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Peabody Energy's Five-Year Business Plan to Emerge from Bankruptcy Is Not Credible

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The Institute for Energy Economics and Financial Analysis (IEEFA) has recently examined the five-year business plan (2017-2021) Peabody Energy has submitted in federal bankruptcy court.

IEEFA finds the plan lacking in credibility on several points.

It is overly optimistic on financial projections in key areas, in its coal-production outlook and in its expectations for cost-control results. It fails to acknowledge that a post-bankruptcy Peabody may not be able to meet its self-bonding solvency requirements. The plan also misrepresents the true size of company assets and suggests wrongly that Peabody will be a larger enterprise than is likely.

This memo is meant as a warning as to the possibility that Peabody may simply end up in bankruptcy again, and as a regulatory missive to the Securities and Exchange Commission, to other federal regulators, to members of Congress who have oversight over federal mining policy and to stakeholders charting Peabody's future.

The memo consists, first, of highlights, which are presented in its first two pages, and second, a three-part analysis that includes an Overview of Peabody's Five-Year Business Plan, notes on the company's Financial Focus on the Powder River Basin and an assessment of Peabody's Approach to Self-Bonding: Current and Future.

Highlights of our findings:

- The plan presents an overly optimistic profile of the company's coal production and cash margins, especially in its operations in the Powder River Basin (PRB), the workhorse region for the company.
- In stating that its PRB operations will increase annual coal production from 100 million tons in 2016 to 131 million tons by 2021, the company is presenting numbers that are jarring. The outlook all but ignores competition in the region and falling demand for coal, and is offered in stark and dubious contrast to United States Energy Information Administration (EIA) estimates that total coal production growth in the Powder River Basin will range over that period of time from only 14 million to 36 million tons.
- Peabody's own outlook for total U.S. annual coal production makes the audacious assumptions in its business plan even more glaring. The company itself—even as it asserts it will increase Powder River production by 31 million—says it sees the U.S. coal industry as a whole increasing production by 20-25 million tons annually between 2016 and 2021. Peabody's assertion that its PRB operations alone will produce an additional 31 million tons by 2021 suggests the rest of the industry will somehow continue to lose customers, sales and market share at a higher rate than Peabody.
- While Peabody anticipates that its annual average per ton PRB revenues over the plan period (2017-2021) will decline by 8% from its 2015 average PRB per ton revenues, the company says it will somehow maintain its profit margins through a program of aggressive cost controls. The business plan assumes basically flat costs for the next five years, which is unlikely. For example, Peabody's estimates of oil prices—diesel oil constitutes a large part of any coal producer's operational expenses—for the period are far below more credible, independent estimates by the EIA and the World Bank. The Peabody cost-control plan also ignores historical cost trends, the impact of rising stripping ratios and changes in royalty rates.
- Peabody states that it currently has 6.3 billion tons of proven and probable reserves, including 2.9 billion tons in the Powder River Basin. These numbers inflate the company's assets and make it appear as if the company is bigger than it is. IEEFA finds this assumption questionable since Peabody's outlook is predicated on lower per-ton revenues, unacknowledged risks in its cost-control program and tightly drawn margins. The company identifies no specific mine closings or economic adjustments to its coal reserves over the five-year plan period. Peabody and other PRB operators are also losing customers as coal-fired power plants retire across the U.S.
- Under the Debtor in Possession process in the bankruptcy court, Peabody has negotiated a new agreement with state regulators to pay 17.5% of its previously-established reclamation liabilities. Responding to critics of the deal, Peabody defends this agreement by saying it has achieved a good deal for the company because if state regulators accept greater financial exposure for underfunded reclamation liabilities, Peabody is off the hook. Peabody argues that neither the bankruptcy court nor the federal Office of Surface Mining Reclamation and Enforcement (OSMRE) can overturn a state decision. This remains to be seen.

- OSMRE has recently announced a new rule-making process to reform the self-bonding program precisely because of situations like this, where state regulators allow insolvent companies to be eligible for self-bonding benefits, in violation of the intent of the program. So it remains to be seen, too, whether Peabody can, under a post-bankruptcy scenario, meet the solvency requirements of the self-bonding program. Peabody's position in the bankruptcy filing is clear: so long as it can curry favor with state regulators it has no solvency concerns. In IEEFA's view, Peabody's position puts the company at risk because it provides evidence for OSMRE's argument that the "cozy" relationship between state regulators and coal companies has resulted in deterioration of program integrity. At this point, it is not clear whether OSMRE's review or Peabody's ongoing negotiations with state regulators will result in any new costs to the company.
- Peabody's bankruptcy is reminiscent of the bankruptcy of Patriot Coal, which Peabody spun off in 2007. Industry consensus was that Patriot failed because it did not adequately align the company's expenses and liabilities, particularly its pension and environmental challenges, with weak revenue potential in a declining coal region (Appalachia). In December 2013 the company emerged from bankruptcy only to file for bankruptcy again, in May 2015. While Peabody's financial condition is different in many respects from Patriots, the similarities are striking, especially in terms of stated coal reserves and in being overly optimistic about the effects of its cost-management strategies.
- Peabody's presentation of its financial condition is misleading. The company acknowledges declining revenues and continued downward pressure on coal prices over the plan period. It projects modest margins and a tight cost control program. IEEFA sees a high likelihood of slippage. We have commented before on an aborted sale of some of Peabody's western coal mines and its inability to execute a value swap for some of its Illinois Basin properties.¹
- The company's forward looking statements suggest that its claim to 6.3 billion tons of proven and probable reserves, that is economically minable coal is an overestimation. An overestimate of coal reserves and related asset values at this time in the company's financial history undermines the efficacy of the bankruptcy process, frustrates state regulators as they try to manage environmental liabilities and impedes the diligence needed to restore the Company's access to the bond and equity markets.

¹ <http://ieefa.org/wp-content/uploads/2016/02/Peabodys-Strategies-for-Survival-Ignore-Market-Realities-and-Risk-Backfiring-FEB-2016.pdf>

I. Overview of Peabody's Five-Year Business Plan

Peabody Energy's five year business plan filed as part of its Chapter 11 bankruptcy includes the following key elements:

- Peabody starts the plan with 6.3 billion tons of proven and probable reserves.² The plan includes no specific mine closings³ or economically driven⁴ coal reserve reductions during the plan period 2017-2021.
- Enterprise-wide revenues (including from its operations in Australia) are flat at \$4.4 to \$4.6 billion per year during the plan period.⁵
- Peabody estimates that enterprise-wide earnings before interest, taxes, depreciation, administration and restructuring costs (EBITDAR) will grow during the plan period from \$386 million to \$630 million. It is relying here on Australian price increases and cost controls to offset continuing erosion in U.S.-based EBITDAR.⁶
- Peabody Energy projects an enterprise-wide increase of 17 million tons of annual coal production during the plan period. Its PRB annual coal production during the plan period is expected to increase by 21 million tons.
- Peabody projects that coal production in the U.S. from 2016 to 2021 will increase by a total of 20 to 25 million tons.⁷
- The Powder River Basin is the workhorse region for Peabody's U.S. and enterprise-wide operations:
 - In 2016, PRB operations account for 75% of enterprise-wide EBITDAR, 45% of U.S. EBITDAR, and 60% of enterprise-wide production.
 - By 2021, PRB operations account for 53% of enterprise-wide EBITDAR, 57% of U.S. EBITDAR, and 68% of enterprise-wide production.

² <https://www.sec.gov/Archives/edgar/data/1064728/000119312516677563/d206195dex991.htm>, p. 7.

³ The plan refers to unspecified aggregating of larger supply centers and complexes to lower costs.
<https://www.sec.gov/Archives/edgar/data/1064728/000119312516677563/d206195dex991.htm>, p. 8.

⁴ <http://ieefa.org/pittsburgh-post-gazette-coal-reserves-unmined-or-unminable/>

⁵ <https://www.sec.gov/Archives/edgar/data/1064728/000119312516677563/d206195dex991.htm>, p. 42

⁶ <https://www.sec.gov/Archives/edgar/data/1064728/000119312516677563/d206195dex991.htm>, p. 34

⁷ <https://www.sec.gov/Archives/edgar/data/1064728/000119312516677563/d206195dex991.htm>, p. 19

II. Financial Focus on the Powder River Basin

The table below examines Peabody's five-year plan for the Powder River basin. IEEFA estimated per-ton revenues for each year by adding a new category for "Royalty and Taxes" to the expense categories already listed in Peabody's Business Plan. Taken together these charges are the component parts of IEEFA's per ton revenue estimate.⁸

Table I: Peabody's Five Year Business Plan for Powder River Basin with IEEFA Estimated Per Ton Revenues

	2015A	2016AE	2017E	2018E	2019E	2020E	2021E
IEEFA Est. Revenue	13.45 ⁹	13.28	12.87	11.90	11.72	12.39	12.94
Clean Coal Cost¹⁰	6.29	6.70	6.40	5.91	5.98	6.21	6.72
Royalty and Taxes¹¹	3.68 ¹²	3.68 ¹³	3.68	3.68	3.68	3.68	3.68
Expenses	9.97 ¹⁴	10.38 ¹⁵	10.08	9.59	9.66	9.89	10.40
Margins	3.48 ¹⁶	2.90 ¹⁷	2.79	2.31	2.06	2.50	2.54

⁸ IEEFA constructed its own estimate of Peabody's PRB per-ton revenues because it is not presented in a transparent manner in the Business Plan. The amount of information provided in the Business Plan, however, is sufficient for an informed calculation of the underlying price. We checked IEEFA's estimates against the more general market price forecast for PRB 8800 coal provided by SNL Energy, Coal Price Forecast/Price/Powder River Basin 8800, August 23, 2016. With the exception of 2017, when there is wide variation between SNL and our estimate, the remaining four years of the SNL and IEEFA estimates are within a \$0.50 per ton margin of error.

⁹ The \$13.45 represents actual PRB Revenues Per Ton – Mining Operations contained in Peabody's 2015 Year End Press Release. <http://www.peabodyenergy.com/content/120/press-releases>

¹⁰ The "Clean Coal Cost" used by Peabody is contained in a chart entitled: "2017-2021 Business Plan Americas Cost and Margins: Cost Containment Efforts in U.S. Lead to Sustainable Margins." The Chart provides cost-related information from each of Peabody Energy's three operating segments in the U.S. We concentrate only on the Powder River Basin in this presentation. <https://www.sec.gov/Archives/edgar/data/1064728/000119312516677563/d206195dex991.htm>, Clean Coal Cost (\$/ton) p. 35.

¹¹ Peabody Business Plan, p. 35 contains a footnote: "Clean coal costs exclude sales-related costs such as royalties and taxes that fluctuate based on changes in sales price." These costs are normally presented in Peabody's financial filings as part of its costs of production. In this presentation the company is specifically focusing on costs that they believe they have more control over.

¹² Royalty and Taxes are derived by subtracting the Clean Coal Cost (6.29 per ton) from Expenses \$9.97 per ton).

¹³ To obtain the \$3.68 Royalty and Tax figure for 2016 we subtracted Peabody's six month cost per ton figure from its Clean Cost

¹⁴ Operating Per Ton Costs for the Powder River Basin in the 2015 Year End press release are \$9.97 per ton.

¹⁵ Form 10Q – 2016 <http://www.peabodyenergy.com/content/162/sec-filings>, shows PRB Operating Costs for first six months of 2016 at \$10.38 per ton.

¹⁶ The Operating Margin used in Peabody Energy's Year End Press Release <http://www.peabodyenergy.com/content/120/press-releases> and in the business plan <https://www.sec.gov/Archives/edgar/data/1064728/000119312516677563/d206195dex991.htm>, Margin \$/ton p. 35 are the same.

¹⁷ IEEFA notes that the 2Q -2016 filing by Peabody Energy provides a margin for the first six months of 2016 of \$3.28 per ton and reflects PRB per ton revenues of \$13.66 per ton. <http://www.peabodyenergy.com/content/162/sec-filings>, Form 10Q, August 8, 2016, p. 61. We use Peabody's 2016 Margin as presented in the Business Plan in order to retain the integrity of the Business Plan Model which is an estimate for the full year.

- Peabody Energy received \$13.45 per ton for its PRB product in 2015. During its five-year business plan it does not expect PRB prices to approach this level in any year.
- IEEFA estimates that Peabody's PRB prices will average \$12.36 per ton during the plan period, a decrease of 8% from the 2015 price.
- Peabody Energy anticipates the 2018 to 2019 period to be the low point for prices with a modest recovery during the 2020-2021 period.
- Peabody achieves its projected profit margins during the plan period by an aggressive program of cost control.¹⁸ The cost-control plan contains substantial risks that are likely to push operating costs higher than estimated by the company.
- Peabody assumes WTI Crude Oil will increase from current levels of \$45/bbl in 2016 to \$56/bbl by 2021.¹⁹ The World Bank is projecting cost of oil at \$68/bbl by 2021.²⁰ The EIA is projecting significantly higher out-year \$/bbl costs for WTI Crude, reaching upward of \$81.00/bbl²¹ in 2021.²² During the period 2018-2019, while Peabody is projecting a decline in its costs, a sizeable portion of which go to oil, the EIA projects a \$22/bbl increase in the price of oil.
- Peabody identifies higher stripping ratios²³ as a factor driving costs upward,²⁴ but the plan provides no quantification of its impact nor offsets to the cost pressure. f
- IEEFA added a category for "Royalty and Taxes," and we used the actual level of royalty and taxes paid by the company in 2015. It should be noted that the company did not include these payments in its expense category or acknowledge these payments may increase due to the pending royalty rate proceedings at the Department of Interior.²⁵
- The business plan assumes no revenues during the plan period from export sales of PRB coal. The plan states that any growth in the global thermal market is likely to be supplied by coal producers in Australia, Indonesia and Colombia.²⁶

¹⁸ <https://www.sec.gov/Archives/edgar/data/1064728/000119312516677563/d206195dex991.htm>, p. 10.

¹⁹ <https://www.sec.gov/Archives/edgar/data/1064728/000119312516677563/d206195dex991.htm>, p. 30.

²⁰ <http://pubdocs.worldbank.org/en/764161469470731154/CMO-2016-July-forecasts.pdf>

²¹ The Peabody analysis includes a sensitivity analysis of +/- \$10/barrel. The outyear margins from EIA are \$25/bbl.

²² https://www.eia.gov/forecasts/aeo/data/browser/#/?id=12-AEO2016&cases=ref2016~ref_no_cpp&sourcekey=0, West Texas Intermediate Spot prices.

²³ <https://www.sec.gov/Archives/edgar/data/1064728/000119312516677563/d206195dex991.htm>, p. 35.

²⁴ A 2011 coal industry study of the PRB by JT Boyd that evaluates long-term cost trends placed all-in operating costs for the North Antelope Rochelle mine rising from \$14.24 per ton in 2015 to \$16.13 per ton in 2020 (p.4-23) and the Caballo mine at \$11.60 to \$12.90 during the same period (p. 4-16). These two mines are Peabody's two largest PRB producers. The Boyd model includes all costs including royalty and taxes and is driven in large measure by stripping ratio analysis. <https://www.xcelenergy.com/staticfiles/xcel/Regulatory/Regulatory%20PDFs/PSCo-ERP-2011/8-Roberts-Exhibit-No-MWR-1.pdf>

²⁵ <https://insideclimatenews.org/news/23062016/white-house-analysis-raising-coal-royalties-will-also-boost-climate-public-lands-leases-carbon-emissions>

²⁶ <https://www.sec.gov/Archives/edgar/data/1064728/000119312516677563/d206195dex991.htm>, p. 24.

Table II: Peabody Production Actual and Estimates for PRB Operations compared to EIA Estimates for Western Coal and Nationwide²⁷ (2015-2021) in Millions of Tons

	2015	2016	2017	2018	2019	2020	2021
Peabody PRB Production²⁸	136 ²⁹	100	110	129	129	131	131
EIA PRB Low Sulfur Reference Case	354	336	343	348	354	343	350
EIA PRB Low Sulfur without Clean Power Plan	354	336	345	351	362	356	372
EIA Total U.S. Coal Reference Case	873	849	853	878	881	872	855
EIA Total U.S. Coal without Clean Power Plan	873	849	853	887	896	890	897

- The business plan says that Peabody will add 31 million tons of annual PRB production between 2016 and 2021,³⁰ (going from 100 annual tons to 131 annual tons), including a 21 million annual ton increase during the period of the plan itself, from 2017 through 2021 (from 110 million annual tons to 131 million annual tons).
- The most recent Energy Information Administration outlook estimates that PRB coal production will increase by an annual amount of from 14 million to 36 million tons over the 2016-2021 period.
- Based on these numbers, Peabody assumes it will have 30% of PRB market share in 2016 and between 35% and 37% of the market by 2021.³¹
- According to the EIA, total United States annual coal production will rise between 6 million and 48 million tons over the period 2016-2021.³² Peabody's estimate of nationwide annual production increases from between 20 and 25 million during the same period.³³

²⁷ https://www.eia.gov/forecasts/aeo/data/browser/#/?id=95-AEO2016&cases=ref2016~ref_no_cpp&sourcekey=0. For Powder River Basin we used the Low Bituminous Coal classification in this analysis. The EIA now publishes a Reference Case that assumes implementation of the Clean Power Plan it also publishes a forecast that assumes the Plan will not be implemented. We discuss them in this paper as a range.

²⁸ Except for 2015 production numbers we rely upon Peabody's Business Model for the forward looking estimates in this chart. <https://www.sec.gov/Archives/edgar/data/1064728/000119312516677563/d206195dex991.htm>, p. 34

²⁹ <http://www.peabodyenergy.com/content/162/sec-filings>, Form 10K, March 16, 2016, p. 39

³⁰ In a recent study of sales of PRB coal to Texas Peabody's customers, sales during the 2010-2015 period remained flat. This occurred as demand dropped generally. IEEFA anticipates additional drop in Texas demand for PRB coal as more coal plants retire and are replaced by wind, solar and natural gas generation resources. Texas is the largest customer for PRB coal. <http://ieefa.org/wp-content/uploads/2016/08/Texas%E2%80%99-Outsize-Role-in-the-Demand-of-the-Powder-River-Basin-Coal-Industry-August-2016.pdf>

³¹ Peabody offers no discussion of the position of its competitors in the Powder River Basin. From ongoing statements and reporting by most of the producers in the PRB, all are expecting to move forward with plans to either remain going concerns or to reorganize under bankruptcy law and compete for market share. See: Julie Silverdrio, *Feds open public comment period on Cloud Peak Energy mine expansion*, SNL Energy, August 8, 2016; Richard Kuyendall, *Contura completes acquisition of top Alpha assets, former Alpha CEO hired*, SNL Energy, July 27, 2016; Richard Kuyendall, *Westmoreland CEO 'excited' to report coal results for coming quarters*, SNL Energy, August 2, 2016; ,and <http://www.bizjournals.com/stlouis/news/2016/07/08/arch-coal-disclosure-statement-clears-bankruptcy.html>

³² Peabody also makes no mention of nationwide competition within the coal industry. See: Richard Kuyendall and Kevein Hert, *10 largest coal companies produce nearly three quarters of U.S. coal sector*, SNL, Energy, August 11, 2016.

³³ <https://www.sec.gov/Archives/edgar/data/1064728/000119312516677563/d206195dex991.htm>, p. 19

III. Peabody's Approach to Self-Bonding: Current and Future

- The business plan allocates \$200 million of the company's Debtor In Possession (DIP) financing for the purpose of covering its \$1.14 billion self-bonding obligation. This effectively reduces coverage by 82.5% from Peabody's pre-petition levels.³⁴
- In a recent filing at the bankruptcy court, Peabody described the DIP agreement as a good deal for the company.³⁵ Peabody claims that the new agreement is an improvement for the states because it includes a letter of credit and cash payments. The company says this form of security is superior to the security provided by Peabody in its pre filing operating environment.³⁶ In response to a challenge that the new arrangement is not sufficient to cover reclamation obligations, Peabody argues that the bankruptcy court cannot overturn a decision simply because the state could have gotten a better deal.³⁷ If state regulators agree to take on more financial risk it is the states right to do so. Peabody says the decision-making power rests with the state governments and that OSMRE may be considering certain program changes,³⁸ but it did not object to the arrangement.³⁹
- Outside the bankruptcy proceeding, Peabody Energy has stated that it is working out plans with states regarding the company's use of self-bonding in a post-bankruptcy environment.⁴⁰

IV. Conclusion

Peabody's presentation of its financial condition is misleading and is reminiscent of the company's 2007 spinoff of Patriot Coal, which filed for bankruptcy in 2012—and again in 2015.

³⁴ In re: Peabody Energy Corporation, et. al; Debtors, *Debtors (I) Reply in support of motion of the Debtors and Debtors in Possession, pursuant to bankruptcy rule 90/9.... (II) Objection to Motion of Fernandez Company, LTD...*, United States Bankruptcy Court, Eastern District of Missouri, Eastern Division, Case No. 16-42529-319, Chapter 11, August 15, 2016, p. 9.

³⁵ *Ibid*, p. 3.

³⁶ *Ibid*, p. 8.

³⁷ *Ibid*, p. 9.

³⁸ During its process of notifying the public regarding an upcoming process of rule changes the head of the program at OSMRE expressed concern over a form of "collusion" between certain state regulators and coal companies. The concern is that financially insolvent companies are being declared eligible for self-bonding despite program regulations that require a finding of financial solvency. http://trib.com/business/energy/concerned-about-self-bonding-top-federal-mining-regulator-wonders-about/article_f5f5565a-2a8b-52e9-8d4f-c68d28f76c39.html

³⁹ *Ibid*, p. 5.

⁴⁰ <https://www.sec.gov/Archives/edgar/data/1064728/000119312516677563/d206195dex991.htm>, p. 36.