IN THE UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

STATE OF WEST VIRGINIA, *et al.*,	)	
Petitioners	)	
v.	)	Case No. 15-1363 and Consolidated Cases
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, *et al.*,	)	
Respondents	)	

DECLARATION OF TOM SANZILLO, INSTITUTE FOR ENERGY ECONOMICS AND FINANCIAL ANALYSIS

Introduction and Qualifications

I, Tom Sanzillo, declare:

1. I am Director of Finance for the Institute for Energy Economics and Financial Analysis ("IEEFA"). I conduct research on a range of fossil fuel issues including U.S. domestic coal markets, U.S. coal-producer and mine finance and financial regulation, and utility finance. I have researched coal and energy issues in at least twenty-five states; testified before three state Public Service Commissions; and submitted affidavits in four coal-related federal proceedings.

2. My work also includes analysis of global economic trends, coal markets and the global seaborne thermal coal trading market. I have co-authored a number of international coal market studies related to India and Australia (with our office in Sydney) and to the Norwegian pension fund, and provided oversight, research and direction on a global analysis of coal markets with Carbon Tracker Initiative. I have published a number of reports related to coal export matters on the U.S. West Coast and Gulf of Mexico.

3. From 1990 to 2007, I held various senior management positions in New York City and New York State government finance, including as First Deputy Comptroller for New York State.[1] My responsibilities included growing the assets of a $156 billion global public pension fund, which Standard & Poor's recognized as one of the best-managed such funds in the nation.

4. I have been asked to analyze declarations filed in support of motions by the National Mining Association, Utility Air Regulatory Group, and Chamber of

[1] Thomas Sanzillo, *The New York State Comptroller's Office*, The Oxford Handbook of New York State Government and Politics, Oxford University Press, 2012.

Commerce to stay the Clean Power Plan regulations ("Clean Power Plan" or "Plan"). I focused on some declarants' claims that a stay of the Plan will protect domestic coal-mining and coal-dependent utility companies from irreparable economic harm. This declaration is based on my experience, education, and review of materials I gathered, in addition to those provided to me by counsel.

Summary of Opinions

5. As I explain at Part A, the financial decline of the U.S. coal industry reflects broad, long-term, structural changes in energy markets.[2] The industry's present financial problems are largely attributable to factors that predate the Plan and are expected to continue and affect the industry for the foreseeable future. These factors include the low relative price of natural gas and renewable sources of electricity, a weak coal export market, and increased production costs and debt levels for coal companies. A stay of the Plan for the period of time it will take this Court to review its legality (which I assume would be on the order of a year to eighteen months) would have little to no effect on these factors. There is accordingly no merit to the coal industry's claims that a stay is needed to alleviate, or would effectively alleviate, any irreparable harm to their economic interests. Looking beyond the stay period, it is also too early to say how individual coal companies will perform under the Plan, because there are so many other factors in play, and emissions limits under the Plan do not even begin taking effect until 2022.

[2] My declaration focuses on financial trends in the coal-mining industry and associated market forces. My colleague David Schlissel's concurrently submitted declaration, which I cross-reference at Part A, provides more detail on associated trends for utilities that burn coal to generate electricity and on some of the general market factors that affect both coal-mining companies and coal-dependent utilities.

6. At Part B, I respond to some declarants' suggestions that the Plan has caused them economic harm because they must continue to make day-to-day business decisions without knowing whether the Plan will ultimately be upheld, or exactly how it will be implemented in individual states. A stay will not answer either of those questions, so it will not alleviate the complained-of uncertainty. Having to make business decisions without being certain about their long-term financial consequences is inherent in running a capital-intensive business with long investment horizons, in a dynamic and complex marketplace. This is not a new challenge for coal-mining companies and utilities, or one that a stay can alleviate.

Opinions

A. The weak financial performance of the U.S. coal industry is attributable to many factors that existed before EPA issued the Clean Power Plan and that will continue to drive industry performance, whether or not the Plan is stayed while the Court reviews it.

1. Domestic coal producers have faced declining demand and low prices for the better part of a decade. These trends are expected to continue.

7. U.S. coal producers are undergoing a fundamental transition. After thirty years of growth, the industry is now shrinking. The trend of declining demand and lower prices for coal began in the late 2000s and will continue for the foreseeable future.

8. The industry's financial distress is largely caused by the decline in domestic demand for coal for electricity generation. The United States used more than one

billion tons of coal per year from 2005-2008.[3] By 2014, coal usage had dropped to 854 million tons. The Energy Information Administration recently estimated that usage in 2015 will be 773 million tons,[4] a 26% reduction over the past decade.

9. The capital markets are accordingly moving away from coal and toward alternative fuels. This trend has also been underway for the better part of a decade.

2. The decline in the coal industry is attributable to many factors, including price competition with alternative fuels, weak international markets, increased production costs, excessive debt, and public health and environmental concerns. All of these factors influence companies' financial performance and access to capital.

10. The factors that influence the day-to-day financial performance of U.S. coal producers and utilities include low prices for natural gas (a competing fuel), increased reliance on wind, solar, and energy efficiency to meet electricity demand, weak international markets, increased production costs and excessive debt within the coal industry, and health and environmental concerns that have shaped and will continue to shape the regulatory environment for companies that extract and burn fossil fuels. All of these factors influence the performance of coal producers and utility companies, and (by extension) investor confidence in these companies and the companies' access to capital on the stock market and through borrowing. The following sections provide additional context on each factor.

[3] Electric Power Monthly, Table 2.1.A. Coal: Consumption for Electricity Generation, by Sector, 2005-August 2015, U.S. Energy Information Administration (Oct. 27, 2015), http://www.eia.gov/electricity/monthly/epm_table_grapher.cfm?t=epmt_2_01_a.
[4] Short-Term Energy Outlook, Custom Table Builder, U.S Energy Information Administration (Nov. 10, 2015), http://www.eia.gov/forecasts/steo/query/.

a. Low natural gas prices

11. Natural gas prices have been low, relative to coal prices, since the late 2000s. I expect natural gas prices to remain low through 2022, well past the possible stay period and into the first year in which utilities would be subject to carbon emissions limits under the Clean Power Plan. Part A of my colleague David Schlissel's concurrently submitted declaration includes a chart illustrating these historical and projected price trends and further discussion of this issue.

12. Current, low natural gas prices determine the price of power on the utility market and mean that, on a day-to-day basis, utilities and power grids are relatively more likely to turn to natural gas than coal. As my colleague David Schlissel explains at Part C of his concurrently submitted declaration, as a result of low natural gas prices and increasing competition from renewables (a factor noted below and discussed in more depth at Part B of Mr. Schlissel's declaration), the proportion of U.S. electricity generation has been declining and is expected to continue declining.

13. Coal prices in Central Appalachia, a region that once led the nation as the largest coal producer, cannot compete against natural gas in this market.[5] While Powder River Basin and Illinois Basin coal remain competitive on paper, the long-term trend of low natural gas prices threatens to further erode coal's share of the electrical generation market in all regions.[6] An exhaustive 2015 study of each energy region in the United States by SNL Energy, an independent analyst, concluded that

[5] Andrew Gelbaugh and Jesse Gilbert, *Generation Investment in RTO Markets – The Challenge and the Opportunity*, SNL Energy (May 2015), available through http://center.snl.com/Resources/Whitepaper.aspx?id=4294974142.

[6] Everett Wheeler, *OTC Market: Coal prices weaken amid worsening domestic, global outlook,* SNL (Nov. 13, 2015), https://www.snl.com/InteractiveX/Article.aspx?id=34508963.

"The nation's power markets continue to experience transitional pains along the path toward an electricity sector increasingly built upon natural gas and renewables. Natural gas prices have continued to fall and look to remain depressed for the foreseeable future, opening new opportunities for expansion of gas generation but potentially stranding legacy investments in coal and nuclear fleets."[7]

14. So long as domestic natural gas prices remain low, the coal industry will continue to lose market share, investor confidence in coal will remain low, and investments in coal production or generation will be worth less than they otherwise would. A stay of the Clean Power Plan, for the time period it takes this Court to review the Plan, should not have any significant effect on natural gas prices in that time period.

b. Competition from renewables and energy efficiency as alternative means of meeting electricity demand

15. Like natural gas, renewable energy sources have been gaining market share and becoming more attractive to investors due to technological advances, declining costs, and other factors. This is another long-term trend that has affected and will continue to affect the financial performance of coal producers. My colleague David Schlissel has included a detailed discussion of this issue at Parts B and C of his concurrently submitted declaration.

16. The declining cost of renewable power makes it easier for renewable power companies to compete against new or existing coal-fired power generators for a greater share of the electricity market. This, in turn, contributes to loss of market

[7] *Supra* note 5. *See also* Everett Wheeler, *Coal generators squeezed by falling natural gas prices*, SNL (July 2, 2015), https://www.snl.com/Interactivex/article.aspx?CdId=A-33141284-12851.

share for coal producers. I would not expect a stay of the Clean Power Plan, pending this Court's review, to have any significant effect on the relative prices of coal and renewable power generation in that time period.

c. Weak export markets

17. The financial performance of U.S. coal producers who have invested in exporting coal is also sensitive to trends in international coal markets. These trends are largely negative for the coal industry and expected to remain so.

18. Coal prices in every major region of the global market have declined recently and are expected to remain low or continue declining. Prices on the global seaborne thermal coal market have collapsed and are not expected to rise to sustainable levels for the foreseeable future. Several coal export terminal projects were cancelled in 2013.[8] IEEFA has concluded that China's demand for imported coal peaked in 2013 at 264 million tons—representing 26% of the global market—and is expected to decline to 173 million tons in 2015.[9] Other major regions in the global marketplace are also in decline. India's demand for imported coal has risen, but is also expected to decline due to increasing domestic production and government policies, as explained below.

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[8] *See* Jessica Goad, *Another Coal Export Terminal Is Terminated As Chinese Developments Could End Business Case For Remaining Three*, Climate Progress (May 9, 2013), http://thinkprogress.org/climate/2013/05/09/1989031/another-coal-export-terminal-is-abandoned-as-new-developments-in-china-could-eliminate-business-case-for-remaining-three/; Kiley Kroh, *The Declining Value Of Coal Just Killed Another Export Terminal*, Climate Progress (Aug. 20, 2013), http://thinkprogress.org/climate/2013/08/20/2494131/another-coal-export-terminal-canceled/.

[9] Tim Buckley and Tom Sanzillo, *Past Peak Coal in China*, Institute for Energy Economics and Financial Analysis, Nov. 2015, http://ieefa.org/wp-content/uploads/2015/11/IEEFA_Peak-Coal_November-2015.pdf.

19. Other analysts have concluded that the export market for U.S. coal is under severe stress and is likely to remain so for the foreseeable future.[10] Most financial analysts now seem to agree that as China reduces coal imports, existing Pacific Rim coal producers (Australia, South Africa, Indonesia, and Russia) have sufficient capacity to meet the needs of the remaining import countries, including India. I expect that U.S. coal producers will continue to fill a niche export market, but one not much larger than what exists today, for the reasons discussed below.

20. In June 2014, J.P. Morgan forecast a decline of U.S. thermal coal exports from 49 million tons per annum (mtpa) to 36 mtpa through 2016, and concluded that "[i]t's not economic to export US coal at present" and that prospects for new sales were limited.[11] In February 2015, Wood Mackenzie, a coal-industry analyst, projected that the global thermal market will stay in a condition of oversupply through approximately 2021, depending on how many new mine projects are actually delayed.[12] And in April 2015, two of China's leading coal producers announced plans to resume coal exports from China.[13]

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[10] *See, e.g.*, John Bridges, et al., *Global Coal Update*, J.P. Morgan, June 2014, http://pg.jrj.com.cn/acc/Res/CN_RES/INDUS/2014/6/29/37603388-1ecd-419e-8cbd-bd7d51fc5902.pdf, p. 1 ("Oversupply of Chinese thermal coal has depressed imports."); *Asian Coal and Power: Less, Less, Less…The Beginning of the End of Coal*, Bernstein Research, June 2013, Cover and *Executive Summary* (noting that Chinese market was the primary driver of new coal-mining investment over the last decade, and that once Chinese demand started to fall, the global thermal coal market would not recover).

[11] *Supra* note 10 (J.P. Morgan), p. 3.

[12] Rohan Somwanshi*, Analyst: Sporadic coal mine closures to not enough to rebalance oversupplied market,* SNL (Feb. 17, 2015), https://www.snl.com/InteractiveX/Article.aspx?id=31136996.

[13] *China's Shenhua, Datong Group Aim to Reverse Slide in Coal Exports*, Platts (Apr. 15, 2015), http://www.platts.com/latest-news/coal/beijing/chinas-shenhua-datong-group-aim-to-reverse-slide-26065883.

21. Coal markets are oversupplied in every region of the world that has an active coal market. Although India is still importing significant amounts of coal—upward of 200 mtpa—the government has said it hopes to drastically reduce, if not end, thermal coal imports.[14]

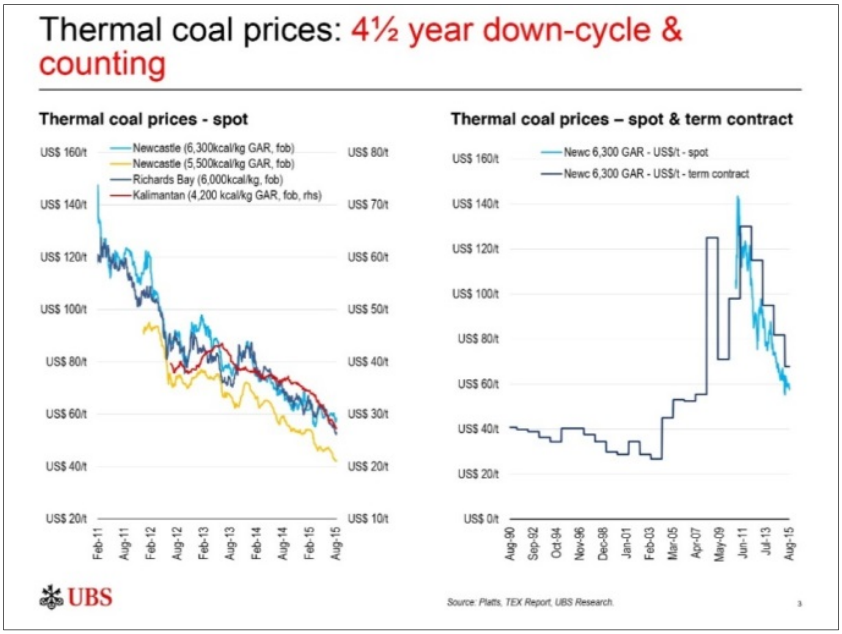
22. U.S. coal exports and export prices are already in decline. In 2012, U.S. coal producer exports peaked at 125 million tons of coal. In September 2015, the Energy Information Administration estimated that U.S. coal exports will drop to 79.5 million tons in 2015 and 72.3 million tons in 2016.[15] The market price for global thermal coal—the price that applies to coal shipped from the United States—has plummeted. A September 2015 price chart from UBS, reproduced below, shows that prices on the global spot market for Newcastle coal have dropped from a high of $140 per ton in 2011 to $30 per ton in August 2015:[16]

[14] Rajesh Kumar Singh, *Coal Revival Seen Fading as India's Rising Output Trims Imports*, Bloomberg Business (Aug. 12, 2015), http://www.bloomberg.com/news/articles/2015-08-12/coal-revival-seen-fading-as-india-s-rising-output-trims-imports.

[15] Everett Wheeler, *U.S. government chops coal export outlook*, SNL (Sept. 9, 2015), https://www.snl.com/InteractiveX/Article.aspx?id=33808886.

[16] Lachian Shaw, *Thermal Coal Markets: Opportunity for Japan?*, UBS, Sept. 2015, http://ieefa.org/wp-content/uploads/2015/09/UBS-report-Japan-et-al.pdf, p. 3. Newcastle coal is typically the benchmark used for the global price of coal and refers to coal mined in Australia.

Thermal coal prices



23. At current price levels, exports of U.S.-produced coal are unprofitable. In 2010, Peabody Energy,[17] one of the companies that has requested a stay of the Clean Power Plan, advised its investors that it required $90 per ton on the global market to profit from U.S. coal shipped through West Coast ports. At the time, Peabody appeared confident that this price target was achievable as a permanent, long-term goal. In 2014, Cloud Peak Energy, whose CEO Colin Marshall submitted a declaration in support of the National Mining Association's stay motion, stated it would require a market price of between $80 and $90 per ton for exports to be profitable.[18] As the UBS chart above illustrates, export prices have now dipped far below those levels, to

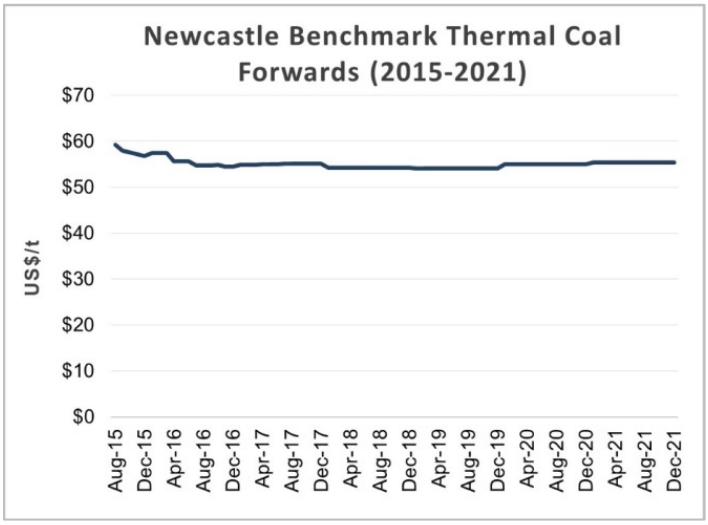
[17] Peter Gartrell and John Miller, *Peabody projections show lucrative Chinese market for PRB coal*, Platts Coal Trader (Dec. 6, 2010), http://archive.wusa9.com/news/article/124286/0/Peabody-projections-show-lucrative-Chinese-market-for-PRB-coal.

[18] *Cloud Peak Energy's CEO Discusses Q1 2014 Results - Earnings Call Transcript*, Seeking Alpha (Apr. 30, 2014), http://seekingalpha.com/article/2175763-cloud-peak-energys-ceo-discusses-q1-2014-results-earnings-call-transcript?part=single.

under $60 per ton. Cloud Peak, formerly the principal West Coast exporter of coal to China and other Asian countries, recently halted its export operations.[19]

24. I expect low coal-export prices to persist. The import trends for China and India suggest a continued slowdown in the global thermal seaborne coal trade. Both countries have internal reasons for adopting policies that reduce or eliminate the level of imported coal into their countries. Future price forecasts are in the high $50-per-ton range through December 2021 (again, well below the breakeven price levels earlier forecast by Peabody and Cloud Peak). This weak pricing is causing coal companies around the world to cut spending and cancel projects.[20]

Newcastle Benchmark Thermal Coal Futures Coal Prices[21]



25. The financial challenges that domestic coal producers are facing on the international market have little to do with the Clean Power Plan, and I would not

[19] Jeff Nagel, *Fewer coal trains as U.S. firm halts exports*, The Now (Oct. 31, 2015), http://www.thenownewspaper.com/news/339131941.html.
[20] *Supra* note 16, p. 8.
[21] ICE NewCastle Coal Futures Prices, Barchart, http://www.barchart.com/commodityfutures/ICE_NewCastle_Coal_Futures/LQ (last visited Nov. 30, 2015).

expect a stay to have any meaningful effect on those challenges. For example, I have no reason to expect that a stay will cause China and India to increase short-term coal imports, or abate competition from other countries that supply the global market. The decline in export markets is not attributable to the Plan, and will persist and hamper the financial performance of U.S. coal companies whether or not a stay is granted.

d. Increasing coal production costs

26. Increasing production costs in the coal industry have also contributed to and will continue to contribute to a decline in producers' financial performance. Since 2004, average production costs for Central Appalachian coal have increased approximately 116%.[22] Average production costs in the Powder River Basin, the other major domestic coal-producing region, have increased 5% to 8% annually.[23] In both regions, the trend in average production costs reflects the fact that the coal companies have generally already mined the most accessible (and thus cheapest to extract) coal, and have had to move on to coal that is costlier to mine and bring to market. I accordingly expect average production costs to increase with or without the Clean Power Plan, and would not expect a stay of the Plan to have any meaningful effect on this trend, during the time it takes this Court to review the Plan.

e. High debt levels caused by past investment decisions

27. Yet another long-term factor that affects the financial performance of the coal industry is the effect of past investment decisions and associated debt. Between 2004

[22] *Changes Underway in the Central Appalachian Coal Industry*, Patriot Coal (July 14, 2014), http://www.thecoalinstitute.org/ckfinder/userfiles/files/Present%20State%20of%20the%20CAPP%20Coal%20Industry%20-%20Ben%20Hatfield%20-%20Patriot%20Coal(1).pdf, Slide 21.

[23] *Cloud Peak Energy (CLD) Colin Marshall on Q3 2015 Results - Earnings Call Transcript*, Seeking Alpha (Oct. 28, 2015), http://seekingalpha.com/article/3611726-cloud-peak-energy-cld-colin-marshall-on-q3-2015-results-earnings-call-transcript.

and 2013, for example, the net debt of all U.S. coal companies increased from $3 billion to $20 billion.[24] Jefferies, a coal-mining industry analyst, has identified a wave of mergers and acquisitions in 2011 as a major factor in the industry's poor financial performance in the subsequent years.[25] For example, stay movant and movant-intervenor Peabody Energy significantly increased its debt through a $4.9 billion 2011 acquisition that a 2015 financial analysis concludes has "yet to produce results."[26]

28. Like many commodity markets, the market for coal has historically included periods in which prices spike. Producers use those periods to improve their cash positions, fund new purchases, and pay off existing debt. The trends in natural gas and renewable-energy prices I discussed earlier suggest that coal companies are unlikely to experience and be able to capitalize on similar price spikes in the future. This makes coal-company debt levels appear less sustainable to prospective investors, and helps explain the loss of investor confidence and stock-price and bond-rating trends I discuss at Part A.2.a, below.[27]

29. Like the other factors discussed above, coal-company debt levels are part of a longer-term trend that predates EPA's issuance of the Clean Power Plan and will continue to affect the industry in the coming years. I would not expect a stay of the

[24] Everett Wheeler, *Cash strapped coal companies seek relief through coal sales*, SNL (Dec. 13, 2013), https://www.snl.com/interactivex/article.aspx?id=26264761&KPLT=6.
[25] Darren Epps, *After met coal market collapse, an uncertain future for the coal industry*, SNL (Mar. 27, 2014), https://www.snl.com/InteractiveX/Article.aspx?id=27556596 (quoting Jefferies analyst).
[26] *See From hero to zero: Peabody Energy Corp.*, Case Study Competition 2015, The Economist, http://www.economist.com/sites/default/files/case_resolution_fictconsulting.pdf (last visited Nov. 30, 2015), at 16.
[27] *Fitch: Higher Default Rates Expected For US Coal Sector*, Fitch Ratings (Oct. 15, 2015), https://www.fitchratings.com/site/fitch-home/pressrelease?id=992355.

Plan to significantly affect this trend during the time it takes this Court to review the Plan.

f. Health and environmental concerns and associated regulatory and political pressures on fossil-fuel producers and generators

30. The performance of coal producers and utilities that run coal-fired power plants is also unavoidably sensitive to public concerns about the impacts of mining and burning fossil fuels on public health, welfare, and the environment. These concerns underlie the Clean Power Plan, but also many other regulatory developments, at the state, national, and international levels. These include state-level renewable portfolio standards (which encourage the use of renewable sources of electricity generation), state and international efforts to regulate carbon emissions from the energy sector, and state and national regulation of conventional pollution (including particulate matter, sulfur dioxide, nitrogen oxide, and toxic metal pollution) released from coal-fired power plants and coal mines. They also include efforts to improve safety and working conditions for coal miners.

31. The Clean Power Plan is thus part of a far broader and longer-term trend towards tighter health and environmental regulation that I would not expect a stay to reverse, and whose long-term financial implications for individual coal companies are hard to predict. I return to this last point at Part B.

2. The Clean Power Plan is a relatively minor factor in the financial performance of the domestic coal industry. A stay of the Plan will not reverse or substantially change current negative trends (including in access to credit) in the industry.

32. In my opinion, given the broader market dynamics discussed above, the Clean Power Plan is at most a marginal factor influencing the financial performance of the coal industry. Although implementation of the Plan's emissions limits (if the Plan is upheld) may in the long run accelerate and intensify some of these trends, none of these trends will be reversed or change substantially during the prospective stay period if the Plan is stayed.

33. The relative insignificance of the Plan and of any short-term stay thereof to coal-industry performance is easier to understand once one puts some of the stay declarants' claims in a broader timeframe, and considers other public statements some stay declarants' companies have made to investors since EPA issued the Plan.

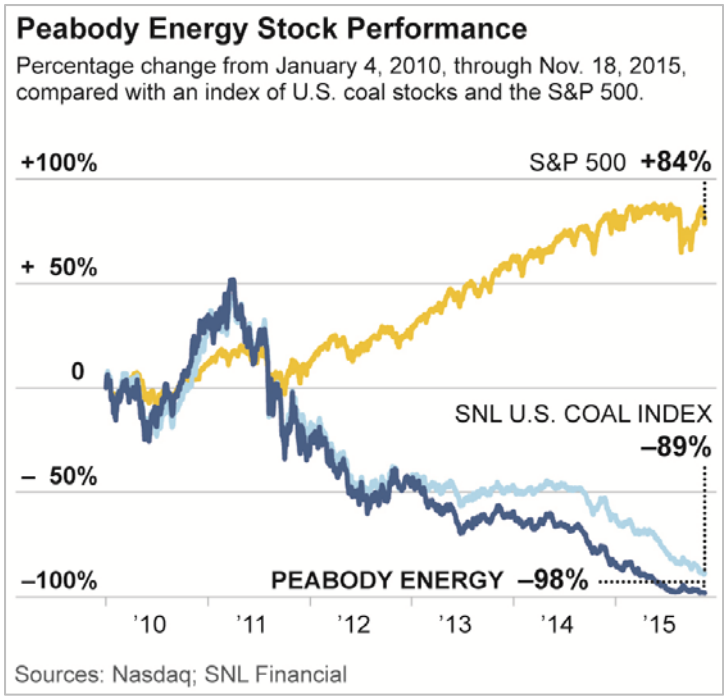
a. Trends in coal-company stock prices, bond ratings, and general access to capital

34. Several declarants have suggested that recent trends in stock prices and bond ratings for coal producers show that a stay of the Clean Power Plan is necessary to avert or could help to avert serious contractions in those companies' access to capital on the stock and bond markets. I disagree.

35. With respect to stock-price movements like those discussed by Bryan Galli (for Peabody Energy) and Seth Schwartz (for the National Mining Association and others), it is important to understand both that the stock values for every major coal company have collapsed over five or more years and that there are many short-term fluctuations in those prices. Coal stocks have declined 89% over the last five years, a

period in which the value of the Standard & Poor's 500 (a major stock index) increased 84%.[28] Cloud Peak Energy's stock price declined roughly 85% during that period, and Peabody Energy's stock price declined roughly 98%:[29]

Peabody Energy Stock Performance



36. Peabody's stock price has been in a declining trend since at least 2011, well before EPA issued its proposed Clean Power Plan regulations. Bryan Galli notes that Peabody's stock dropped $90 million on the day the final Plan was announced and strongly suggests the drop was attributable to the Plan, but he also acknowledges in a footnote that the stock rebounded within days.[30] There are similar patterns

[28] Peabody Energy Corporation, Stock Chart, SNL, https://www.snl.com/InteractiveX/BriefingBookGraph.aspx?ID=4065857&GraphType=1 (last visited Nov. 30, 2015).
[29] Peabody Energy Market Cap, YCharts, https://ycharts.com/companies/BTU/market_cap (last visited Nov. 30, 2015).
[30] Galli Decl ¶ 30 & n.13.

surrounding past climate initiatives, and they underscore the perils of over-generalizing from short-term stock-price fluctuations.[31]

37. After EPA published the final Clean Power Plan, BlackRock Investment Institute issued a report that opined on past and current climate initiatives and their impacts on company valuations. BlackRock questioned the premise that carbon regulation has affected valuations, saying it found "little evidence that assets more susceptible to climate change and related regulatory risks trade at a discount to the market."[32]

38. The long-term decline in coal-industry stock prices is driven primarily by investor judgments about how coal companies will perform in light of market factors like those described earlier in this declaration. Stock-price trends for individual companies may, of course, also reflect company-specific developments, such as new acquisitions. The dramatic long-term decline in coal stock prices was not caused by the Clean Power Plan, and I would not expect a stay of the Plan to reverse this trend.

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[31] For example, in July 2010, when a climate bill being considered by Congress was defeated in the Senate, Peabody's stock price briefly moved upward, from $43.75 on July 21 to $45.23 per share on July 23. But by July 31, it had returned to $44.00. *See* Peabody Energy Corp., Historical Prices, Yahoo! Finance, http://finance.yahoo.com/q/hp?s=BTU&a=06&b=1&c=2010&d=08&e=30&f=2010&g=d (last visited Nov. 30, 2015).

[32] BlackRock Investment Institute, *The Price of Climate Change: Global Warming's Impact on Portfolios*, Oct. 2015, https://www.blackrock.com/corporate/en-mx/literature/whitepaper/bii-pricing-climate-risk-international.pdf, p. 6. BlackRock Investment Institute is part of BlackRock, Inc. The Institute's purpose is to provide investment insights and analysis for BlackRock's team of professionals who serve BlackRock's clients. BlackRock funds hold over 900,000 shares of Peabody and over 5 million shares of Cloud Peak. *See* SNL, Cloud Peak and Peabody Energy corporate profile, Institutional Ownership Information. SNL's database is made available to IEEFA under a proprietary agreement. The information on Cloud Peak and Peabody is available upon request.

39. Coal-company bond ratings likewise reflect long-term, negative trends in the coal market. In an August 2015 report, Moody's predicted that the final Plan's impact on coal producers' near-term access to credit "will be marginal because demand for coal has already been in a steep decline owing to stiff competition from low natural gas prices over the past few years," and that the Plan generally "will have a minimal incremental impact in the short run."[33] Although Moody's mentioned the Plan in its most recent bond-rating opinion for Murray Energy, one of the stay movants and Plan challengers, it also referenced other factors including low natural gas costs, weak export markets, high production costs, earlier environmental regulations, and labor concerns.[34]

b. Coal-producer investor statements since the Plan was issued

40. Another way to put the coal-industry declarants' claims about the Clean Power Plan in context is to consider how publicly traded coal producers have characterized the main factors that affect their financial performance in the months since EPA issued the final Plan. For example, in an October 27, 2015, statement on its release of third-quarter earnings, Cloud Peak Energy CEO and stay declarant Colin Marshall identified natural gas prices and weather as "the largest factors impacting coal demand," before going on to discuss "ongoing" regulation and other factors including competition for renewables and a "very weak" international thermal coal market.[35]

[33] Moody's Investors Service, *EPA Carbon Rule Hurts Coal, Boosts Renewables* (Aug. 12, 2015), pp. 2, 4.
[34] Moody's Investors Service, *Credit Opinion: Murray Energy Corporation* (Sept. 28, 2015).
[35] Press Release, *Cloud Peak Energy Inc. Announces Results for the Third Quarter and the First Nine Months of 2015* (Oct. 27, 2015), http://investor.cloudpeakenergy.com/press-release/earnings/cloud-peak-energy-inc-announces-results-third-quarter-and-first-nine-months-5. In its October 28, 2015, quarterly report, filed after Mr. Marshall's declaration in this case, the company said it expected the Plan to diminish the coal market, but was "not in a position to make any meaningful determination

41. Looking well beyond the prospective stay period, to put the declarants' statements in an even broader context, it is important to note that by 2022, when the carbon emissions limits included in the Plan are scheduled to start taking effect, the U.S. will remain a leading coal-production market.[36]

B. Making business decisions in the face of uncertainty is an inescapable part of running a capital-intensive business with long-investment horizons in a complex market. The Clean Power Plan is only one of many sources of uncertainty for coal-mining companies and utilities that are invested in coal-fired generation. A stay would not remove uncertainty attributable to the Plan, and might deepen it.

42. As I explained in Part A.1, there are many significant market factors that influence the financial health of the coal industry, that predate the Clean Power Plan and that will persist whether or not the Plan is stayed (or ultimately upheld and implemented).

43. Some declarants suggest that the Plan has further complicated short-term decisions about how to run their businesses, because they must continue to make investment and other day-to-day decisions without knowing whether the Plan will be upheld, or how it will be implemented in individual states.[37] But even if the Court were to issue a stay, the stay would not answer those questions. Thus, even if one assumes for the sake of argument that EPA's issuance of the Plan is a significant

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about the extent of the [Plan's] impacts to [its] operations." Cloud Peak, *SEC Form 10-Q for the period ending September 30, 2015*, p. 43.

[36] For example, EPA estimates a domestic coal market for generation by 2025 of between 606 and 625 million tons per year. U.S. Environmental Protection Agency, *Regulatory Impact Analysis for the Clean Power Plan Final Rule*, Table 3-15 Coal Production for the Electric Power Sector, p. 3-33, Oct. 23, 2015, http://www2.epa.gov/sites/production/files/2015-08/documents/cpp-final-rule-ria.pdf. At this level the United States will remain the world's second or third largest coal market.

[37] *See, e.g.*, Frenzel Decl ¶ 29.

source of short-term uncertainty in the coal market, relative to all of the other market factors discussed in this declaration, a stay would not remove that uncertainty.

44. Some declarants in support of stay motions seem to acknowledge that to the extent that EPA's issuance of the Plan has been a source of uncertainty for their businesses, a stay alone cannot remove uncertainty and therefore will have little to no practical effect on their financial performance and prospects. For example, in his declaration, Cloud Peak Energy CEO Colin Marshall compares the business decisions he expects the company will make if the Plan "is not stayed" with those it will make if the Plan "is withdrawn or vacated" (*e.g.*, not simply stayed).[38] Only if the regulation is vacated and a substantially similar rule was not likely to replace it does Cloud Peak see a clear path to future investment.

45. If anything, it seems that a stay would *deepen* the kind of uncertainty concerning how the Plan will be implemented that some declarants complain of—for example, by encouraging certain states to defer work on their state-specific implementation plans.

Conclusion

46. For the reasons stated above, a stay of the Clean Power Plan would not ameliorate any serious economic harm the coal industry may otherwise suffer in the period it will take the Court to consider the merits of the Plan. The industry's financial problems are deep, long in the making, driven by factors that predate the Plan, and part of a broader market transformation. To the extent that the industry is harmed because it must make short-term investment and other business decisions in an

[38] Marshall Decl ¶¶ 20-21.

uncertain economic environment, that kind of economic uncertainty is traceable to many market factors, and a stay of the Plan would not meaningfully reduce it, and could deepen it.

I swear under penalty of perjury that the foregoing is true and correct.

Tom Sanzillo

Dated December 1, 2015