

In re:	)	Chapter 11
	)	
FIRSTENERGY SOLUTIONS CORP., <i>et al.</i>	)	Case No. 18-50757
	)	Jointly Administered
Debtors.	)	
	)	Hon. Judge Alan M. Koschik
	)	

I, David A. Schlissel, hereby declare under oath:

## **Background and Qualifications**

2. I graduated from the Massachusetts Institute of Technology in 1968 with a Bachelor of Science Degree in Engineering. In 1969, I received a Master of Science Degree in Engineering from Stanford University. I received a Juris Doctor degree from Stanford University in 1973. In addition, I studied nuclear engineering at the Massachusetts Institute of Technology during the years 1983-1986.

3. I have more than 44 years of experience providing expert analyses and testimony before utility regulatory commissions in 34 states, the U.S. Nuclear Regulatory Commission, and in state and federal court proceedings. My clients have included governmental bodies, publicly-owned utilities, and private organizations. A copy of my current C.V. is attached to this Declaration.

4. My work since 2005 has focused primarily on the economic and financial viability of coal-fired power plants, particularly those located in deregulated wholesale markets including the PJM Energy Market. As part of this work I have analyzed the viability of coal plants owned by FirstEnergy Corp. and certain of its subsidiaries which are Debtors here.<sup>1</sup>

5. In preparation of this declaration, I have reviewed the proposed *Settlement Agreement*, the *Motion of Debtors to Approve Settlement Among the Debtors, Non-Debtor Affiliates and Certain Other Settlement Parties*, and the *Declaration of Charles M. Moore in Support of the Debtors' Motion*. I also have reviewed the *Response of the United States, State of Ohio, and Pennsylvania Department of Environmental Protection to Motion to Approve Settlement, FE Non-Debtor Parties' Statement in Support of Motion of Debtors to Approve Settlement, and Debtors' Reply in Support of Motion of Debtors to Approve Settlement*. In addition, I have reviewed publicly available testimony and exhibits from FirstEnergy Corp.-related regulatory proceedings in Ohio and West Virginia, as well as reports and information on recent forward natural gas and PJM energy market prices and the possible costs of environmental remediation of retired coal-fired generators.<sup>2</sup>

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<sup>1</sup> For example, see <http://ieefa.org/wp-content/uploads/2016/02/4-Billion-Bailout-in-the-Buckeye-State-FirstEnergy-Plan-Will-Cost-Customers-for-Years-to-Come-Feb-2016.pdf> and <http://www.psc.state.wv.us/scripts/WebDocket/ViewDocument.cfm?CaseActivityID=480163>

<sup>2</sup> For example, see the historical and forward natural gas and PJM energy market price data and historical coal plant operating cost and operating performance data published by S&P Global Market Intelligence; *A site assessment study on potential land use options at the Salem harbor power station site*, [https://www.salem.com/sites/salemma/files/uploads/power\\_plant\\_study\\_final.pdf](https://www.salem.com/sites/salemma/files/uploads/power_plant_study_final.pdf), *Repurposing Legacy Power Plant Lessons for the Future*, <https://docplayer.net/51592370-Repurposing-legacy-power-plants-lessons-for-the-future.html>, *Decommissioning US Power Plants, Decisions, Costs and Key Issues*, <http://www.rff.org/files/document/file/RFF%20Rpt%20Decommissioning%20Power%20Plants.pdf>, and *TLG Decommissioning Cost Study for Xcel Energy*, [http://www.debarel.com/BSB\\_Library/8\\_Seymore\\_Exhibit\\_1.pdf](http://www.debarel.com/BSB_Library/8_Seymore_Exhibit_1.pdf).

## **Summary**

6. It is extremely uncertain whether the Debtors will have sufficient assets to properly and completely decommission and environmentally clean up and remediate the sites of the Bruce Mansfield (“Mansfield”), W.H. Sammis (“Sammis”) and Pleasants Power Station (“Pleasants”) coal-fired power plants (collectively, “the Coal Plants”) after they are retired. If Debtors do not have sufficient funds to accomplish these tasks and responsibilities, then either the costs will be shifted to the public or the coal plants and the dangerous materials on the sites will not be cleaned up and remediated.

7. This uncertainty is due to the facts that: (1) the terms of the proposed Settlement Agreement do not appear to place any restrictions requiring Debtors to set aside and maintain any of the funds they receive through the settlement or otherwise for the purposes of decommissioning, clean up and remediation of the Coal Plants; (2) as a result of underlying market changes since 2010, all of the Coal Plants have been uneconomic, producing large losses for FirstEnergy Corp. and Debtors, a situation that is unlikely to change in the foreseeable future; and (3) in any event, the actual costs of decommissioning and environmental cleanup and remediation are very plant-specific and highly uncertain, especially before detailed engineering and environmental studies of the Mansfield, Sammis and Pleasants coal plants have been conducted.

### **The Proposed Settlement Does Not Require the Set-Aside of Any Funds for Coal Plant Decommissioning and Environmental Clean Up and Remediation**

8. The proposed settlement would require FirstEnergy Corp. to make a cash payment of \$225 million to the Debtors. The Debtors are allowed to distribute part or all of this Cash Payment to their creditors under a plan of reorganization or liquidation.

9. FirstEnergy Corp. also would issue unsecured New FirstEnergy Corp. Notes to the Debtors in the principal amount of \$628 million, subject to possible adjustments, with a maturity date of December 31, 2022. The Debtors would be permitted to distribute part or all these New FirstEnergy Corp. Notes to their creditors under a plan of reorganization or liquidation.

**Underlying Market Changes Since 2010 Have Undermined  
the Financial Viability of the Mansfield, Sammis and Pleasants Coal Plants**

10. Since 2009, natural gas prices have declined due to the growing supply of shale gas, and the cost of generating power at natural gas-fired power plants has likewise declined.

11. In more recent years, there has been increased competition in the wholesale competitive PJM markets from renewable energy resources – particularly wind power and solar energy – due to declining installation prices and improved operating performance.

12. As a result, energy market prices have fallen. For example, the average peak energy market prices at PJM’s Dayton Ohio Hub declined from \$53.18 in 2008 to \$29.22 in 2017, a 55 percent drop. Therefore, the owners of the Mansfield, Sammis and Pleasants coal plants have each received substantially less revenue from each megawatt hour of electricity that they generate and sell into the wholesale markets.

13. At the same time, generation from less-expensive natural gas-fired plants has displaced electricity that would otherwise have been generated at the Mansfield, Sammis, and Pleasants coal plants. For example, generation at the Mansfield coal plant declined by nearly 60 percent between 2010 and 2017. Generation at the Sammis coal plant also declined by 58 percent during the same period, and generation at the Pleasants coal plant declined by 7 percent.

14. This means that the owners of these coal plants are selling less electricity from their plants, and they also are receiving less revenue from each sale. As a result, the Coal Plants are no longer financially viable.

15. FirstEnergy Corp. and the Debtors acknowledge the threat posed by these changes to the viability of their coal plants and nuclear power plants. For example, testimony filed at the Public Utilities Commission of Ohio (“PUCO”) in August 2014 by Donald Moul on behalf of parent FirstEnergy Corp. noted that:

The economic viability of the [Sammis and Davis-Besse plants] is in doubt. Market-based revenues for energy and capacity have been at historic lows and are insufficient to permit FES to continue operating the plants and to make the necessary investments. [at page 2]

\* \* \* \*

Markets have not, and are not, providing sufficient revenues to ensure continued operation of the Plants. Since 2008, FES has managed the Plants in the face of significant revenue decline and uncertainty, pricing volatility and ever-changing environmental mandates. [at page 3]

\* \* \* \*

The only thing that can be said with certainty is that the future of the Plants is in doubt. The Plants are not receiving sufficient revenues to cover the Plants’ costs, both from an energy and capacity standpoint.

In light of the historically low level of revenues for the last several years, FES may not be financially able to bear the short-term losses associated with the Plants, despite the fact that market prices are expected to rise over the long term.

Simply put, FES may not be able to continue incurring losses by continuing to run the Plants in the near term in order to incur the long-term benefits associated with the Plants. [at pages 3 and 4]<sup>3</sup>

16. Mr. Moul’s comments about the viability of the Sammis coal plant applied equally to the Mansfield and Pleasants coal plants because they faced the same set of market conditions.

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<sup>3</sup> <https://dis.puc.state.oh.us/TiffToPDF/A1001001A14H04B61449B97661.pdf>

17. The market conditions facing the Mansfield, Sammis and Pleasants coal plants have continued to be more challenging since Mr. Moul filed testimony in August 2014. Except for relatively short-term periods, natural gas and energy market prices have been lower. At the same time, additional new natural gas-fired plants and renewable energy resources have been added to the grid, providing increased competition.

18. For example, Bruce Mansfield lost \$90 million in 2017 alone, and was projected to lose even more — \$104 million — this year. Low-cost natural gas prices have been cited as a leading cause for the plant’s struggles.<sup>4</sup>

19. These same market conditions are expected to continue for the foreseeable future as current forward prices both for natural gas and for PJM energy market prices remain low. Thus, there is no reasonable prospect that the Mansfield, Sammis or Pleasants coal plants will turn around and produce sustained profitable revenue flows, instead of losses. First Energy Solutions has thus announced its plans to “de-activate” – namely, shut down – all of these coal plants in the next few years.

20. FirstEnergy Corp’s SEC 10-K filing for the Year Ending December 31, 2017 recognized in several places the risks faced by the coal and nuclear plants owned by its competitive subsidiaries FES and AE Supply:

Weak wholesale energy and capacity markets with significantly low results from recent capacity auctions and anemic demand forecasts have lowered the value of the business and continue to challenge the [Competitive Energy Sector] including FES...<sup>5</sup>

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<sup>4</sup> *Motion of the Debtors for Entry of An Order Authorizing the Debtors to Reject Certain Lease Agreements*, at paragraph 26 on page 9, [https://www.google.com/search?q=Bruce+Mansfield+%2490+million+2017&rlz=1C5CHFA\\_enUS721US721&oq=Bruce+Mansfield+%2490+million+2017&aqs=chrome..69i57.9583j0j4&sourceid=chrome&ie=UTF-8](https://www.google.com/search?q=Bruce+Mansfield+%2490+million+2017&rlz=1C5CHFA_enUS721US721&oq=Bruce+Mansfield+%2490+million+2017&aqs=chrome..69i57.9583j0j4&sourceid=chrome&ie=UTF-8).

<sup>5</sup> FirstEnergy Corp., SEC For 10-K Filing for the Year Ending December 31, 2017, at page 27.

Based upon continued significantly low prices in the wholesale energy and capacity markets, weak demand for electricity and anemic demand forecasts along with the inability to obtain legislative or regulatory relief, FES' cash flow from operations may be insufficient to repay its indebtedness or trade payables in the near- and long-term. FES' near-term obligations and their impact to liquidity raise substantial doubt about FES' ability to meet its obligations as they come due over the next twelve months and, as such, its ability to continue as a going concern.<sup>6</sup>

21. For these reasons, FirstEnergy Corp. and the Debtors have decided to deactivate all three units at the Bruce Mansfield coal plant by June 1, 2021, and the Sammis coal plant Units 1-4 in May 2020, and the Sammis coal plant Units 5-7 by June 1, 2022. FirstEnergy announced that it will deactivate the Pleasants coal plant by January 1, 2019. However, there is substantial uncertainty over the magnitude of the total financial losses that these plants will accumulate before they are deactivated and whether there will be any funds available for decommissioning and environmental cleanup and remediation.

22. In his Declaration of August 26, 2018, Charles M. Moore states that the transfer of the Pleasants Power Plant would provide “[A]nother direct source of value” for the Debtors.<sup>7</sup> It is unclear how this statement can be correct given current and reasonably expected future PJM market conditions and the fact that the Pleasants Plant is currently scheduled to be deactivated on January 1, 2019. In fact, Mr. Moore acknowledged that given the “uncertain financial outlook of the Pleasants Power Plant, it is difficult to assign a value to the asset.”<sup>8</sup>

23. Also, in his August 26, 2018 Declaration, Mr. Moore also stated that “The possibility of adding another coal-fired power station into the portfolio for the reorganized business would add size and purchasing power to enhance the value to the Debtors’ enterprise.”<sup>9</sup> However, just three days later, Debtors announced its plans to deactivate the Bruce Mansfield

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<sup>6</sup> Id., at page 28.

<sup>7</sup> Declaration of Charles M. Moore, Paragraph 41, at page 15.

<sup>8</sup> Declaration of Charles M. Moore, Paragraph 47, at page 18.

<sup>9</sup> Id.

coal plant Units 1-3 by June 1, 2021 and the Sammis coal plant Units 5-7 by June 1, 2022. These deactivations were based on Debtors' conclusion that the market environment fails to adequately compensate generators.<sup>10</sup>

24. Debtors also plan to deactivate four nuclear plants in 2020 and 2021. These are the 908 MW Davis-Besse nuclear plant in northwestern Ohio in 2020, followed by the 1,268 MW Perry nuclear plant in northeastern Ohio and the 1,872 MW Beaver Valley 1 & 2 nuclear plant in western Pennsylvania in 2021.

25. In addition, Debtor FES has agreed to sell its retail and wholesale load-serving business which has approximately 900,000 commercial & industrial and residential customers in six Midwest and Mid-Atlantic states, primarily Ohio and Pennsylvania, and serves 41 terawatt-hours of electric loads.<sup>11</sup> Therefore, Debtor FES will have many fewer customers to whom it will be selling electricity generated by its financially distressed coal plants and nuclear plants.

26. It is highly uncertain how, after the Pleasants, Mansfield and Sammis coal plants are fully deactivated, and after the sale of its retail and wholesale business, Debtors will have any significant revenue-producing assets (beyond the lone West Lorain natural gas-fired plant) that could provide any funding support for decommissioning and environmental cleanup and remediation of these plants.

27. It also is highly uncertain how, after its recent asset sales, AE Supply will have significant revenue-producing assets that could provide any funding for the share of decommissioning and environmental cleanup and remediation costs for the Pleasants Plant that FirstEnergy Corp. and AE Supply would retain under the proposed Settlement Agreement for plant operation prior to the proposed transfer to Debtor FES.

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<sup>10</sup> S&P Global, *First Energy Solutions to shut down 4,000 MW of coal capacity*, August 29, 2018.

<sup>11</sup> FirstEnergy Solutions Press Release, dated 07/10/2018.



**There is Significant Uncertainty About  
What it Will Ultimately Cost to Decommission and Environmentally  
Clean Up and Remediate the Mansfield, Sammis and Pleasants Coal Plant Sites**

28. The cost and difficulty of completing decommissioning, monitoring, and environmental cleanup and remediation activities at retired coal plants is very plant-specific, depending on such factors as the volumes of the hazardous chemicals and wastes produced at the site, the volume of coal combustion residuals (CCRs or coal ash) produced and stored at the site, whether there is a wet impoundment (and the type of liner and dam), and whether there has been ground water contamination. The age of the plant is also a factor, as older plants can sometimes be expected to contain large amounts of asbestos.

29. Without a detailed engineering and environmental analysis, it is not possible to develop a reasonable estimate of what it will cost to decommission and environmentally clean up and remediate closed plant sites. Often, as with power plant construction, the actual cost of the work may not be known until the project is started, or even completed.

30. FirstEnergy Corp. is a guarantor for \$169 million of FES' surety bonds as part of a Consent Decree related to the cleanup of coal ash at the Little Blue Run impoundment at the Bruce Mansfield coal plant.<sup>12</sup> Little Blue Run is among the largest coal ash impoundments in the U.S., (1,694.9 acres), it has no liner, and the retaining dam that backs on to the Ohio River is an earth and rock fill dam that FirstEnergy's contracted engineers rated as high hazard.<sup>13</sup> It is uncertain if the \$169 million surety bond will provide enough funds to fully clean up Little Blue Run given that FirstEnergy's closure plan and solid waste disposal permit impose long-term closure and post-closure obligations to monitor the site and achieve environmental remediation.

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<sup>12</sup> FirstEnergy's SEC 10-Q Filing for the Quarter Ending June 30, 2017, at page 40.  
<https://investors.firstenergycorp.com/Cache/389885137.PDF?O=PDF&T=&Y=&D=&FID=389885137&iid=4056944>.

<sup>13</sup>[http://ccrdocs.firstenergycorp.com/files/CCR%20Impoundments/Little%20Blue%20Run/Operating%20Requirements/Hazard%20Potential%20Classification/LBR\\_Initial%20Hazard%20Classification.pdf](http://ccrdocs.firstenergycorp.com/files/CCR%20Impoundments/Little%20Blue%20Run/Operating%20Requirements/Hazard%20Potential%20Classification/LBR_Initial%20Hazard%20Classification.pdf).

It is also uncertain what funding would cover the potential decommissioning of the plant or the potential cleanup and remediation of other areas of the Bruce Mansfield coal plant site. It is furthermore unclear whether FirstEnergy Corp. will remain as guarantor of the surety bond after the Debtors have separated into a new company.

31. FirstEnergy Corp. is also the guarantor for a \$12 million surety bond for the Sammis coal plant.<sup>14</sup> However, without at least a detailed engineering and environmental analysis it is unclear whether this will be sufficient to fully decommission and remediate the plant's site after it is retired. The North and South CCR impoundments at the Sammis coal plant were both classified by FirstEnergy's contracted engineers to have a significant hazard potential.<sup>15</sup>

32. As part of the proposed Settlement Agreement, AE Supply would retain all of its liabilities under environmental laws (excluding any post-transfer changes thereto) with respect to the ownership and operation of the Pleasants Power Plant to the extent that such liabilities are based on facts and circumstances occurring prior to the Transfer Date. This includes AE Supply's retention of all of its ownership interests in the McElroy's Run Impoundment.<sup>16</sup> The McElroy's Run Impoundment was classified as having a high hazard potential, meaning "failure or misoperation may cause loss of human life and could cause economic loss, environmental damage, or disruption of lifeline facilities."

33. In addition, FirstEnergy Corp. has agreed to (i) fully guarantee the indemnity obligations of AE Supply .... with respect to McElroy's Run Impoundment through the closure

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<sup>14</sup> FirstEnergy's SEC 10-Q Filing for the Quarter Ending June 30, 2017, at page 40.  
<https://investors.firstenergycorp.com/Cache/389885137.PDF?O=PDF&T=&Y=&D=&FID=389885137&iid=4056944>

<sup>15</sup>[http://ccrdocs.firstenergycorp.com/files/CCR%20Impoundments/McElroy's%20Run/Operating%20Requirements/Hazard%20Potential%20Classification/MCELROYS\\_Initial%20Hazard%20Classification.pdf](http://ccrdocs.firstenergycorp.com/files/CCR%20Impoundments/McElroy's%20Run/Operating%20Requirements/Hazard%20Potential%20Classification/MCELROYS_Initial%20Hazard%20Classification.pdf).

<sup>16</sup> Declaration of Charles M. Moore, Paragraph 44, at page 17.

and remediation of the McElroy's Run Impoundment; and (ii) provide a guarantee in an amount equal to \$15 million with respect to the indemnity obligations of AE Supply ... with respect to other retained environmental liabilities (excluding the McElroy's Run Impoundment) until the third anniversary of the Pleasants Closing Date.<sup>17</sup>

34. Thus, it is uncertain whether the \$15 million guarantee that FirstEnergy Corp. provides will be adequate to provide for the complete decommissioning and environmental cleanup and remediation of the Pleasants Power Plant site, outside of the McElroy's Run Impoundment.

### **Conclusions**

35. First, it is uncertain whether Debtors will set aside any of the cash or New FirstEnergy Notes that they would receive as part of the proposed Settlement Agreement for the eventual decommissioning and environmental cleanup and remediation of the Coal Plants.

36. Second, it is unlikely that the Coal Plants will provide sufficient positive revenue flows before they are deactivated so that Debtors will be able to set aside adequate funds for the eventual decommissioning and environmental cleanup and remediation of these Coal Plants.

37. Third, it is unlikely that after its nuclear power plants and coal plants are deactivated, the Debtors will then have assets with sufficient positive revenue flows to enable them to fund the decommissioning and environmental cleanup and remediation of the Coal Plants.

38. Finally, the actual costs of decommissioning and environmental cleanup and remediation of the Coal Plants are currently very uncertain.

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<sup>17</sup> Settlement Agreement, Article III, Section 3.1(h), at page 37.

39. Consequently, there is a significant risk that Debtors will be unable to fund part or all of the necessary costs for the decommissioning and environmental cleanup and remediation of the Coal Plants.

Pursuant to 28 U.S.C. S 1746, I declare under penalty of perjury that the foregoing statements are true and correct to the best of my knowledge, information and belief.

Dated: September 23, 2018

Respectfully Submitted

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