sales - commercial	1,087,485	—	—	1,087,485	791,424	—	—	791,424
Electric energy sales - large light and power	1,221,608	—	—	1,221,608	837,834	—	—	837,834
Electric energy sales - other	17,063	—	—	17,063	10,770	—	—	10,770
Bank fees	—	48,883	—	48,883	—	46,658	—	46,658
Other sales	—	—	11,804	11,804	—	—	4,086	4,086
Total revenues from contracts with customers	3,404,528	48,883	11,804	3,465,215	2,470,681	46,658	4,086	2,521,425
Revenues from other sources								
Regulatory revenue	(29,124)	—	—	(29,124)	40,069	—	—	40,069
Bank interest and dividend income	—	265,874	—	265,874	—	242,266	—	242,266
Other bank noninterest income	—	6,311	—	6,311	—	17,474	—	17,474
Other	33,183	—	526	33,709	28,886	—	259	29,145
Total revenues from other sources	4,059	272,185	526	276,770	68,955	259,740	259	328,954
Total revenues	\$ 3,408,587	\$ 321,068	\$ 12,330	\$ 3,741,985	\$ 2,539,636	\$ 306,398	\$ 4,345	\$ 2,850,379
Timing of revenue recognition								
Services/goods transferred at a point in time	\$ —	\$ 48,883	\$ —	\$ 48,883	\$ —	\$ 46,658	\$ —	\$ 46,658
Services/goods transferred over time	3,404,528	—	11,804	3,416,332	2,470,681	—	4,086	2,474,767
Total revenues from contracts with customers	\$ 3,404,528	\$ 48,883	\$ 11,804	\$ 3,465,215	\$ 2,470,681	\$ 46,658	\$ 4,086	\$ 2,521,425

There are no material contract assets or liabilities associated with revenues from contracts with customers existing at December 31, 2022 and 2021. Accounts receivable and unbilled revenues related to contracts with customers represent an unconditional right to consideration since all performance obligations have been satisfied. These amounts are disclosed as *accounts receivable and unbilled revenues, net* on HEI's consolidated balance sheets and *customer accounts receivable, net and accrued unbilled revenues, net* on Hawaiian Electric's consolidated balance sheets.

As of December 31, 2022, the Company had no material remaining performance obligations due to the nature of the Company's contracts with its customers. For the Utilities, performance obligations are fulfilled as electricity is delivered to customers. For ASB, fees are recognized when a transaction is completed.

Note 10 · Retirement benefits

Defined benefit plans. Substantially all of the employees of HEI and the Utilities hired on or before December 31, 2021, participate in the Retirement Plan for Employees of Hawaiian Electric Industries, Inc. and Participating Subsidiaries (HEI Pension Plan). The HEI Pension Plan was closed to new employees first hired on or after January 1, 2022. Substantially all of the employees of ASB participated in the American Savings Bank Retirement Plan (ASB Pension Plan) until it was frozen on December 31, 2007. The HEI Pension Plan and the ASB Pension Plan (collectively, the Plans) are qualified, noncontributory defined benefit pension plans and include, in the case of the HEI Pension Plan, benefits for utility union employees determined in accordance with the terms of the collective bargaining agreements between the Utilities and the union. The Plans are subject to the provisions of ERISA. In addition, some current and former executives and directors of HEI and its subsidiaries participate in noncontributory, nonqualified plans (collectively, Supplemental Plans). In general, benefits are based on the employees' or directors' years of service and compensation.

The continuation of the Plans and the Supplemental Plans and the payment of any contribution thereunder are not assumed as contractual obligations by the participating employers. The Supplemental Plan for directors has been frozen since 1996. The ASB Pension Plan was frozen as of December 31, 2007. The HEI Supplemental Executive Retirement Plan and ASB Supplemental Executive Retirement, Disability, and Death Benefit Plan (noncontributory, nonqualified, defined benefit plans) were frozen as of December 31, 2008. No participants have accrued any benefits under these plans after the respective plan's freeze and the plans will be terminated at the time all remaining benefits have been paid.

Each participating employer reserves the right to terminate its participation in the applicable plans at any time, and HEI and ASB reserve the right to terminate their respective plans at any time. If a participating employer terminates its participation in the Plans, the interest of each affected participant would become 100% vested to the extent funded. Upon the termination of the Plans, assets would be distributed to affected participants in accordance with the applicable allocation provisions of ERISA and any excess assets that exist would be paid to the participating employers. Participants' benefits in the Plans are covered up to certain limits under insurance provided by the Pension Benefit Guaranty Corporation.

Postretirement benefits other than pensions. HEI and the Utilities provide eligible employees health and life insurance benefits upon retirement under the Postretirement Welfare Benefits Plan for Employees of Hawaiian Electric Company, Inc. and participating employers (Hawaiian Electric Benefits Plan). Eligibility of employees and dependents is based on eligibility to retire at termination, the retirement date and the date of hire. The plan was amended in 2011, changing eligibility for certain bargaining unit employees hired prior to May 1, 2011, based on new minimum age and service requirements effective January 1, 2012, per the collective bargaining agreement, and certain management employees hired prior to May 1, 2011 based on new eligibility minimum age and service requirements effective January 1, 2012. The minimum age and service requirements for management and bargaining unit employees hired May 1, 2011 and thereafter have increased and their dependents are not eligible to receive postretirement benefits. Employees may be eligible to receive benefits from the HEI Pension Plan but may not be eligible for postretirement welfare benefits if the different eligibility requirements are not met.

The executive death benefit plan was frozen on September 10, 2009 for participants at benefit levels as of that date.

The Company's and Utilities' cost for OPEB has been adjusted to reflect the plan amendments, which reduced benefits and created prior service credits to be amortized over average future service of affected participants. The amortization of the prior service credit will reduce benefit costs until the various credit bases are fully recognized. Each participating employer reserves the right to terminate its participation in the Hawaiian Electric Benefits Plan at any time.

Balance sheet recognition of the funded status of retirement plans. Employers must recognize on their balance sheets the funded status of defined benefit pension and other postretirement benefit plans with an offset to AOCI in shareholders' equity (using the projected benefit obligation (PBO) and accumulated postretirement benefit obligation (APBO), to calculate the funded status).

The PUC allowed the Utilities to adopt pension and OPEB tracking mechanisms in previous rate cases. The amount of the net periodic pension cost (NPPC) and net periodic benefits costs (NPBC) to be recovered in rates is established by the PUC in each rate case or as allowed under the PBR Framework (see "Regulatory proceedings" in Note 3). Under the Utilities' tracking mechanisms, any actual costs determined in accordance with GAAP that are over/under amounts allowed in rates are charged/credited to a regulatory asset/liability. The regulatory asset/liability for each utility will then be amortized over 5 years beginning with the respective utility's next rate case. Accordingly, all retirement benefit expenses (except for executive life and nonqualified pension plan expenses, which amounted to \$1.3 million and \$1.2 million in 2022 and 2021, respectively) determined in accordance with GAAP will be recovered.

Under the tracking mechanisms, amounts that would otherwise be recorded in AOCI (excluding amounts for executive life and nonqualified pension plans), net of taxes, as well as other pension and OPEB charges, are allowed to be reclassified as a

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

regulatory asset, as those costs will be recovered in rates through the NPPC and NPBC in the future. The Utilities have reclassified a regulatory asset/(liability) charges for retirement benefits that would otherwise be recorded in AOCI (amounting to the elimination of a potential adjustment to AOCI of \$(269.3) million pretax and \$(230.8) million pretax for 2022 and 2021, respectively).

Under the pension tracking mechanism, the Utilities are required to make contributions to the pension trust in the amount of the actuarially calculated NPPC, except when limited by the ERISA minimum contribution requirements or the maximum contributions imposed by the Internal Revenue Code. Contributions in excess of the calculated NPPC are recorded in a separate regulatory asset.

The OPEB tracking mechanisms generally require the Utilities to make contributions to the OPEB trust in the amount of the actuarially calculated NPBC, (excluding amounts for executive life), except when limited by material, adverse consequences imposed by federal regulations. Future decisions in rate cases could further impact funding amounts.

Defined benefit pension and other postretirement benefit plans information. The changes in the obligations and assets of the Company's and Utilities' retirement benefit plans and the changes in AOCI (gross) for 2022 and 2021 and the funded status of these plans and amounts related to these plans reflected in the Company's and Utilities' consolidated balance sheets as of December 31, 2022 and 2021 were as follows:

(in thousands)	2022		2021	
	Pension benefits	Other benefits	Pension benefits	Other benefits
HEI consolidated				
Benefit obligation, January 1	\$ 2,644,639	\$ 218,151	\$ 2,624,530	\$ 226,421
Service cost	78,173	2,580	81,432	2,827
Interest cost	80,062	6,502	75,361	6,122
Actuarial gains	(848,905)	(60,283)	(43,300)	(8,527)
Participants contributions	—	3,348	—	2,943
Benefits paid and expenses	(97,204)	(12,862)	(93,384)	(11,635)
Benefit obligation, December 31	1,856,765	157,436	2,644,639	218,151
Fair value of plan assets, January 1	2,320,745	239,311	2,089,491	219,873
Actual return on plan assets	(461,669)	(39,469)	271,443	28,130
Employer contributions	42,542	—	51,777	—
Participants contributions	—	3,348	—	2,943
Benefits paid and expenses	(95,239)	(12,643)	(91,966)	(11,635)
Fair value of plan assets, December 31	1,806,379	190,547	2,320,745	239,311
Accrued benefit asset (liability), December 31	\$ (50,386)	\$ 33,111	\$ (323,894)	\$ 21,160
Other assets	\$ 21,012	\$ 33,526	\$ 23,675	\$ 21,663
Defined benefit pension and other postretirement benefit plans liability	(71,398)	(415)	(347,569)	(503)
Accrued benefit asset (liability), December 31	\$ (50,386)	\$ 33,111	\$ (323,894)	\$ 21,160
AOCI debit/(credit), January 1 (excluding impact of PUC D&Os)	\$ 347,799	\$ (19,975)	\$ 557,564	\$ 2,395
Recognized during year – prior service credit	—	928	—	1,533
Recognized during year – net actuarial gain (loss)	(27,412)	12	(27,245)	(203)
Occurring during year – net actuarial gain	(245,969)	(7,203)	(182,520)	(23,700)
AOCI debit/(credit) before cumulative impact of PUC D&Os, December 31	74,418	(26,238)	347,799	(19,975)
Cumulative impact of PUC D&Os	(55,201)	19,486	(324,162)	19,166
AOCI debit/(credit), December 31	\$ 19,217	\$ (6,752)	\$ 23,637	\$ (809)
Net actuarial loss (gain)	\$ 74,418	\$ (25,363)	\$ 347,799	\$ (18,172)
Prior service gain	—	(875)	—	(1,803)
AOCI debit/(credit) before cumulative impact of PUC D&Os, December 31	74,418	(26,238)	347,799	(19,975)
Cumulative impact of PUC D&Os	(55,201)	19,486	(324,162)	19,166
AOCI debit/(credit), December 31	19,217	(6,752)	23,637	(809)
Income taxes (benefits)	(5,088)	1,740	(6,199)	209
AOCI debit/(credit), net of taxes (benefits), December 31	\$ 14,129	\$ (5,012)	\$ 17,438	\$ (600)

As shown in the table above, as of December 31, 2022, the other postretirement benefit plan with APBO in excess of plan assets is an unfunded plan, and as of December 31, 2021, the other postretirement benefit plans with APBOs in excess of plan assets are unfunded plans.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

(in thousands)	2022		2021	
	Pension benefits	Other benefits	Pension benefits	Other benefits
Hawaiian Electric consolidated				
Benefit obligation, January 1	\$ 2,464,944	\$ 209,470	\$ 2,440,758	\$ 217,074
Service cost	75,845	2,554	79,463	2,802
Interest cost	74,363	6,227	70,235	5,875
Actuarial gains	(804,498)	(58,253)	(39,755)	(7,779)
Participants contributions	—	3,286	—	2,886
Benefits paid and expenses	(88,450)	(12,750)	(85,425)	(11,388)
Transfers	(6,079)	—	(332)	—
Benefit obligation, December 31	1,716,125	150,534	2,464,944	209,470
Fair value of plan assets, January 1	2,142,617	235,525	1,909,730	216,315
Actual return on plan assets	(426,825)	(38,764)	266,922	27,712
Employer contributions	41,894	—	51,079	—
Participants contributions	—	3,286	—	2,886
Benefits paid and expenses	(87,952)	(12,541)	(84,852)	(11,388)
Other	(3,854)	(12)	(262)	—
Fair value of plan assets, December 31	1,665,880	187,494	2,142,617	235,525
Accrued benefit asset (liability), December 31	\$ (50,245)	\$ 36,960	\$ (322,327)	\$ 26,055
Other assets	\$ —	\$ 36,960	\$ —	\$ 26,055
Other liabilities (short-term)	(497)	—	(547)	—
Defined benefit pension and other postretirement benefit plans liability	(49,748)	—	(321,780)	—
Accrued benefit asset (liability), December 31	\$ (50,245)	\$ 36,960	\$ (322,327)	\$ 26,055
AOCI debit/(credit), January 1 (excluding impact of PUC D&Os)	\$ 329,645	\$ (20,231)	\$ 538,521	\$ 1,181
Recognized during year – prior service credit	—	925	—	1,530
Recognized during year – net actuarial loss	(26,358)	—	(27,534)	(206)
Occurring during year – net actuarial gain	(246,023)	(6,096)	(181,342)	(22,736)
AOCI debit/(credit) before cumulative impact of PUC D&Os, December 31	57,264	(25,402)	329,645	(20,231)
Cumulative impact of PUC D&Os	(55,201)	19,486	(324,162)	19,166
AOCI debit/(credit), December 31	\$ 2,063	\$ (5,916)	\$ 5,483	\$ (1,065)
Net actuarial loss (gain)	\$ 57,264	\$ (24,530)	\$ 329,645	\$ (18,434)
Prior service gain	—	(872)	—	(1,797)
AOCI debit/(credit) before cumulative impact of PUC D&Os, December 31	57,264	(25,402)	329,645	(20,231)
Cumulative impact of PUC D&Os	(55,201)	19,486	(324,162)	19,166
AOCI debit/(credit), December 31	2,063	(5,916)	5,483	(1,065)
Income taxes (benefits)	(531)	1,523	(1,412)	274
AOCI debit/(credit), net of taxes (benefits), December 31	\$ 1,532	\$ (4,393)	\$ 4,071	\$ (791)

Pension benefits. In 2022, actuarial gains (losses) due to demographic experience, including any assumption changes, the most significant of which was the increase in the discount rate used to measure PBO compared to the prior year, improved funded position while investment returns lower than assumed rates, partially offset the improvement.

In 2021, investment returns were higher than assumed rates and improved the funded position. Actuarial gains due to demographic experience, including assumption changes, the most significant of which was the increase in the discount rate used to measure PBO compared to the prior year, improved funded position while the updates to mortality assumptions projected generationally, partially offset the improvement.

Other benefits. In 2022, actuarial gains (losses) due to demographic experience, including any assumption changes, the most significant of which was the increase in the discount rate used to measure APBO compared to the prior year, improved funded position while investment returns lower than assumed rates, partially offset the improvement.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

In 2021, investment returns were higher than assumed rates and improved funded position. Actuarial gains due to demographic experience, including assumption changes, the most significant of which was the increase in the discount rate used to measure APBO, improved the funded position while the updates to the per capita claims cost to reflect 2022 premiums and mortality assumptions projected generationally, partially offset the improvement.

The dates used to determine retirement benefit measurements for the defined benefit plans and OPEB were December 31 of 2022, 2021 and 2020.

Through December 31, 2020, for purposes of calculating NPPC and NPBC for all plan assets, the Company and the Utilities have determined the market-related value of retirement benefit plan assets, primarily equity securities and fixed income securities, by calculating the difference between the expected return and the actual return on the fair value of the plan assets, then amortizing the difference over future years – 0% in the first year and 25% in each of years two through five – and finally adding or subtracting the unamortized differences for the past four years from fair value. The method includes a 15% range restriction around the fair value of such assets (i.e., 85% to 115% of fair value). Effective January 1, 2021, the Company adopted a change in accounting principle for the plans’ fixed income securities from the calculated market-related value method to the fair value method in the calculation of the expected return on plan assets component of NPPC and NPBC. The remaining plan assets continue to use the calculated market-related value methodology. The Company considers the fair value approach to be preferable for its fixed-income securities portfolio because it results in a current reflection of the changes in the value of plan assets in a way similar to the obligations it is intended to hedge. The Company evaluated the effect of this change in accounting principle and deemed it to be immaterial to the historical financial statements of the Company and Hawaiian Electric and, therefore, did not account for the change retrospectively and recorded the cumulative effects from the change in accounting principle in earnings for non-Utility businesses in the first quarter of 2021. Amounts related to the Utilities were reflected as adjustments to regulatory assets as appropriate, consistent with the expected regulatory treatment as described in the following paragraph.

The Utilities have implemented pension and OPEB tracking mechanisms under which all of their retirement benefit expenses (except for executive life and nonqualified pension plan expenses) determined in accordance with GAAP are recovered over time. Under the tracking mechanisms, any actual costs determined in accordance with GAAP that are over/under amounts allowed in rates are charged/credited to a regulatory asset/liability. The regulatory asset/liability for each utility will then be amortized over 5 years beginning with the respective utility’s next rate case.

A primary goal of the plans is to achieve long-term asset growth sufficient to pay future benefit obligations at a reasonable level of risk. The investment policy target for defined benefit pension and OPEB plans of HEI and the Utilities reflects the philosophy that long-term growth can best be achieved by prudent investments in equity securities while balancing overall fund and pension liability volatility by an appropriate allocation to fixed income securities. To reduce the level of portfolio risk and volatility in returns, efforts have been made to diversify the plans’ investments by asset class, geographic region, market capitalization and investment style. ASB’s frozen, overfunded defined benefit pension plan is invested in a portfolio that uses a liability-driven investment strategy to limit funded status volatility.

The asset allocation of defined benefit retirement plans to equity and fixed income securities (excluding cash) and related investment policy targets and ranges were as follows:

December 31	Pension benefits ¹				Other benefits ²			
	2022	2021	Investment policy		2022	2021	Investment policy	
			Target	Range ³			Target	Range ³
Assets held by category								
U.S. equity securities	58%	59%	50%	40-65%	57%	58%	50%	40-65%
Non-U.S. equity securities	13	13	15	5-25%	15	15	15	5-25%
Fixed income securities	27	27	30	20-60%	28	27	30	20-60%
Private equity	2	1	5	0-10%	—	—	5	0-10%
	100%	100%	100%		100%	100%	100%	

¹ Asset allocation (excluding cash) is applicable to only HEI and the Utilities. As of December 31, 2022 and 2021, nearly all of ASB’s pension assets were invested in fixed income securities.

² Asset allocation (excluding cash) is applicable to only HEI and the Utilities. ASB does not fund its other benefits.

³ Broad range for equity securities is a minimum of 60% and a maximum of 80% for pension benefits and other benefits.

The fair values of the investments shown in the tables below represent the Company’s best estimates of the amounts that would be received upon sale of those assets in an orderly transaction between market participants at that date. Those fair value

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

measurements maximize the use of observable inputs. However, in situations where there is little, if any, market activity for the asset at the measurement date, the fair value measurement reflects the Company's judgments about the assumptions that market participants would use in pricing the asset. Those judgments are developed by the Company based on the best information available in the circumstances.

The Company used the following valuation methodologies for assets measured at fair value. There have been no changes in the methodologies used at December 31, 2022 and 2021.

Equity securities, equity index fund, exchange-traded funds, U.S. Treasury fixed income securities and mutual funds (Level 1). Equity securities, equity index fund, exchange-traded funds, U.S. Treasury fixed income securities and mutual funds are valued at the closing price reported on the active market on which the individual securities or funds are traded.

Fixed income securities and preferred securities (Level 2). Fixed income and preferred securities, other than those issued by the U.S. Treasury, are valued based on yields currently available on comparable securities of issuers with similar credit ratings.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

Assets held in various trusts for the retirement benefit plans are measured at fair value on a recurring basis and were as follows:

(in millions)	Pension benefits			Other benefits		
	December 31	Fair value measurements using		December 31	Fair value measurements using	
		Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)		Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)
2022						
U.S. equity securities	\$ 387	\$ 387	\$ —	\$ 48	\$ 48	\$ —
Non-U.S. equity securities	147	147	—	18	18	—
U.S. equity index and exchange-traded funds	580	580	—	58	58	—
Non-U.S. equity investments at net asset value (NAV)	75	—	—	10	—	—
Total equity investments	1,189	1,114	—	134	124	—
Fixed income securities	83	10	73	—	—	—
Fixed income mutual and exchange-traded funds	225	225	—	50	50	—
Fixed income investments at NAV	226	—	—	3	—	—
Total fixed income investments	534	235	73	53	50	—
Private equity at NAV	34	—	—	—	—	—
Cash equivalents, fund and at NAV	48	15	—	4	3	—
Total	1,805	\$ 1,364	\$ 73	191	\$ 177	\$ —
Cash, receivables and payables, net	1			—		
Fair value of plan assets	<u>\$ 1,806</u>			<u>\$ 191</u>		
2021						
U.S. equity securities	\$ 432	\$ 431	\$ 1	\$ 53	\$ 53	\$ —
Non-U.S. equity securities	188	188	—	24	24	—
U.S. equity index and exchange-traded funds	830	830	—	84	84	—
Non-U.S. equity investments at NAV	96	—	—	12	—	—
Total equity investments	1,546	1,449	1	173	161	—
Fixed income securities and mutual funds	393	146	247	58	56	2
Fixed income investments at NAV	307	—	—	5	—	—
Total fixed income investments	700	146	247	63	56	2
Private equity at NAV	22	—	—	—	—	—
Cash equivalents, fund and at NAV	50	15	—	3	3	—
Total	2,318	\$ 1,610	\$ 248	239	\$ 220	\$ 2
Cash, receivables and payables, net	3			—		
Fair value of plan assets	<u>\$ 2,321</u>			<u>\$ 239</u>		

The fair value of investments measured at NAV presented in the table above is intended to permit reconciliation to the fair value of plan assets.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

The following table represents assets measured at NAV.

Measured at NAV (in millions)	Pension benefits			Other benefits		
	December 31	Redemption frequency	Redemption notice period	December 31	Redemption frequency	Redemption notice period
2022						
Non-U.S. equity funds (a)	\$ 75	Daily-Monthly	5-30 days	\$ 10	Daily-Monthly	5-30 days
Fixed income investments (b)	226	Daily	15 days	3	Daily	15 days
Private equity (c)	34	NA	NA	—	NA	NA
Cash equivalents (d)	33	Daily	0-1 day	1	Daily	0-1 day
	<u>\$ 368</u>			<u>\$ 14</u>		
2021						
Non-U.S. equity funds (a)	\$ 96	Daily-Monthly	5-30 days	\$ 12	Daily-Monthly	5-30 days
Fixed income investments (b)	307	Daily	15 days	5	Daily	15 days
Private equity (c)	22	NA	NA	—	NA	NA
Cash equivalents (d)	35	Daily	0-1 day	—	Daily	0-1 day
	<u>\$ 460</u>			<u>\$ 17</u>		

NA Not applicable

None of the investments presented in the tables above have unfunded commitments, other than private equity disclosed in (c) below.

- (a) Represents investments in funds that primarily invest in non-U.S., emerging markets equities. Redemption frequency for pension benefits assets as of December 31, 2022 were: daily, 59% and monthly, 41%, and as of December 31, 2021 were daily, 61% and monthly, 39%. Redemption frequency for other benefits assets as of December 31, 2022 were: daily, 56% and monthly, 44% and as of December 31, 2021 were: daily, 57% and monthly, 43%.
- (b) Represents investments in fixed income securities invested in a US-dollar denominated fund that seeks to exceed the Bloomberg US Long Corporate A or Better Bond Index through investments in US-dollar denominated fixed income securities and commingled vehicles.
- (c) Represents investment in a private equity fund. The fund is valued as reported by the General Partner, based on the valuation of the underlying investments. As of December 31, 2022 and 2021, the unfunded commitment of the private equity fund was \$56 million and \$66 million, respectively; the fund does not allow redemptions but may be dissolved with six months written notice. The termination date of the fund is November 1, 2100, unless dissolved earlier.
- (d) Represents investments in cash equivalent funds. This class includes funds that invest primarily in securities issued or guaranteed by the U.S. government or its agencies or instrumentalities. For pension benefits, the fund may also invest in fixed income securities of investment grade issuers.

The following weighted-average assumptions were used in the accounting for the plans:

December 31	Pension benefits			Other benefits		
	2022	2021	2020	2022	2021	2020
Benefit obligation						
Discount rate ¹	5.67%	3.05%	2.92%	5.66%	3.07%	2.83%
Rate of compensation increase	3.5	3.5	3.5	NA	NA	NA
Net periodic pension/benefit cost (years ended)						
Discount rate ²	3.05	2.92	3.61	3.07	2.83	3.52
Expected return on plan assets ³	7.25	7.25	7.25	7.25	7.25	7.25
Rate of compensation increase ⁴	3.5	3.5	3.5	NA	NA	NA

NA Not applicable

¹ HEI and the Utilities pension benefits discount rate only at December 31, 2022, 2021 and 2020. ASB's pension benefits discount rate at December 31, 2022, 2021 and 2020 was 5.63%, 3.04% and 2.76%, respectively. All other disclosed rates apply to the Company and the Utilities.

² ASB's pension benefits discount rate for the year ended December 31, 2022, 2021 and 2020 was 3.04%, 2.76% and 3.49%. All other disclosed rates apply to the Company and the Utilities.

³ HEI and the Utilities' plan assets only (gross return). For 2022, 2021 and 2020, ASB's expected return on plan assets was 3.24%, 2.96% and 3.69%, respectively.

⁴ HEI and the Utilities use a graded rate of compensation increase assumption based on age. The rate provided above is an average across all future years of service for the current population. NA for ASB.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

The Company and the Utilities based their selection of an assumed discount rate for 2023 NPPC and NPBC and December 31, 2022 disclosure on a cash flow matching analysis that utilized bond information provided by Bloomberg for all non-callable, high quality bonds (generally rated Aa or better) as of December 31, 2022. In selecting the expected rate of return on plan assets for 2023 NPPC and NPBC: a) HEI and the Utilities considered economic forecasts for the types of investments held by the plans (primarily equity and fixed income investments), the Plans' asset allocations, industry and corporate surveys and the past performance of the plans' assets in selecting 7.25% and b) ASB considered its liability-driven investment strategy in selecting 5.83%, which is consistent with the assumed discount rate as of December 31, 2022 with a 20 basis point active manager premium. For 2022, retirement benefit plans' assets of both the Company and the Utilities had a net loss of (19.8)%.

As of December 31, 2022, the assumed health care trend rates for 2023 and future years were as follows: medical, 6.50%, grading down to 5% for 2029 and thereafter; dental, 5%; and vision, 4%. As of December 31, 2021, the assumed health care trend rates for 2022 and future years were as follows: medical, 6.50%, grading down to 5% for 2028 and thereafter; dental, 5%; and vision, 4%.

The components of NPPC and NPBC were as follows:

(in thousands)	Pension benefits			Other benefits		
	2022	2021	2020	2022	2021	2020
HEI consolidated						
Service cost	\$ 78,173	\$ 81,432	\$ 73,387	\$ 2,580	\$ 2,827	\$ 2,537
Interest cost	80,062	75,361	81,335	6,502	6,122	7,407
Expected return on plan assets	(141,266)	(132,223)	(113,800)	(13,621)	(12,957)	(12,124)
Amortization of net prior service (gain) cost	—	—	8	(928)	(1,533)	(1,761)
Amortization of net actuarial losses	27,412	27,245	33,456	(12)	203	208
Net periodic pension/benefit cost	44,381	51,815	74,386	(5,479)	(5,338)	(3,733)
Impact of PUC D&Os	37,148	27,963	20,997	4,966	4,839	3,179
Net periodic pension/benefit cost (adjusted for impact of PUC D&Os)	\$ 81,529	\$ 79,778	\$ 95,383	\$ (513)	\$ (499)	\$ (554)
Hawaiian Electric consolidated						
Service cost	\$ 75,845	\$ 79,463	\$ 71,604	\$ 2,554	\$ 2,802	\$ 2,515
Interest cost	74,363	70,235	75,484	6,227	5,875	7,103
Expected return on plan assets	(133,873)	(125,404)	(107,369)	(13,381)	(12,755)	(11,957)
Amortization of net prior service (gain) cost	—	—	9	(925)	(1,530)	(1,758)
Amortization of net actuarial losses	26,358	27,534	30,566	—	206	207
Net periodic pension/benefit cost	42,693	51,828	70,294	(5,525)	(5,402)	(3,890)
Impact of PUC D&Os	37,148	27,963	20,997	4,966	4,839	3,179
Net periodic pension/benefit cost (adjusted for impact of PUC D&Os)	\$ 79,841	\$ 79,791	\$ 91,291	\$ (559)	\$ (563)	\$ (711)

The Company recorded pension expense of \$47 million, \$47 million, \$59 million in 2022, 2021 and 2020, respectively, and OPEB income of \$(0.1) million in 2022, 2021 and 2020 and charged the remaining amounts primarily to electric utility plant. The Utilities recorded pension expense of \$45 million, \$47 million and \$55 million, respectively, and OPEB income of \$(0.1) million, \$(0.2) million and \$(0.2) million in 2022, 2021 and 2020, respectively, and charged the remaining amounts primarily to electric utility plant.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

Additional information on the defined benefit pension plans' accumulated benefit obligations (ABOs), which do not consider projected pay increases (unlike the PBOs shown in the table above), and pension plans with ABOs and PBOs in excess of plan assets were as follows:

December 31 (in billions)	HEI consolidated		Hawaiian Electric consolidated	
	2022	2021	2022	2021
Defined benefit plans - ABOs	\$ 1.7	\$ 2.3	\$ 1.5	\$ 2.1
Defined benefit plans with PBOs in excess of plan assets				
PBOs	1.8	2.5	1.7	2.5
Fair value of plan assets	1.7	2.2	1.7	2.1

HEI consolidated. The Company estimates that the cash funding for the qualified defined benefit pension plans in 2023 will be \$8 million, which will fully satisfy the ERISA minimum required contribution, the requirements of the Utilities' pension tracking mechanisms and the Plan's funding policy. The Company's current estimate of contributions to its other postretirement benefit plans in 2023 is nil.

As of December 31, 2022, the benefits expected to be paid under all retirement benefit plans in 2023, 2024, 2025, 2026, 2027 and 2028 through 2032 amount to \$107 million, \$111 million, \$114 million, \$117 million, \$121 million and \$655 million, respectively.

Hawaiian Electric consolidated. The Utilities estimate that the cash funding for the qualified defined benefit pension plan in 2023 will be \$8 million, which will fully satisfy the ERISA minimum required contribution, the requirements of the pension tracking mechanisms and the Plan's funding policy. The Utilities' current estimate of contributions to its other postretirement benefit plans in 2023 is nil.

As of December 31, 2022, the benefits expected to be paid under all retirement benefit plans in 2023, 2024, 2025, 2026, 2027 and 2028 through 2032 amounted to \$98 million, \$101 million, \$104 million, \$107 million, \$110 million and \$601 million, respectively.

Defined contribution plans information. For 2022, 2021 and 2020, the Company's expense for its defined contribution plans under the HEIRSP and the ASB 401(k) Plan was \$9 million, \$6 million and \$7 million, respectively; and its cash contributions were \$7 million, \$6 million and \$7 million, respectively. Included in the 2022 amount are non-elective employer contributions for the Utilities and HEI employees first hired on or after January 1, 2022, equal to 10% of those new employees' annual compensation. For each of 2022, 2021 and 2020 the Utilities' expense and cash contributions for its defined contribution plan under the HEIRSP was \$4 million, \$3 million, and \$3 million, respectively.

Note 11 · Share-based compensation

Under the 2010 Equity and Incentive Plan, as amended, HEI can issue shares of common stock as incentive compensation to selected employees in the form of stock options, stock appreciation rights, restricted shares, restricted stock units, performance shares and other share-based and cash-based awards. The 2010 Equity and Incentive Plan (original EIP) was amended and restated effective March 1, 2014 (EIP) and an additional 1.5 million shares were added to the shares available for issuance under these programs.

As of December 31, 2022, approximately 2.8 million shares remained available for future issuance under the terms of the EIP, assuming recycling of shares withheld to satisfy statutory tax liabilities relating to EIP awards, including an estimated 0.5 million shares that could be issued upon the vesting of outstanding restricted stock units and the achievement of performance goals for awards outstanding under long-term incentive plans (assuming that such performance goals are achieved at maximum levels).

Restricted stock units awarded under the EIP in 2022, 2021, 2020 and 2019 will vest and be issued in unrestricted stock in three (2022 and 2021) or four (2020 and 2019) equal annual increments on the anniversaries of the grant date and are forfeited to the extent they have not become vested for terminations of employment during the vesting period, except that pro-rata vesting is provided for terminations due to death, disability and retirement. Restricted stock units expense has been recognized in accordance with the fair-value-based measurement method of accounting. Dividend equivalent rights are accrued quarterly and are paid at the end of the restriction period when the associated restricted stock units vest.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

Stock performance awards granted under the 2022-24, 2021-23 and 2020-22 long-term incentive plans (LTIP) entitle the grantee to shares of common stock with dividend equivalent rights once service conditions and performance conditions are satisfied at the end of the three-year performance period. LTIP awards are forfeited for terminations of employment during the performance period, except that pro-rata participation is provided for terminations due to death, disability and retirement based upon completed months of service after a minimum of 12 months of service in the performance period. Compensation expense for the stock performance awards portion of the LTIP has been recognized in accordance with the fair-value-based measurement method of accounting for performance shares.

Under the 2011 Nonemployee Director Stock Plan (2011 Director Plan), HEI can issue shares of common stock as compensation to nonemployee directors of HEI, Hawaiian Electric and ASB. As of December 31, 2022, there were 208,627 shares remaining available for future issuance under the 2011 Director Plan.

Share-based compensation expense and the related income tax benefit were as follows:

(in millions)	2022		2021		2020
HEI consolidated					
Share-based compensation expense ¹	\$	10.4	\$	9.1	\$ 5.8
Income tax benefit		2.1		1.4	1.0
Hawaiian Electric consolidated					
Share-based compensation expense ¹		3.0		2.7	1.8
Income tax benefit		0.7		0.6	0.4

¹ For 2022, 2021 and 2020, the Company has not capitalized any share-based compensation.

Stock awards. HEI granted HEI common stock to nonemployee directors under the 2011 Director Plan as follows:

(dollars in millions)	2022		2021		2020
Shares granted		35,720		29,816	36,100
Fair value	\$	1.5	\$	1.3	\$ 1.3
Income tax benefit		0.4		0.3	0.3

The number of shares issued to each nonemployee director of HEI, Hawaiian Electric and ASB is determined based on the closing price of HEI common stock on the grant date.

Restricted stock units. Information about HEI's grants of restricted stock units was as follows:

	2022		2021		2020	
	Shares	(1)	Shares	(1)	Shares	(1)
Outstanding, January 1	233,448	\$ 38.10	193,939	\$ 40.89	207,641	\$ 35.36
Granted	98,463	41.31	137,582	34.66	78,595	47.99
Vested	(96,282)	37.75	(79,623)	38.51	(77,719)	34.19
Forfeited	(53,101)	39.01	(18,450)	39.92	(14,578)	36.20
Outstanding, December 31	182,528	\$ 39.75	233,448	\$ 38.10	193,939	\$ 40.89
Total weighted-average grant-date fair value of shares granted (in millions)	\$	4.1	\$	4.8	\$	3.8

(1) Weighted-average grant-date fair value per share based on the average price of HEI common stock on the date of grant.

For 2022, 2021 and 2020, total restricted stock units and related dividends that vested had a fair value of \$4.2 million, \$3.0 million and \$4.2 million, respectively, and the related tax benefits were \$0.6 million, \$0.6 million and \$0.7 million, respectively.

As of December 31, 2022, there was \$4.3 million of total unrecognized compensation cost related to the nonvested restricted stock units. The cost is expected to be recognized over a weighted-average period of 1.7 years.

Long-term incentive plan payable in stock. The 2020-22, 2021-23 and 2022-24 LTIPs provide for performance awards under the EIP of shares of HEI common stock based on the satisfaction of performance goals, including a market condition goal. The number of shares of HEI common stock that may be awarded is fixed on the date the grants are made, subject to the achievement of specified performance levels and calculated dividend equivalents. The potential payout varies from 0% to 200% of the number of target shares, depending on the achievement of the goals. The market condition goal is based on HEI's total shareholder return (TSR) compared to the Edison Electric Institute Index over the relevant three-year period. The other performance condition goals relate to EPS growth, return on average common equity (ROACE), renewable portfolio standards,

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

carbon emissions reduction, Hawaiian Electric’s net income growth, ASB’s efficiency ratio and strategic initiatives and Pacific Current’s EBITDA growth and return on average invested capital.

LTIP linked to TSR. Information about HEI’s LTIP grants linked to TSR was as follows:

	2022		2021		2020	
	Shares	(1)	Shares	(1)	Shares	(1)
Outstanding, January 1	90,974	\$ 42.86	89,222	\$ 42.10	96,402	\$ 39.62
Granted	26,469	54.92	46,024	41.12	24,630	48.62
Vested (issued or unissued and cancelled)	(29,042)	41.07	(32,355)	38.20	(29,409)	39.51
Forfeited	(16,827)	44.45	(11,917)	43.07	(2,401)	41.22
Outstanding, December 31	71,574	\$ 47.67	90,974	\$ 42.86	89,222	\$ 42.10
Total weighted-average grant-date fair value of shares granted (in millions)	\$ 1.5		\$ 1.9		\$ 1.2	

(1) Weighted-average grant-date fair value per share determined using a Monte Carlo simulation model.

The grant date fair values of the shares were determined using a Monte Carlo simulation model utilizing actual information for the common shares of HEI and its peers for the period from the beginning of the performance period to the grant date and estimated future stock volatility of HEI and its peers over the remaining three-year performance period. The expected stock volatility assumptions for HEI and its peer group were based on the three-year historic stock volatility. A dividend assumption is not required for the Monte Carlo simulation because the grant payout includes dividend equivalents and projected returns include the value of reinvested dividends.

The following table summarizes the assumptions used to determine the fair value of the LTIP awards linked to TSR and the resulting fair value of LTIP awards granted:

	2022	2021	2020
Risk-free interest rate	1.71%	0.19%	1.39%
Expected life in years	3	3	3
Expected volatility	31.0%	29.9%	13.1%
Range of expected volatility for Peer Group	25.4% to 76.7%	25.6% to 102.9%	13.6% to 95.4%
Grant date fair value (per share)	\$ 54.92	\$ 41.12	\$ 48.62

For 2022, 2021 and 2020, total vested LTIP awards linked to TSR and related dividends had a fair value of \$0.8 million, \$0.8 million and \$2.6 million, respectively, and the related tax benefits were \$0.1 million, \$0.2 million and \$0.4 million, respectively.

As of December 31, 2022, there was \$1.2 million of total unrecognized compensation cost related to the nonvested performance awards payable in shares linked to TSR. The cost is expected to be recognized over a weighted-average period of 1.5 years.

LTIP awards linked to other performance conditions. Information about HEI’s LTIP awards payable in shares linked to other performance conditions was as follows:

	2022		2021		2020	
	Shares	(1)	Shares	(1)	Shares	(1)
Outstanding, January 1	306,342	\$ 38.42	220,715	\$ 41.03	403,768	\$ 35.15
Granted	105,860	41.31	184,102	34.37	98,522	48.10
Vested	(71,807)	37.68	(43,155)	34.12	(135,804)	33.48
Increase above target (cancelled)	36,505	35.75	(7,646)	39.06	(136,163)	36.44
Forfeited	(67,311)	37.35	(47,674)	38.74	(9,608)	38.36
Outstanding, December 31	309,589	\$ 39.50	306,342	\$ 38.42	220,715	\$ 41.03
Total weighted-average grant-date fair value of shares granted (at target performance levels) (in millions)	\$ 4.4		\$ 6.3		\$ 4.7	

(1) Weighted-average grant-date fair value per share based on the average price of HEI common stock on the date of grant.

For 2022, 2021 and 2020, total vested LTIP awards linked to other performance conditions and related dividends had a fair value of \$3.2 million, \$1.7 million and \$7.6 million, respectively, and the related tax benefits were \$0.4 million, \$0.4 million and \$1.2 million, respectively.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

As of December 31, 2022, there was \$3.7 million of total unrecognized compensation cost related to the nonvested shares linked to performance conditions other than TSR. The cost is expected to be recognized over a weighted-average period of 1.4 years.

Note 12 · Income taxes

The components of income taxes attributable to net income for common stock were as follows:

Years ended December 31	HEI consolidated			Hawaiian Electric consolidated		
	2022	2021	2020	2022	2021	2020
(in thousands)						
Federal						
Current	\$ 77,595	\$ 51,455	\$ 23,207	\$ 75,118	\$ 42,794	\$ 31,950
Deferred	(37,410)	(11,689)	(4,215)	(39,646)	(12,109)	(5,408)
Deferred tax credits, net*	4,031	4,611	10,979	137	302	1,549
	44,216	44,377	29,971	35,609	30,987	28,091
State						
Current	11,981	12,119	8,430	15,780	4,861	3,768
Deferred	4,914	6,290	2,509	(1,769)	8,279	8,559
Deferred tax credits, net*	56	21	—	56	21	—
	16,951	18,430	10,939	14,067	13,161	12,327
Total	\$ 61,167	\$ 62,807	\$ 40,910	\$ 49,676	\$ 44,148	\$ 40,418

* In 2022, 2021 and 2020, primarily represents federal tax credits related to Mauo’s solar-plus-storage project, deferred and amortized starting in 2022, 2021 and 2020, respectively.

A reconciliation of the amount of income taxes computed at the federal statutory rate to the amount provided in the consolidated statements of income was as follows:

Years ended December 31	HEI consolidated			Hawaiian Electric consolidated		
	2022	2021	2020	2022	2021	2020
(in thousands)						
Amount at the federal statutory income tax rate	\$ 63,881	\$ 65,281	\$ 50,531	\$ 50,526	\$ 46,995	\$ 44,468
Increase (decrease) resulting from:						
State income taxes, net of federal income tax benefit	14,438	15,735	9,448	11,026	10,323	9,658
Net deferred tax asset (liability) adjustment related to the Tax Act	(9,886)	(9,886)	(11,267)	(9,886)	(9,886)	(11,267)
Other, net	(7,266)	(8,323)	(7,802)	(1,990)	(3,284)	(2,441)
Total	\$ 61,167	\$ 62,807	\$ 40,910	\$ 49,676	\$ 44,148	\$ 40,418
Effective income tax rate (%)	20.1	20.2	17.0	20.6	19.7	19.1

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

The tax effects of book and tax basis differences that give rise to deferred tax assets and liabilities were as follows:

December 31	HEI consolidated			Hawaiian Electric consolidated		
	2022	2021		2022	2021	
(in thousands)						
Deferred tax assets						
Regulatory liabilities, excluding amounts attributable to property, plant and equipment	\$ 82,488	\$ 87,817		\$ 82,488	\$ 87,817	
Operating lease liabilities	45,016	35,449		37,472	29,661	
Retirement benefits	7,692	—		6,852	—	
Revenue taxes	51,392	35,040		51,392	35,040	
Allowance for bad debts	22,734	26,217		2,195	7,156	
Available-for-sale investments	120,405	11,728		—	—	
Other ¹	39,399	46,790		20,287	20,529	
Total deferred tax assets	369,126	243,041		200,686	180,203	
Deferred tax liabilities						
Property, plant and equipment related	511,832	500,659		497,929	490,713	
Operating lease right-of-use assets	44,461	35,271		37,472	29,661	
Regulatory assets, excluding amounts attributable to property, plant and equipment	22,183	23,700		22,183	23,700	
Retirement benefits	—	6,863		—	8,261	
Other	53,112	61,308		27,532	36,502	
Total deferred tax liabilities	631,588	627,801		585,116	588,837	
Net deferred income tax liability	\$ 262,462	\$ 384,760		\$ 384,430	\$ 408,634	

¹ As of December 31, 2022, HEI consolidated has deferred tax assets of \$4.3 million relating to the benefit of state tax credit carryforwards of \$5.6 million. These state tax credit carryforwards primarily relate to the West Loch PV project and do not expire. The Company concluded that as of December 31, 2022, a valuation allowance is not required.

The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences are deductible. Based upon historical taxable income and projections for future taxable income, management believes it is more likely than not the Company and the Utilities will realize substantially all of the benefits of the deferred tax assets. As of December 31, 2022 and 2021, valuation allowances for deferred tax benefits were nil. The Utilities are included in the consolidated federal and Hawaii income tax returns of HEI and are subject to the provisions of HEI's tax sharing agreement, which determines each subsidiary's (or subgroup's) income tax return liabilities and refunds on a standalone basis as if it filed a separate return (or subgroup consolidated return).

The following is a reconciliation of the Company's liability for unrecognized tax benefits for 2022, 2021 and 2020.

(in millions)	HEI consolidated			Hawaiian Electric consolidated		
	2022	2021	2020	2022	2021	2020
Unrecognized tax benefits, January 1	\$ 17.1	\$ 12.7	\$ 2.2	\$ 11.6	\$ 12.7	\$ 1.7
Additions based on tax positions taken during the year	19.0	2.8	0.2	0.1	0.3	0.2
Reductions based on tax positions taken during the year	(3.5)	(0.5)	—	—	—	—
Additions for tax positions of prior years	0.6	7.6	11.6	0.2	0.2	11.6
Reductions for tax positions of prior years	(2.6)	(5.5)	(0.1)	(0.2)	(1.6)	(0.1)
Lapses of statute of limitations	—	—	(0.2)	—	—	(0.2)
Settlement	—	—	(1.0)	—	—	(0.5)
Unrecognized tax benefits, December 31	\$ 30.6	\$ 17.1	\$ 12.7	\$ 11.7	\$ 11.6	\$ 12.7

At December 31, 2022 and 2021, there were \$10.2 million of unrecognized tax benefits that, if recognized, would affect the Company's and Utilities' annual effective tax rate.

HEI consolidated. The Company recognizes interest accrued related to unrecognized tax benefits in "Interest expense—other than on deposit liabilities and other bank borrowings" and penalties, if any, in operating expenses. In 2022, 2021 and

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

2020, the Company recognized approximately \$0.4 million, \$0.2 million and \$(0.5) million, respectively, in interest expense. The Company had \$0.6 million and \$0.3 million of interest accrued as of December 31, 2022 and 2021, respectively.

Hawaiian Electric consolidated. The Utilities recognize interest accrued related to unrecognized tax benefits in “Interest expense and other charges, net” and penalties, if any, in operating expenses. In 2022, 2021 and 2020, the Utilities recognized approximately \$0.1 million, \$0.1 million and \$(0.3) million, respectively, in interest expense. The Utilities had \$0.2 million and \$0.1 million of interest accrued as of December 31, 2022 and 2021, respectively.

As of December 31, 2022, the disclosures above present the Company’s and the Utilities’ accruals for potential tax liabilities, which involve management’s judgment regarding the likelihood of the benefits being sustained under governmental review. While the Company and the Utilities currently do not expect material changes to occur in the next twelve months, the Company and the Utilities are generally unable to estimate the range of impacts on the balance of uncertain tax positions or the impact on the effective tax rate from the resolution of these issues until the Internal Revenue Service addresses them in the current examination process, and therefore, it is possible that the amount of unrecognized benefit with respect to the Company’s and the Utilities’ uncertain tax positions could increase or decrease within the next 12 months. The final resolution of uncertain tax positions could result in adjustments to recorded amounts.

Based on information currently available, the Company and the Utilities believe these accruals have adequately provided for potential income tax issues with federal and state tax authorities, and that the ultimate resolution of tax issues for all open tax periods will not have a material adverse effect on its results of operations, financial condition or liquidity.

The statute of limitations for IRS examinations has expired for years prior to 2017. The Company is currently under IRS examination for the tax years 2017 and 2018. In the fourth quarter of 2020, the Company and the Hawaii Department of Taxation agreed to a final assessment of tax liabilities for the years 2011 through 2018, however, the statute of limitations for Hawaii remains open for tax years 2017 and subsequent.

Tax developments. The Inflation Reduction Act of 2022 (IRA) was signed by President Biden on August 16, 2022. Key provisions under the IRA include a 15% corporate alternative minimum tax (CAMT) imposed on certain large corporations and a 1% excise tax on stock repurchases after December 31, 2022. Based on current interpretation of the law and current guidance available we do not believe HEI will be impacted by the CAMT or stock repurchase excise tax provisions.

The IRA also creates new tax credits and enhances others to stimulate investment in renewable energy sources. Certain provisions of the IRA will become effective beginning tax year 2023. The Company continues to monitor guidance and assess related tax planning opportunities.

Note 13 · Cash flows

Years ended December 31	2022	2021	2020
(in millions)			
Supplemental disclosures of cash flow information			
HEI consolidated			
Interest paid to non-affiliates, net of amounts capitalized	\$ 106	\$ 98	\$ 98
Income taxes paid (net of refundable credits)	41	41	32
Income taxes refunded (including refundable credits)	2	7	3
Hawaiian Electric consolidated			
Interest paid to non-affiliates, net of amounts capitalized	69	71	65
Income taxes paid (net of refundable credits)	67	45	41
Income taxes refunded (including refundable credits)	—	5	3
Supplemental disclosures of noncash activities			
HEI consolidated			
Property, plant and equipment-Unpaid invoices and accruals for capital expenditures, balance, end of period (investing)	68	48	44
Loans transferred from held for investment to held for sale (investing)	—	61	—
Real estate transferred from property, plant and equipment to other assets held-for-sale (investing)	—	3	—
Right-of-use assets obtained in exchange for operating lease obligations (investing)	51	44	26
Property, plant, equipment and other assets received in exchange for the assumption of debt associated with a business acquisition (investing)	68	—	—
Debt, lease liabilities and other liabilities assumed in business acquisition (financing)	68	—	—
Common stock issued (gross) for director and executive/management compensation (financing) ¹	10	7	16
Obligations to fund low income housing investments, net (investing)	9	36	25
Transfer of securities from available for sale to held to maturities (investing)	755	—	—
Hawaiian Electric consolidated			
Electric utility property, plant and equipment-Unpaid invoices and accruals for capital expenditures, balance, end of period (investing)	64	43	41
Right-of-use assets obtained in exchange for operating lease obligations (investing)	44	44	17
HEI Consolidated and Hawaiian Electric consolidated			
Electric utility property, plant and equipment			
Estimated fair value of noncash contributions in aid of construction (investing)	14	8	10
Increase related to an acquisition (investing)	15	—	—
Right-of-use assets obtained in exchange for finance lease obligations (financing)	48	—	—
Reduction of long-term debt from funds previously transferred for repayment (financing)	—	—	82

¹ The amounts shown represent the market value of common stock issued for director and executive/management compensation and withheld to satisfy statutory tax liabilities.

Note 14 · Regulatory restrictions on net assets

The abilities of certain of HEI's subsidiaries to pay dividends or make other distributions to HEI are subject to contractual and regulatory restrictions. Under the PUC Agreement, in the event that the consolidated common stock equity of the electric utility subsidiaries falls below 35% of the total capitalization of the electric utilities (including the current maturities of long-term debt, but excluding short-term borrowings), the electric utility subsidiaries would, absent PUC approval, be restricted in their payment of cash dividends to 80% of the earnings available for the payment of dividends in the current fiscal year and preceding five years, less the amount of dividends paid during that period. The PUC Agreement also provides that the foregoing dividend restriction shall not be construed as relinquishing any right the PUC may have to review the dividend policies of the electric utility subsidiaries. As of December 31, 2022, the consolidated common stock equity of HEI's electric utility subsidiaries was 57% of their total capitalization (as calculated for purposes of the PUC Agreement). As of December 31, 2022,

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

Hawaiian Electric and its subsidiaries had common stock equity of \$2.3 billion of which approximately \$951 million was not available for transfer to HEI in the form of dividends, loans or advances without regulatory approval.

The ability of ASB to make capital distributions to HEI and other affiliates is restricted under federal law. Subject to a limited exception for stock redemptions that do not result in any decrease in ASB's capital and would improve ASB's financial condition, ASB is prohibited from declaring any dividends, making any other capital distributions, or paying a management fee to a controlling person if, following the distribution or payment, ASB would be deemed to be undercapitalized, significantly undercapitalized or critically undercapitalized. ASB is required to notify the FRB and OCC prior to making any capital distribution (including dividends) to HEI (through ASB Hawaii). All dividends are subject to review by the OCC and FRB and receipt of a letter from the FRB communicating the agencies' non-objection to the payment of any dividend ASB proposes to declare and pay to ASB Hawaii and HEI. Generally, the FRB and OCC may disapprove or deny ASB's request to make a capital distribution if the proposed distribution will cause ASB to become undercapitalized, or the proposed distribution raises safety and soundness concerns, or the proposed distribution violates a prohibition contained in any statute, regulation or agreement between ASB and the OCC. As of December 31, 2022, ASB could transfer approximately \$194 million of net assets to HEI and maintain its "well-capitalized" position.

HEI and its subsidiaries are also subject to debt covenants, preferred stock resolutions and the terms of guarantees that could limit their respective abilities to pay dividends. The Company does not expect that the regulatory and contractual restrictions applicable to HEI and/or its subsidiaries will significantly affect the operations of HEI or its ability to pay dividends on its common stock.

Note 15 · Significant group concentrations of credit risk

Most of the Company's business activity is with customers located in the State of Hawaii.

The Utilities are regulated operating electric public utilities engaged in the generation, purchase, transmission, distribution and sale of electricity on the islands of Oahu, Hawaii, Maui, Lanai and Molokai in the State of Hawaii. The Utilities provide the only electric public utility service on the islands they serve. The Utilities extend credit to customers, all of whom reside or conduct business in the State of Hawaii. See Note 3 for a discussion of the Utilities' major customers. The International Brotherhood of Electrical Workers Local 1260 represents roughly half of the Utilities' workforce covered by a collective bargaining agreement that expires on October 31, 2024.

Most of ASB's financial instruments are based in the State of Hawaii, except for the investment securities it owns. Substantially all real estate loans are collateralized by real estate in Hawaii. ASB's policy is to require mortgage insurance on all real estate loans with a loan to appraisal ratio in excess of 80% at origination.

Pacific Current's investments are in projects located in the State of Hawaii since its strategy is focused on investing in non-regulated renewable energy and sustainable infrastructure in the State of Hawaii.

Note 16 · Fair value measurements

Fair value measurement and disclosure valuation methodology. The following are descriptions of the valuation methodologies used for assets and liabilities recorded at fair value and for estimating fair value for financial instruments not carried at fair value:

Short-term borrowings—other than bank. The carrying amount of short-term borrowings approximated fair value because of the short maturity of these instruments.

Investment securities. The fair value of ASB's investment securities is determined quarterly through pricing obtained from independent third-party pricing services or from brokers not affiliated with the trade. Non-binding broker quotes are infrequent and generally occur for new securities that are settled close to the month-end pricing date. The third-party pricing vendors ASB uses for pricing its securities are reputable firms that provide pricing services on a global basis and have processes in place to ensure quality and control. The third-party pricing services use a variety of methods to determine the fair value of securities that fall under Level 2 of ASB's fair value measurement hierarchy. Among the considerations are quoted prices for similar securities in an active market, yield spreads for similar trades, adjustments for liquidity, size, collateral characteristics, historic and generic prepayment speeds, and other observable market factors.

To enhance the robustness of the pricing process, ASB will on a quarterly basis compare its standard third-party vendor's price with that of another third-party vendor. If the prices are within an acceptable tolerance range, the price of the standard vendor will be accepted. If the variance is beyond the tolerance range, an evaluation will be conducted by ASB and a challenge

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

to the price may be made. Fair value in such cases will be based on the value that best reflects the data and observable characteristics of the security. In all cases, the fair value used will have been independently determined by a third-party pricing vendor or non-affiliated broker.

The fair value of the mortgage revenue bonds is estimated using a discounted cash flow model to calculate the present value of future principal and interest payments and, therefore is classified within Level 3 of the valuation hierarchy.

Loans held for sale. Residential and commercial loans are carried at the lower of cost or market and are valued using market observable pricing inputs, which are derived from third party loan sales and, therefore, are classified within Level 2 of the valuation hierarchy.

Loans held for investment. Fair value of loans held for investment is derived using a discounted cash flow approach which includes an evaluation of the underlying loan characteristics. The valuation model uses loan characteristics which includes product type, maturity dates and the underlying interest rate of the portfolio. This information is input into the valuation models along with various forecast valuation assumptions including prepayment forecasts, to determine the discount rate. These assumptions are derived from internal and third party sources. Since the valuation is derived from model-based techniques, ASB includes loans held for investment within Level 3 of the valuation hierarchy.

Collateral dependent loans. Collateral dependent loans have been adjusted to fair value. When a loan is identified as collateral dependent, the Company measures the impairment using the current fair value of the collateral, less selling costs. Depending on the characteristics of a loan, the fair value of collateral is generally estimated by obtaining external appraisals, but in some cases, the value of the collateral may be estimated as having little or no value. Non-real estate collateral may be valued using an appraisal, net book value per the borrower's financial statements, or aging reports, adjusted or discounted based on management's historical knowledge, changes in market conditions from the time of the valuation and management's expertise and knowledge of the client and client's business, resulting in a Level 3 fair value classification. If it is determined that the value of the collateral dependent loan is less than its recorded investment, the Company recognizes this impairment and adjusts the carrying value of the loan to fair value through the allowance for credit losses.

Real estate acquired in settlement of loans. Foreclosed assets are initially measured at fair value (less estimated costs to sell) and subsequently measured at the lower of the carrying value or fair value less selling costs. Fair values are generally based upon appraisals or independent market prices that are periodically updated subsequent to classification as real estate owned. Such adjustments typically result in a Level 3 classification of the inputs for determining fair value. ASB estimates the fair value of collateral-dependent loans and real estate owned using the sales comparison approach.

Mortgage servicing rights. MSRs are capitalized at fair value based on market data at the time of sale and accounted for in subsequent periods at the lower of amortized cost or fair value. MSRs are evaluated for impairment at each reporting date. ASB's MSRs are stratified based on predominant risk characteristics of the underlying loans including loan type and note rate. For each stratum, fair value is calculated by discounting expected net income streams using discount rates that reflect industry pricing for similar assets. Expected net income streams are estimated based on industry assumptions regarding prepayment expectations and income and expenses associated with servicing residential mortgage loans for others. Impairment is recognized through a valuation allowance for each stratum when the carrying amount exceeds fair value, with any associated provision recorded as a component of loan servicing fees included in "Revenues - bank" in the consolidated statements of income. A direct write-down is recorded when the recoverability of the valuation allowance is deemed to be unrecoverable. ASB compares the fair value of MSRs to an estimated value calculated by an independent third-party. The third-party relies on both published and unpublished sources of market related assumptions and its own experience and expertise to arrive at a value. ASB uses the third-party value only to assess the reasonableness of its own estimate. ASB includes MSRs within Level 3 of the valuation hierarchy.

Time deposits. The fair value of fixed-maturity certificates of deposit was estimated by discounting the future cash flows using the rates currently offered for FHLB advances of similar remaining maturities. Deposit liabilities are classified in Level 2 of the valuation hierarchy.

Other borrowings. For advances and repurchase agreements, fair value is estimated using quantitative discounted cash flow models that require the use of interest rate inputs that are currently offered for advances and repurchase agreements of similar remaining maturities. The majority of market inputs are actively quoted and can be validated through external sources, including broker market transactions and third party pricing services.

Long-term debt—other than bank. Fair value of fixed-rate long-term debt—other than bank was obtained from third-party financial services providers based on the current rates offered for debt of the same or similar remaining maturities and from discounting the future cash flows using the current rates offered for debt of the same or similar risks, terms, and remaining

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

maturities. The carrying amount of floating rate long-term debt—other than bank approximated fair value because of the short-term interest reset periods. Long-term debt—other than bank is classified in Level 2 of the valuation hierarchy.

Interest rate lock commitments (IRLCs). The estimated fair value of commitments to originate residential mortgage loans for sale is based on quoted prices for similar loans in active markets. IRLCs are classified as Level 2 measurements.

Forward sales commitments. To be announced (TBA) mortgage-backed securities forward commitments are classified as Level 1, and consist of publicly-traded debt securities for which identical fair values can be obtained through quoted market prices in active exchange markets. The fair values of ASB's best efforts and mandatory delivery loan sale commitments are determined using quoted prices in the market place that are observable and are classified as Level 2 measurements.

Interest rate swaps. The Company measures its interest rate swaps at fair value. The fair values of the Company's interest rate swaps are based on the estimated amounts that the Company would receive or pay to terminate the contracts at the reporting date and are determined using interest rate pricing models and interest rate related observable inputs. The fair values of the Company's interest rate swaps are classified as a Level 2 measurements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

The following table presents the carrying or notional amount, fair value, and placement in the fair value hierarchy of the Company's financial instruments.

(in thousands)	Carrying or notional amount	Estimated fair value			Total
		Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)	
December 31, 2022					
Financial assets					
HEI consolidated					
Available-for-sale investment securities	\$ 1,429,667	\$ —	\$ 1,414,765	\$ 14,902	\$ 1,429,667
Held-to-maturity investment securities	1,251,747	—	1,150,971	—	1,150,971
Loans, net	5,907,514	—	821	5,453,381	5,454,202
Mortgage servicing rights	9,047	—	—	17,646	17,646
Derivative assets	16,220	18	1,330	—	1,348
Financial liabilities					
HEI consolidated					
Deposit liabilities	611,718	—	597,617	—	597,617
Short-term borrowings—other than bank	172,568	—	172,568	—	172,568
Other bank borrowings	695,120	—	695,095	—	695,095
Long-term debt, net—other than bank	2,384,980	—	2,122,605	—	2,122,605
Derivative liabilities	22,949	—	472	—	472
Hawaiian Electric consolidated					
Short-term borrowings	87,967	—	87,967	—	87,967
Long-term debt, net	1,684,816	—	1,487,496	—	1,487,496
December 31, 2021					
Financial assets					
HEI consolidated					
Available-for-sale investment securities	\$ 2,574,618	\$ —	\$ 2,559,191	\$ 15,427	\$ 2,574,618
Held-to-maturity investment securities	522,270	—	510,474	—	510,474
Loans, net	5,150,388	—	10,403	5,218,121	5,228,524
Mortgage servicing rights	9,950	—	—	14,480	14,480
Derivative assets	57,377	—	909	—	909
Financial liabilities					
HEI consolidated					
Deposit liabilities	423,976	—	442,361	—	442,361
Short-term borrowings—other than bank	53,998	—	53,998	—	53,998
Other bank borrowings	88,305	—	88,304	—	88,304
Long-term debt, net—other than bank	2,321,937	—	2,624,130	—	2,624,130
Derivative liabilities	57,000	11	5,271	—	5,282
Hawaiian Electric consolidated					
Long-term debt, net	1,676,402	—	1,955,710	—	1,955,710

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

Fair value measurements on a recurring basis. Assets and liabilities measured at fair value on a recurring basis were as follows:

December 31 (in thousands)	2022			2021		
	Fair value measurements using			Fair value measurements using		
	Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Available-for-sale investment securities (bank segment)						
Mortgage-backed securities — issued or guaranteed by U.S. Government agencies or sponsored agencies	\$ —	\$ 1,292,968	\$ —	\$ —	\$ 2,437,923	\$ —
U.S. Treasury and federal agency obligations	—	81,063	—	—	90,090	—
Corporate bonds	—	40,734	—	—	31,178	—
Mortgage revenue bonds	—	—	14,902	—	—	15,427
	\$ —	\$ 1,414,765	\$ 14,902	\$ —	\$ 2,559,191	\$ 15,427
Derivative assets						
Interest rate lock commitments (bank segment) ¹	\$ —	\$ 9	\$ —	\$ —	\$ 638	\$ —
Forward commitments (bank segment) ¹	18	—	—	—	—	—
Interest rate swap (Other segment) ²	—	1,321	—	—	271	—
	\$ 18	\$ 1,330	\$ —	\$ —	\$ 909	\$ —
Derivative liabilities						
Interest rate lock commitments (bank segment) ¹	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —
Forward commitments (bank segment) ¹	—	—	—	11	—	—
Interest rate swap (Other segment) ²	—	472	—	—	5,271	—
	\$ —	\$ 472	\$ —	\$ 11	\$ 5,271	\$ —

1 Derivatives are carried at fair value in other assets or other liabilities in the balance sheets with changes in value included in mortgage banking income.

2 Derivatives are included in other assets and other liabilities in the balance sheets.

There were no transfers of financial assets and liabilities between Level 1 and Level 2 of the fair value hierarchy during the years ended December 31, 2022 and 2021.

The changes in Level 3 assets and liabilities measured at fair value on a recurring basis were as follows:

(in thousands)	2022	2021
Mortgage revenue bonds		
Balance, January 1	\$ 15,427	\$ 27,185
Principal payments received	(525)	(11,758)
Purchases	—	—
Unrealized gain (loss) included in other comprehensive income	—	—
Balance, December 31	\$ 14,902	\$ 15,427

Mortgage revenue bonds are issued by the Department of Budget and Finance of the State of Hawaii. The Company estimates the fair value by using a discounted cash flow model to calculate the present value of estimated future principal and interest payments. The unobservable input used in the fair value measurement is the weighted average discount rate. As of December 31, 2022, the weighted average discount rate was 4.89% which was derived by incorporating a credit spread over the one month LIBOR rate. Significant increases (decreases) in the weighted average discount rate could result in a significantly lower (higher) fair value measurement.

Fair value measurements on a nonrecurring basis. Certain assets and liabilities are measured at fair value on a nonrecurring basis and therefore are not included in the tables above. These measurements primarily result from assets carried at the lower of cost or fair value or from impairment of individual assets. As of December 31, 2022 and 2021, there were no financial instruments measured at fair value on a nonrecurring basis.

For 2022 and 2021, there were no adjustments to fair value for ASB's loans held for sale.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

HEI and Hawaiian Electric: None

ITEM 9A. CONTROLS AND PROCEDURES

HEI:

Conclusion Regarding the Effectiveness of Disclosure Controls and Procedures

Scott W. H. Seu, HEI Chief Executive Officer (CEO), and Paul K. Ito, HEI Chief Financial Officer (CFO), have evaluated the disclosure controls and procedures of HEI as of December 31, 2022. Based on their evaluation, as of December 31, 2022, they have concluded that the disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended) were effective in ensuring that information required to be disclosed by HEI in reports HEI files or submits under the Securities Exchange Act of 1934:

- (1) is recorded, processed, summarized, and reported within the time periods specified in the Securities and Exchange Commission rules and forms, and
- (2) is accumulated and communicated to HEI management, including HEI's CEO and CFO, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure.

Management's Annual Report on Internal Control Over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rule 13a-15(f) and Rule 15d-15(f) promulgated under the Securities Exchange Act of 1934, as amended. The Company's internal control over financial reporting was designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Management conducted an evaluation of the effectiveness of the Company's internal control over financial reporting as of December 31, 2022 based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on this evaluation, management has concluded that the Company's internal control over financial reporting was effective as of December 31, 2022.

The effectiveness of the Company's internal control over financial reporting as of December 31, 2022 has been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in its report which appears herein.

Changes in Internal Control over Financial Reporting

There have been no changes in internal control over financial reporting during the quarter ended December 31, 2022 that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

Hawaiian Electric:

Conclusion Regarding the Effectiveness of Disclosure Controls and Procedures

Shelee M. T. Kimura, Hawaiian Electric CEO, and Tayne S. Y. Sekimura, Hawaiian Electric CFO, have evaluated the disclosure controls and procedures of Hawaiian Electric as of December 31, 2022. Based on their evaluation, as of December 31, 2022, they have concluded that the disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended) were effective in ensuring that information required to be disclosed by Hawaiian Electric in reports Hawaiian Electric files or submits under the Securities Exchange Act of 1934:

- (1) is recorded, processed, summarized, and reported within the time periods specified in the Securities and Exchange Commission rules and forms, and
- (2) is accumulated and communicated to Hawaiian Electric management, including Hawaiian Electric's CEO and CFO, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure.

Management’s Annual Report on Internal Control Over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rule 13a-15(f) and Rule 15d-15(f) promulgated under the Securities Exchange Act of 1934, as amended. Hawaiian Electric’s internal control over financial reporting was designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Management conducted an evaluation of the effectiveness of Hawaiian Electric’s internal control over financial reporting as of December 31, 2022 based on criteria established in *Internal Control - Integrated Framework (2013)* issued by COSO. Based on this evaluation, management has concluded that Hawaiian Electric’s internal control over financial reporting was effective as of December 31, 2022.

Changes in Internal Control over Financial Reporting

There have been no changes in internal control over financial reporting during the quarter ended December 31, 2022 that have materially affected, or are reasonably likely to materially affect, Hawaiian Electric’s internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

HEI and Hawaiian Electric: None

ITEM 9C. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

HEI and Hawaiian Electric: None

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

HEI:

Information regarding HEI’s executive officers is provided in the “Information about our Executive Officers” section following Item 4 of this report.

The remaining information required by this Item 10 for HEI is incorporated herein by reference to the following sections in HEI’s 2023 Proxy Statement:

- “Director Nominees for Election”
- “Continuing Directors”
- “Committees of the Board” (portions regarding whether HEI has an audit & risk committee and identifying its members; no other portion of the Committees of the Board section is incorporated herein by reference)
- “Audit & Risk Committee Report” (portion identifying audit & risk committee financial experts who serve on the HEI Audit & Risk Committee only; no other portion of the Audit & Risk Committee Report is incorporated herein by reference)

Family relationships; director arrangements

There are no family relationships between any HEI director or director nominee and any other HEI director or director nominee or any HEI executive officer. There are no arrangements or understandings between any HEI director or director nominee and any other person pursuant to which such director or director nominee was selected. Information required to be reported under this caption is incorporated herein by reference to the “Other relationships and related person transactions” section in HEI’s 2023 Proxy Statement.

Delinquent Section 16(a) reports

Information required to be reported under this caption is incorporated herein by reference to the “Delinquent Section 16(a) Reports” section in HEI’s 2023 Proxy Statement.

Code of Conduct

HEI has a Corporate Code of Conduct that includes a code of ethics applicable to, among others, its principal executive officer, principal financial officer and principal accounting officer. The Corporate Code of Conduct is available on HEI’s website at www.hei.com. HEI intends to disclose the information required by Form 8-K, Item 5.05, “Amendments to the Registrant’s Code of Ethics, or Waiver of a Provision of the Code of Ethics,” through this website and such information will remain available on this website for at least a 12-month period.

Hawaiian Electric:

The information required by this Item 10 for Hawaiian Electric is incorporated herein by reference to pages 1 to 6 of Hawaiian Electric Exhibit 99.1.

ITEM 11. EXECUTIVE COMPENSATION

HEI:

The information required by this Item 11 for HEI is incorporated herein by reference to the information relating to executive and director compensation in HEI’s 2023 Proxy Statement.

Hawaiian Electric:

The information required by this Item 11 for Hawaiian Electric is incorporated herein by reference to:

- Pages 7 to 35 of Hawaiian Electric Exhibit 99.1 to this Form 10-K;
- The discussion of “2021-23 Long-Term Incentive Plan” at pages 17 to 18 of Hawaiian Electric’s Exhibit 99.1 to Annual Report on Form 10-K for the year ended December 31, 2021; and
- Information concerning compensation paid to directors of Hawaiian Electric who are also directors of HEI under the section of HEI’s 2023 Proxy Statement entitled, “Director Compensation.”

COMPENSATION & HUMAN CAPITAL MANAGEMENT COMMITTEE INTERLOCKS AND INSIDER PARTICIPATION

HEI:

The information required to be reported under this caption for HEI is incorporated herein by reference to the “Compensation & Human Capital Management Interlocks and Insider Participation” section in HEI’s 2023 Proxy Statement.

Hawaiian Electric:

The information required to be reported under this caption for Hawaiian Electric is incorporated herein by reference to page 23 of Hawaiian Electric Exhibit 99.1.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

HEI:

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS

The information required by this Item 12 for HEI is incorporated herein by reference to the “Stock Ownership Information-Security Ownership of Certain Beneficial Owners” section in HEI’s 2023 Proxy Statement.

Equity Compensation Plan Information

Information as of December 31, 2022 about HEI Common Stock that may be issued under all of the Company’s equity compensation plans was as follows:

Plan category	(a) Number of securities to be issued upon exercise of outstanding options, warrants and rights (1)	(b) Weighted-average exercise price of outstanding options, warrants and rights	(c) Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (2)
Equity compensation plans approved by shareholders	514,181	\$ —	2,454,293
Equity compensation plans not approved by shareholders	—	—	—
Total	514,181	\$ —	2,454,293

(1) This column includes the number of shares of HEI Common Stock which may be issued under the HEI 2010 Equity and Incentive Plan, as amended (EIP) on account of awards outstanding as of December 31, 2022, including:

EIP	
125,391	Restricted stock units plus estimated compounded dividend equivalents (if applicable)*
388,790	Shares to be issued in February 2023, 2024 and 2025 under the 2020-22, 2021-23 and 2022-24 LTIPs, respectively, plus compounded dividend equivalents**
514,181	

- * Under the EIP as of December 31, 2022, RSUs count as one share against shares available for issuance less estimated shares withheld for taxes under net share settlement, which again become available for the issuance of new shares on a one-to-one basis.
- ** For shares to be issued in February 2024 and 2025 under the 2021-23 and 2022-24 LTIPs, respectively, the number of shares to be issued assumes that applicable performance goals are achieved and shares are issued at maximum levels, reduced by the estimated number of shares withheld for taxes.

(2) This represents the number of shares available as of December 31, 2022 for future awards, including 2,245,666 shares available for future awards under the EIP and 208,627 shares available for future awards under the 2011 Nonemployee Director Plan.

Hawaiian Electric:

The information required by this Item 12 for Hawaiian Electric is incorporated herein by reference to pages 35 to 36 of Hawaiian Electric Exhibit 99.1.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

HEI:

The information required by this Item 13 for HEI is incorporated herein by reference to the sections relating to related person transactions and director independence in HEI’s 2023 Proxy Statement.

Hawaiian Electric:

The information required by this Item 13 for Hawaiian Electric is incorporated herein by reference to pages 36 to 37 of Hawaiian Electric Exhibit 99.1.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

HEI:

The information required by this Item 14 for HEI is incorporated herein by reference to the relevant information in the Audit & Risk Committee Report in HEI's 2023 Proxy Statement (but no other part of the "Audit & Risk Committee Report" is incorporated herein by reference).

Hawaiian Electric:

The information required by this Item 14 for Hawaiian Electric is incorporated herein by reference to page 38 of Hawaiian Electric Exhibit 99.1.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a)(1) Financial statements

See Item 8 for the Consolidated Financial Statements of HEI and Hawaiian Electric.

(a)(2) and (c) Financial statement schedules

The following financial statement schedules for HEI and Hawaiian Electric are included in this report on the pages indicated below:

		<u>Page/s in Form 10-K</u>	
		<u>HEI</u>	<u>Hawaiian Electric</u>
Schedule I	Condensed Financial Information of Registrant, Hawaiian Electric Industries, Inc. (Parent Company) at December 31, 2022 and 2021 and for the years ended December 31, 2022, 2021 and 2020	188-190	NA
Schedule II	Valuation and Qualifying Accounts, Hawaiian Electric Industries, Inc. and subsidiaries and Hawaiian Electric Company, Inc. and subsidiaries for the years ended December 31, 2022, 2021 and 2020	192	192

NA Not applicable.

Certain schedules, other than those listed, are omitted because they are not required, or are not applicable, or the required information is shown in the Consolidated Financial Statements.

ITEM 16. FORM 10-K SUMMARY

HEI and Hawaiian Electric: None

Hawaiian Electric Industries, Inc.
SCHEDULE I — CONDENSED FINANCIAL INFORMATION OF REGISTRANT
HAWAIIAN ELECTRIC INDUSTRIES, INC. (PARENT COMPANY)
CONDENSED BALANCE SHEETS

December 31	2022	2021
(dollars in thousands)		
Assets		
Cash and cash equivalents	\$ 611	\$ 479
Accounts receivable	946	873
Notes receivable from subsidiaries	1,140	—
Property, plant and equipment, net	1,877	2,052
Deferred income tax assets	12,107	17,000
Other assets and intercompany receivables	17,695	15,940
Investments in subsidiaries, at equity	2,894,856	3,025,729
Total assets	\$ 2,929,232	\$ 3,062,073
Liabilities and shareholders' equity		
Liabilities		
Accounts payable	\$ 797	\$ 914
Interest payable	1,554	2,238
Commercial paper	49,683	53,998
Short-term debt, net	34,918	—
Long-term debt, net	557,874	548,480
Retirement benefits liability	21,983	26,340
Other	59,924	39,219
Total liabilities	726,733	671,189
Shareholders' equity		
Preferred stock, no par value, authorized 10,000,000 shares; issued: none	—	—
Common stock, no par value, authorized 200,000,000 shares; issued and outstanding: 109,470,795 shares and 109,311,785 shares at December 31, 2022 and 2021, respectively	1,692,697	1,685,496
Retained earnings	845,830	757,921
Accumulated other comprehensive loss, net of tax benefits	(336,028)	(52,533)
Total shareholders' equity	2,202,499	2,390,884
Total liabilities and shareholders' equity	\$ 2,929,232	\$ 3,062,073

Hawaiian Electric Industries, Inc.
SCHEDULE I — CONDENSED FINANCIAL INFORMATION OF REGISTRANT (continued)
HAWAIIAN ELECTRIC INDUSTRIES, INC. (PARENT COMPANY)
CONDENSED STATEMENTS OF INCOME

Years ended December 31	2022	2021	2020
(in thousands)			
Revenues	\$ 320	\$ 105	\$ 208
Equity in net income of subsidiaries	273,076	278,743	227,098
Expenses:			
Operating, administrative and general	20,850	24,006	20,731
Depreciation of property, plant and equipment	399	414	485
Taxes, other than income taxes	732	514	654
Total expenses	21,981	24,934	21,870
Income before interest expense and income tax benefits	251,415	253,914	205,436
Retirement defined benefits credit (expense)—other than service costs	147	(114)	634
Interest expense	21,997	18,444	18,237
Income before income tax benefits	229,271	235,584	186,565
Income tax benefits	11,867	10,582	11,259
Net income	\$ 241,138	\$ 246,166	\$ 197,824

HAWAIIAN ELECTRIC INDUSTRIES, INC. (PARENT COMPANY)
STATEMENTS OF COMPREHENSIVE INCOME
STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY

Incorporated by reference are HEI and Subsidiaries' Statements of Consolidated Comprehensive Income and Consolidated Statements of Changes in Shareholders' Equity in Part II, Item 8.

Hawaiian Electric Industries, Inc.
SCHEDULE I — CONDENSED FINANCIAL INFORMATION OF REGISTRANT (continued)
HAWAIIAN ELECTRIC INDUSTRIES, INC. (PARENT COMPANY)
CONDENSED STATEMENTS OF CASH FLOWS

Years ended December 31	2022	2021	2020
(in thousands)			
Net cash provided by operating activities	\$ 167,150	\$ 154,151	\$ 134,363
Cash flows from investing activities			
Increase in note receivable from subsidiary	(1,140)	—	—
Decrease in note receivable from subsidiary	—	—	22,719
Capital expenditures	(224)	(10)	(20)
Investments in subsidiaries	(50,629)	(76,232)	(42,664)
Other	1,662	180	2,435
Net cash used in investing activities	(50,331)	(76,062)	(17,530)
Cash flows from financing activities			
Net decrease in short-term borrowings with original maturities of three months or less	(4,315)	(10,493)	(32,232)
Proceeds from issuance of short-term debt	35,000	—	65,000
Repayment of short-term debt	—	(15,000)	(50,000)
Proceeds from issuance of long-term debt	160,000	150,000	50,000
Repayment of long-term debt	(150,000)	(50,000)	—
Proceeds from issuance of syndicated credit facility	—	—	66,300
Repayment of syndicated credit facility	—	—	(66,300)
Withheld shares for employee taxes on vested share-based compensation	(3,165)	(2,006)	(5,700)
Common stock dividends	(153,229)	(148,643)	(144,096)
Other	(978)	(1,767)	(459)
Net cash used in financing activities	(116,687)	(77,909)	(117,487)
Net increase (decrease) in cash and equivalents	132	180	(654)
Cash and cash equivalents, January 1	479	299	953
Cash and cash equivalents, December 31	\$ 611	\$ 479	\$ 299

NOTES TO CONDENSED FINANCIAL INFORMATION

Basis of Presentation

The “Notes to Consolidated Financial Statements” in Part II, Item 8 should be read in conjunction with the above HEI (Parent Company) financial statements. All HEI subsidiaries are reflected in the Condensed Financial Statements under the equity method. Income taxes for equity method investments are included in “Equity in net income of subsidiaries.”

Long-term debt

The components of long-term debt, net, were as follows:

December 31	2022	2021
(dollars in thousands)		
HEI 2.99% term loan, paid in 2022	\$ —	\$ 150,000
HEI 3.99% senior notes, due 2023	50,000	50,000
HEI 4.58% senior notes, due 2025	50,000	50,000
HEI 4.72% senior notes, due 2028	100,000	100,000
HEI 2.82% senior notes, due 2028	24,000	24,000
HEI 2.48% senior notes, due 2028	30,000	30,000
HEI 2.98% senior notes, due 2030	50,000	50,000
HEI 3.15% senior notes, due 2031	51,000	51,000
HEI 2.78% senior notes, due 2031	25,000	25,000
HEI 2.98% senior notes, due 2032	30,000	—
HEI 5.43% senior notes, due 2032	75,000	—
HEI 5.43% senior notes, due 2034	35,000	—
HEI 3.74% senior notes, due 2051	20,000	20,000
HEI 3.94% senior notes, due 2052	20,000	—
Less unamortized debt issuance costs	(2,126)	(1,520)
Long-term debt, net	\$ 557,874	\$ 548,480

The aggregate payments of principal required within five years after December 31, 2022 on long-term debt are \$50 million in 2023, nil in 2024, \$50 million in 2025, nil in 2026, nil for 2027, and \$460 million thereafter.

Income taxes

The Company’s financial reporting policy for income tax allocations is based upon a separate entity concept whereby each subsidiary provides income tax expense (or benefits) as if each were a separate taxable entity. The difference between the aggregate separate tax return income tax provisions and the consolidated financial reporting income tax provision is charged or credited to HEI’s separate tax provision.

Dividends from HEI subsidiaries

In 2022, 2021 and 2020, cash dividends received from subsidiaries were \$168 million, \$172 million and \$145 million, respectively.

Supplemental disclosures of noncash activities

In 2022, 2021 and 2020, \$1.9 million, \$2.1 million and \$2.3 million, respectively, of HEI accounts receivable from ASB Hawaii were reduced with a corresponding reduction in HEI notes payable to ASB Hawaii in noncash transactions.

In 2022, 2021 and 2020, \$1.9 million, \$2.1 million and \$2.3 million, respectively, were contributed as equity by HEI into ASB Hawaii with a corresponding increase in HEI notes payable to ASB Hawaii in noncash transactions.

Under the HEI DRIP, common stock dividends reinvested by shareholders in HEI common stock in noncash transactions was immaterial for 2022, 2021 and 2020 as HEI satisfied the share purchase requirements of the DRIP in 2022, 2021 and 2020 through open market purchases of its common stock rather than new issuances.

Hawaiian Electric Industries, Inc. and subsidiaries
and Hawaiian Electric Company, Inc. and subsidiaries
SCHEDULE II — VALUATION AND QUALIFYING ACCOUNTS
Years ended December 31, 2022, 2021 and 2020

Col. A	Col. B	Col. C		Col. D	Col. E
(in thousands)	Additions				
Description	Balance at beginning of period	Charged to costs and expenses	Charged to other accounts	Deductions	Balance at end of period
2022					
Allowance for uncollectible accounts – electric utility	\$ 26,100	\$ 6,028	\$ (14,626) (a)	\$ 11,391 (b)	\$ 6,111
2021					
Allowance for uncollectible accounts – electric utility	\$ 17,809	\$ 4,183	\$ 11,795 (a)	\$ 7,687 (b)	\$ 26,100
2020					
Allowance for uncollectible accounts – electric utility	\$ 1,377	\$ 2,100	\$ 18,041 (a)	\$ 3,709 (b)	\$ 17,809

- (a) Includes recoveries, (\$16,200) of recoveries from previous deferred bad debt expense for 2022 as well as \$10,700 and \$16,700 of bad debt expenses for 2021 and 2020, respectively, that have been deferred to regulatory assets pursuant to a PUC order as the recovery is probable. Total deferred bad debt expense of \$10,700 in 2021 is net of a \$2,000 reversal associated with customer bill credits to be provided under the Utilities’ bill forgiveness program.
- (b) Bad debts charged off.

(a)(3) and (b) Exhibits

The exhibits listed for HEI and Hawaiian Electric are listed in the index under the headings “HEI” and “Hawaiian Electric,” respectively, except that the exhibits listed under “Hawaiian Electric” are also exhibits for HEI.

EXHIBIT INDEX

The exhibits designated by an asterisk (*) are filed herewith. The exhibits not so designated are incorporated by reference to the indicated filing.

Exhibit no.	Description	Form	File Number	Exhibit #	Filing date
HEI:					
3(i)	<u>HEI’s Amended and Restated Articles of Incorporation effective June 2, 2020.</u>	10-Q	1-8503	3.1	8/6/20
3(ii)	<u>HEI’s Amended and Restated Bylaws effective November 3, 2022.</u>	8-K	1-8503	3	11/7/22
4	<u>Description of HEI Common Stock</u>	10-K	1-8503	4	2/28/20
4.1	<u>Agreement to provide the SEC with instruments which define the rights of holders of certain long-term debt of HEI and its subsidiaries.</u>	10-Q	1-8503	4.1	5/9/22
4.2	<u>Master Note Purchase Agreement among HEI and the Purchasers thereto, dated March 24, 2011.</u>	8-K	1-8503	4(a)	3/28/11
4.2(a)	<u>First Supplement to Note Purchase Agreement among HEI and the Purchasers thereto, dated March 6, 2013.</u>	8-K	1-8503	4(a)	3/6/13
* 4.3	<u>Hawaiian Electric Industries Retirement Savings Plan, restatement effective October 6, 2022.</u>				
4.4	<u>Master Trust Agreement dated as of September 4, 2012 between HEI and ASB and Fidelity Management Trust Company, as Trustee</u>	10-Q	1-8503	4	11/8/12
4.4(a)	<u>Letter Amendment effective November 28, 2012 to Master Trust Agreement dated as of September 4, 2012 between HEI and ASB and Fidelity Management Trust Company.</u>	10-K	1-8503	4.6(a)	2/19/13
4.4(b)	<u>Letter Amendment effective October 1, 2014 to Master Trust Agreement dated as of September 4, 2012 between HEI and ASB and Fidelity Management Trust Company.</u>	10-Q	1-8503	4	11/6/14
4.4(c)	<u>First Amendment effective March 1, 2015 to Master Trust Agreement (dated as of September 4, 2012) between HEI and ASB and Fidelity Management Trust Company.</u>	10-Q	1-8503	4	5/6/15
4.4(d)	<u>Letter Amendment effective August 3, 2015 to Master Trust Agreement (dated as of September 4, 2012) between HEI and ASB and Fidelity Management Trust Company.</u>	10-K	1-8503	4.4(d)	3/1/18
4.4(e)	<u>Letter Amendment effective August 15, 2017 to Master Trust Agreement (dated September 4, 2012) between HEI and ASB and Fidelity Management Trust Company.</u>	10-Q	1-8503	4	11/2/17
4.4(f)	<u>Second Amendment effective January 1, 2018 to Master Trust Agreement (dated September 4, 2012) between HEI and ASB and Fidelity Management Trust Company.</u>	10-K	1-8503	4.4(f)	3/1/18
4.4(g)	<u>Letter of Direction effective January 2, 2018 to Master Trust Agreement (dated September 4, 2012) between HEI and ASB and Fidelity Management Trust Company.</u>	10-K	1-8503	4.4(g)	3/1/18
4.4(h)	<u>Third Amendment effective July 1, 2018 to Master Trust Agreement (dated September 4, 2012) between HEI and ASB and Fidelity Management Trust Company.</u>	10-Q	1-8503	4	8/3/18
4.4(i)	<u>Fourth Amendment effective June 26, 2019 to Master Trust Agreement (dated September 4, 2012) between HEI and ASB and Fidelity Management Trust Company.</u>	S-8	333-232360	4.15	6/26/19
4.4(j)	<u>Letter Amendment effective November 1, 2019 to Master Trust Agreement (dated September 4, 2012) between HEI and ASB and Fidelity Management Trust Company.</u>	10-K	1-8503	4.4(j)	2/28/20
4.4(k)	<u>Fifth Amendment effective March 1, 2020 to Master Trust Agreement (dated September 4, 2012) between HEI and ASB and Fidelity Management Trust Company.</u>	10-Q	1-8503	4.2	5/5/20
4.4(l)	<u>Letter Amendment effective October 15, 2021 to Master Trust Agreement (dated September 4, 2012) between HEI and ASB and Fidelity Management Trust Company.</u>	10-Q	1-8503	4	11/5/21

Exhibit no.	Description	Form	File Number	Exhibit #	Filing date
4.4(m)	<u>Letter Amendment effective November 1, 2022 to Master Trust Agreement (dated September 4, 2012) between HEI and ASB and Fidelity Management Trust Company.</u>	10-Q	1-8503	4	11/7/22
* 4.4(n)	<u>Letter Amendment effective January 1, 2023 to Master Trust Agreement (dated September 4, 2012) between HEI and ASB and Fidelity Management Trust Company.</u>				
4.5	<u>Hawaiian Electric Industries, Inc. Dividend Reinvestment and Stock Purchase Plan, as amended and restated, effective November 3, 2022.</u>	S-3	333-268339	4.3	11/14/22
4.6	<u>American Savings Bank 401(k) Plan, restatement effective January 1, 2013.</u>	10-K	1-8503	4.8	2/19/13
4.6(a)	<u>Amendment 2013-1 to the American Savings Bank 401(k) Plan, effective January 1, 2014.</u>	10-K	1-8503	4.7(a)	2/23/16
4.6(b)	<u>Amendment 2019-1 to the American Savings Bank 401(k) Plan, effective as of May 6, 2019.</u>	S-8	333-232361	4.5	6/26/19
4.6(c)	<u>Amendment 2020-1 to the American Savings Bank 401(k) Plan, effective as of January 1, 2020.</u>	10-K	1-8503	4.1	2/28/20
* 4.6(d)	<u>Amendment 2021-1 to the American Savings Bank 401(k) Plan, executed on of October 4, 2021.</u>				
* 4.6(e)	<u>Amendment 2022-1 to the American Savings Bank 401(k) Plan, executed on June 8, 2022.</u>				
* 4.6(f)	<u>Amendment 2022-2 to the American Savings Bank 401(k) Plan, executed on December 5, 2022.</u>				
* 4.6(g)	<u>Amendment 2023-1 to the American Savings Bank 401(k) Plan, executed on January 12, 2023.</u>				
10.1	<u>Conditions for the Merger and Corporate Restructuring of Hawaiian Electric Company, Inc. dated September 23, 1982.</u>	10-K	1-8503	10.1	2/28/07
10.2	<u>Regulatory Capital Maintenance/Dividend Agreement dated May 26, 1988, between HEI, HEIDI and the Federal Savings and Loan Insurance Corporation (by the Federal Home Loan Bank of Seattle).</u>	8-K	1-8503	10.2	5/9/22
10.3	<u>OTS letter regarding release from Part II.B. of the Regulatory Capital Maintenance/Dividend Agreement dated May 26, 1988.</u>	10-K	1-8503	10.3	5/9/22
HEI Exhibits 10.4 through 10.21 are management contracts or compensatory plans or arrangements required to be filed as exhibits pursuant to Item 15(b) of this report. HEI Exhibits 10.4 through 10.18 are also management contracts or compensatory plans or arrangements with Hawaiian Electric participants.					
10.4	<u>HEI Executive Incentive Compensation Plan amended as of February 4, 2013.</u>	10-K	1-8503	10.4	2/19/13
10.5	<u>HEI Executives' Deferred Compensation Plan amended and restated effective January 1, 2019.</u>	10-K	1-8503	10.5	2/28/19
10.6	<u>Hawaiian Electric Industries, Inc. 2010 Equity and Incentive Plan, as amended and restated November 16, 2010.</u>	10-K	1-8503	10.6	2/18/11
10.7	<u>Hawaiian Electric Industries, Inc. 2010 Equity and Incentive Plan, as amended and restated February 14, 2014.</u>	Proxy (DEF 14A)	1-8503	Appendix D	3/25/14
10.7(a)	<u>Form of Non-Qualified Stock Option Agreement pursuant to 2010 Equity and Incentive Plan.</u>	S-8	333-166737	4.4	5/11/10
10.7(b)	<u>Form of Stock Appreciation Right Agreement pursuant to 2010 Equity and Incentive Plan.</u>	S-8	333-166737	4.5	5/11/10
10.7(c)	<u>Form of Restricted Shares Agreement pursuant to 2010 Equity and Incentive Plan.</u>	S-8	333-166737	4.6	5/11/10
10.7(d)	<u>Form of Performance Shares Agreement pursuant to 2010 Equity and Incentive Plan.</u>	S-8	333-166737	4.7	5/11/10
10.7(e)	<u>Form of Restricted Stock Unit Agreement, pursuant to 2010 Equity and Incentive Plan, as amended and restated February 5, 2021.</u>	10-Q	1-8503	10	5/10/21
10.8	<u>HEI Long-Term Incentive Plan amended and restated as of February 5, 2021.</u>	10-K	1-8503	10.8	2/26/21
10.9	<u>HEI Supplemental Executive Retirement Plan amended and restated as of January 1, 2009.</u>	10-Q	1-8503	10.3	11/5/08
10.9(a)	<u>Amendments to the HEI Supplemental Executive Retirement Plan Freezing Benefit Accruals Effective December 31, 2008.</u>	10-K	1-8503	10.9(a)	2/27/09
10.10	<u>HEI Excess Pay Plan amended and restated as of January 1, 2009.</u>	10-K	1-8503	10.10	2/27/09

Exhibit no.	Description	Form	File Number	Exhibit #	Filing date
10.10(a)	<u>HEI Excess Pay Plan Addendum for Constance H. Lau.</u>	10-K	1-8503	10.10(a)	2/27/09
10.10(b)	<u>Amendment No. 1 dated December 13, 2010 to January 1, 2009 Restatement of HEI Excess Pay Plan.</u>	10-K	1-8503	10.10(c)	2/19/13
10.11	<u>Form of Change in Control Agreement.</u>	10-K	1-8503	10.11	2/27/09
10.12	<u>Nonemployee Director Retirement Plan, effective as of October 1, 1989.</u>	10-K	1-8503	10.12	5/9/22
10.13	<u>HEI 2011 Nonemployee Director Stock Plan, as amended effective October 31, 2019.</u>	10-K	1-8503	10.13	2/28/20
10.14	<u>HEI Non-Employee Directors' Deferred Compensation Plan.</u>	10-Q	1-8503	10.5	11/5/08
10.15	<u>Executive Death Benefit Plan of HEI and Participating Subsidiaries restatement effective as of January 1, 2009.</u>	10-Q	1-8503	10.6	11/5/08
10.15(a)	<u>Resolution of the Compensation Committee of the Board of Directors of Hawaiian Electric Industries, Inc. Re: Adoption of Amendment No. 1 to January 1, 2009 Restatement of the Executive Death Benefit Plan.</u>	10-Q	1-8503	10.1	11/2/09
10.16	<u>Amended and Restated Severance Pay Plan for Management Employees of Hawaiian Electric Industries, Inc. and Executive Employees of Affiliates, effective as of April 2, 2018.</u>	10-Q	1-8503	10	8/3/18
10.17	<u>Hawaiian Electric Industries, Inc. Executives' Deferred Compensation Plan effective on January 1, 2009.</u>	10-Q	1-8503	10.2	11/5/08
10.18	<u>Form of Indemnity Agreement (HEI, Hawaiian Electric and ASB with their respective directors and HEI with certain of its senior officers).</u>	10-Q	1-8503	10.1	11/8/12
10.19	<u>American Savings Bank Select Deferred Compensation Plan (Restatement Effective January 1, 2009).</u>	10-Q	1-8503	10.7	11/5/08
10.19(a)	<u>Amendment No. 1 to January 1, 2009 Restatement of American Savings Bank Select Deferred Compensation Plan dated December 30, 2009.</u>	10-K	1-8503	10.20(a)	2/23/16
10.19(b)	<u>Amendment No. 2 to January 1, 2009 Restatement of American Savings Bank Select Deferred Compensation Plan dated December 29, 2010.</u>	10-K	1-8503	10.20(b)	2/23/16
10.19(c)	<u>Amendment No. 3 to January 1, 2009 Restatement of American Savings Bank Select Deferred Compensation Plan dated December 3, 2014.</u>	10-K	1-8503	10.20(c)	2/23/16
10.19(d)	<u>Amendment No. 4 to January 1, 2009 Restatement of American Savings Bank Select Deferred Compensation Plan dated December 4, 2017.</u>	10-K	1-8503	10.20(d)	3/1/18
10.19(e)	<u>Amendment No. 5 to January 1, 2009 Restatement of American Savings Bank Select Deferred Compensation Plan dated December 5, 2018.</u>	10-K	1-8503	10.20(e)	2/28/20
* 10.19(e)	<u>Amendment No. 6 to January 1, 2009 Restatement of American Savings Bank Select Deferred Compensation Plan dated December 5, 2022.</u>				
10.20	<u>American Savings Bank Supplemental Executive Retirement, Disability, and Death Benefit Plan, effective January 1, 2009.</u>	10-Q	1-8503	10.8	11/5/08
10.20(a)	<u>Amendments to the American Savings Bank Supplemental Executive Retirement, Disability, and Death Benefit Plan Freezing Benefit Accruals Effective December 31, 2008.</u>	10-K	1-8503	10.19(b)	2/27/09
10.21	<u>Executive Separation and Release Agreement dated as of May 5, 2021 between Richard F. Wacker, American Savings Bank, F.S.B., and Hawaiian Electric Industries, Inc.</u>	10-Q	1-8503	10.1	8/9/21
10.22***	<u>Third Amended and Restated Credit Agreement, dated as of May 14, 2021, among Hawaiian Electric Industries, Inc., as Borrower, the Lenders Party Hereto, and Bank of America, N.A. and U.S. Bank National Association, as Co-Syndication Agents, and Wells Fargo Bank, National Association, MUFU Union Bank, N.A., Barclays Bank PLC, Bank of Hawaii and The Toronto-Dominion Bank, New York Branch, as Co-Documentation Agents, and JPMorgan Chase Bank, N.A., as Administrative Agent, Swingline Lender and Issuing Bank, and JPMorgan Chase Bank, N.A. and Bank of America, N.A. as Sustainability Structuring Agents and JPMorgan Chase Bank, N.A., BofA Securities, Inc. and U.S. Bank National Association, as Joint Lead Arrangers and Joint Book Runners.</u>	10-Q	1-8503	10.2	8/9/21
* 21.1	<u>HEI - Subsidiaries of the Registrant.</u>				
* 23.1	<u>Consent of Independent Registered Public Accounting Firm (Deloitte & Touche LLP).</u>				
* 31.1	<u>Certification Pursuant to Section 13a-14 of the Securities Exchange Act of 1934 of Scott W. H. Seu (HEI Chief Executive Officer).</u>				
* 31.2	<u>Certification Pursuant to Section 13a-14 of the Securities Exchange Act of 1934 of Paul K. Ito (HEI Chief Financial Officer).</u>				

<u>Exhibit no.</u>	<u>Description</u>	<u>Form</u>	<u>File Number</u>	<u>Exhibit #</u>	<u>Filing date</u>
* 32.1	<u>HEI Certification Pursuant to 18 U.S.C. Section 1350.</u>				
* 101.INS	XBRL Instance Document.				
* 101.SCH	XBRL Taxonomy Extension Schema Document.				
* 101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document.				
* 101.DEF	XBRL Taxonomy Extension Definition Linkbase Document.				
* 101.LAB	XBRL Taxonomy Extension Label Linkbase Document.				
* 101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document.				
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101).				

Hawaiian Electric:

3(i).1	Hawaiian Electric's Certificate of Amendment of Articles of Incorporation.	10-K	1-4955	3.1	3/31/89
3(i).2	Articles of Amendment to Hawaiian Electric's Amended Articles of Incorporation.	10-K	1-4955	3.1(b)	3/27/90**
3(i).3	Articles of Amendment to Hawaiian Electric's Amended Articles of Incorporation.	10-K	1-4955	3(i).4	3/23/99
3(i).4	<u>Articles of Amendment amending Article V of Hawaiian Electric's Amended Articles of Incorporation effective August 6, 2009.</u>	10-Q	1-4955	3(i).4	8/7/09
3(ii)	<u>Hawaiian Electric's Amended and Restated Bylaws (as last amended August 6, 2010).</u>	8-K	1-4955	3(ii)	8/9/10
4	<u>Description of Hawaiian Electric's Preferred Stock</u>	10-K	1-4955	4	2/28/20
4.1	<u>Agreement to provide the SEC with instruments which define the rights of holders of certain long-term debt of Hawaiian Electric, Hawaii Electric Light and Maui Electric</u>	10-K	1-4955	4.1	3/19/03
4.2	<u>Note Purchase Agreement among Hawaiian Electric and the Purchasers that are parties thereto, dated April 19, 2012.</u>	8-K	1-4955	4(a)	4/23/12
4.3	<u>Note Purchase and Guaranty Agreement among Hawaiian Electric, Maui Electric and the Purchasers that are parties thereto, dated April 19, 2012.</u>	8-K	1-4955	4(b)	4/23/12
4.4	<u>Note Purchase and Guaranty Agreement among Hawaiian Electric, Hawaii Electric Light and the Purchasers that are parties thereto, dated April 19, 2012.</u>	8-K	1-4955	4(c)	4/23/12
4.5	<u>Note Purchase Agreement among Hawaiian Electric and the Purchasers that are parties thereto, dated September 13, 2012.</u>	8-K	1-4955	4	9/14/12
4.6	<u>Note Purchase Agreement among Hawaiian Electric Company, Inc. and the Purchasers that are parties thereto, dated as of October 3, 2013.</u>	8-K	1-4955	4(a)	10/7/13
4.7	<u>Note Purchase and Guaranty Agreement among Hawaiian Electric, Maui Electric Company, Limited and the Purchasers that are parties thereto, dated as of October 3, 2013.</u>	8-K	1-4955	4(b)	10/7/13
4.8	<u>Note Purchase and Guaranty Agreement among Hawaiian Electric, Hawaii Electric Light Company, Inc. and the Purchasers that are parties thereto, dated as of October 3, 2013.</u>	10-Q	1-4955	4	11/7/13
4.9	<u>Note Purchase Agreement among Hawaiian Electric Company, Inc. and the Purchasers that are parties thereto, dated as of October 15, 2015.</u>	8-K	1-4955	4(a)	10/16/15
4.10	<u>Note Purchase and Guaranty Agreement among Hawaiian Electric, Maui Electric Company, Limited and the Purchasers that are parties thereto, dated as of October 15, 2015.</u>	8-K	1-4955	4(b)	10/16/15
4.11	<u>Note Purchase and Guaranty Agreement among Hawaiian Electric, Hawaii Electric Light Company, Inc. and the Purchasers that are parties thereto, dated as of October 15, 2015.</u>	8-K	1-4955	4(c)	10/16/15
4.12	<u>Note Purchase Agreement among Hawaiian Electric Company, Inc. and the Purchasers that are parties thereto, dated as of December 15, 2016.</u>	8-K	1-4955	4	12/19/16
10.1(a)	Power Purchase Agreement between Kalaeloa Partners, L.P., and Hawaiian Electric dated October 14, 1988.	10-Q	1-4955	10(a)	11/14/88
10.1(b)	Amendment No. 1 to Power Purchase Agreement between Hawaiian Electric and Kalaeloa Partners, L.P., dated June 15, 1989.	10-Q	1-4955	10(c)	8/14/89
10.1(c)	Lease Agreement between Kalaeloa Partners, L.P., as Lessor, and Hawaiian Electric, as Lessee, dated February 27, 1989.	10-Q	1-4955	10(d)	8/14/89

<u>Exhibit no.</u>	<u>Description</u>	<u>Form</u>	<u>File Number</u>	<u>Exhibit #</u>	<u>Filing date</u>
10.1(d)	Restated and Amended Amendment No. 2 to Power Purchase Agreement between Hawaiian Electric and Kalaeloa Partners, L.P., dated February 9, 1990.	10-K	1-4955	10.2(c)	3/27/90**
10.1(e)	Amendment No. 3 to Power Purchase Agreement between Hawaiian Electric and Kalaeloa Partners, L.P., dated December 10, 1991.	10-K	1-4955	10.2(e)	3/24/92
10.1(f)	<u>Amendment No. 4 to Power Purchase Agreement between Hawaiian Electric and Kalaeloa Partners, L.P., dated October 1, 1999.</u>	10-Q	1-4955	10.1	11/8/00
10.1(g)	<u>Confirmation Agreement Concerning Section 5.2B(2) of Power Purchase Agreement and Amendment No. 5 to Power Purchase Agreement between Hawaiian Electric and Kalaeloa Partners, L.P., dated October 12, 2004.</u>	10-Q	1-4955	10.3	11/5/04
10.1(h)	<u>Agreement for Increment Two Capacity and Amendment No. 6 to Power Purchase Agreement between Hawaiian Electric and Kalaeloa Partners, L.P., dated October 12, 2004.</u>	10-Q	1-4955	10.4	11/5/04
10.1(i)	<u>Letter agreement dated July 28, 2016 and executed August 1, 2016 extending the term of the Power Purchase Agreement between Hawaiian Electric and Kalaeloa Partners, L.P., dated October 14, 1988 (as amended).</u>	10-Q	1-4955	10	11/4/16
10.1(j)	<u>Amended and Restated Power Purchase Agreement between Hawaiian Electric and Kalaeloa Partners, L.P., dated October 29, 2021.</u>	10-K	1-4955	10.1(j)	2/25/22
10.2(a)	Purchase Power Contract between Hawaii Electric Light and Thermal Power Company dated March 24, 1986.	10-Q	1-4955	10(a)	8/14/89
10.2(b)	Firm Capacity Amendment between Hawaii Electric Light and Puna Geothermal Venture (assignee of AMOR VIII, who is the assignee of Thermal Power Company) dated July 28, 1989 to Purchase Power Contract between Hawaii Electric Light and Thermal Power Company dated March 24, 1986.	10-Q	1-4955	10(b)	8/14/89
10.2(c)	Amendment made in October 1993 to Purchase Power Contract between Hawaii Electric Light and Puna Geothermal Venture dated March 24, 1986, as amended.	10-K	1-4955	10.5(b)	3/27/98
10.2(d)	Third Amendment dated March 7, 1995 to the Purchase Power Contract between Hawaii Electric Light and Puna Geothermal Venture dated March 24, 1986, as amended.	10-K	1-4955	10.5(c)	3/27/98
10.2(e)	Performance Agreement and Fourth Amendment dated February 12, 1996 to the Purchase Power Contract between Hawaii Electric Light and Puna Geothermal Venture dated March 24, 1986, as amended.	10-K	1-4955	10.5(b)	3/25/96
10.2(f)	<u>Fifth Amendment dated February 7, 2011 to the Purchase Power Contract between Hawaii Electric Light and Puna Geothermal Venture dated March 24, 1986, as amended.</u>	10-K	1-4955	10.4(f)	2/17/12
10.2(g)	<u>Power Purchase Agreement between Puna Geothermal Venture and Hawaii Electric Light dated February 7, 2011.</u>	10-K	1-4955	10.4(g)	2/17/12
10.2(h)	<u>Amended and Restated Power Purchase Agreement between Puna Geothermal Venture and Hawaii Electric Light dated December 31, 2019.</u>	10-K	1-4955	10.3(h)	2/28/20
10.3(a)	Power Purchase Agreement between Encogen Hawaii, L.P. and Hawaii Electric Light dated October 22, 1997 (but with the following attachments omitted: Attachment C, "Selected portions of the North American Electric Reliability Council Generating Availability Data System Data Reporting Instructions dated October 1996" and Attachment E, "Form of the Interconnection Agreement between Encogen Hawaii, L.P. and Hawaii Electric Light," which is provided in final form as Exhibit 10.6(b)).	10-K	1-4955	10.7	3/27/98
10.3(b)	Interconnection Agreement between Encogen Hawaii, L.P. and Hawaii Electric Light dated October 22, 1997.	10-K	1-4955	10.7(a)	3/27/98
10.3(c)	Amendment No. 1, executed on January 14, 1999, to Power Purchase Agreement between Encogen Hawaii, L.P. and Hawaii Electric Light dated October 22, 1997.	10-K	1-4955	10.7(b)	3/23/99
10.3(d)	<u>Notice and acknowledgment under power purchase agreement effective November 24, 2017 by Hamakua Energy, LLC and acknowledged by Hawaii Electric Light.</u>	10-K	1-4955	10.4(d)	3/1/18
10.4	<u>Supply Contract for Low Sulfur Fuel Oil, High Sulfur Fuel Oil, No. 2 Diesel, and Ultra-Low Sulfur Diesel by and between Hawaiian Electric, Hawaii Electric Light, and Maui Electric and PAR Hawaii Refining, LLC dated January 21, 2019 (certain confidential information has been omitted)</u>	10-Q	1-4955	10	5/7/19
10.4(a)	<u>First Amendment dated June 9, 2020 to Supply Contract for Low Sulfur Fuel Oil, High Sulfur Fuel Oil, No. 2 Diesel, and Ultra-Low Sulfur Diesel by and between Hawaiian Electric, Hawaii Electric Light, and Maui Electric and PAR Hawaii Refining, LLC dated January 21, 2019 (certain confidential information has been omitted).</u>	10-Q	1-4955	10	8/6/20

<u>Exhibit no.</u>	<u>Description</u>	<u>Form</u>	<u>File Number</u>	<u>Exhibit #</u>	<u>Filing date</u>
10.4(b)	<u>Second Amendment dated February 1, 2022 to Supply Contract for Low Sulfur Fuel Oil, High Sulfur Fuel Oil, No. 2 Diesel, and Ultra-Low Sulfur Diesel by and between Hawaiian Electric, Hawaii Electric Light, and Maui Electric and PAR Hawaii Refining, LLC dated January 21, 2019 (certain confidential information has been omitted).</u>	10-Q	1-4955	10.4	5/9/22
10.5	<u>Supply Contract for Low Sulfur Fuel Oil, High Sulfur Fuel Oil, No. 2 Diesel, and Ultra-Low Sulfur Diesel by and between Hawaiian Electric, Hawaii Electric Light, and Maui Electric and PAR Hawaii Refining, LLC dated February 1, 2022 (certain confidential information has been omitted)</u>	10-Q	1-4955	10.1	5/9/22
10.6	<u>Inter-Island Fuel Transportation Contract between Sause Bros., Inc. and Hawaiian Electric dated August 23, 2021 (certain confidential information has been omitted)</u>	10-K	1-4955	10.6	2/25/22
10.7	<u>Amended and Restated Power Purchase Agreement between Hawaiian Electric and Hu Honua Bioenergy, LLC dated May 9, 2017.</u>	10-K	1-4955	10.11(a)	3/1/18
10.8***	<u>Third Amended and Restated Credit Agreement, dated as of May 14, 2021, among Hawaiian Electric Company, Inc., as Borrower, the Lenders Party Hereto, and Bank of America, N.A. and U.S. Bank National Association, as Co-Syndication Agents, and Wells Fargo Bank, National Association, MUFJ Union Bank, N.A., Barclays Bank PLC, Bank of Hawaii and The Toronto-Dominion Bank, New York Branch, as Co-Documentation Agents, and JPMorgan Chase Bank, N.A., as Administrative Agent, Swingline Lender and Issuing Bank, and JPMorgan Chase Bank, N.A. and Bank of America, N.A. as Sustainability Structuring Agents and JPMorgan Chase Bank, N.A., BofA Securities, Inc. and U.S. Bank National Association, as Joint Lead Arrangers and Joint Book Runners.</u>	10-Q	1-4955	10.3	8/9/21
* 21.2	<u>Hawaiian Electric - Subsidiaries of the Registrant.</u>				
* 31.3	<u>Certification Pursuant to Section 13a-14 of the Securities Exchange Act of 1934 of Shelee M. T. Kimura (Hawaiian Electric Chief Executive Officer).</u>				
* 31.4	<u>Certification Pursuant to Section 13a-14 of the Securities Exchange Act of 1934 of Tayne S. Y. Sekimura (Hawaiian Electric Chief Financial Officer).</u>				
* 32.2	<u>Hawaiian Electric Certification Pursuant to 18 U.S.C. Section 1350.</u>				
* 99.1	<u>Hawaiian Electric's Directors, Executive Officers and Corporate Governance; Hawaiian Electric's Executive Compensation; Hawaiian Electric's Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters; Hawaiian Electric's Certain Relationships and Related Transactions, and Director Independence; and Hawaiian Electric's Principal Accounting Fees and Services.</u>				

** Date of transmittal letter to SEC.

*** Schedules and exhibits have been omitted from this filing pursuant to Item 601(a) (5) of the Regulation S-K. We agree to furnish a copy of any omitted schedule or exhibit to the Securities and Exchange Commission upon request.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrants have duly caused this report to be signed on their behalf by the undersigned, thereunto duly authorized. The execution of this report by registrant Hawaiian Electric Company, Inc. shall be deemed to relate only to matters having reference to such registrant and its subsidiaries.

HAWAIIAN ELECTRIC INDUSTRIES, INC.

(Registrant)

By /s/ Paul K. Ito
Paul K. Ito
Executive Vice President, Chief Financial Officer
and Treasurer
(Principal Financial Officer of HEI)

Date: February 27, 2023

HAWAIIAN ELECTRIC COMPANY, INC.

(Registrant)

By /s/ Tayne S. Y. Sekimura
Tayne S. Y. Sekimura
Senior Vice President, Chief Financial Officer
and Treasurer
(Principal Financial Officer of Hawaiian Electric)

Date: February 27, 2023

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrants and in the capacities indicated on February 27, 2023. The execution of this report by each of the undersigned who signs this report solely in such person's capacity as a director or officer of Hawaiian Electric Company, Inc. shall be deemed to relate only to matters having reference to such registrant and its subsidiaries.

Signature	Title
<u>/s/ Scott W. H. Seu</u> Scott W. H. Seu	President & Chief Executive Officer of HEI and Director of HEI (Principal Executive Officer of HEI)
<u>/s/ Shelee M. T. Kimura</u> Shelee M. T. Kimura	President & Chief Executive Officer of Hawaiian Electric and Director of Hawaiian Electric (Principal Executive Officer of Hawaiian Electric)
<u>/s/ Paul K. Ito</u> Paul K. Ito	Executive Vice President, Chief Financial Officer and Treasurer of HEI (Principal Financial and Accounting Officer of HEI)
<u>/s/ Tayne S. Y. Sekimura</u> Tayne S. Y. Sekimura	Senior Vice President, Chief Financial Officer and Treasurer of Hawaiian Electric (Principal Financial Officer of Hawaiian Electric)
<u>/s/ Shannon K. Asato</u> Shannon K. Asato	Controller of Hawaiian Electric (Principal Accounting Officer of Hawaiian Electric)
<u>/s/ James A. Ajello</u> James A. Ajello	Director of Hawaiian Electric
<u>/s/ Kevin M. Burke</u> Kevin M. Burke	Director of Hawaiian Electric
<u>/s/ Celeste A. Connors</u> Celeste A. Connors	Director of HEI

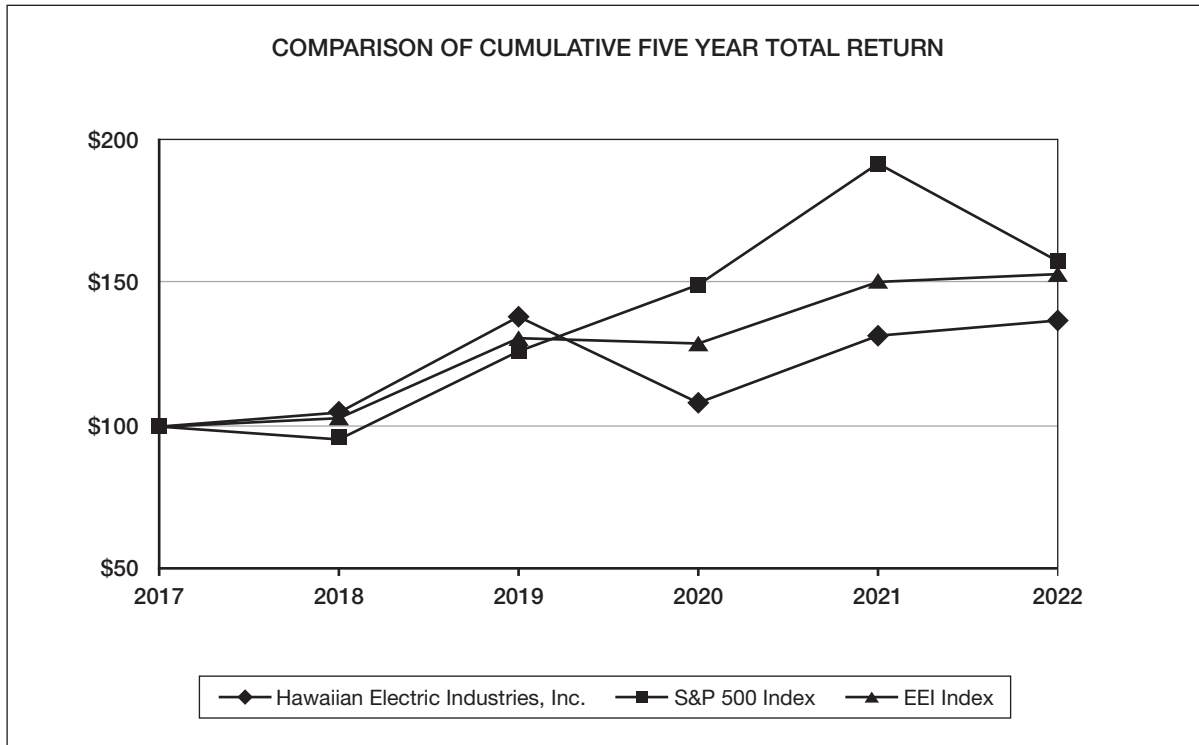
Signature	Title
<u>/s/ Richard J. Dahl</u> Richard J. Dahl	Director of HEI
<u>/s/ Thomas B. Fargo</u> Thomas B. Fargo	Chair of the Board of Directors of HEI
<u>/s/ Elisia K. Flores</u> Elisia K. Flores	Director of HEI
<u>/s/ Peggy Y. Fowler</u> Peggy Y. Fowler	Director of HEI
<u>/s/ Timothy E. Johns</u> Timothy E. Johns	Chair of the Board of Directors of Hawaiian Electric
<u>/s/ Micah A. Kāne</u> Micah A. Kāne	Director of HEI
<u>/s/ Michael J. Kennedy</u> Michael J. Kennedy	Director of HEI
<u>/s/ Mary E. Kipp</u> Mary E. Kipp	Director of Hawaiian Electric
<u>/s/ Yoko Otani</u> Yoko Otani	Director of HEI
<u>/s/ Alana Kobayashi Pakkala</u> Alana Kobayashi Pakkala	Director of Hawaiian Electric
<u>/s/ Keith P. Russell</u> Keith P. Russell	Director of HEI
<u>/s/ William James Scilacci, Jr.</u> William James Scilacci, Jr.	Director of HEI
<u>/s/ Kelvin H. Taketa</u> Kelvin H. Taketa	Director of Hawaiian Electric
<u>/s/ Toby B. Taniguchi</u> Toby B. Taniguchi	Director of Hawaiian Electric

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Appendix A

Shareholder Return Performance Graph

The graph below compares the cumulative total shareholder return on HEI Common Stock against the cumulative total return of the companies listed on the S&P 500 Stock index and the Edison Electric Institute (EEI) Index of Investor-Owned Electric Companies (39 companies were included as of December 31, 2022). The graph is based on the market price of common stock for all companies in the indices at December 31 each year and assumes that \$100 was invested on December 31, 2017 in HEI Common Stock and the common stock of all companies in the indices and that dividends were reinvested.



Source: S&P Global Inc.

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Executive Management (as of March 1, 2023)

HEI

Scott W. H. Seu

President and Chief Executive Officer,
Hawaiian Electric Industries, Inc.
Chair, American Savings Bank, F.S.B.

Paul K. Ito

Executive Vice President,
Chief Financial Officer and Treasurer

Kurt K. Murao

Executive Vice President, General Counsel,
Chief Administrative Officer and
Corporate Secretary

Darcy L. Endo-Omoto

Vice President, Executive Advisor
to the President

Avelino J. Halagao, Jr.

Vice President, Corporate and
Community Advancement
President, HEI Charitable Foundation

Christine N. Ohashi

Vice President, Internal Audit

Julie R. Smolinski

Vice President, Strategy and
Corporate Sustainability

HAWAIIAN ELECTRIC

Shelee M. T. Kimura

President and Chief Executive Officer

Jimmy D. Alberts

Senior Vice President and
Chief Operations Officer

Jason E. Benn

Senior Vice President and
Chief Information Officer

Colton K. Ching

Senior Vice President,
Planning and Technology

Tayne S. Y. Sekimura

Senior Vice President, Chief Financial Officer
and Treasurer

Joseph P. Viola

Senior Vice President,
Customer, Legal and Regulatory Affairs

Brendan S. Bailey

Vice President, Customer Service

Rebecca Dayhuff Matsushima

Vice President, Resource Procurement

Michael R. DeCaprio

Vice President, Power Supply

Jacqueline I. U. Ingamells

Vice President, Human Resources &
Chief People Strategist

James P. Kelly

Vice President, Government and Community
Relations and Corporate Communications

Erin P. Kippen

Vice President, General Counsel,
Chief Compliance Officer and
Corporate Secretary

Keola Siafuafu

Vice President, Enterprise Operations Services

Rudy W. Tamayo

Vice President, Energy Delivery

Edward S. Tavares

Vice President, Cybersecurity Risk
Management and Chief Information
Security Officer

AMERICAN SAVINGS BANK

Ann C. Teranishi

President and Chief Executive Officer

Danielle K. N. Aiu

Executive Vice President, Consumer Banking

Gabriel S. H. Lee

Executive Vice President, Commercial Markets

Steven R. Nakahara

Executive Vice President,
Chief Credit Officer

David S. Oyadomari

Executive Vice President, Operations

Natalie M. H. Taniguchi

Executive Vice President, Enterprise Risk and
Regulatory Relations

Dane A. Teruya

Executive Vice President and
Chief Financial Officer

John S. Ward

Executive Vice President and
Chief Marketing and Product Officer

Beth Whitehead

Executive Vice President and
Chief Administrative Officer

Brian M. Yoshii

Executive Vice President and
Chief Information Officer

PACIFIC CURRENT

Scott A. Valentino


President

Board of Directors

HEI



Admiral Thomas B. Fargo, USN (ret.)
Chair, HEI
*Former Commander of the U.S. Pacific Command
 President, Fargo Associates, LLC*




Scott W. H. Seu
President and CEO, HEI
Director, HEI



Celeste A. Connors
Director, HEI
CEO, Hawai'i Green Growth Local2030 Hub



Richard J. Dahl
Director, HEI
Former Chairman, President and CEO, James Campbell Company LLC




Elisia K. Flores
Director, HEI
CEO and Vice Chair, L&L Franchise, Inc.



Peggy Y. Fowler
Director, HEI
Former CEO, Portland General Electric Company




Micah A. Kāne
Director, HEI
President and CEO, Hawai'i Community Foundation



Michael J. Kennedy
Director, HEI
Former CEO, Velo Labs



Yoko Otani
Director, HEI
Partner, Straterix



Keith P. Russell
Director, HEI
President, Russell Financial, Inc.



William James Scilacci, Jr.
Director, HEI
Former Executive Vice President and Chief Financial Officer, Edison International


HAWAIIAN ELECTRIC



Timothy E. Johns
Chair, Hawaiian Electric
President and CEO, Zephyr Insurance Company, Inc.



Shelee M. T. Kimura
President and CEO, Hawaiian Electric
Director, Hawaiian Electric



James A. Ajello
Director, Hawaiian Electric
Senior Vice President Finance, Chief Financial Officer and Treasurer, Portland General Electric Company



Kevin M. Burke
Director, Hawaiian Electric
Former Chief Marketing Officer, Square, Inc.



Mary E. Kipp
Director, Hawaiian Electric
President and CEO, Puget Sound Energy, Inc.



Alana K. Pakkala
Director, Hawaiian Electric
Managing Partner and Executive Vice President, Kobayashi Group, LLC



Kelvin H. Taketa
Director, Hawaiian Electric
Former President and CEO, Hawai'i Community Foundation



Toby B. Taniguchi
Director, Hawaiian Electric
President and COO, KTA Super Stores

ASB



Scott W. H. Seu
President and CEO, HEI
Chair, ASB



Ann C. Teranishi
President and CEO, ASB
Director, ASB

The following HEI directors are also directors of American Savings Bank:

- Admiral Thomas B. Fargo, USN (ret.)
- Celeste A. Connors
- Richard J. Dahl
- Elisia K. Flores
- Peggy Y. Fowler
- Micah A. Kāne
- Michael J. Kennedy
- Yoko Otani
- Keith P. Russell
- William James Scilacci, Jr.

CORPORATE HEADQUARTERS

Hawaiian Electric Industries, Inc.
1001 Bishop Street, Suite 2900
Honolulu, Hawai'i 96813
Telephone: 808-543-5662

Mailing address:
Investor Relations
P.O. Box 730
Honolulu, Hawai'i 96808-0730

NEW YORK STOCK EXCHANGE

Common stock symbol: HE

SHAREHOLDER SERVICES

c/o Broadridge Corporate Issuer Solutions
P.O. Box 1342
Brentwood, NY 11717
Telephone: 808-206-7529
Toll Free: 866-672-5841
M-F 9:00 a.m. to 9:30 p.m. EST
E-mail: shareholder@broadridge.com

Correspondence about common stock and utility preferred stock ownership, dividend payments, transfer requirements, changes of address, lost stock certificates, duplicate mailings, and account status may be directed to Shareholder Services, c/o Broadridge.

A copy of the 2022 Form 10-K Annual Report for Hawaiian Electric Industries, Inc. and Hawaiian Electric Company, Inc., including financial statements and schedules, will be provided by HEI without charge upon written request directed to Shareholder Services at the above address for Shareholder Services or through HEI's website.

WEBSITE

Internet users can access information about HEI and its subsidiaries at www.hei.com.

DIVIDENDS AND DISTRIBUTIONS

Common stock quarterly dividends are customarily paid on or about the 10th of March, June, September, and December to shareholders of record on the dividend record date.

Utility company preferred stock quarterly dividends are paid on the 15th of January, April, July, and October to preferred shareholders of record on the 5th of these months.



HEI.COM

TRANSFER AGENT

Common stock and utility company preferred stock:
Shareholder Services
c/o Broadridge Corporate Issuer Solutions

DIRECT REGISTRATION

HEI common stock can be issued in direct registration (book entry) form. The stock is DRS (Direct Registration System) eligible.

DIVIDEND REINVESTMENT AND STOCK PURCHASE PLAN

Any individual of legal age or any entity may buy HEI common stock at market prices directly from HEI. The minimum initial investment is \$250. Additional optional cash investments may be as small as \$25. The annual maximum investment is \$300,000. After your account is open, you may reinvest all of your dividends to purchase additional shares or elect to receive some or all of your dividends in cash. You may instruct HEI to electronically debit a regular amount from a checking or savings account. HEI can also deposit dividends automatically to your checking or savings account. A prospectus describing the plan may be obtained through HEI's website or by contacting Shareholder Services, c/o Broadridge.

ANNUAL MEETING

Friday, May 5, 2023 at 10:00 a.m.
American Savings Bank Campus
300 N. Beretania Street
7th Floor, Kākou 1 & 2
Honolulu, HI 96817

Please direct inquiries to:
Kurt K. Murao, Executive Vice President, General Counsel,
Chief Administrative Officer and Corporate Secretary
Telephone: 808-543-5884
Facsimile: 808-543-7735

INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Deloitte & Touche LLP
999 Bishop Street, Suite 2700
Honolulu, Hawai'i 96813
Telephone: 808-543-0700

INSTITUTIONAL INVESTOR AND SECURITIES ANALYST INQUIRIES

Please direct inquiries to:
Mateo Garcia
Director, Investor Relations
Telephone: 808-543-7300
Email: ir@hei.com



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