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**Caroline Kim**  
Division of Corporate Finance

**Fax:**

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813-6982

**Tel:****Message:**

Caroline,

Please email me at mryan@cwt.com to confirm receipt.

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December 10, 2010

Roger Schwall  
United States Securities and Exchange Commission  
Division of Corporation Finance  
100 F Street, N.E.  
Washington, D.C. 20549

Re: Cloud Peak Energy Inc.  
Registration Statement on Form S-1  
Filed November 19, 2010  
File No. 333-170744

BY HAND

&

BY FAX TO (202) 772-9220 and (703) 813-6982

Dear Mr. Schwall:

As discussed, enclosed for your consideration please find a form of preliminary prospectus supplement which has been prepared on the assumption that the selling shareholders, Rio Tinto Energy America Inc. and Kennecott Management Services Company, would shortly seek to sell 19,110,000 shares of common stock of Cloud Peak Energy Inc. (or approximately two-thirds of the selling shareholders' collective remaining economic interest in Cloud Peak Energy Inc.). The preliminary prospectus supplement includes an underwriting section and names the underwriters that the selling shareholders expect to retain in the event that they proceed with an offering. We have also enclosed a form of the preliminary prospectus (in a form substantially similar to the preliminary prospectus included in the Form S-1 as currently on file with the SEC).

We understand that the selling shareholders have not yet made a decision whether to proceed next week with an offering or, if they proceed, whether to sell two-thirds of their economic interest, 100% of their economic interest or some other amount. The form of prospectus supplement with 19,110,000 shares is just intended for illustration purposes, as the actual amount of shares, if any, have not yet been determined. Such amount will be determined on the date of the launch of any offering depending on market conditions.

USActive 21280340,3

Assuming that, after further conversation with the expected underwriters, the selling shareholders decide to proceed with an offering next week, the company would file with the SEC on Monday morning the actual preliminary prospectus supplement (including the preliminary prospectus) that would be used in such offering which would include the actual number of shares that the selling shareholders would be offering to sell at such time to the public.

We believe that such filing may appropriately be made pursuant to Rule 424(a). We understand that you have not yet concluded that such an approach would be appropriate. If the SEC will not permit the company to file on this basis, the company will endeavor to make the filing in the form of an amendment to the Form S-1.

In either case it would be our intention, if the selling shareholders choose to proceed, to begin marketing the offering on Monday. The company would also file an acceleration request on Monday requesting effectiveness on Wednesday so that, if the offering is successful, at the end of the day Wednesday it would be possible to price the securities and sign an underwriting agreement.

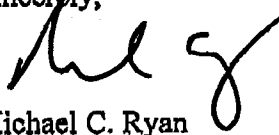
For us to proceed in this manner we would ask for the SEC to confirm to us that this approach is appropriate today.

We appreciate your attention to this request as well as the Staff's attention to the filing up to this point in time.

\* \* \*

Should you have any questions or comments with respect to this letter, please call me at (212) 504-6177.

Sincerely,



Michael C. Ryan

cc: Anne Nguyen Parker (Securities and Exchange Commission)  
Caroline Kim (Securities and Exchange Commission)  
Colin Marshall (Cloud Peak Energy Inc.)  
Bryan Pechersky (Cloud Peak Energy Inc.)  
Penny M. Williams (Cadwalader, Wickersham & Taft LLP)  
Stuart H. Gelfond (Fried, Frank, Harris, Shriver & Jacobson LLP)  
Vasiliki B. Tsaganos (Fried, Frank, Harris, Shriver & Jacobson LLP)  
Richard A. Drucker (Davis Polk & Wardwell LLP)

The information in this prospectus supplement is not complete and may be changed. The selling shareholders may not sell these securities until the registration statement filed with the Securities and Exchange Commission of which this prospectus supplement forms a part is effective. This prospectus supplement does not constitute an offer to sell these securities or solicitation of an offer to buy these securities in any jurisdiction where such offer, sale or solicitation is not permitted.

Filed Pursuant to Rule 424(a)  
Registration No. 333-170744

SUBJECT TO COMPLETION, DATED DECEMBER 10, 2010

**PRELIMINARY PROSPECTUS SUPPLEMENT**  
To Preliminary Prospectus Dated December 10, 2010

19,110,000 Shares

**CLOUD PEAK ENERGY INC.**



**CLOUD PEAK**  
**ENERGY™**

Common Stock

This prospectus supplement supplements and amends the preliminary prospectus dated December 10, 2010 relating to the resale from time to time of up to 29,400,000 shares of common stock of Cloud Peak Energy Inc., par value \$0.01 per share, by Rio Tinto Energy America Inc. and Kennecott Management Services Company, the selling shareholders.

This prospectus supplement should be read in conjunction with and accompanied by the prospectus and is qualified by reference to the prospectus, except to the extent that the information in this prospectus supplement modified or supersedes the information contained in the prospectus.

Our common stock is traded on the New York Stock Exchange ("NYSE") under the symbol "CLD." On December 9, 2010, the last reported trading price for our common stock on the NYSE was \$22.61 per share.

The selling shareholders will bear all commissions and discounts, if any, attributable to the sales of common stock. We will not receive any of the proceeds from the sale of our common stock by the selling shareholders.

Investing in our common stock involves risks. See "Risk Factors" beginning on page S-13 of this prospectus supplement and on page 13 of the accompanying prospectus.

	Price to Public	Underwriting Discounts and Commissions	Proceeds to Selling Shareholders
Per Share.....	\$	\$	\$
Total .....	\$	\$	\$

The underwriters have the option for a period of 30 days to purchase a maximum of 2,866,500 additional shares of common stock from the selling shareholders to cover over-allotments of shares of common stock.

Delivery of the shares of common stock will be made on or about , 2010.

Neither the Securities and Exchange Commission (the "SEC") nor any state securities commission has approved or disapproved of these securities or passed upon the accuracy or adequacy of this prospectus supplement or the accompanying prospectus. Any representation to the contrary is a criminal offense.

**Credit Suisse**

**Morgan Stanley**

**RBC Capital Markets**

**J.P. Morgan**

The date of this prospectus supplement is , 2010.

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### PROSPECTUS

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We have not, and the underwriters or the selling shareholders have not, authorized anyone to provide any information other than that contained or incorporated by reference in this prospectus supplement, the accompanying prospectus or in any free writing prospectus prepared by or on behalf of us or to which we have referred you. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. We have not, and the underwriters or the selling shareholders have not, authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. This prospectus supplement does not constitute an offer to sell, or solicitation of an offer to buy, these securities in any jurisdiction where such offer, sale or solicitation is not permitted. You should assume that the information appearing in this prospectus supplement is accurate only as of the date on the front cover of this prospectus supplement.

### ABOUT THIS PROSPECTUS SUPPLEMENT

This document consists of two parts. The first part is this prospectus supplement, which contains specific information about the terms and conditions of this particular offering of our common stock by the selling shareholders. The second part is the accompanying preliminary prospectus dated December 10, 2010, which contains and incorporates by reference important business and financial information about us and other information about the offering. This prospectus supplement and the accompanying prospectus are part of a registration statement on Form S-1, as amended by the Amendment No. 1 to Registration Statement on Form S-1/A (File No. 333-170744), that we filed with the SEC using a "shelf" registration or continuous offering process. Under this shelf process, the selling shareholders may from time to time sell the shares of common stock covered by the accompanying prospectus in one or more offerings. Before investing in our common stock, you should carefully read the registration statement (including the exhibits thereto) of which this prospectus supplement and the accompanying prospectus form a part, this prospectus supplement, the accompanying prospectus and the documents incorporated by reference into the accompanying prospectus. The incorporated documents are described under "Incorporation of Certain Documents by Reference" in the accompanying prospectus. This prospectus supplement may add information to, or update or change information contained in, the accompanying prospectus. To the extent that any statement that we make in this prospectus supplement is inconsistent with the statements made in the accompanying prospectus,

including the documents incorporated therein by reference, the statements made in the accompanying prospectus are deemed amended, modified or superseded by the statements made in this prospectus supplement.

## PROSPECTUS SUPPLEMENT SUMMARY

*This summary highlights information contained elsewhere in this prospectus supplement and the accompanying prospectus. This summary does not contain all of the information you should consider before investing in our common stock. You should read the entire prospectus supplement and the accompanying prospectus carefully, including the section describing the risks of investing in our common stock under "Risk Factors." You should also read carefully the information incorporated by reference in the accompanying prospectus before making an investment decision.*

*In this prospectus supplement, unless the context otherwise requires, references to:*

- "Cloud Peak Energy," "we," "us," "our" or the "company" refer collectively to Cloud Peak Energy Inc., a Delaware corporation, and its consolidated subsidiary, CPE Resources, together with the businesses that CPE Resources operates;
- "CPE Resources" refers to Cloud Peak Energy Resources LLC, a Delaware limited liability company, formerly known as Rio Tinto Sage LLC, which is the operating company for our business, and of which Cloud Peak Energy Inc. is the sole managing member;
- "IPO Structuring Agreements" refers to the following agreements entered into in connection with our November 2009 initial public offering (the "IPO"): the master separation agreement, the acquisition agreement, the assignment agreement, the agency contract, the promissory note, the employee matters agreement, the escrow agreement, the third amended and restated limited liability company agreement of CPE Resources (the "LLC Agreement"), the management services agreement (the "Management Services Agreement"), the registration rights agreement (the "Registration Rights Agreement"), the Rio Tinto Energy America coal supply agreement, the software license agreement, the tax receivable agreement (the "Tax Receivable Agreement"), the trademark assignment agreement, the trademark license agreement, and the transition services agreement. For a description of our agreements with Rio Tinto and its affiliates, see the information set forth under the caption "Corporate Governance—Certain Relationships and Related Transactions" in the 2010 Proxy Statement (defined below), which is incorporated by reference in the accompanying prospectus. We refer generally to the transactions we entered into in connection with these IPO Structuring Agreements as the IPO structuring transactions or the structuring transactions. See "Initial Public Offering and Related IPO Structuring Transactions" in "Note 2. Basis of Presentation" of "Notes to Consolidated Financial Statements" contained in the 2009 Form 10-K (defined below), which is incorporated by reference in the accompanying prospectus;
- "RTEA" refers to Rio Tinto Energy America Inc., our predecessor for accounting purposes;
- "RTA" refers to Rio Tinto America Inc. ("RTA"), which is the owner of RTEA;
- "KMS" refers to Kennecott Management Services Company, a wholly-owned subsidiary of RTA;
- "Rio Tinto" refers to Rio Tinto plc and Rio Tinto Limited and their subsidiaries, collectively. Rio Tinto plc is the ultimate parent of RTA and RTEA;
- "2009 Form 10-K" refers to our annual report on Form 10-K for the year ended December 31, 2009, filed with the SEC on March 17, 2010;
- "2010 3Q Form 10-Q" refers to our quarterly report on Form 10-Q for the quarter ended September 30, 2010, filed with the SEC on November 5, 2010; and
- "2010 Proxy Statement" refers to our definitive proxy statement on Schedule 14A for our 2010 annual meeting of stockholders, filed with the SEC on April 29, 2010.

### Our Corporate History and Structure

Cloud Peak Energy is the third largest producer of coal in the U.S. and in the Powder River Basin (the "PRB"), based on our 2009 coal production of 93.3 million tons. We had revenues from our continuing operations of \$1.4 billion in 2009. We operate some of the safest mines in the industry. According to data from the Mine Safety and Health Administration (the "MSHA"), in 2009, we had the lowest employee all injury incident rate among the ten largest U.S. coal

producing companies. We operate solely in the PRB, the lowest cost major coal producing region in the U.S., and operate two of the four largest coal mines in the region and in the U.S. Our operations include three wholly-owned surface coal mines, two of which are in Wyoming and one of which is in Montana. We also own a 50% interest in a fourth surface coal mine located in Montana. We produce sub-bituminous steam coal with low sulfur content and sell our coal primarily to domestic electric utilities, supplying approximately 70 customers with over 100 domestic plants. We do not produce any metallurgical coal. Steam coal is primarily consumed by electric utilities and industrial consumers as fuel for electricity generation. In 2009, the coal we produced generated approximately 4% of the electricity produced in the U.S. As of December 31, 2009, we controlled approximately one billion tons of proven and probable reserves.

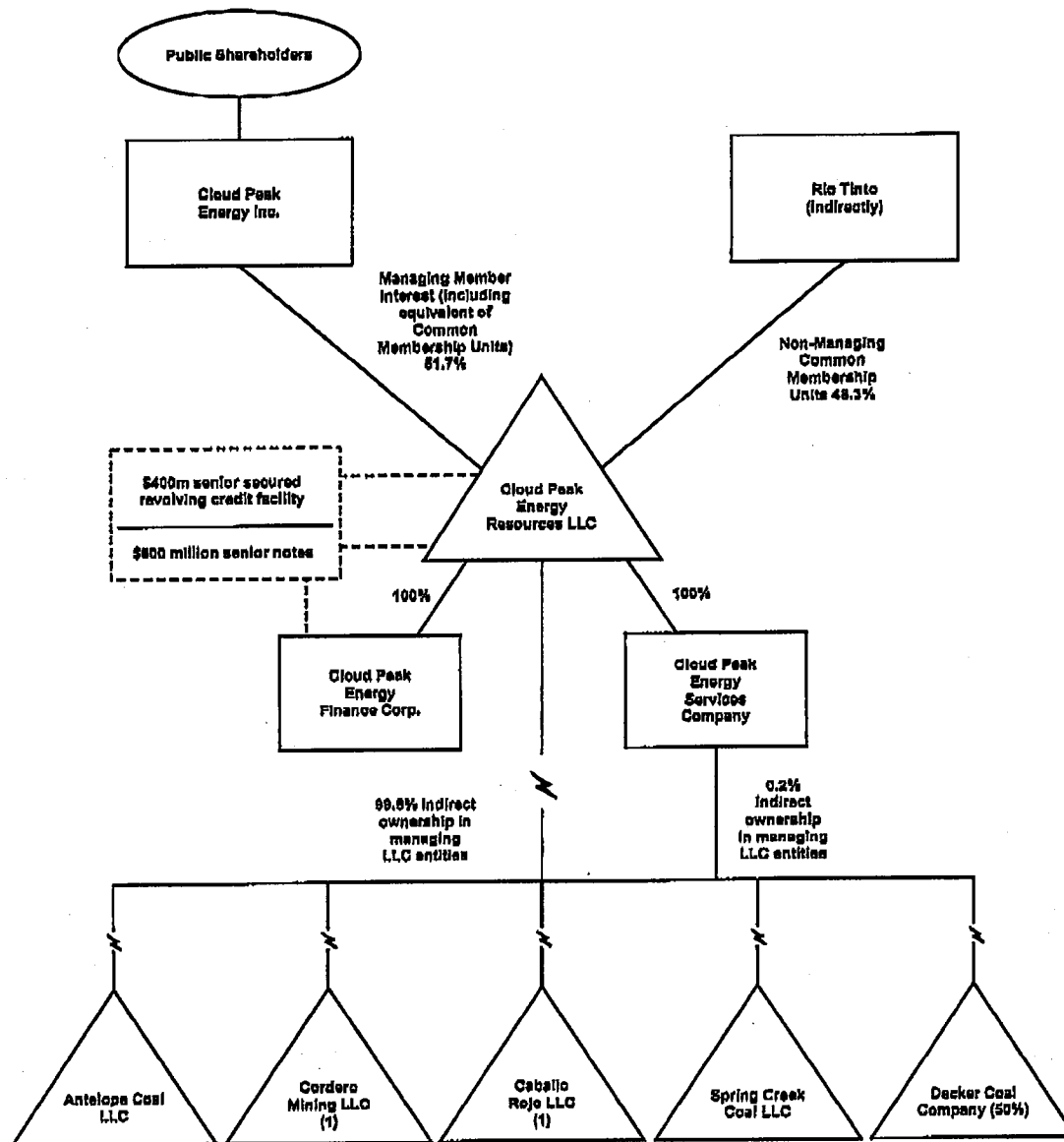
Rio Tinto initially formed RTEA in 1993 as Kennecott Coal Company, which was subsequently renamed Kennecott Energy and Coal Company. Between 1993 and 1998, Kennecott Energy and Coal Company acquired the Antelope, Colowyo, Jacobs Ranch and Spring Creek mines and the Cordero mine and Caballo Rojo mine, which are currently operated together as the Cordero Rojo mine, and a 50% interest in the Decker mine, which is operated by a third-party mine operator. In 2006, Kennecott Energy and Coal Company was renamed Rio Tinto Energy America Inc., as part of Rio Tinto's global branding initiative.

CPE Resources was formerly known as Rio Tinto Sage LLC, a Delaware limited liability company formed as a wholly-owned subsidiary of RTEA on August 19, 2008. In order to separate certain businesses from RTEA, in December 2008, RTEA contributed RTA's western U.S. coal business to CPE Resources (other than the Colowyo mine, which is now indirectly owned by RTA). On October 1, 2009, CPE Resources sold the Jacobs Ranch mine to Arch Coal, Inc. and did not retain the proceeds from that sale. CPE Resources currently holds, directly or indirectly, all of the equity interests of each of our mining entities, including a 50% interest in the Decker mine, which is managed by a third party mine operator.

Cloud Peak Energy Inc. is a Delaware corporation organized on July 31, 2008. On November 19, 2009, Cloud Peak Energy Inc. acquired from RTEA approximately 51% of the common membership units in CPE Resources in exchange for a promissory note. As a result of these transactions, Cloud Peak Energy Inc. became the sole managing member of CPE Resources with a controlling interest in CPE Resources and its subsidiaries. Cloud Peak Energy Inc. used the proceeds from the IPO to repay the promissory note upon the completion of the IPO on November 25, 2009. Cloud Peak Energy Inc. is a holding company and its only business and material asset is its managing member interest in CPE Resources. Cloud Peak Energy Inc.'s only source of cash flow from operations is distributions from CPE Resources pursuant to the LLC Agreement and management fees and cost reimbursements pursuant to the Management Services Agreement. As of September 30, 2010, Cloud Peak Energy Inc. owned approximately 51.7% of the common membership units in CPE Resources, and subsidiaries of Rio Tinto held the remaining 48.3%.



The following condensed diagram depicts our current organizational structure as of September 30, 2010, and does not reflect the sale of the shares of our common stock offered hereby:



(†) Operated together as the Cordero Rojo mine.

### Recent Developments

On November 4, 2010, the company issued a press release announcing its results for the third quarter 2010. With respect to its contracted coal position, the company provided that:

- for 2010, it had contracted all of its tons and expected to deliver approximately 94 million tons with an estimated realized price of around \$12.33 per ton;
- for 2011, 92 million tons were contracted from the three company owned and operated mines. Of this committed 2011 production, 81 million tons are under fixed price contracts. Assuming a recent market price of \$14.20 per ton for 8800 BTU coal and \$11.60 per ton for 8400 BTU coal for unpriced tons, the estimated 2011 full-year weighted average realized price would be approximately \$13.04 per ton; and
- for 2012, it had contracted 65 million tons from the three company owned and operated mines, of which 51 million tons are under fixed price contracts.

### Company Information

Our principal executive office is located at 505 S. Gillette Ave., Gillette, Wyoming 82716, and our telephone number at that address is (307) 687-6000. Our website is located at [www.cloudpeakenergy.com](http://www.cloudpeakenergy.com). The information that is contained on, or is or becomes accessible through, our website is not part of this prospectus supplement.

"Cloud Peak Energy" and the Cloud Peak Energy logo are trademarks and service marks of Cloud Peak Energy Inc. or its affiliates. All other trademarks, service marks or trade names appearing in this prospectus supplement are owned by their respective holders.

### The Offering

Common stock offered by the selling shareholders.....	19,110,000 shares (21,976,500 shares if the underwriters' option to purchase additional shares is exercised in full). Such shares were issued to the selling shareholders upon the exercise of their right to require CPE Resources to acquire by redemption 21,976,500 common membership units in CPE Resources held by the selling shareholders and the exercise by Cloud Peak Energy Inc. of its right to assume CPE Resources' obligation to acquire such common membership units in exchange for common stock of Cloud Peak Energy Inc.
Common stock to be outstanding after this offering .....	50,591,652 shares (53,458,152 shares if the underwriters' option to purchase additional shares is exercised in full), based on the number of shares outstanding as of October 31, 2010. This does not reflect additional shares of our common stock which may be issued in connection with future redemptions by the selling shareholders with respect to their remaining common membership units in CPE Resources.
Over-allotment option .....	The selling shareholders have granted the underwriters a 30-day option to purchase up to 2,866,500 additional shares of our common stock to cover over-allotments of shares of common stock.
Common membership units in CPE Resources held by Cloud Peak Energy Inc. and Rio Tinto .....	After giving effect to this offering, Cloud Peak Energy Inc. will hold approximately 83.1% (87.8% if the underwriters' option to purchase additional shares is exercised in full) of the common membership units in CPE Resources and RTEA and KMS will hold approximately 16.9% (12.2% if the underwriters' option to purchase additional shares is exercised in full) of the common membership units.
Use of proceeds .....	We will not receive any proceeds from the sale of these shares of our common stock. The selling shareholders will receive all of the net proceeds from the sales of common stock offered by them pursuant to this prospectus supplement. The selling shareholders will bear any underwriting commissions and discounts attributable to the sale of our common stock by the selling shareholders pursuant to this prospectus supplement.

**Risk factors.....** See "Risk Factors" beginning on beginning on page S-13 of this prospectus supplement and on page 13 of the accompanying prospectus for a discussion of factors you should carefully consider before deciding to invest in our common stock.

**NYSE symbol.....** "CLD"

Unless otherwise indicated, the information regarding common membership units in CPE Resources presented in this prospectus supplement excludes any common membership units that will be issued to Cloud Peak Energy Inc. on a one-for-one basis upon the exercise by holders of options to acquire our common stock.

### Summary Historical and Unaudited Pro Forma Consolidated Financial Data

The following tables set forth selected historical and unaudited pro forma consolidated financial data for the periods indicated. This information should be read in conjunction with "Unaudited Pro Forma Condensed Consolidated Financial Information" in this prospectus supplement, as well as "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and related notes thereto contained in the 2009 Form 10-K and in the 2010 3Q Form 10-Q, which are incorporated by reference in the accompanying prospectus.

Our historical consolidated financial statements are not comparable to the unaudited pro forma condensed consolidated financial information included elsewhere in this prospectus supplement or to the results investors should expect after the offering pursuant to this prospectus supplement. Cloud Peak Energy Inc. is a holding company and its only business and material asset is its managing member interest in CPE Resources. As of September 30, 2010, Cloud Peak Energy Inc. owned approximately 51.7% of the common membership units in CPE Resources.

We have derived the historical consolidated financial data as of December 31, 2009 and 2008 and for each of the three years in the period ended December 31, 2009, from our audited consolidated financial statements contained in the 2009 Form 10-K, which is incorporated by reference in the accompanying prospectus. We have derived the historical condensed consolidated financial data as of September 30, 2010 and 2009 and for the nine months ended September 30, 2010 and 2009 from our unaudited condensed consolidated financial statements contained in the 2010 3Q Form 10-Q, which is incorporated by reference in the accompanying prospectus. We have derived the historical consolidated balance sheet data as of December 31, 2007, from the audited consolidated financial statements of RTEA, our predecessor for accounting purposes, not included in this prospectus supplement.

The historical financial information included in this prospectus supplement for all periods prior to our IPO was derived from the consolidated financial statements of RTEA and does not reflect what our financial position, results of operations, and cash flows would have been had we been a separate, stand-alone public company during those periods. We were not operated as a separate, stand-alone public company for the historical periods presented prior to our IPO. The historical costs and expenses reflected in our consolidated financial statements include allocations of certain general and administrative expenses incurred by RTEA and other Rio Tinto affiliates. We believe these allocations were reasonable; however, the allocated expenses are not necessarily indicative of the expenses that would have been incurred if we had been a separate, independent entity.

The unaudited pro forma consolidated financial data as of September 30, 2010 and for the year ended December 31, 2009 and for the nine months ended September 30, 2010, was derived from the unaudited pro forma condensed consolidated financial information, included elsewhere in this prospectus supplement. See "Unaudited Pro Forma Condensed Consolidated Financial Information" in this prospectus supplement. The unaudited pro forma condensed consolidated financial information is based on our historical consolidated financial statements contained in the 2009 Form 10-K and in the 2010 3Q Form 10-Q, which are incorporated by reference in the accompanying prospectus. The unaudited pro forma adjustments are based on available information and certain assumptions that we believe are reasonable and are described below in the accompanying notes. The unaudited pro forma condensed consolidated balance sheet as of September 30, 2010 and the unaudited pro forma condensed consolidated statements of operations for the year ended December 31, 2009 and for the nine months ended September 30, 2010 are presented on a pro forma basis to give effect, in each case, to the issuance of the shares of our common stock covered by this prospectus supplement as if issued on September 30, 2010 for balance sheet adjustments and January 1, 2009 for statement of operations adjustments.

When we refer to our pro forma financial information, we are giving effect to (1) the issuance of the 19,110,000 shares of common stock covered by this prospectus supplement to RTEA and KMS pursuant to the terms and conditions of the LLC Agreement, (2) an estimated public offering price of \$20.87 per share, the five-day average closing price of our common stock on the NYSE from November 9, 2010 through November 15, 2010, (3) the increase in Cloud Peak Energy Inc.'s ownership in CPE Resources from 51.7% to 83.1% (assuming no exercise of the underwriters' over-allotment option), and (4) changes in our estimated undiscounted future liability under the Tax Receivable Agreement of \$64.6 million, resulting increases in our deferred tax asset balances of \$103.3 million and estimates of future realizability, and re-calculation of our estimated effective income tax rate. An increase in the estimated per share price would increase our tax basis in the acquired assets. On a pro forma basis, we estimate that a \$1.00 per share increase from the assumed \$20.87 per share price would increase total deferred income taxes, total tax agreement liability, and total equity by approximately \$9 million, \$4 million and \$5 million, respectively. A \$1.00 per share decrease from the assumed \$20.87 per share price would have a similar inverse impact on the same items. The estimates and assumptions used in preparation of the pro forma financial information may be materially different from our actual experience in connection with this offering by the selling shareholders.

The pro forma condensed consolidated statement of operations presents financial information through income (loss) from continuing operations. Accordingly, the income (loss) from discontinued operations related to the Colowyo mine, the Jacobs Ranch mine and the uranium mining venture are not reflected in continuing operations and no pro forma adjustment will be necessary in the pro forma condensed consolidated statement of operations.

The unaudited pro forma consolidated financial data is for informational purposes only, and is not intended to represent what our results of operations would be after giving effect to this offering, or to indicate our results of operations for any future period. Therefore, investors should not place undue reliance on the unaudited pro forma consolidated financial data.

**Summary Unaudited Pro Forma Consolidated Financial Data**  
(dollars in thousands, except per share amounts)

	For the Nine Months Ended September 30, 2010 Pro Forma	For the Year Ended December 31, 2009 Pro Forma
<b>Statement of Operations Data</b>		
Revenues .....	\$ 1,024,960	\$ 1,398,200
Costs and expenses		
Cost of product sold (exclusive of depreciation, depletion, amortization and accretion, shown separately) .....	719,007	933,489
Depreciation and depletion .....	75,212	97,869
Amortization .....	3,197	28,719
Accretion .....	9,903	12,587
Selling, general and administrative expenses .....	47,159	69,835
Asset impairment charges .....	—	698
Total costs and expenses .....	854,478	1,143,197
Interest expense .....	(36,186)	(5,992)
Tax agreement expense .....	(19,669)	—
Other, net .....	534	329
Total other expense .....	(55,321)	(5,663)
Income from continuing operations before income tax provision and earnings from unconsolidated affiliates .....	115,161	249,340
Income tax provision .....	(39,978)	(65,231)
Earnings from unconsolidated affiliates, net of tax .....	2,152	1,519
Income from continuing operations .....	\$ 77,335	\$ 185,628
Income from continuing operations per share		
Basic .....	\$ 1.09	\$ 2.88
Diluted .....	\$ 1.09	\$ 2.84
Weighted-average shares outstanding		
Basic .....	49,710,000	49,710,000
Diluted .....	49,710,000	60,000,000
<b>Balance Sheet Data</b>		
Cash and cash equivalents .....	\$	287,713
Accounts receivable, net .....		87,542
Inventories, net .....		66,705
Property, plant and equipment, net .....		965,130
Intangible assets, net .....		35,634
Deferred income taxes .....		178,438
Total assets .....		1,896,411
Tax agreement liability .....		132,852
Total long-term debt (including current portion)(7) .....		717,373
Total liabilities .....		1,317,440
Shareholders' equity attributable to controlling interest .....		488,567

**Summary Historical Consolidated Financial Data**  
(dollars in thousands, except per share amounts)

	For the Years Ended December 31,			For the Nine Months Ended September 30,	
	2009	2008	2007	2010	2009
<b>Statement of Operations Data</b>					
Revenues(1) .....	\$ 1,398,200	\$ 1,239,711	\$ 1,053,168	\$ 1,024,960	\$ 1,061,286
Operating income(2)(3) .....	255,003	124,936	102,731	170,482	206,931
Income from continuing operations .....	182,472	88,340	53,789	87,448	147,268
Income (loss) from discontinued operations(4) .....	211,078	(25,215)	(21,482)	—	42,790
Net income .....	393,550	63,125	32,307	87,448	190,058
<b>Amounts attributable to controlling interest(5)</b>					
Income from continuing operations .....	170,623	88,340	53,789	20,856	147,268
Income (loss) from discontinued operations(4) .....	211,078	(25,215)	(21,482)	—	42,790
Net income .....	381,701	63,125	32,307	20,856	190,058
<b>Earnings per share—basic(5)(6)</b>					
Income from continuing operations .....	\$ 3.01	\$ 1.47	\$ 0.90	\$ 0.68	\$ 2.45
Income (loss) from discontinued operations(4) .....	\$ 3.73	\$ (0.42)	\$ (0.36)	\$ —	\$ 0.72
Net income .....	\$ 6.74	\$ 1.05	\$ 0.54	\$ 0.68	\$ 3.17
<b>Earnings per share attributable to controlling interest—diluted(5)(6)</b>					
Income from continuing operations .....	\$ 2.97	\$ 1.47	\$ 0.90	\$ 0.68	\$ 2.45
Income (loss) from discontinued operations(4) .....	\$ 3.52	\$ (0.42)	\$ (0.36)	\$ —	\$ 0.72
Net income .....	\$ 6.49	\$ 1.05	\$ 0.54	\$ 0.68	\$ 3.17

	As of the Years Ended December 31,			As of the Nine Months Ended September 30,	
	2009	2008	2007	2010	2009
<b>Balance Sheet Data</b>					
Cash and cash equivalents .....	\$ 268,316	\$ 15,935	\$ 23,616	\$ 287,713	\$ 18,319
Property, plant and equipment, net .....	987,143	927,910	719,743	965,130	981,248
Assets of discontinued operations(4) .....	—	587,168	721,835	—	582,304
Total assets .....	1,677,596	1,785,191	1,781,201	1,793,144	1,977,312
Senior notes, net of unamortized discount .....	595,321	—	—	595,592	—
Other long-term debt(7) .....	178,367	209,526	571,559	131,201	175,604
Liabilities of discontinued operations(4) .....	—	127,220	270,049	—	139,359
Total liabilities .....	1,232,118	800,025	1,446,240	1,252,828	796,924
Controlling interest equity(5) .....	252,905	985,166	334,961	282,019	1,180,388
Noncontrolling interest equity(5) .....	192,573	—	—	258,297	—

	For the Years Ended December 31,			For the Nine Months Ended September 30,	
	2009	2008	2007	2010	2009
<b>Other Data</b>					
Adjusted EBITDA(8) .....	\$ 320,582	\$ 207,229	\$ 160,809	\$ 253,092	\$ 254,205
Tons sold—company owned and operated mines (millions) .....	90.9	93.7	90.7	70.4	68.0
Tons sold—Decker mine (millions)(9) .....	2.3	3.3	3.5	1.0	1.7
Tons sold—total production (millions) .....	93.3	97.0	94.2	71.4	69.7
Tons purchased and resold (millions) .....	10.1	8.1	8.1	1.4	8.0
Total tons sold (millions) .....	103.3	105.1	102.3	72.8	77.7

- (1) Billings for freight and delivery services accounted for 6.9%, 4.5% and 1.4% of our total revenues for the years ended December 31, 2009, 2008 and 2007, respectively, and 11.2% and 6.9% of our total revenues for the nine months ended September 30, 2010 and 2009, respectively.
- (2) Operating income reflects allocations of general and administrative expenses incurred by RTA and other Rio Tinto affiliates of \$20.7 million, \$25.4 million and \$24.4 million for the years ended December 31, 2009, 2008 and 2007, respectively, and \$0 and \$19.8 for the nine months ended September 30, 2010 and 2009, respectively. Also reflected in operating income are costs incurred as a result of Rio Tinto's actions to divest our business, either through a trade

sale or an initial public offering, of \$18.3 million, \$25.8 million and \$11.3 million for the years ended December 31, 2009 and 2008, and the nine months ended September 30, 2009, respectively.

- (3) Operating income reflects an asset impairment charge of \$0.7 million for costs incurred on an abandoned time-keeping software project for the year ended December 31, 2009. For the year ended December 31, 2008, operating income reflects a \$4.6 million charge to write-off certain contract rights, a \$1 million charge for an abandoned cost efficiency project, and a \$3 million favorable adjustment to the enterprise resource planning ("ERP") system costs that were included in the 2007 asset impairment charge. For the year ended December 31, 2007, operating income reflects an \$18.3 million asset impairment charge related to an abandoned ERP systems implementation. The ERP systems implementation was a worldwide Rio Tinto initiative designed to align processes, procedures, practices and reporting across all Rio Tinto business units. The implementation was abandoned in connection with Rio Tinto's actions to divest our business.
- (4) Discontinued operations includes the operations, net of related income taxes, of the Colowyo coal mine, the Jacobs Ranch coal mine and the uranium mining venture. For the year ended December 31, 2009, discontinued operations includes the \$264.8 million pre-tax gain on sale of the Jacobs Ranch coal mine. Assets and liabilities of continuing operations exclude balances associated with discontinued operations. See "Note 4. Discontinued Operations" of "Notes to Consolidated Financial Statements" contained in the 2009 Form 10-K, which is incorporated by reference in the accompanying prospectus.
- (5) For periods prior to our IPO, income or loss attributable to controlling interest reflects income or loss attributable to RTEA as the former parent company, and includes 100% of income or loss from CPE Resources and its subsidiaries. For the period following our IPO, income or loss attributable to controlling interest reflects our interest (approximately 51.7% as of September 30, 2010) in CPE Resources and its subsidiaries. Noncontrolling interest equity at September 30, 2010 reflects the 48.3% interest in CPE Resources held collectively by RTEA and KMS.
- (6) Earnings per share for periods prior to the IPO assumes 60,000,000 outstanding shares, which is the number of shares that our predecessor, RTEA, would have been required to have outstanding in prior periods based on the capital structure of CPE Resources, which requires a one-to-one ratio between the number of common membership units held by Cloud Peak Energy Inc. and the number of shares of Cloud Peak Energy Inc. common stock outstanding. See "Note 15. Earnings Per Share" of "Notes to Consolidated Financial Statements" contained in the 2009 Form 10-K, which is incorporated by reference in the accompanying prospectus.
- (7) Other long-term debt includes the current and long-term portions of other long-term debt, which included discounted obligations pursuant to federal coal leases of \$169.1 million, \$206.3 million and \$67.6 million as of December 31, 2009, 2008 and 2007, respectively, and \$121.8 million and \$169.1 million for the nine months ended September 30, 2010 and 2009, respectively.
- (8) This prospectus supplement includes the non-GAAP financial measure of Adjusted EBITDA. Adjusted EBITDA is intended to provide additional information only and does not have any standard meaning prescribed by generally accepted accounting principles in the U.S., or U.S. GAAP. A quantitative reconciliation of Adjusted EBITDA to income from continuing operations is found in the table below.

EBITDA represents income from continuing operations before (1) interest income (expense) net, (2) income tax provision, (3) depreciation and depletion, (4) amortization, and (5) accretion. Adjusted EBITDA represents EBITDA as further adjusted to exclude specifically identified items that management believes do not directly reflect our core operations. For the periods presented herein, the specifically identified items are the income statement impacts of: (1) the tax agreement and (2) our significant broker contract that expired in the first quarter of 2010.

Adjusted EBITDA is an additional tool intended to assist our management in comparing our performance on a consistent basis for purposes of business decision-making by removing the impact of certain items that management believes do not directly reflect our core operations. Adjusted EBITDA is a metric intended to assist management in evaluating operating performance, comparing performance across periods, planning and forecasting future business operations and helping determine levels of operating and capital investments. Period-to-period comparisons of Adjusted EBITDA are intended to help our management identify and assess additional trends potentially impacting our company that may not be shown solely by period-to-period comparisons of income from continuing operations. Adjusted EBITDA may also be used as part of our incentive compensation program for our executive officers and others.



We believe Adjusted EBITDA is also useful to investors, analysts and other external users of our consolidated financial statements in evaluating our operating performance from period to period and comparing our performance to similar operating results of other relevant companies. Adjusted EBITDA allows investors to measure a company's operating performance without regard to items such as interest expense, taxes, depreciation and depletion, amortization and accretion and other specifically identified items that are not considered to directly reflect our core operations.

Our management recognizes that using Adjusted EBITDA as a performance measure has inherent limitations as compared to income from continuing operations or other U.S. GAAP financial measures, as this non-GAAP measure excludes certain items, including items that are recurring in nature, which may be meaningful to investors. Adjusted EBITDA excludes interest expense and interest income; however, as we have historically borrowed money in order to finance transactions and operations, and have invested available cash to generate interest income, interest expense and interest income are elements of our cost structure and influence our ability to generate revenue and returns for shareholders. Adjusted EBITDA excludes depreciation and depletion and amortization; however, as we use capital and intangible assets to generate revenues, depreciation, depletion and amortization are necessary elements of our costs and ability to generate revenue. Adjusted EBITDA also excludes accretion expense; however, as we are legally obligated to pay for costs associated with the reclamation and closure of our mine sites, the periodic accretion expense relating to these reclamation costs is a necessary element of our costs and ability to generate revenue. Adjusted EBITDA excludes income taxes; however, as we are organized as a corporation, the payment of taxes is a necessary element of our operations. Adjusted EBITDA excludes tax agreement expense; however, this represents our current estimate of payments we will be required to make to RTEA under our Tax Receivable Agreement. Finally, Adjusted EBITDA excludes income statement amounts attributable to our significant broker contract that expired in the first quarter of 2010; however, this historically represented a positive contribution to our operating results.

As a result of these exclusions, Adjusted EBITDA should not be considered in isolation and does not purport to be an alternative to income from continuing operations or other U.S. GAAP financial measures as a measure of our operating performance.

When using Adjusted EBITDA as a performance measure, management intends to compensate for these limitations by comparing it to income from continuing operations in each period, so as to allow for the comparison of the performance of the underlying core operations with the overall performance of the company on a full-cost, after-tax basis. Using Adjusted EBITDA and income from continuing operations to evaluate the business allows management and investors to (a) assess our relative performance against our competitors and (b) ultimately monitor our capacity to generate returns for shareholders.

Because not all companies use identical calculations, our presentation of Adjusted EBITDA may not be comparable to other similarly titled measures of other companies. Moreover, our presentation of Adjusted EBITDA is different than EBITDA as defined in our debt financing agreements.

- (9) Decker tons sold represent our portion (50%) of Decker operations.

The following table presents a reconciliation of income from continuing operations to Adjusted EBITDA for each of the periods presented is as follows:

	For the Years Ended December 31,			For the Nine Months Ended September 30,	
	2009	2008	2007	2010	2009
	(dollars in thousands)			(dollars in thousands)	
Income from continuing operations .....	\$ 182,472	\$ 88,340	\$ 53,789	\$ 87,448	\$ 147,268
Depreciation and depletion.....	97,869	88,972	80,133	75,212	68,383
Amortization (1).....	28,719	45,989	34,512	3,197	24,770
Accretion.....	12,587	12,742	12,212	9,903	8,402
Interest expense .....	5,992	20,376	40,930	36,186	1,007
Interest income .....	(320)	(2,865)	(7,302)	(411)	(228)
Income tax provision.....	68,249	25,318	18,050	30,212	59,888
EBITDA .....	<u>\$ 395,568</u>	<u>\$ 278,872</u>	<u>\$ 232,324</u>	<u>\$ 241,747</u>	<u>\$ 309,490</u>
Tax agreement expense .....	—	—	—	19,669	—
Expired long-term broker contract .....	(74,986)	(71,643)	(71,515)	(8,324)	(55,285)
Adjusted EBITDA.....	<u>\$ 320,582</u>	<u>\$ 207,229</u>	<u>\$ 160,809</u>	<u>\$ 253,092</u>	<u>\$ 254,205</u>

(1) The impact of the expired significant broker contract on the Statement of Operations is a combination of net income and the amortization expense related to the contract. All amortization expense for the periods presented was attributable to the significant broker contract.

## RISK FACTORS

*Investing in our common stock involves risks. You should carefully consider the risk factors described below, the risk factors described in the accompanying prospectus and all of the information set forth in this prospectus supplement and the accompanying prospectus and incorporated by reference in the accompanying prospectus before you decide to invest in our common stock. If any of these risk factors, as well as other risks and uncertainties that are not currently known to us or that we currently believe are not material, actually occur, our business, financial condition and results of operations could be materially and adversely affected. In such a case, you may lose part or all of your investment.*

### **Risks Related to Ownership of Our Common Stock**

*Our common stock has only traded since November 20, 2009 and our stock price could be volatile and could decline for a variety of reasons, resulting in a substantial loss on your investment.*

Our common stock has only traded since November 20, 2009. The stock markets generally have experienced extreme volatility, often unrelated to the operating performance of the individual companies whose securities are traded publicly. Broad market fluctuations and general economic conditions may materially adversely affect the trading price of our common stock.

Significant price fluctuations in our common stock could result from a variety of other factors, including, among other things, actual or anticipated fluctuations in our operating results or financial condition, new laws or regulations or new interpretations of existing laws or regulations applicable to our business, sales of our common stock by our shareholders and any other factors described in this "Risk Factors" section of this prospectus supplement and the "Risk Factors" section of the accompanying prospectus.

*If securities analysts cease coverage about our company and our industry, or if they issue unfavorable commentary about us or our industry or downgrade our common stock, the price of our common stock could decline.*

The trading market for our common stock depends in part on the research and reports that third-party securities analysts publish about our company and our industry. One or more analysts could downgrade our stock or issue other negative commentary about our company or our industry. If one or more of these analysts cease coverage of our company, we could lose visibility in the market. The occurrence of one or more of these factors could cause the trading price for our stock to decline.

*Future sales of our common stock or other securities convertible into our common stock could cause our stock price to decline.*

Sales of substantial amounts of our common stock in the public market, including in this offering or in future offerings by RTEA or KMS if they exercise their right to require CPE Resources to acquire by redemption their remaining common membership units in CPE Resources and we choose to issue shares of our common stock, or the perception that these sales may occur, could cause the market price of our common stock to decrease significantly.

We also may offer additional shares of our common stock to the public in order to satisfy any additional redemption request by RTEA or KMS with cash in connection with the CPE Assumption Right or for other corporate purposes. In addition, we have granted RTEA, KMS and their permitted transferees certain "piggyback" registration rights which will allow them to include their shares of our common stock in any future registrations of our equity securities, whether or not that registration relates to a primary offering by us or a secondary offering by or on behalf of any of our stockholders. In particular, during the first three years following our IPO, RTEA and KMS have priority over us and any other of our stockholders in any registration that is an underwritten offering. Any such filing or the perception that such a filing may occur could cause the prevailing market price of our common stock to decline and may impact our ability to sell equity to finance the operations of CPE Resources or make strategic acquisitions.

A decline in the trading price of our common stock due to the occurrence of any future sales of stock might impede our ability to raise capital through the issuance of additional shares of our common stock or other equity securities and may cause you to lose part or all of your investment in our shares of common stock.

***Anti-takeover provisions in our charter documents and other aspects of our structure could discourage, delay or prevent a change in control of our company and may adversely affect the trading price of our common stock.***

Certain provisions in our amended and restated certificate of incorporation and amended and restated bylaws and other aspects of our structure may discourage, delay or prevent a change in our management or a change in control over us that stockholders may consider favorable. Among other things, our amended and restated certificate of incorporation and amended and restated bylaws:

- provide for a classified board of directors, which may delay the ability of our stockholders to change the membership of a majority of our board of directors;
- authorize the issuance of "blank check" preferred stock that could be issued by our board of directors to thwart a takeover attempt;
- do not provide for cumulative voting;
- provide that vacancies on the board of directors, including newly created directorships, may be filled only by a majority vote of directors then in office;
- limit the calling of special meetings of stockholders;
- provide that stockholders may not act by written consent;
- provide that our directors may be removed only for cause;
- require supermajority voting to effect certain amendments to our certificate of incorporation and our bylaws; and
- require stockholders to provide advance notice of new business proposals and director nominations under specific procedures.

In addition, the LLC Agreement requires that we conduct all our business operations through CPE Resources.

## CAUTIONARY NOTICE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement and the accompanying prospectus and the information incorporated by reference in the accompanying prospectus contain forward-looking statements that involve substantial risks and uncertainties. You can identify these statements by forward-looking words such as "anticipate," "believe," "could," "estimate," "expect," "intend," "may," "plan," "potential," "should," "will," "would" or similar words. You should read statements that contain these words carefully because they discuss our plans, strategies, prospects and expectations concerning our business, operating results, financial condition and other similar matters. We believe that it is important to communicate our future expectations to our investors. Our forward-looking statements include, but are not limited to, information in this prospectus supplement and the accompanying prospectus and the information incorporated by reference in the accompanying prospectus regarding general domestic and global economic conditions, our reserves, the Lease by Application ("LBA") acquisition process, our business and growth strategy, our costs, expectations for pricing conditions and demand in the U.S. and foreign coal industries and in the PRB, the amount of cash or other collateral needed to secure our surety bond arrangements and market data related to the domestic and foreign coal industry. In particular, there are forward-looking statements in this prospectus supplement and in the accompanying prospectus under the headings "Prospectus Supplement Summary," "Risk Factors" and "Unaudited Pro Forma Condensed Consolidated Financial Information," and in the various sections of the 2009 Form 10-K and the 2010 3Q Form 10-Q, which are incorporated by reference in the accompanying prospectus. There may be events in the future, however, that we are not able to predict accurately or control. The factors listed under "Risk Factors," as well as any cautionary language in this prospectus supplement and the accompanying prospectus and the information incorporated by reference in the accompanying prospectus, provide examples of risks, uncertainties and events that may cause our actual results to differ materially from the expectations we describe in our forward-looking statements. Before you invest in our common stock, you should be aware that the occurrence of the events described in these risk factors and elsewhere in this prospectus supplement and the accompanying prospectus and the information incorporated by reference in the accompanying prospectus could have a material adverse effect on our business, results of operation and financial position. Any forward-looking statement made by us in this prospectus supplement and the accompanying prospectus and the information incorporated by reference in the accompanying prospectus speak only as of the date on which we make it. Additional factors or events that could cause our actual results to differ may emerge from time to time, and it is not possible for us to predict all of them. We undertake no obligation to update or revise publicly any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

The following factors are among those that may cause actual results to differ materially from our forward-looking statements:

- future economic conditions, including impacts of efforts to recover from an economic downturn;
- the contract prices we receive for coal and our customers' ability to honor contract terms;
- market demand for domestic and foreign coal, electricity and steel;
- safety and environmental laws and regulations, including those directly affecting our coal mining and production, and those affecting our customers' coal usage, gaseous emissions or ash handling as well as related costs and liabilities;
- future legislation, changes in regulations or governmental policies or changes in interpretations thereof, and third-party regulatory legal challenges, including with respect to carbon emissions, safety standards and regulatory processes and approvals required to lease and obtain permits for coal mining operations;
- our ability to produce coal at existing and planned volumes and costs;
- the availability and cost of coal reserve acquisitions and surface rights and our ability to successfully acquire new coal reserves and surface rights at attractive prices and in a timely manner;
- the impact of any offerings pursuant to this prospectus supplement, including resulting tax implications and changes to our valuation allowance on our deferred tax assets;
- our assumptions regarding payments arising under the Tax Receivable Agreement and other IPO Structuring Agreements;

- our plans and objectives for future operations and the development of additional coal reserves or acquisition opportunities;
- our relationships with, and other conditions affecting, our customers, including economic conditions and the credit performance and credit risks associated with our customers;
- timing of reductions or increases in customer coal inventories;
- risks inherent to surface coal mining;
- weather conditions or catastrophic weather-related damage;
- changes in energy policy;
- competition;
- the availability and cost of competing energy resources, including changes in the price of crude oil and natural gas generally, as well as subsidies to encourage use of alternative energy sources;
- railroad and other transportation performance and costs;
- disruptions in delivery or changes in pricing from third-party vendors of raw materials and other consumables that are necessary for our operations, such as explosives, petroleum-based fuel, tires, steel and rubber;
- our assumptions concerning coal reserve estimates;
- the terms of CPE Resources' indebtedness;
- changes in costs that we incur as a stand-alone public company as compared to our expectations;
- inaccurately estimating the costs or timing of our reclamation and mine closure obligations;
- liquidity constraints, including those resulting from the cost or unavailability of financing due to credit market conditions;
- our liquidity, results of operations and financial condition, including amounts of working capital that are available; and
- other factors, including those discussed in "Risk Factors" in this prospectus supplement and the accompanying prospectus.

Our forward-looking statements also include estimates of the total amount of payments, including annual payments, under the Tax Receivable Agreement. These estimates are based on assumptions that are subject to change due to various factors, including, among other factors, changes in our operating plan or performance, the acquisition of new LBAs and the prices of those new LBAs, tax law changes, and/or the timing and amounts paid when RTEA and/or KMS redeems their remaining common membership units. See "Risk Factors—Risks Related to Our Corporate Structure and the IPO Structuring Transactions—We are required to pay RTEA for most of the tax benefits we may claim as a result of the tax basis step-up we received in connection with our IPO and related IPO structuring transactions. In certain cases, payments to RTEA may be accelerated or exceed our actual cash tax savings. These provisions may deter a change in control of our company" in the accompanying prospectus.

**PRICE RANGE OF OUR COMMON STOCK**

Our common stock, \$0.01 par value, has traded on the NYSE under the symbol "CLD" since November 20, 2009. Prior to November 20, 2009, there was no public market for our common stock. The following table sets forth the high and low closing sales prices of our common stock, as reported by the NYSE, for each of the periods listed.

	<u>High</u>	<u>Low</u>
<b>Fiscal 2009</b>		
(commencing November 20, 2009)	15.04	12.69
<b>Fiscal 2010</b>		
First Quarter 2010	16.84	13.51
Second Quarter 2010	17.15	13.26
Third Quarter 2010	18.37	13.20
October 1, 2010 – December 9, 2010	22.70	16.86

The last reported sale price of our common stock on the NYSE on December 9, 2010 was \$22.61 per share. As of the close of business on November 17, 2010, we have 1,463 holders of record of our common stock.

**CAPITALIZATION**

The following table sets forth our capitalization as of September 30, 2010 on an actual and a pro forma basis giving effect to this offering and the pro forma adjustments set forth under "Unaudited Pro Forma Condensed Consolidated Financial Information" and the related notes thereto (and assuming no exercise of the underwriters' over-allotment option).

This table should be read in conjunction with "Unaudited Pro Forma Condensed Consolidated Financial Information" in this prospectus supplement, as well as "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the consolidated financial statements and related notes thereto contained in the 2009 Form 10-K and in the 2010 3Q Form 10-Q, which are incorporated by reference in the accompanying prospectus.

	<u>Historical</u>	<u>Adjustments</u>	<u>Pro Forma</u>
	(dollars in thousands, except per share amounts)		
Revolving credit facility(1) .....	—	—	—
Senior notes due 2017 and 2019 .....	595,592	—	595,592
Federal coal lease obligations (including current portion) .....	121,781	—	121,781
Total long-term debt (including current portion)(2) .....	717,373	—	717,373
Equity:			
Common stock (\$0.01 par value; 200,000,000 shares authorized; 31,482,594 shares issued and outstanding on a historical basis; 50,592,594 shares issued and outstanding on a pro forma basis) .....	315	191	506
Additional paid-in capital .....	258,875	171,705	430,580
Retained earnings (accumulated deficit) .....	29,420	38,655	68,075
Accumulated other comprehensive income (loss) .....	(6,591)	(4,003)	(10,594)
Shareholders' equity attributable to controlling interest .....	282,019	206,548	488,567
Noncontrolling interest .....	258,297	(167,893)	90,404
Total equity .....	540,316	38,655	578,971
Total capitalization(3) .....	\$ 1,257,689	\$ 38,655	\$ 1,296,344

- (1) We currently use \$10.5 million of the capacity under our revolving credit facility to issue letters of credit. We may use additional capacity to secure our reclamation obligations going forward.
- (2) Total long-term debt includes current portion of long-term debt. For additional information on our long-term debt, see "Note 9. Long-Term Debt" of "Notes to Consolidated Financial Statements" contained in the 2009 Form 10-K, which is incorporated by reference in the accompanying prospectus.
- (3) As the Tax Receivable Agreement liability does not meet the definition of either debt or equity we have not included the Tax Receivable Agreement liability within the capitalization table above. As described in our pro forma financial statements, the Tax Receivable Agreement liability is estimated to increase from \$66.6 million to \$131.2 million, an increase of \$64.6 million as a result of this offering and the corresponding tax benefit expected to be generated in future years from this transaction.



**UNAUDITED PRO FORMA CONDENSED CONSOLIDATED FINANCIAL INFORMATION**

The following unaudited pro forma condensed consolidated information sets forth our unaudited pro forma and historical consolidated statements of operations for the year ended December 31, 2009 and for the nine months ended September 30, 2010 and the unaudited pro forma and historical consolidated balance sheets at September 30, 2010. Such information for 2009 is based in part on the audited and unaudited consolidated financial statements of RTEA, our predecessor for accounting purposes, contained in the 2009 Form 10-K, which is incorporated by reference in the accompanying prospectus. RTEA's consolidated financial statements were prepared on a carve-out basis from our previous ultimate parent company, Rio Tinto plc. Such carve-out information is not intended to be a complete presentation of the financial position or results of operations of our company had we operated as a stand-alone public company for the entire year ended December 31, 2009. RTEA is considered to be our predecessor for accounting purposes and its consolidated financial statements are our historical consolidated financial statements for periods prior to our IPO. Cloud Peak Energy Inc. is a holding company that manages its consolidated subsidiary CPE Resources, but has no business operations or material assets other than its ownership interest as of September 30, 2010 of approximately 51.7% of the common membership units in CPE Resources.

The unaudited pro forma condensed consolidated balance sheet at September 30, 2010, and the unaudited pro forma condensed consolidated statements of operations for the nine months ended September 30, 2010 and for the year ended December 31, 2009, give effect to the issuance of the 19,110,000 shares of common stock covered by this prospectus supplement as if it had occurred on September 30, 2010 for the unaudited pro forma condensed consolidated balance sheet and on January 1, 2009 for the unaudited pro forma condensed consolidated statements of operations. On a pro forma basis, we estimate that a \$1.00 per share increase from the assumed \$20.87 per share price would increase total deferred income taxes, total tax agreement liability, and total equity by approximately \$9 million, \$4 million, and \$5 million, respectively. A \$1.00 per share decrease from the assumed \$20.87 per share price would have a similar inverse impact on the same items.

The unaudited pro forma adjustments are based on available information and certain assumptions that we believe are reasonable. Presentation of the unaudited pro forma financial information is prepared in conformity with Article 11 of Regulation S-X.

The unaudited pro forma condensed consolidated financial information should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and related notes thereto contained in the 2009 Form 10-K and in the 2010 3Q Form 10-Q, which are incorporated by reference in the accompanying prospectus. The unaudited pro forma condensed consolidated financial information is for informational purposes only and is not intended to represent or be indicative of the consolidated results of operations or financial position that we would have reported had this offering been completed on the dates indicated and should not be taken as representative of our future consolidated results of operations or financial position.

The estimates and assumptions used in preparation of the pro forma financial information may be materially different from our actual experience in connection with this offering by the selling shareholders. For additional information on the pro forma adjustments, see "Pro Forma Adjustments" of the "Notes to Unaudited Pro Forma Condensed Consolidated Financial Information" in this prospectus supplement.

**Unaudited Pro Forma Consolidated Balance Sheet**  
**As of September 30, 2010**  
(dollars in thousands, except per share amounts)

	<u>Historical</u>	<u>Adjustments</u>	<u>Pro Forma</u>
<b>ASSETS</b>			
<b>Current assets</b>			
Cash and cash equivalents .....	\$ 287,713	\$ —	\$ 287,713
Restricted cash .....	218,397	—	218,397
Accounts receivable, net .....	87,542	—	87,542
Due from related parties .....	2,898	—	2,898
Inventories .....	66,705	—	66,705
Deferred income taxes .....	1,738	687 (a)	2,425
Other assets .....	15,096	—	15,096
Total current assets .....	680,089	687	680,776
<b>Non-current assets</b>			
Property, plant and equipment, net .....	965,130	—	965,130
Intangible assets, net .....	—	—	—
Goodwill .....	35,634	—	35,634
Deferred income taxes .....	73,433	102,580 (a)	176,013
Other assets .....	38,858	—	38,858
Total assets .....	<u>\$ 1,793,144</u>	<u>\$ 103,267</u>	<u>1,896,411</u>
<b>LIABILITIES AND EQUITY</b>			
<b>Current liabilities</b>			
Accounts payable .....	\$ 51,670	\$ —	\$ 51,670
Royalties and production taxes .....	134,302	—	134,302
Accrued expenses .....	66,014	—	66,014
Current portion of tax agreement liability .....	1,685	—	1,685
Current portion of federal coal lease obligations .....	54,394	—	54,394
Other liabilities .....	4,543	—	4,543
Total current liabilities .....	312,608	—	312,608
<b>Non-current liabilities</b>			
Tax agreement liability, net of current portion .....	66,555	64,612 (b)	131,167
Senior notes .....	595,592	—	595,592
Federal coal lease obligations, net of current portion .....	67,387	—	67,387
Asset retirement obligations, net of current portion .....	181,437	—	181,437
Other liabilities .....	29,249	—	29,249
Total liabilities .....	1,252,828	64,612	1,317,440
<b>Equity</b>			
Common stock (\$0.01 par value; 200,000,000 shares authorized; 31,482,594 shares issued and outstanding on a historical basis; 50,591,652 shares issued and outstanding on a pro forma basis) .....	315	191 (c)	506
Additional paid-in capital .....	258,875	171,705 (c)	430,580
Retained earnings .....	29,420	103,267 (a)	68,075
		(64,612)(b)	
Accumulated other comprehensive loss .....	(6,591)	(4,003)(c)	(10,594)
Total Cloud Peak Energy Inc. shareholders' equity .....	282,019	206,548	488,567
Noncontrolling interest .....	258,297	(167,893)	90,404
Total equity .....	540,316	38,655	578,971
Total liabilities and equity .....	<u>\$ 1,793,144</u>	<u>\$ 103,267</u>	<u>\$ 1,896,411</u>

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

**Unaudited Pro Forma Condensed Consolidated Statement of Operations**  
**For the Nine Months Ended September 30, 2010**  
(dollars in thousands, except per share amounts)

	<u>Historical</u>	<u>Adjustments</u>	<u>Pro Forma</u>
Revenues.....	\$ 1,024,960	\$ —	\$ 1,024,960
<b>Costs and expenses</b>			
Cost of product sold (exclusive of depreciation, depletion, amortization and accretion, shown separately).....	719,007	—	719,007
Depreciation and depletion.....	75,212	—	75,212
Amortization.....	3,197	—	3,197
Accretion.....	9,903	—	9,903
Selling, general and administrative expenses.....	47,159	—	47,159
<b>Total costs and expenses.....</b>	<b>854,478</b>	<b>—</b>	<b>854,478</b>
<b>Operating income.....</b>	<b>170,482</b>	<b>—</b>	<b>170,482</b>
<b>Other income (expense)</b>			
Interest income.....	411	—	411
Interest expense.....	(36,186)	—	(36,186)
Tax agreement expense.....	(19,669)	—	(19,669)
Other, net.....	123	—	123
<b>Total other expense.....</b>	<b>(55,321)</b>	<b>—</b>	<b>(55,321)</b>
<b>Income from continuing operations before income tax provision and earnings from unconsolidated affiliates.....</b>	<b>115,161</b>	<b>—</b>	<b>115,161</b>
Income tax provision.....	(30,212)	(9,766) (e)	(39,978)
Earnings from unconsolidated affiliates, net of tax.....	2,499	(347) (e)	2,152
<b>Income from continuing operations.....</b>	<b>87,448</b>	<b>(10,113)</b>	<b>77,335</b>
Income from discontinued operations, net of tax.....	—	—	—
<b>Net income.....</b>	<b>87,448</b>	<b>(10,133)</b>	<b>77,335</b>
Less: Net income attributable to noncontrolling interest.....	66,592	(43,272) (f)	23,320
<b>Net income attributable to controlling interest.....</b>	<b>\$ 20,856</b>	<b>\$ 33,159</b>	<b>\$ 54,015</b>
<b>Amounts attributable to controlling interest common shareholders:</b>			
Income from continuing operations.....	\$ 20,856	\$ 33,159	\$ 54,015
Income from discontinued operations.....	—	—	—
<b>Net income.....</b>	<b>\$ 20,856</b>	<b>\$ 33,159</b>	<b>\$ 54,015</b>
<b>Earnings per common share attributable to controlling interest:</b>			
<b>Basic and Diluted</b>			
Income from continuing operations.....	\$ 0.68	—	\$ 1.09 (g)
Income from discontinued operations.....	—	—	— (g)
<b>Net income.....</b>	<b>\$ 0.68</b>	<b>—</b>	<b>\$ 1.09</b>
<b>Weighted-average shares outstanding.....</b>	<b>30,600,000</b>	<b>—</b>	<b>49,710,000 (f)</b>

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

**Unaudited Pro Forma Condensed Consolidated Statement of Operations**  
**For the Year Ended December 31, 2009**  
(dollars in thousands, except per share amounts)

	<u>Historical</u>	<u>Adjustments</u>	<u>Pro Forma</u>
Revenues .....	\$ 1,398,200	\$ —	\$ 1,398,200
Costs and expenses			
Cost of product sold (exclusive of depreciation, depletion, amortization and accretion, shown separately) .....	933,489	—	933,489
Depreciation and depletion .....	97,869	—	97,869
Amortization .....	28,719	—	28,719
Accretion .....	12,587	—	12,587
Selling, general and administrative expenses .....	69,835	—	69,835
Asset impairment charges .....	698	—	698
Total costs and expenses .....	<u>1,143,197</u>	<u>—</u>	<u>1,143,197</u>
Operating income .....	<u>255,003</u>	<u>—</u>	<u>255,003</u>
Other income (expense)			
Interest income .....	320	—	320
Interest expense .....	(5,992)	—	(5,992)
Other, net .....	9	—	9
Total other expense .....	<u>(5,663)</u>	<u>—</u>	<u>(5,663)</u>
Income from continuing operations before income tax provision and earnings from unconsolidated affiliates .....	249,340	—	249,340
Income tax provision .....	(68,249)	3,018 (e)	(65,231)
Earnings from unconsolidated affiliates, net of tax .....	1,381	138 (e)	1,519
Income from continuing operations .....	182,472	3,156	185,628
Income (loss) from discontinued operations, net of tax .....	211,078	—	211,078
Net income .....	393,550	3,156	396,706
Less: Net income attributable to noncontrolling interest .....	11,849	30,683 (f)	42,532
Net income attributable to controlling interest .....	<u>\$ 381,701</u>	<u>\$ (27,527)</u>	<u>\$ 354,174</u>
Amounts attributable to controlling interest common shareholders:			
Income from continuing operations .....	170,623	(27,527)	143,096
Income from discontinued operations .....	211,078	—	211,078
Net income .....	<u>\$ 381,701</u>	<u>\$ (27,527)</u>	<u>\$ 354,174</u>
Earnings (loss) per common share attributable to controlling interest:			
Basic			
Income from continuing operations .....	\$ 3.01	—	\$ 2.88 (g)
Income from discontinued operations .....	3.73	—	4.25 (g)
Net income .....	<u>\$ 6.74</u>	<u>—</u>	<u>\$ 7.12</u>
Weighted-average shares outstanding—basic .....	<u>56,616,986</u>	<u>—</u>	<u>49,710,000 (f)</u>
Diluted			
Income from continuing operations .....	\$ 2.97	—	\$ 2.84 (g)
Income from discontinued operations .....	3.52	—	3.52 (g)
Net income .....	<u>\$ 6.49</u>	<u>—</u>	<u>\$ 6.36</u>
Weighted-average shares outstanding—diluted .....	<u>60,000,000</u>	<u>—</u>	<u>60,000,000 (f)</u>

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

## Notes to Unaudited Pro Forma Condensed Consolidated Financial Information

### Basis of Presentation

The unaudited pro forma condensed consolidated financial information is based on our historical consolidated financial statements contained in the 2009 Form 10-K and in the 2010 3Q Form 10-Q, which are incorporated by reference in the accompanying prospectus. The pro forma condensed consolidated statement of operations presents financial information through income (loss) from continuing operations. The income (loss) from discontinued operations related to the Colowyo mine, the Jacobs Ranch mine and the uranium mining venture are not reflected in continuing operations and no pro forma adjustment is necessary in the pro forma condensed consolidated statement of operations.

### Pro Forma Adjustments

When we refer to our pro forma financial information we are giving effect to:

- the issuance of the 19,110,000 shares of common stock covered by this prospectus supplement to RTEA and KMS pursuant to the terms and conditions of the LLC Agreement,
- an estimated public offering price of \$20.87 per share, the five-day average closing price of our common stock on the NYSE from November 9, 2010 through November 15, 2010,
- the increase in Cloud Peak Energy Inc.'s ownership in CPE Resources from 51.7% to 83.1% (assuming no exercise of the underwriters' over-allotment option), and
- changes in our estimated undiscounted future liability under the Tax Receivable Agreement, resulting changes in our deferred tax asset balances and estimate of future realizability, and re-calculation of our estimated effective income tax rate.

The estimates and assumptions used in preparation of the pro forma financial information may be materially different from our actual experience in connection with this offering by the selling shareholders.

The pro forma amounts represent the pro forma adjustments made to give effect to the items described above:

- (a) Reflects the effects on our deferred income tax accounts that result from Cloud Peak Energy Inc.'s acquisition of additional common membership units of CPE Resources as a result of Cloud Peak Energy Inc.'s exercise of its CPE Assumption Right. At the time of this acquisition, CPE Resources has in effect an election under Section 754 of the Internal Revenue Code, which will result in an increase in the tax basis of Cloud Peak Energy Inc.'s share of the net assets of CPE Resources. This increase in tax basis will result in additional income tax deductions over the remaining lives of the affected assets, which consist primarily of property, plant and equipment used in our mining operations. Based on currently enacted tax rates, these deductions and tax attributes, to the extent that they reduce future taxable income, would result in a decrease in our future income tax payments. The increased tax basis results in a gross deferred tax asset of \$123.1 million, calculated as the combined federal and state statutory rate of 36% multiplied by the amount by which our tax basis in these assets exceed the related financial reporting carrying amounts. The unaudited pro forma condensed consolidated balance sheet as of September 30, 2010, thus reflects adjustments to record an additional \$103.3 million in net deferred tax assets related to the excess of the tax basis of Cloud Peak Energy Inc.'s interest in CPE Resources over its interest in the related carrying amounts of CPE Resources' net assets as reported in the historical consolidated balance sheet as of September 30, 2010. The future realization of the deferred income tax assets that result from the increased tax basis of our interest in CPE Resources' net assets depends on the existence of sufficient future taxable income. Based on our consideration of CPE Resources' historical operations, current forecasts of taxable income over the remaining lives of our mines, the availability of tax planning strategies, and other factors, we determined that \$103.3 million of the potential tax benefits resulting from the increased tax basis of Cloud Peak Energy Inc.'s interest in CPE Resources are more likely than not to be realized at the statutory federal and state income tax rates. Accordingly, the unaudited pro forma condensed consolidated balance sheet as of September 30, 2010, reflects a \$19.8 million adjustment to record an additional valuation allowance to reduce the deferred income tax assets to the net amount that we determined is more likely than not to be realized. For U.S. GAAP purposes, the deferred income tax assets and related valuation allowance that will be recognized as a result of our increased tax basis in CPE Resources' net assets are attributable to

transactions between the owners of CPE Resources. The tax effects of such equity transactions are required by U.S. GAAP to be recorded in equity. Accordingly, the unaudited pro forma condensed consolidated balance sheet as of September 30, 2010, reflects a \$38.7 million increase in shareholders' equity (see note (d) below) to reflect the net effects of the pro forma adjustments to deferred income taxes described above.

- (b) As part of the IPO structuring transactions in 2009, Cloud Peak Energy Inc. entered into the Tax Receivable Agreement with RTEA, pursuant to which Cloud Peak Energy Inc. will pay to RTEA approximately 85% of its cash savings in income taxes that it realizes as a result of the increase in the tax basis of its initial and additional interest under this transaction in CPE Resources. Additional cash tax savings arises from future tax deductions that will result from a further step-up in our tax basis based on the value paid for RTEA's units in connection with this offering, including tax benefits attributable to payments made under the Tax Receivable Agreement. The unaudited pro forma condensed consolidated balance sheet as of September 30, 2010, reflects adjustments to recognize additional current and noncurrent liabilities totaling \$64.6 million, with a corresponding charge to shareholders' equity (see note (d) below), based on our estimate, using assumptions consistent with those used in determining the amount of the deferred tax asset valuation allowance, of the undiscounted amounts that we expect to pay to RTEA under this agreement. We estimate that annual payments to RTEA under the agreement will range from approximately \$1 million to \$17 million per year based on our operating plan which takes into account only our existing LBAs. Payments would be greater if we generate income significantly in excess of the amounts used in our operating plan, for example, because we acquire additional LBAs beyond our existing LBAs, and as a result we realize the full tax benefit of such increased tax basis (or an increased portion thereof). Our obligation may also increase if there are changes in law, including the increase of current corporate income tax rates. These estimates are based on assumptions related to our business that could change and the actual estimated payments could differ materially from these estimates.
- (c) Reflects the effects of Cloud Peak Energy Inc.'s issuance of 19,110,000 shares of Cloud Peak Energy Inc. common stock to RTEA and KMS, and Cloud Peak Energy Inc.'s acquisition of a corresponding number of common membership units from RTEA and KMS in accordance with provisions of the LLC Agreement that require a one-to-one ratio of common shares to common membership units held by Cloud Peak Energy Inc. This acquisition of common membership units increased Cloud Peak Energy Inc.'s managing member interest in CPE Resources to 83.1% and reduced RTEA's and KMS's noncontrolling interest in CPE Resources to 16.9%. The unaudited pro forma condensed consolidated balance sheet as of September 30, 2010 includes an adjustment to increase additional paid-in capital by \$171.7 million and decrease the noncontrolling interest in shareholders' equity by \$167.9 million to reflect these changes in ownership. Further, \$4.0 million of our accumulated other comprehensive loss was also reclassified to additional paid-in capital.
- (d) The pro forma adjustments for this offering reflect a series of transactions involving Cloud Peak Energy Inc., RTEA and CPE Resources. The aggregate effect of these adjustments is a \$38.7 million net increase in shareholders' equity, as follows:

	Note	
Adjustments to the deferred income taxes	(a)	\$ 103,267
Recognition of additional Tax Receivable Agreement liability	(b)	(64,612)
Net increase in pro forma consolidated shareholders' equity		<u>\$ 38,655</u>

- (e) Reflects the effects on our income tax provision of the pro forma adjustments to income from continuing operations attributable to the reduction of RTEA's noncontrolling interest discussed in note (g) below. The calculated amount reflects a combined federal and state statutory income tax rate of 36% and applies only to Cloud Peak Energy Inc.'s new ownership interest in CPE Resources. The calculation of such additional income tax expense includes the effects of permanent differences between financial reporting income and taxable income that are reflected in our historical consolidated statements of operations and adjustments to those permanent differences that are directly attributable to the exchange at \$20.87 per common membership unit (the assumed offering price).
- (f) Reflects the effect of the reduction of RTEA's and KMS's ownership interest in CPE Resources as a result of this offering (assuming no exercise of the underwriters' over-allotment option).

- (g) Pro forma income from continuing operations per share for the year ended December 31, 2009, and the nine months ended September 30, 2010, reflects 19,110,000 weighted average shares that are offered by this prospectus supplement. In applying the effects of this offering, we have increased the numerator to include CPE Resources income attributable to the noncontrolling interest and decreased the numerator to reflect the additional income tax expense that results from the attribution of additional CPE Resources income to Cloud Peak Energy Inc.'s controlling interest in CPE Resources.

The following table presents the calculation of pro forma basic and diluted income from continuing operations per share.

	Year Ended December 31, 2009	Nine Months Ended September 30, 2010
	(dollars in thousands, except per share amounts)	
Numerator for basic income from continuing operations per share—pro forma income from continuing operations .....	\$ 143,096	\$ 54,015
Add back pro forma income from continuing operations attributable to noncontrolling interest, net of estimated income taxes .....	27,220	—
Numerator for diluted income from continuing operations per share .....	\$ 170,316	\$ 54,015
Denominator for basic income from continuing operations per share—common shares issued in the offering .....	49,710,000	49,710,000
Dilutive potential common shares:		
Weighted average dilutive potential shares—non-vested share awards .....	—	—
Common shares from exchange of CPE Resources common membership units held by noncontrolling interest .....	10,290,000	—
Denominator for diluted income from continuing operations per share .....	60,000,000	49,710,000
Pro forma basic income from continuing operations per share .....	\$ 2.88	\$ 1.09
Pro forma diluted income from continuing operations per share .....	\$ 2.84	\$ 1.09

## UNDERWRITING

Under the terms and subject to the conditions contained in an underwriting agreement dated \_\_\_\_\_, 2010, the selling shareholders have agreed to sell to the underwriters named below for whom Credit Suisse Securities (USA) LLC, Morgan Stanley & Co. Incorporated, RBC Capital Markets, LLC and J.P. Morgan Securities LLC are acting as representatives, the following respective numbers of shares of our common stock:

<u>Underwriter</u>	<u>Number of Shares</u>
Credit Suisse Securities (USA) LLC.....	
Morgan Stanley & Co. Incorporated.....	
RBC Capital Markets, LLC.....	
J.P. Morgan Securities LLC.....	
Total.....	

The underwriting agreement provides that the underwriters are obligated to purchase all the shares of common stock in this offering, other than those shares covered by the over-allotment option described below. The underwriting agreement also provides that if an underwriter defaults, the purchase commitments of non-defaulting underwriters may be increased or this offering may be terminated.

The selling shareholders have granted to the underwriters a 30-day option to purchase up to 2,866,500 additional shares at the public offering price set forth on the cover of this prospectus supplement less the underwriting discounts and commissions. The option may be exercised only to cover any over-allotments of common stock.

The underwriters propose to offer the shares of common stock directly to the public at the public offering price on the cover page of this prospectus supplement and to selling group members at that price less a selling concession of \$ \_\_\_\_\_ per share. After the shares of common stock are released for sale to the public, the representatives may change the public offering price and concession.

The following table shows the public offering price, the underwriting discounts and commissions payable by the selling shareholders and the proceeds before expenses to the selling shareholders. This information assumes either no exercise or full exercise by the underwriters of their over-allotment option.

	<u>Per Share</u>	<u>Total</u>	
		<u>Without Option</u>	<u>With Option</u>
Public offering price.....	\$	\$	\$
Underwriting discounts and commissions.....	\$	\$	\$
Proceeds, before expenses, to selling shareholders.....	\$	\$	\$

The expenses of this offering are estimated to be approximately \$ \_\_\_\_\_. We and the selling shareholders will bear the costs associated with this offering and the registration statement in accordance with the terms of the Registration Rights Agreement, which provides that the selling shareholders will bear 75% and we will bear 25% of all reasonable, out-of-pocket fees and expenses incident to the registration of the securities covered by this prospectus supplement. The selling shareholders will bear all commissions and discounts, if any, attributable to the sales of common stock. We will not receive any of the proceeds from the sale of our common stock by the selling shareholders.

We and CPE Resources have agreed that we will not, directly or indirectly, offer, sell, contract to sell, pledge or otherwise dispose of, or file with the SEC a registration statement under the Securities Act relating to, any shares of our common stock or securities convertible into or exchangeable or exercisable for any shares of our common stock (other than a post-effective amendment to the registration statement on Form S-3 registering the resale of our common stock by members of CPE Resources), or publicly disclose the intention to make any offer, sale, pledge, disposition or filing, without the prior written consent of Credit Suisse Securities (USA) LLC and Morgan Stanley & Co. Incorporated for a period of 90 days after the date of this prospectus supplement, except issuances pursuant to an employee benefit plan in effect on the date of this prospectus supplement, the filing by us of any registration statement on Form S-8 relating to the offering of any such securities and the issuance by us of common stock in connection with acquisitions of businesses or in connection with the formation of joint ventures, provided that the amount of common stock issued in connection with any such acquisition or joint venture does not in the aggregate exceed 15% of our total common stock outstanding and the recipients sign a lock-up agreement for the remainder of such 90-day period.



Each selling shareholder has agreed that it will not, directly or indirectly, offer, sell, contract to sell, pledge or otherwise dispose of any shares of our common stock or securities convertible into or exchangeable or exercisable for any shares of our common stock, enter into a transaction that would have the same effect, or enter into any swap, hedge or other arrangement that transfers, in whole or in part, any of the economic consequences of ownership of our common stock, whether any of these transactions are to be settled by delivery of our common stock or other securities, in cash or otherwise, or publicly disclose the intention to make any offer, sale, pledge or disposition, or to enter into any transaction, swap, hedge or other arrangement, without, in each case, the prior written consent of Credit Suisse Securities (USA) LLC and Morgan Stanley & Co. Incorporated for a period of 90 days after the date of this prospectus supplement. This will not prohibit the selling shareholders from redeeming their common membership units in CPE Resources in exchange for cash pursuant to the terms of the LLC Agreement.

Our officers and directors have agreed that they will not offer, sell, contract to sell, pledge or otherwise dispose of, directly or indirectly, any shares of our common stock or securities convertible into or exchangeable or exercisable for any shares of our common stock, enter into a transaction that would have the same effect, or enter into any swap, hedge or other arrangement that transfers, in whole or in part, any of the economic consequences of ownership of our common stock, whether any of these transactions are to be settled by delivery of our common stock or other securities, in cash or otherwise, or publicly disclose the intention to make any offer, sale, pledge or disposition, or to enter into any transaction, swap, hedge or other arrangement, without, in each case, the prior written consent of Credit Suisse Securities (USA) LLC and Morgan Stanley & Co. Incorporated for a period of 90 days after the date of this prospectus supplement, except any shares of common stock acquired in the open market, distributions or transfers of shares of common stock or any security convertible into common stock (including units in CPE Resources) to affiliates, limited partners or stockholders and transfers of shares of common stock to a family member or trust, provided that the transferee agrees to be bound in writing by the terms of the lockup agreement prior to such transfer and, in the case of a transfer to a family member or trust, such transfer shall not involve a disposition of value and no filing by any party (donor, donee, transferor or transferee) under the Securities Exchange Act of 1934 (the "Exchange Act") shall be required or shall be voluntarily made in connection with such transfer.

We, CPE Resources and the selling shareholders have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act, or contribute to payments that the underwriters may be required to make in that respect in accordance with the terms of the underwriting agreement.

The shares of common stock are listed on the NYSE under the symbol "CLD."

Certain of the underwriters and their respective affiliates have from time to time performed, and may in the future perform, various financial advisory, commercial banking and investment banking services for us and for our affiliates in the ordinary course of business for which they have received and would receive customary compensation.

In connection with this offering, the underwriters may engage in stabilizing transactions, over-allotment transactions, syndicate covering transactions and penalty bids in accordance with Regulation M under the Exchange Act.

- Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum.
- Over-allotment involves sales by the underwriters of shares in excess of the number of shares the underwriters are obligated to purchase, which creates a syndicate short position. The short position may be either a covered short position or a naked short position. In a covered short position, the number of shares over-allotted by the underwriters is not greater than the number of shares that they may purchase in the over-allotment option. In a naked short position, the number of shares involved is greater than the number of shares in the over-allotment option. The underwriters may close out any covered short position by either exercising their over-allotment option and/or purchasing shares in the open market.
- Syndicate covering transactions involve purchases of the common stock in the open market after the distribution has been completed in order to cover syndicate short positions. In determining the source of shares to close out the short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the over-allotment option. If the underwriters sell more shares than could be covered by the over-allotment option, a naked short position, the position can only be closed out by buying shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there could be downward pressure on the price of the shares in the open market after pricing that could adversely affect investors who purchase in this offering.

- Penalty bids permit the representative to reclaim a selling concession from a syndicate member when the common stock originally sold by the syndicate member is purchased in a stabilizing or syndicate covering transaction to cover syndicate short positions.

These stabilizing transactions, syndicate covering transactions and penalty bids may have the effect of raising or maintaining the market price of our common stock or preventing or retarding a decline in the market price of the common stock. As a result the price of our common stock may be higher than the price that might otherwise exist in the open market. These transactions may be effected on the New York Stock Exchange or otherwise and, if commenced, may be discontinued at any time.

An electronic version of this prospectus supplement and the accompanying prospectus may be made available on the web sites maintained by one or more of the underwriters, or selling group members, if any, participating in this offering and one or more of the underwriters participating in this offering may distribute prospectus supplements and the accompanying prospectus electronically. The representatives may agree to allocate a number of shares to underwriters and selling group members for sale to their online brokerage account holders. Internet distributions will be allocated by the underwriters and selling group members that will make internet distributions on the same basis as other allocations.

#### European Economic Area

In relation to each Member State of the European Economic Area which has implemented the Prospectus Directive (each, a Relevant Member State), each underwriter represents and agrees that with effect from and including the date on which the Prospectus Directive is implemented in that Relevant Member State (the Relevant Implementation Date) it has not made and will not make an offer of shares of common stock to the public in that Relevant Member State except that it may, with effect from and including the Relevant Implementation Date, make an offer of shares of common stock to the public in that Relevant Member State at any time,

- to legal entities which are authorized or regulated to operate in the financial markets or, if not so authorized or regulated, whose corporate purpose is solely to invest in securities;
- to any legal entity which has two or more of an average of at least 250 employees during the last financial year; a total balance sheet of more than €43,000,000 and an annual net turnover of more than €50,000,000, as shown in its last annual or consolidated accounts;
- to fewer than 100 natural or legal persons (other than qualified investors as defined in the Prospectus Directive) subject to obtaining the prior consent of the manager for any such offer; or
- in any other circumstances which do not require the publication by the Issuer of a prospectus pursuant to Article 3 of the Prospectus Directive.

For the purposes of this provision, the expression an "offer of shares to the public" in relation to any shares of common stock in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and the shares of common stock to be offered so as to enable an investor to decide to purchase or subscribe the shares of common stock, as the same may be varied in that Member State by any measure implementing the Prospectus Directive in that Member State and the expression Prospectus Directive means Directive 2003/71/EC and includes any relevant implementing measure in each Relevant Member State.

#### United Kingdom

Each underwriter has represented and agreed that it has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of Section 21 of the Financial Services and Markets Act 2000) in connection with the issue or sale of shares of common stock in circumstances in which Section 21(1) of such Act does not apply to us and it has complied and will comply with all applicable provisions of such Act with respect to anything done by it in relation to any shares of common stock in, from or otherwise involving the United Kingdom.

### LEGAL MATTERS

The validity of the shares of common stock described in this prospectus supplement and other legal matters concerning this prospectus supplement will be passed upon for us by Cadwalader, Wickersham & Taft LLP, New York, New York. Certain legal matters in connection with this offering will be passed upon for the underwriters by Davis Polk & Wardwell LLP, New York, New York.

### EXPERTS

The audited consolidated financial statements of Cloud Peak Energy Inc. and its subsidiaries as of December 31, 2009 and for each of the three years in the period ended December 31, 2009 contained in the 2009 Form 10-K, which is incorporated by reference in the accompanying prospectus, except as they relate to Decker Coal Company, have been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, and, insofar as they relate to Decker Coal Company, by KPMG LLP, an independent registered public accounting firm. Such financial statements have been so incorporated in reliance on the reports of such independent registered public accounting firms given on the authority of such firms as experts in auditing and accounting.