

PEABODY ENERGY CORP  
Form 11-K  
June 17, 2011

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549  
FORM 11-K

(Mark One)

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

For the fiscal year ended December 31, 2010

or

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

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission File Number: 1-16463

**BIG RIDGE, INC. 401(K) PROFIT SHARING PLAN AND TRUST**

Full title of the plan

**PEABODY ENERGY CORPORATION**

**701 Market Street, St. Louis, Missouri 63101-1826**

Name of issuer of the securities held pursuant to the plan and the address of its principal executive office

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Big Ridge, Inc. 401(k) Profit Sharing Plan and Trust  
Financial Statements and Supplemental Schedule  
Years Ended December 31, 2010 and 2009  
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**Report of Independent Registered Public Accounting Firm**

The Plan Administrator  
Defined Contribution Administrative Committee

We have audited the accompanying statements of net assets available for benefits of Big Ridge, Inc. 401(k) Profit Sharing Plan and Trust (the Plan) as of December 31, 2010 and 2009, and the related statements of changes in net assets available for benefits for the years then ended. These financial statements are the responsibility of the Plan's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. We were not engaged to perform an audit of the Plan's internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Plan's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the net assets available for benefits of the Plan at December 31, 2010 and 2009, and the changes in its net assets available for benefits for the years then ended, in conformity with U.S. generally accepted accounting principles.

Our audits were performed for the purpose of forming an opinion on the financial statements taken as a whole. The accompanying supplemental schedule of assets (held at end of year) as of December 31, 2010, is presented for purposes of additional analysis and is not a required part of the financial statements but is supplementary information required by the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974. This supplemental schedule is the responsibility of the Plan's management. The supplemental schedule has been subjected to the auditing procedures applied in our audits of the financial statements and, in our opinion, is fairly stated in all material respects in relation to the financial statements taken as a whole.

/s/ Ernst & Young LLP

St. Louis, Missouri  
June 17, 2011

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Big Ridge, Inc. 401(k) Profit Sharing Plan and Trust  
 Statements of Net Assets Available for Benefits

	<b>December 31,</b>	
	<b>2010</b>	<b>2009</b>
<b>Assets:</b>		
Investments, at fair value:		
Investments in mutual funds	\$ 7,509,435	\$ 5,862,501
Investment in common/collective trust	5,277,632	4,906,609
Interest in Master Trust	648,305	571,730
 Total investments	 13,435,372	 11,340,840
 Receivables:		
Employer contributions	5,700	32,500
Employee contributions	5,700	32,500
 Total receivables	 11,400	 65,000
 Total assets	 13,446,772	 11,405,840
 Adjustment from fair value to contract value for fully benefit-responsive investment contracts	 (207,823)	 (106,072)
 Net assets available for benefits	 \$ 13,238,949	 \$ 11,299,768

*See accompanying notes.*

Big Ridge, Inc. 401(k) Profit Sharing Plan and Trust  
Statements of Changes in Net Assets Available for Benefits

	<b>Years Ended December 31,</b>	
	<b>2010</b>	<b>2009</b>
<b>Additions:</b>		
Investment income:		
Interest and dividends	\$ 312,868	\$ 234,169
Net realized and unrealized appreciation of mutual funds	838,061	1,165,840
Net investment income in the Master Trust	270,659	341,768
 Net investment income	 1,421,588	 1,741,777
 Contributions:		
Employee	908,616	1,025,888
Employer	311,900	375,443
Rollover	497	12,692
 Total contributions	 1,221,013	 1,414,023
 Total additions	 2,642,601	 3,155,800
 <b>Deductions:</b>		
Benefits paid to participants	(699,936)	(975,899)
Administrative expenses	(3,484)	(2,810)
 Total deductions	 (703,420)	 (978,709)
 Net increase in net assets available for benefits	 1,939,181	 2,177,091
Net assets available for benefits at beginning of year	11,299,768	9,122,677
 Net assets available for benefits at end of year	 \$ 13,238,949	 \$ 11,299,768

*See accompanying notes.*

Big Ridge, Inc. 401(k) Profit Sharing Plan and Trust  
Notes to Financial Statements  
Years Ended December 31, 2010 and 2009

**1. Description of the Plan**

The following description of the Big Ridge, Inc. (Big Ridge, the Company, or the Employer) 401(k) Profit Sharing Plan and Trust (the Plan) provides only general information. Participants should refer to the plan documents for a more complete description of the Plan's provisions. Big Ridge is an indirect, wholly owned subsidiary of Peabody Energy Corporation (Peabody). The Plan's administrator and sponsor is Peabody Holding Company, LLC (the Plan Administrator or the Plan Sponsor).

**General**

The Plan is a defined contribution plan, and participation in the Plan is voluntary. Employees of Big Ridge who are represented by the International Brotherhood of Boilermakers are eligible for participation on the date of their employment. The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974, as amended (ERISA).

The Plan allows participants to invest in a selection of mutual funds, a common/collective trust and the Peabody Energy Stock Fund, which is the participating investment in the Master Trust. See Notes 2 and 3 for additional details related to the Master Trust. All investments in the Plan are participant-directed.

**Contributions**

Each year participants may contribute on a pre-tax basis any whole percentage from 1% to 90% of eligible compensation, as defined in the Plan. Additionally, eligible participants may elect to contribute \$125, \$150, or \$175 of their monthly Wage Incentive Program (WIP) payment on a pre-tax basis. In the calendar year that a participant is age 50 or older, and each year thereafter, he or she is permitted to make catch-up contributions to the Plan. Participants may also rollover account balances from other qualified defined benefit or defined contribution plans.

The Employer makes matching contributions equal to 100% of eligible WIP contributions that participants make to the Plan. The Company may contribute a discretionary amount to the accounts of qualifying participants, as defined in the Plan.

Participants direct the investment of all contributions into various investment options offered by the Plan. All contributions are subject to certain limitations as defined by the Plan and the Internal Revenue Service (IRS).

**Vesting**

Participants are vested immediately in their own contributions, Employer matching and discretionary contributions, and the actual earnings thereon.

Big Ridge, Inc. 401(k) Profit Sharing Plan and Trust  
Notes to Financial Statements

**Notes Receivable from Participants**

The Plan does not offer participant loans.

**Participant Accounts**

Each participant's account is credited with the participant's contributions, Employer matching and discretionary contributions, and plan earnings. The benefit to which a participant is entitled is the vested balance of the participant's account as defined in the Plan.

**Payment of Benefits**

Participants are eligible for distribution of their entire account balance upon death, disability, or termination of employment. Participants may elect to receive their distribution as a lump-sum payment or transfer their account balance into an individual retirement account or another qualified plan.

Participants who have attained the age of 59<sup>1/2</sup> have the right to receive a partial or full distribution of their account balance. Withdrawals in cases of hardship and other withdrawals are also permitted, as defined in the Plan.

**Plan Termination**

The Plan could be terminated through the collective bargaining process, subject to the provisions of ERISA.

Participants' accounts will remain fully vested upon termination of the Plan. Currently, the Company has no intention to terminate the Plan.

**Administrative Expenses**

All significant administrative expenses of the Plan, including recordkeeping, audit and trustee fees, are paid by the Company. Participants are required to pay for certain miscellaneous transaction fees.

Big Ridge, Inc. 401(k) Profit Sharing Plan and Trust  
Notes to Financial Statements

**2. Summary of Significant Accounting Policies**

**Basis of Presentation**

Financial statements of the Plan are prepared using the accrual method of accounting.

**Newly Adopted Accounting Standards**

In January 2010, the Financial Accounting Standards Board issued accounting guidance that requires new fair value disclosures, including significant transfers in and out of Level 1 and Level 2 fair value measurements and a description of the reasons for the transfers. In addition, the guidance requires new disclosures regarding activity in Level 3 fair value measurements, including a gross basis reconciliation. The new disclosure requirements became effective for annual periods beginning January 1, 2010, except for the disclosure of activity within Level 3 fair value measurements, which is effective for fiscal years beginning after December 15, 2010 (January 1, 2011 for the Plan). Accordingly, adoption of the guidance does not impact the Plan's disclosures. Adoption of the gross presentation of Level 3 activity is not expected to impact the Plan's disclosures as the Plan currently does not have any Level 3 investments.

**Valuation of Investments**

The Plan Sponsor defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. See Note 3 for further description of fair value measurements.

The Vanguard Retirement Savings Trust invests in fully benefit-responsive investment contracts. These investment contracts are recorded at fair value; however, since these contracts are fully benefit-responsive, an adjustment is reflected in the statements of net assets available for benefits to present these investments at contract value. Contract value is the relevant measurement attributable to fully benefit-responsive investment contracts because contract value is the amount participants would receive if they were to initiate permitted transactions under the terms of the Plan. Contract value represents contributions plus earnings, less participant withdrawals and administrative expenses.

**Securities Transactions**

Purchases and sales of securities are recorded on a trade-date basis. Realized gains (losses) are computed based on the average cost of securities sold. Interest income is recorded when earned. Dividend income is recorded on the ex-dividend date. Capital gain distributions are included in dividend income.

**Interest in Master Trust**

The Master Trust Agreement for the Peabody Energy Stock Fund (the Master Trust) was established to hold investments in the Peabody Energy Stock Fund for this Plan as well as Peabody's other defined contribution plans. Total investment income (loss) of the Master Trust is allocated to each plan investing in the Master Trust based on the units held in the Master Trust by each Plan.



Big Ridge, Inc. 401(k) Profit Sharing Plan and Trust  
Notes to Financial Statements

**Payment of Benefits**

Benefit distributions are recorded when paid.

**Use of Estimates**

The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates.

**3. Fair Value Measurements**

The Plan Sponsor uses a three-level fair value hierarchy that categorizes assets and liabilities measured at fair value based on the observability of the inputs utilized in the valuation. These levels include: Level 1, inputs are quoted prices in active markets for identical assets or liabilities; Level 2, inputs other than quoted prices included in Level 1 that are directly or indirectly observable through market-corroborated inputs; and Level 3, inputs are unobservable, or observable but cannot be market-corroborated, requiring the Plan Sponsor to make assumptions about pricing by market participants. There were no Level 3 investments in the Plan as of December 31, 2010 and 2009.

A financial instrument's level within the valuation hierarchy is based upon the lowest level of input that is significant to the fair value measurement. Following is a description of the valuation techniques and inputs used for each major class of investments measured at fair value, including the general classification of such investments pursuant to the valuation hierarchy.

*Mutual Funds*

Plan investments include a wide variety of mutual fund types that can generally be classified as holding primarily equity securities, fixed income securities, or a combination of equity and fixed income securities aimed at certain target retirement dates. Shares of mutual funds are valued at quoted market prices, which represent the net asset value (NAV) of shares held by the Plan at year-end. NAV is based on the value of the underlying assets owned by the fund, minus its liabilities, and then divided by the number of shares outstanding. The NAV for these investments is a quoted price in an active market and is classified within Level 1 of the valuation hierarchy.

*Common/Collective Trust*

Units in the common/collective trust are valued at NAV at year-end. These investments are classified within Level 2 of the valuation hierarchy as the NAV for these investments is a derived price in an active market. This fund is primarily invested in guaranteed and synthetic investment contracts. Participant-directed redemptions have no restrictions; however, the Plan is required to provide a one-year redemption notice to liquidate its entire share in the fund. The NAV has been estimated based on the fair value of the underlying investment contracts in the fund as reported by the issuer of the fund. The fair value differs from the contract value. As previously discussed in Note 2, contract value is the relevant measurement attributable to fully benefit-responsive investment contracts because contract value is the amount participants would receive if they were to initiate permitted transactions under the terms of the Plan.

Big Ridge, Inc. 401(k) Profit Sharing Plan and Trust  
Notes to Financial Statements

*Peabody Energy Stock Fund*

The Peabody Energy Stock Fund is valued at its unit closing price (comprised of quoted market price plus uninvested cash position, if any) reported on the active market on which the security is traded and is classified within Level 1 of the valuation hierarchy.

The methods described above may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. Furthermore, while the Plan Sponsor believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different fair value measurement at the reporting date. The inputs or methodologies used for valuating investments are not necessarily an indication of the risk associated with investing in those investments.

The following tables present the fair value hierarchy of the investments on the statements of net assets available for benefits.

	<b>December 31, 2010</b>		
	<b>Level 1</b>	<b>Level 2</b>	<b>Total</b>
Equity mutual funds	\$ 4,747,118	\$	\$ 4,747,118
Fixed income mutual funds	958,442		958,442
Target retirement mutual funds	1,803,875		1,803,875
Fixed income common/collective trust		5,277,632	5,277,632
Peabody Energy Stock Fund <sup>(1)</sup>	648,305		648,305
Total assets at fair value	\$ 8,157,740	\$ 5,277,632	\$ 13,435,372

	<b>December 31, 2009</b>		
	<b>Level 1</b>	<b>Level 2</b>	<b>Total</b>
Equity mutual funds	\$ 3,734,269	\$	\$ 3,734,269
Fixed income mutual funds	848,573		848,573
Target retirement mutual funds	1,279,659		1,279,659
Fixed income common/collective trust		4,906,609	4,906,609
Peabody Energy Stock Fund <sup>(1)</sup>	571,730		571,730
Total assets at fair value	\$ 6,434,231	\$ 4,906,609	\$ 11,340,840

<sup>(1)</sup> Interest in Master Trust

Big Ridge, Inc. 401(k) Profit Sharing Plan and Trust  
Notes to Financial Statements

**4. Investments**

The following table presents investment information for the Master Trust:

	<b>Years Ended December 31,</b>	
	<b>2010</b>	<b>2009</b>
Investments, at fair value:		
Peabody Energy Stock Fund	\$ 82,306,257	\$ 64,602,794
Plan's interest in Master Trust	1%	1%
Master Trust net investment income:		
Dividend income	\$ 335,848	\$ 377,150
Net appreciation of common stock	25,181,095	33,994,621
Net investment income	\$ 25,516,943	\$ 34,371,771

Investments representing 5% or more of the fair value of the Plan's net assets were as follows:

	<b>December 31,</b>	
	<b>2010</b>	<b>2009</b>
Mutual funds:		
T. Rowe Price Mid-Cap Growth Fund	\$ 1,156,892	\$ 863,275
Vanguard International Growth Fund	873,027	685,967
Vanguard Total Bond Market Index Fund	869,409	779,871
Vanguard 500 Index Fund	857,953	731,675
Harbor Capital Appreciation Fund	716,949	613,664
Common/collective trust:		
Vanguard Retirement Savings Trust	5,277,632	4,906,609

Big Ridge, Inc. 401(k) Profit Sharing Plan and Trust  
Notes to Financial Statements

**5. Reconciliation of Financial Statements to Form 5500**

The following is a reconciliation of net assets available for benefits per the financial statements to the Form 5500:

	<b>December 31,</b>	
	<b>2010</b>	<b>2009</b>
Net assets available for benefits per the financial statements	\$ 13,238,949	\$ 11,299,768
Adjustment from contract value to fair value for fully benefit-responsive contracts	207,823	106,072
Net assets available for benefits per the Form 5500	\$ 13,446,772	\$ 11,405,840

**6. Related Party Transactions**

The Plan invests in shares of mutual funds and units in a common/collective trust managed by an affiliate of its trustee, Vanguard Fiduciary Trust Company, a party-in-interest with respect to the Plan. These transactions are covered by an exemption from the prohibited transaction provisions of ERISA and the Internal Revenue Code of 1986 (the Code), as amended. The Plan also invests in Peabody stock through the Peabody Energy Stock Fund, which is a permitted party-in-interest transaction.

**7. Income Tax Status**

Effective July 1, 2007, the Plan was amended and restated subsequent to the IRS opinion letter dated August 22, 2001, and the non-standardized prototype plan was replaced with an individually designed plan. The Plan applied for a new determination letter in April 2010. The Plan's administrator believes the Plan is being operated in compliance with the applicable requirements of the Code and, therefore, believes the Plan, as amended, is qualified and the related trust is tax-exempt.

Big Ridge, Inc. 401(k) Profit Sharing Plan and Trust  
Notes to Financial Statements

**8. Risks and Uncertainties**

The Plan invests in various investment securities. Investment securities are exposed to various risks such as interest rate, market and credit risks. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect participants' account balances and the amounts reported in the statements of net assets available for benefits.

**9. Subsequent Event**

The labor agreement whereby Plan participants were represented by the International Brotherhood of Boilermakers expired on April 15, 2011. The United Mine Workers of America (UMWA) filed a petition with the National Labor Relations Board (NLRB) to replace the International Brotherhood of Boilermakers as the employees' representative at the Willow Lake Mine in Illinois. An election conducted by NLRB on May 19 and May 20, 2011 resulted in the workers voting in favor of UMWA representation. The Company filed objections with the NLRB on May 26, 2011 and requested that a new election be held based on numerous instances of intimidation and threats, coercion and fraudulent conduct that affected the result of the election. If the Company's election challenges are ultimately rejected, the collective bargaining process may result in changes to the Plan, subject to the provisions of ERISA.

Supplemental Schedule  
 Big Ridge, Inc. 401(k) Profit Sharing Plan and Trust  
 Employer ID #37-1126950  
 Plan #001  
 Schedule H, Line 4i Schedule of Assets (Held at End of Year)  
 December 31, 2010

(a)	(b) Identity of Issue	(c) Description of Investment	(d) Cost <sup>(1)</sup>	(e) Current Value
	T. Rowe Price Mid-Cap Growth Fund	19,766 shares of mutual fund		\$ 1,156,892
*	Vanguard International Growth Fund	45,141 shares of mutual fund		873,027
*	Vanguard Total Bond Market Index Fund	82,020 shares of mutual fund		869,409
*	Vanguard 500 Index Fund	7,408 shares of mutual fund		857,953
	Harbor Capital Appreciation Fund	19,525 shares of mutual fund		716,949
*	Vanguard Windsor II Fund	11,143 shares of mutual fund		286,053
	T. Rowe Price Small-Cap Stock Fund	6,730 shares of mutual fund		231,700
*	Vanguard Small-Cap Index Fund	6,045 shares of mutual fund		210,073
*	Vanguard REIT Index Fund	8,150 shares of mutual fund		149,800
*	Vanguard High-Yield Corporate Fund	12,836 shares of mutual fund		73,164
*	Vanguard PRIMECAP Fund	1,027 shares of mutual fund		67,563
*	Vanguard Developed Markets Index Fund	4,119 shares of mutual fund		41,436
	Lazard U.S. Small Cap Equity Value Portfolio	2,100 shares of mutual fund		30,556
*	Vanguard Total Stock Market Index Fund	903 shares of mutual fund		28,510
	MSIFT U.S. Small Cap Value Portfolio	930 shares of mutual fund		25,051
	Vanguard Emerging Markets Stock Index Fund	789 shares of mutual fund		23,950
	Sound Shore Fund	538 shares of mutual fund		17,109
*	Vanguard Extended Market Index Fund	287 shares of mutual fund		11,842
	Baron Asset Fund	195 shares of mutual fund		10,761
*	Vanguard GNMA Fund	769 shares of mutual fund		8,261
*	Vanguard International Value Fund	245 shares of mutual fund		7,893
*	Vanguard Long-Term Bond Index Fund	632 shares of mutual fund		7,608
*	Vanguard Target Retirement 2010 Fund	4,652 shares of mutual fund		103,783
*	Vanguard Target Retirement 2015 Fund	25,649 shares of mutual fund		318,556
*	Vanguard Target Retirement 2020 Fund	20,124 shares of mutual fund		444,743
*	Vanguard Target Retirement 2025 Fund	10,031 shares of mutual fund		126,591
*	Vanguard Target Retirement 2030 Fund	2,766 shares of mutual fund		59,971
*	Vanguard Target Retirement 2035 Fund	11,771 shares of mutual fund		154,079
*	Vanguard Target Retirement 2040 Fund	11,151 shares of mutual fund		239,748
*	Vanguard Target Retirement 2045 Fund	9,310 shares of mutual fund		125,679
*	Vanguard Target Retirement 2050 Fund	10,782 shares of mutual fund		230,725
		5,069,809 units of		
*	Vanguard Retirement Savings Trust	common/collective trust		5,277,632
				\$ 12,787,067

\* Denotes party-in-interest

(1) Cost is not presented as all investments are participant directed investments

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**SIGNATURE**

*Big Ridge, Inc. 401(k) Profit Sharing Plan and Trust.* Pursuant to the requirements of the Securities Exchange Act of 1934, the Plan Administrator has duly caused this annual report to be signed on its behalf by the undersigned hereunto duly authorized.

Big Ridge, Inc. 401(k) Profit Sharing Plan  
and Trust

Date: June 17, 2011

By: /s/ SHARON D. FIEHLER  
Sharon D. Fiehler  
Peabody Energy Corporation  
Executive Vice President and  
Chief Administrative Officer

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**EXHIBIT INDEX**

The exhibit below is numbered in accordance with the Exhibit Table of Item 601 of Regulation S-K.

Exhibit

No.	Description of Exhibit
23	Consent of Ernst & Young LLP, Independent Registered Public Accounting Firm.

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