

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 11-K

- ☒ ANNUAL REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES
EXCHANGE ACT OF 1934

For the fiscal year ended **December 31, 2007**

or

- ☐ TRANSITION REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES
EXCHANGE ACT OF 1934

For the transition period from _____ to _____

Commission File Number: 1-9894

- A. Full title of the plan and address of the plan, if different from that of the issuer named below:

ALLIANT ENERGY CORPORATION 401(k) SAVINGS PLAN

- B. Name of issuer of the securities held pursuant to the plan and the address of its principal
executive office:

ALLIANT ENERGY CORPORATION
4902 North Biltmore Lane
Madison, Wisconsin 53718

REQUIRED INFORMATION

The following financial statements and schedules of the Alliant Energy Corporation 401(k) Savings Plan, prepared in accordance with the financial reporting requirements of the Employee Retirement Income Security Act of 1974, as amended, are filed herewith.

ALLIANT ENERGY CORPORATION

401(k) SAVINGS PLAN

FINANCIAL STATEMENTS AS OF DECEMBER 31, 2007 AND 2006

AND FOR THE YEAR ENDED DECEMBER 31, 2007,

SUPPLEMENTAL SCHEDULES AS OF AND FOR THE YEAR ENDED DECEMBER 31, 2007, AND

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

ALLIANT ENERGY CORPORATION

401(k) SAVINGS PLAN

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Report of Independent Registered Public Accounting Firm

To the Total Compensation Committee and Participants of the Alliant Energy Corporation 401(k) Savings Plan:

We have audited the accompanying statements of net assets available for benefits of Alliant Energy Corporation 401(k) Savings Plan (the "Plan") as of December 31, 2007 and 2006, and the related statement of changes in net assets available for benefits for the year ended December 31, 2007. These financial statements are the responsibility of the Plan's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Plan is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Plan's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such financial statements present fairly, in all material respects, the net assets available for benefits of the Plan as of December 31, 2007 and 2006, and the changes in net assets available for benefits for the year ended December 31, 2007, in conformity with accounting principles generally accepted in the United States of America.

Our audits were conducted for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplemental schedules of (1) assets (held at end of year) as of December 31, 2007, (2) assets (acquired and disposed of within year) for the year ended December 31, 2007, and (3) reportable transactions for the year ended December 31, 2007, are presented for the purpose of additional analysis and are not a required part of the basic financial statements, but are supplementary information required by the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974. These schedules are the responsibility of the Plan's management. Such schedules have been subjected to the auditing procedures applied in our audit of the basic 2007 financial statements and, in our opinion, are fairly stated in all material respects when considered in relation to the basic financial statements taken as a whole.

/s/ Deloitte & Touche LLP

Milwaukee, Wisconsin
June 27, 2008

ALLIANT ENERGY CORPORATION

401(k) SAVINGS PLAN

STATEMENTS OF NET ASSETS AVAILABLE FOR BENEFITS

	December 31,	
	<u>2007</u>	<u>2006</u>
Investment income receivable	<u>\$--</u>	<u>\$220,277</u>
Investments, other than participant promissory notes (Refer to Notes 7 and 8)	632,459,824	577,699,020
Participant promissory notes	<u>9,904,024</u>	<u>9,305,638</u>
Total investments	<u>642,363,848</u>	<u>587,004,658</u>
Net assets available for benefits at fair value	642,363,848	587,224,935
Adjustments from fair value to contract value for fully benefit-responsive investment contracts (Refer to Note 2)	<u>539,804</u>	<u>435,698</u>
Net assets available for benefits	<u>\$642,903,652</u>	<u>\$587,660,633</u>

The accompanying Notes to Financial Statements are an integral part of these statements.

ALLIANT ENERGY CORPORATION

401(k) SAVINGS PLAN

STATEMENT OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS

For the Year Ended December 31, 2007

Net assets available for benefits - beginning of year	\$587,660,633
Contributions:	
Cash contributions from employees	29,025,000
Employer contributions:	
Cash for purchase of Alliant Energy Corporation common stock	8,234,907
Cash	986,789
Rollovers from other qualified plans	919,064
Investment income:	
Net appreciation in fair value of investments (Refer to Note 7)	24,575,585
Interest and dividends	31,081,984
Distributions to participants	<u>(39,580,310)</u>
Net increase	<u>55,243,019</u>
Net assets available for benefits - end of year	<u><u>\$642,903,652</u></u>

The accompanying Notes to Financial Statements are an integral part of this statement.

ALLIANT ENERGY CORPORATION
401(k) SAVINGS PLAN

NOTES TO FINANCIAL STATEMENTS
FOR THE YEAR ENDED DECEMBER 31, 2007

Note 1. Description of the Plan

The Alliant Energy Corporation 401(k) Savings Plan (the Plan) is a qualified defined contribution plan under Section 401(k) of the Internal Revenue Code (the Code), as amended, and meets the applicable requirements of the Employee Retirement Income Security Act of 1974, as amended (ERISA). The following brief description of the Plan is provided for general information purposes only. More complete information regarding the Plan is provided in the plan document and summary plan description, which have been made available to all eligible Plan participants (participants). The Plan is administered by the Total Compensation Committee (the Committee) and the Plan sponsor is Alliant Energy Corporate Services, Inc. (a direct subsidiary of Alliant Energy Corporation). The Committee reserves the right to terminate, amend or modify the Plan if future conditions warrant such action.

Any regular employee of Alliant Energy Corporation and its participating subsidiaries (the Company) age 18 and over may participate in the Plan. Regular full-time employees and regular part-time employees customarily scheduled to work at least half-time may participate immediately following 30 days of service. Part-time employees customarily scheduled to work less than half-time may participate after 12 months of service during which he or she has earned at least 1,000 paid hours.

An Employee Stock Ownership Plan (ESOP) is in place within the Plan. Under these provisions, participants have the option to elect to receive cash for any dividends paid on Company common stock within the Plan or to have the dividends reinvested in additional shares based on the current market price. Also, the Company is eligible for the dividend deduction provisions of Section 404(k) of the Code for Company common stock held in the ESOP.

Effective Jan. 1, 2006, the Company made changes to the Plan for newly hired non-bargaining employees and certain employees of Alliant Energy Resources, Inc. (Resources) and Cedar Rapids and Iowa City Railway Company (CRANDIC) employees. These changes are also effective for certain newly hired bargaining employees as of the dates per their respective bargaining agreements. For all other non-bargaining employees, the following changes will go into effect on Aug. 1, 2008. The changes include the Company providing matching contributions of \$0.50 for each \$1 contributed by the participant up to the first 8% of each respective participant's eligible compensation. In addition, the Company provides a contribution into each active employee's 401(k) account each pay period based on a percentage of base pay (non-elective Company cash contribution) as follows:

<u>Age plus Years of Service</u>	<u>Company Contribution</u>
≤ 49	4%
50 – 69	5%
70+	6%

For all other non-bargaining and bargaining employees, the Company provides matching contributions of \$0.50 for each \$1 contributed by the participant up to the first 6% of each respective participant's eligible compensation.

Beginning Dec. 27, 2007, certain bargaining employees who were eligible to participate in the Plan on or before June 1, 2007, are also eligible for a Company contribution of 1% of their respective eligible compensation. This Company contribution is in addition to any other Company provided match and will be invested in the Alliant Energy Corporation Common Stock Fund. This Company contribution is subject to the three years of service diversification provisions as described below.

Employee contribution limits for 2007 were as follows:

Eligible employee annual contribution limit as a percentage of compensation	50%
Maximum annual contribution limit*	\$15,500

*Participants who were at least age 50 by Dec. 31, 2007 were eligible to make additional catch-up contributions of up to \$5,000 in 2007. These additional catch-up contributions were not eligible for any Company match.

Company contributions are invested in the Alliant Energy Corporation Common Stock Fund, except for the non-elective Company cash contribution. The non-elective Company cash contribution is invested at each participant's discretion. Effective Oct. 2, 2006, the Plan enhanced its existing diversification provisions by allowing participants with at least three years of service to transfer their Company matching contributions invested in the Alliant Energy Corporation Company Stock Fund to any other investment fund. Previously, Company matching contributions invested in the Alliant Energy Corporation Company Stock Fund could not be transferred to any other investment fund, except for certain participants during the 30-day period immediately prior to retirement and participants age 55 with 10 years of service were eligible to diversify up to 100% of their ESOP account to one or more of the investment options.

An "additional" Company contribution is contributed to the accounts of active participants, as of the last day of the Plan year, who contributed at least 6% of compensation during the Plan year and did not receive a Company matching contribution equal to 3% of compensation or for those eligible for a matching contribution equal to 4% of compensation who contributed 8% of compensation during the Plan year. The amount of the "additional" Company contribution is the difference between 3% of compensation or 4% of compensation for certain employees during the Plan year and the amount of Company matching contributions previously received during the Plan year.

Participants are immediately vested in their respective employee and employer contributions. Participants may subsequently redesignate the distribution of future contributions or transfer existing balances between investment funds on a daily basis, subject to the limits set forth in the Plan.

Contributions under the Plan are held and invested, until distribution, in a Trust Fund maintained by J.P. Morgan Retirement Plan Services LLC (the Trustee or JPMorgan). JPMorgan became the Trustee and recordkeeper effective Oct. 15, 2007. Prior to Oct. 15, 2007, Wachovia Bank, National Association, as successor to Ameriprise Trust Company, served as trustee. On June 1, 2006, Wachovia Bank, National Association acquired Ameriprise Trust Company's recordkeeping business. Individual accounts are maintained by the Trustee for each participant. Each participant's account is credited with the participant's contributions, Company contributions, and an allocation of Plan earnings, and charged with withdrawals and an allocation of Plan losses and administrative expenses. Allocations are based on participant earnings or account balances, as defined. The benefit to which a participant is entitled is the benefit that can be provided from the participant's vested account balance.

The Plan has provisions under which participants who are active employees may take loans up to the lesser of \$50,000 or 50% of their total account balance (a \$1,000 minimum loan amount and a maximum of three loans for each participant also apply). The Committee determines the loan interest rate pursuant to the Plan. Interest rates on participant loans outstanding ranged from 5.0% to 10.5% at both Dec. 31, 2007 and 2006. Principal and interest are repaid bi-weekly through employee payroll deductions.

Note 2. Summary of Significant Accounting Policies

(a) Basis of Accounting - The financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America (GAAP).

(b) New Accounting Pronouncements - In September 2006, the Financial Accounting Standard Board issued Statement of Financial Accounting Standards 157, "Fair Value Measurements," (SFAS 157) which defines fair value, establishes a framework for measuring fair value in GAAP and expands disclosures about fair value measurements. The Plan is required to adopt SFAS 157 on Jan. 1, 2008 and is evaluating the implications of SFAS 157 on its financial statements.

(c) Accounting for Fully Benefit-Responsive Contracts - In 2006, the Plan adopted Financial Accounting Standards Board Staff Position, FSP AAG INV-1 and SOP 94-4-1, "Reporting of Fully Benefit-Responsive Contracts Held by Certain Investment Companies Subject to the AICPA Investment Company Guide and Defined-Contribution Health and Welfare and Pension Plans" (FSP). As required by the FSP, the statements of net assets available for benefits present investments at fair value as well as an additional line item showing an adjustment of fully benefit-responsive contracts from fair value to contract value. The statement of changes in net assets available for benefits is presented on a contract value basis and was not affected by the adoption of the FSP.

(d) Valuation of Investments and Income Recognition - The Plan's investments are stated at fair value. All Guaranteed Investment Contracts (GICs) held by the Plan are fully benefit-responsive and at Dec. 31, 2007 all were synthetic GICs. The contract value of all GIC investments was \$68,374,996 and \$48,954,702 at Dec. 31, 2007 and 2006, respectively. The approximate fair value of these investments was \$67,835,192 and \$48,570,228 at Dec. 31, 2007 and 2006, respectively, based on the fair value of the underlying assets. The weighted average yields for the GICs based on annualized earnings on Dec. 31, 2007 and 2006, were 6.66% and 5.47%, respectively. The weighted average yields for the GICs based on the interest rate credited to participants on Dec. 31, 2007 and 2006, were 5.53% and 5.11%, respectively. Participant loans are carried at unpaid principal balances due, which approximates fair value. All other Plan investments are carried at fair value as determined by quoted market prices or the net asset value of shares held by the Plan on the valuation date. Interest income is accrued when earned. Dividend income is recorded on the ex-dividend date. Investment transactions are recorded on the trade date.

(e) Net Appreciation in Fair Value of Investments - Net realized and unrealized appreciation is recorded in the accompanying statement of changes in net assets available for benefits as "Net appreciation in fair value of investments."

(f) Payment of Benefits - Benefit payments to participants are recorded when paid.

(g) Expenses - All expenses paid through the Plan are recorded with investment earnings in the accompanying statement of changes in net assets available for benefits. On individual participant statements, prior to the conversion to JPMorgan, investment management and recordkeeping fees were paid from investment earnings prior to crediting earnings to the individual participant account balances. On JPMorgan individual participant statements, recordkeeping fees are reported separate from investment earnings and are paid for directly by the Plan participants. Investment management fees are paid from investment earnings prior to crediting earnings to the individual participant account balances, but can be identified in the investment fund information supplied to participants from JPMorgan. Certain other Plan administrative expenses are absorbed by the Company. Expenses incurred in maintaining Self-Managed Brokerage Accounts are the responsibility of the respective Plan participants.

(h) Use of Estimates - The preparation of financial statements in conformity with GAAP requires the Plan administrator to make estimates and assumptions that affect the reported amounts of net assets available for benefits at the date of the financial statements and the reported amounts of changes in net assets available for benefits during the reporting period. Actual results could differ from those estimates.

(i) Risk and Uncertainties - The Plan invests in various investments, including common investment funds, mutual funds, common stock of the Company and investment contracts. The Plan also offers a Self-Managed Brokerage Account option which allows participants to invest in a wide range of mutual funds. Investments, in general, are exposed to various risks, such as interest rate, credit, and overall market volatility. Due to the level of risk associated with certain investments, it is reasonably possible that changes in the values of certain investments may occur in the near term and that such changes could materially affect the amounts reported in the financial statements.

Note 3. Tax Status

The Internal Revenue Service has determined and informed the Company by a letter dated Aug. 25, 2003, that the Plan and related trust are designed in accordance with the applicable sections of the Code. The Plan has been

amended since receiving the determination letter. However, the Committee and the Plan's tax counsel believe that the Plan is designed and is currently being operated in compliance with the applicable requirements of the Code.

Note 4. Plan Termination Provisions

Upon termination of the Plan in its entirety, each participant is entitled to receive, in accordance with the terms of the Plan, the entire balance in their account. The Company has no intention to terminate the Plan.

Note 5. Withdrawals and Distributions

Withdrawals from participants' account balances are allowed when participants who are actively employed reach age 70-1/2 (or age 59-1/2 for certain participants). Withdrawals are also allowed due to special "hardship" circumstances. Distributions from the Plan will be made upon termination of employment (by retirement, death, disability or otherwise) if the participant's account balance is less than \$5,000. If a withdrawing participant's account balance exceeds \$1,000 but is less than \$5,000, and the participant does not make an election to either have the account paid as a direct rollover or as a cash payment, the distribution will be paid as a direct rollover to an individual retirement account established at the Trustee. If a withdrawing participant's account balance exceeds \$5,000, the participant may elect to defer payment until he or she is age 70-1/2. Distributions can be either in the form of a lump sum or substantially equal annual installments. The unpaid portion of all loans made to the participant, including accrued interest, will be deducted from the amount of the participant account to be distributed. Distributions payable to participants at Dec. 31, 2007 and 2006 were \$0 and \$227,307, respectively. Distributions payable are not included as a liability within net assets available for benefits in the accompanying financial statements, however, they are recorded as liabilities in the Plan's Form 5500 (refer to Note 10).

Note 6. Derivative Financial Instruments

The Plan did not invest in any material derivative financial instruments during 2007 and 2006.

Note 7. Other Investment Information

Investments held which were greater than 5% of the Plan's net assets available for benefits as of Dec. 31 were as follows:

	<u>2007</u>	<u>2006</u>
Alliant Energy Corporation Common Stock* (non-participant directed: \$1,171,361 (28,787 shares) and \$817,826 (21,654 shares), respectively) (participant directed: \$136,815,403 (3,362,384 shares) and \$137,002,457 (3,627,526 shares), respectively)	\$137,986,764	\$137,820,283
American Funds Growth Fund of America, 2,868,962 Class R5 and 2,716,565 Class A shares, respectively	97,544,722	89,293,482
State Street Global Advisors S&P 500 Fund, 2,884,397 Class C and 0 shares, respectively	75,891,380	--
JPMorgan Intermediate Bond Fund*, 5,225,680 and 0 shares, respectively	61,558,512	--
Dodge & Cox Stock Fund, 435,882 and 367,953 shares, respectively	60,265,040	56,466,030
American Funds EuroPacific Growth Fund, 1,114,089 Class R5 and 913,251 Class R4 shares, respectively	56,673,723	41,991,279
PIMCO Total Return Fund, 3,705,129 and 3,024,733 shares, respectively	39,607,826	31,396,730
RiverSource Trust Equity Index Fund III*, 0 and 1,959,874 shares, respectively	--	78,104,900

* Represents party known to be a party-in-interest to the Plan.

During 2007, the Plan's investments, including gains and losses on investments acquired and disposed of, as well as held during the year, appreciated (depreciated) in value as follows:

American Funds Growth Fund of America, class C	\$14,548,891
Alliant Energy Corporation Common Stock*	11,012,837
American Funds EuroPacific Growth Fund, class R4	8,910,293
RiverSource Trust Equity Index Fund III*	8,677,685
Dreyfus Premier Emerging Markets Fund	6,432,954
State Street Global Advisors S&P Midcap Index Fund	1,952,111
PIMCO Total Return Fund	1,822,106
RiverSource Trust Income Fund I*	518,622
RiverSource Trust Bond Index Fund II*	326,589
State Street Global Advisors Bond Index Fund	203,462
Brown Capital Management Small Company Fund	190,837
Boston Company Emerging Markets Value Equity Fund	37,120
Self-Managed Brokerage Accounts	(7,713)
Wellington Mid Cap Growth Fund	(389,764)
Evergreen Small Cap Value Fund	(488,721)
Janus Advisor Mid Cap Value Fund	(604,720)
Riversource Small Cap Value Fund*	(2,363,184)
Buffalo Small Cap Fund	(2,974,688)
State Street Global Advisors S&P 500 Index Fund	(3,388,376)
American Funds EuroPacific Growth Fund, class R5	(4,181,478)
Dodge & Cox Stock Fund	(5,811,795)
American Funds Growth Fund of America, class R5	(9,847,483)
Net appreciation in fair value of investments	<u>\$24,575,585</u>

* Represents party known to be a party-in-interest to the Plan.

Note 8. Non-Participant Directed Investments

Information about the net assets and the significant components of the changes in net assets relating to the non-participant directed investments was as follows:

	Dec. 31,	
	2007	2006
Net assets:		
Alliant Energy Corporation Common Stock*	\$1,171,361	\$817,826
RiverSource Trust Money Market Fund I*	--	12,120
Investment income receivable	--	1,659
	<u>\$1,171,361</u>	<u>\$831,605</u>
Changes in net assets:	2007	
Employer contributions	\$524,406	
Investment activity:		
Net appreciation in fair value of investments	93,709	
Investment income	38,655	
Transfers to participant directed investments (Note 1)	(317,014)	
	<u>\$339,756</u>	

* Represents party known to be a party-in-interest to the Plan.

Note 9. Related Party Transactions

Certain Plan investments are shares of mutual funds and common trust funds managed by an affiliate of the Trustee and shares of common stock of the Company. As of Dec. 31, 2007 and 2006, the Plan held 3,391,171 and 3,649,180 shares of Alliant Energy Corporation common stock with a cost basis of \$95,423,377 and \$90,603,322 respectively. In 2007 and 2006, the Plan recorded dividend income of \$4,444,427 and \$4,317,068 respectively, from investments in common stock of the Company. These transactions qualify as exempt party-in-interest transactions.

Note 10. Reconciliation to Form 5500

Distributions payable to participants are not included as a liability within net assets available for benefits in the accompanying financial statements, however, they are recorded as liabilities in the Plan's Form 5500. For 2007, net assets available for benefits in the accompanying financial statements are at contract value, however, they are recorded at fair value in the Plan's Form 5500. The following table reconciles net assets available for benefits per the financial statements to the Plan's Form 5500 as filed by the Company:

	2007	2006
Net assets available for benefits per financial statements	\$642,903,652	\$587,660,633
Adjustments:		
Fair value to contract value for fully benefit-responsive investment contracts	(539,804)	(435,698)
Benefits requested not yet paid	--	(227,307)
Amounts reported per Form 5500	<u>\$642,363,848</u>	<u>\$586,997,628</u>

The following table reconciles the net increase in net assets available for benefits per the financial statements to the Form 5500 as filed by the Company for 2007:

	Net increase
Amounts reported per financial statements	\$55,243,019
Adjustments:	
Changes in adjustment from fair value to contract value for fully benefit-responsive investment contracts	(104,106)
Changes in benefits requested not yet paid	227,307
Amounts reported per Form 5500	<u>\$55,366,220</u>

Note 11. Subsequent Events

In May 2008, the Committee and the Board of Directors of Alliant Energy Corporation approved two amendments to the Plan. The first amendment requires the non-elective Company cash contribution to be subject to a three year cliff vesting schedule for new employees hired on July 1, 2008 or later, or on a date agreed to pursuant to the terms of the participant's respective bargaining agreement. The second amendment allows the Company matching contributions to be invested according to each participant's investment elections. These amendments will be implemented in 2008.

ALLIANT ENERGY CORPORATION

401(k) SAVINGS PLAN

FORM 5500, SCHEDULE H, PART IV, LINE 4i - SCHEDULE OF ASSETS (HELD AT END OF YEAR)

AS OF DECEMBER 31, 2007

Identity of issue, borrower, lessor, or similar party	Description of investment including maturity date, rate of interest, collateral, par or maturity value	Cost*	Current Value
Registered Investment Companies	American Funds Growth Fund of America, 2,868,962 class R5 shares		\$97,544,722
	Dodge & Cox Stock Fund, 435,882 shares		60,265,040
	American Funds EuroPacific Growth Fund, 1,114,089 class R5 shares		56,673,723
	PIMCO Total Return Fund, 3,705,129 class I shares		39,607,826
	Buffalo Small Cap Fund, 1,186,317 shares		28,673,275
	Riversource Small Cap Value Fund**, 2,194,265 class R5 shares		10,532,472
	Janus Advisor Mid Cap Value Fund, 408,077 class I shares		7,455,569
Common/Collective Trusts	State Street Global Advisors S&P 500 Fund, 2,884,397 class C shares		75,891,380
	JPMorgan Intermediate Bond Fund**, 5,225,680 shares		61,558,512
	Boston Company Emerging Markets Value Equity Fund, 494,988 shares		28,828,279
	State Street Global Advisors Bond Index Fund, 926,438 class L shares		11,050,561
	Wellington Mid Cap Growth Fund, 641,895 shares		7,869,637
	JPMorgan Liquidity Fund**, 3,805,454 shares		3,805,454
Corporate Stocks: Common	Alliant Energy Corporation common stock**, 3,391,171 shares	\$95,423,377	137,986,764
Corporate Bonds	CWALT 2007-OA9 A2, Variable rate, 6/25/47, par value \$334,620		309,003
	CWALT 2006-HY12 A2, Variable rate, 8/25/36, par value \$167,408		167,572
	RALI 2006-QS3 1A10, 6.00%, 3/25/36, par value \$90,527		90,798
Government and Agency Obligations	US TREASURY NOTE 4.25%, 9/30/12, par value \$905,000		936,746
	US TREASURY NOTE 4.75%, 8/15/17, par value \$610,000		644,265
	FHLMC 30 YR FH 1G2450 Mtg Back FRN 8/1/36, par value \$301,332		306,312
	FNMA 10 YR FN 387608 Mtg Back 4.80%, 9/1/15, par value \$216,161		215,750
	FNMA 30 YR FN 887096 Mtg Back FRN, 7/1/36, par value \$187,478		189,038
	FNMA 30 YR FN 826908 Mtg Back FRN, 8/1/35, par value \$150,643		149,000
	FNMA 30 YR FN 866097 Mtg Back FRN, 2/1/36, par value \$133,323		136,395
	FNMA 30 YR FN 705304 Mtg Back FRN, 6/1/33, par value \$123,465		124,315
	FNMA 30 YR FN 844705 Mtg Back FRN, 12/1/35, par value \$113,774		113,946
	FNMA 30 YR FN 902818 Mtg Back FRN, 11/1/36, par value \$103,919		105,855
	FNMA 30 YR FN 725090 Mtg Back FRN, 11/1/33, par value \$102,704		102,713
	FNMA 30 YR FN 801344 Mtg Back FRN, 10/1/34, par value \$87,914		88,316
	FNMA 30 YR FN 799769 Mtg Back FRN, 11/1/34, par value \$86,790		87,171
	FNMA 30 YR FN 764082 Mtg Back FRN, 1/1/34, par value \$78,852		79,494
	FNMA 30 YR FN 809534 Mtg Back FRN, 2/1/35, par value \$75,883		76,599
	FNMA 30 YR FN 849082 Mtg Back FRN, 1/1/36, par value \$72,712		73,317
	FNMA 30 YR FN 872753 Mtg Back FRN, 6/1/36, par value \$71,334		72,686
	US TREASURY NOTE 4.00%, 9/30/09, par value \$50,000		50,797
	US TREASURY NOTE 3.63%, 10/31/07, par value \$15,000		15,148
Participant-Directed Brokerage Accounts	Self-Managed Brokerage Accounts		581,374
Participant Promissory Notes**	Maximum allowable loan -- \$50,000		
	Various interest rates -- 5.0% to 10.5%		
	Primarily maturing within 5 years		9,904,024
			<u>\$642,363,848</u>

* Cost value is not required for participant-directed investments.

** Represents party known to be a party-in-interest to the Alliant Energy Corporation 401(k) Savings Plan.

ALLIANT ENERGY CORPORATION

401(k) SAVINGS PLAN

FORM 5500, SCHEDULE H, PART IV, LINE 4i - SCHEDULE OF ASSETS (ACQUIRED AND DISPOSED OF WITHIN YEAR)

FOR THE YEAR ENDED DECEMBER 31, 2007

Identity of issue, borrower, lessor, or similar party	Description of investment including maturity date, rate of interest, collateral, par or maturity value	Cost of Acquisitions	Proceeds of Dispositions
Corporate Bonds	ARMT 2007-1-3A11, 6.20%, 2/25/37	\$15,349	\$15,088
	CWALT 2007-OA9-A2, 5.67%, 6/25/47	21,519	22,299
	CWHL 2006-HYB1-1A1, 5.40%, 3/20/36	110,278	110,278
	INDYMB 2007-AR5A-1, 6.37%, 5/25/37	3,976	3,926
	JPMCC 2004-LN2-A1, 4.48%, 7/15/41	3,173	3,242
	JPMCC 2005-LDP5-A1, 5.04%, 12/15/44	233,798	234,591
	WMALT 2007-OC1-A2, 5.55%, 1/25/47	25,506	25,506
	WFMBS 2006-AR12-2A, 6.12%, 9/25/36	26,833	26,612

ALLIANT ENERGY CORPORATION

401(k) SAVINGS PLAN

FORM 5500, SCHEDULE H, PART IV

LINE 4j - SCHEDULE OF REPORTABLE TRANSACTIONS

FOR THE YEAR ENDED DECEMBER 31, 2007

Identity of Party Involved and <u>Description of Assets</u>	Total Number of <u>Purchases</u>	Total Value of <u>Purchases</u>	Total Number <u>of Sales</u>	Net Selling <u>Price</u>	Adjusted Cost of <u>Assets Sold</u>	Net Gain <u>(Loss)</u>
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Single Transaction Exceeds 5% of Value:

None.

Series of Transactions With Same Broker Exceeds 5% of Value:

None.

Series of Transactions In Same Security Exceeds 5% of Value:

None.

Single Transaction With One Broker Exceeds 5% of Value:

None.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Total Compensation Committee, which administers the Plan, has duly caused this Annual Report to be signed on its behalf by the undersigned, thereunto duly authorized, on this 27th day of June 2008.

ALLIANT ENERGY CORPORATION 401(k) SAVINGS PLAN

/s/ Christopher J. Lindell
Christopher J. Lindell

The foregoing person is the Vice President - Shared Services of Alliant Energy Corporation and Alliant Energy Corporate Services, Inc., and the Chairperson of the Alliant Energy Corporation Total Compensation Committee.

EXHIBIT INDEX TO ANNUAL REPORT ON FORM 11-K

**ALLIANT ENERGY CORPORATION
401(k) SAVINGS PLAN**

FOR THE YEAR ENDED DECEMBER 31, 2007

<u>Exhibit No.</u>	<u>Exhibit</u>	Page Number in Sequentially Numbered <u>Form 11-K</u>
23	Consent of Independent Registered Public Accounting Firm	18

Exhibit 23

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement No. 333-117654 of Alliant Energy Corporation on Form S-8 of our report dated June 27, 2008, appearing in this Annual Report on Form 11-K of Alliant Energy Corporation 401(k) Savings Plan for the year ended December 31, 2007.

/s/ Deloitte & Touche LLP

Milwaukee, WI
June 27, 2008