



500 LEE STREET EAST • SUITE 1600 • P.O. BOX 553 • CHARLESTON, WEST VIRGINIA 25322 • TELEPHONE: 304-340-1000 • TELECOPIER: 304-340-1130
www.jacksonkelly.com

(304) 340-1251
e-mail: ccallas@jacksonkelly.com
Telecopier: (304) 340-1080
WV Bar ID # 5991

June 1, 2012

Via Hand Delivery

Ms. Sandra Squire
Executive Secretary
Public Service Commission of West Virginia
201 Brooks Street
Charleston, WV 25323

04:10 PM JUN 01 2012 PSC EXEC SEC DIV

RE: Case No. 11-1274-E-P (REOPENED)
MONONGAHELA POWER COMPANY
and THE POTOMAC EDISON COMPANY
doing business as ALLEGHENY POWER
Petition to initiate the annual review and to update
the ENEC rates currently in effect.

Dear Ms. Squire:

Monongahela Power Company ("Mon Power") and The Potomac Edison Company ("PE") (together the "Companies") provided information related to the Companies' decision to deactivate three subcritical generating facilities as a closed entry in this proceeding on March 12, 2012. On April 30, 2012, the Companies provided additional information in response to particular questions presented in the Public Service Commission of West Virginia ("Commission") Order dated April 2, 2012 ("Commission's First Request"). The Commission issued a second request for information in an Order dated May 17, 2012, to which the Companies respond in this letter.

Responses to Commission's Second Request for Information

QUESTION 1

1. In Question No. 10 of the April 2, 2012 Order, the Commission asked the Companies to explain and quantify for each plant (by estimate if necessary) the gross amount that would be received, and the net effect on income, if the next two years capacity obligations to PJM included the West Virginia generation plants scheduled for retirement. The Companies did not provide an answer showing the net potential impact on customers of maintaining the plants for the next two years, perhaps because the question was not clearly framed. We want the Companies to explain and quantify for each plant (estimated if necessary) the revenue requirement impact if the plants had been available for capacity receipts over the next two years, net of the minimum annual cost

of maintaining the plants in a condition that would have allowed them to receive capacity payments from PJM.

RESPONSE:

[Note: Confidential Exhibit 1 to this letter sets forth the unredacted version of this response. Because the unredacted material in Confidential Exhibit 1 is the same as or derived from information sought to be protected from public disclosure in the Companies' First Amendment to Protective Order filed on May 3, 2012, the Companies incorporate by reference this filing in the relief requested in the First Amendment.]

Confidential Table 2 of the Companies' April 30, 2012 response identified capacity revenues for the next two PJM delivery years (2013/2014 and 2014/2015) of \$___ million for Albright, \$___ for Rivesville and \$___ million for Willow Island. The Companies estimate energy market revenue net of fuel expense and other revenue for ancillary services for the same period of \$___ million for Albright, \$___ million for Rivesville and \$___ million for Willow Island. Confidential Table 5¹ of the Companies' April 30, 2012 response identified expenses to maintain reliability of the stations of \$___ million for Albright, \$___ million for Rivesville and \$___ million for Willow Island for that two-year period. Confidential Table 5 also identified capital investment to maintain reliability of the stations of \$___ million for Albright, \$___ million for Rivesville and \$___ million for Willow Island. Based on this information, the revenue requirement impact to West Virginia customers for the two year period if the plants had been available for capacity, energy, and ancillary receipts during that time is a \$2.1 million increase for Albright, a \$10.5 million increase for Rivesville and a \$14.6 million increase for Willow Island.

QUESTION 2

2. *The Commission does not understand the response to Question No. 12 of the April 2, 2012 Order. The Companies indicate that "[d]elaying the availability of the employees at the retiring Mon Power plants would have prevented them from the opportunity to participate in filling the backlog of positions created by the hiring suspension." (Emphasis added.) It sounds like employees were not prevented from the opportunities listed by the Companies. Yet, in the next sentence, the Companies indicate that "[u]ntil the PJM retirement process is complete and final decisions are made in light of the Commission's request . . . FirstEnergy is unable to execute these plans." Does this mean that all, or some, of the 'enhanced separation' plans and hiring plans described by FirstEnergy have been delayed, or has FirstEnergy proceeded with the plans for all, or some employees?*

¹ Confidential Table 5 was correctly identified in the text of the April 30 filing as well as in its index of tables and appendices, but was erroneously labeled as Confidential Table 6.0 in the confidential materials provided with that filing.

RESPONSE:

The enhanced separation plans identified in the Companies' response to Question No. 12 of the Commission's First Request have not been delayed and are available to eligible employees at the Facilities that meet the criteria to qualify. Staffing at the Facilities on the date the deactivations were announced, February 8, 2012, totaled 105 employees. The present staffing level at the Facilities is 87 employees. The staffing reductions are attributable to employee retirements, employees leaving FirstEnergy for other opportunities, and transfers within FirstEnergy. FirstEnergy continues to evaluate staffing needs at the Facilities and has reduced staffing levels at the Facilities to near minimum levels necessary for safe and reliable operation. The uncertainty created by the Commission's requests has precluded the Companies – in an effort to try to demonstrate to the Commission the basis for the deactivation decision – from clearly identifying when the Facilities will no longer need to be staffed at a level adequate to operate the Facilities and, at this time, from identifying a date certain when all of the employees will be available for open positions elsewhere in FirstEnergy. This has been done in order to comply with the Commission's request not to undertake any retirement activity that would render the Facilities inoperable or would require extensive additional expenditures (and not because Mon Power believes the Commission has jurisdiction over deactivations of individual plants). Until Mon Power has more certainty on this issue, most of the remaining employees at the Facilities will need to remain in their present locations and will not be permitted to transfer to other positions in FirstEnergy.

QUESTION 3

3: In responding to Question No. 15 of the April 2, 2012 Order, the Companies refer to a "Levelized Cost Model" that was used to evaluate converting Albright to natural gas. Please provide the results of the model. Indicate if the model assumed conversion to a combined cycle combustion turbine plant or simply burning natural gas in a steam plant. If the latter, indicate if the model assumed replacement of the boilers and turbines, and if so, why the efficiency of the existing plant had any bearing on the model. Explain and quantify how the cost of converting the plant to a natural gas combined cycle generation plant compares to construction of a similar plant at greenfield site. Explain whether a potential conversion to natural gas that may be considered in the future affects the retirement steps (removal of all equipment and structures versus maintaining some equipment and structures) that are planned at Albright, Rivesville or Willow Island.

Ms. Sandra Squire
June 1, 2012
Page 4

RESPONSE:

As described in the Companies' March 9, 2012 filing, FirstEnergy's primary analysis focused on the feasibility of retrofitting the subcritical plants to comply with MATS regulations. It was determined that it was not cost effective to make these investments given the high capital cost and the plants' relatively uncompetitive position in the market. Additionally, FirstEnergy reviewed alternate uses of the Albright plant, namely fuel switching to either biomass or natural gas. These analyses did not contemplate the replacement of the units' boilers or turbines. In both instances we concluded that these options were also economically unattractive. Both of these conversions would require a significant capital outlay to facilitate the fuel switch. Furthermore, the fuel switch would not materially change the efficiency (heat rate) of the generator. Thus, even if an alternative fuel were used, Albright would remain uncompetitive with modern plants using the alternative fuel.

A comparison of potential options at Albright, expressed in levelized costs, is displayed in graphical form in Confidential Exhibit 2 to this letter. (Levelized cost analysis, a construct frequently used in analyzing investment in electricity generation, is the minimum price of electricity at which a technology generates enough revenue to pay the utilities' costs, including a sufficient return to investors.). Confidential Exhibit 2 illustrates that due to a combination of high capital cost and high fuel costs, the Albright retrofit and fuel switching options require materially higher revenue per MWh than a new combined cycle alternative. For the sake of comparison, the capacity factors were held at 25% in all cases.

The Exhibit also demonstrates the effect of using the Albright site for a new combined cycle installation versus a green field project. The Exhibit shows that building a combined cycle plant at the existing Albright site may be more advantageous than constructing at a green field site in that it has the potential to reduce capital development costs. An obvious benefit of an existing plant site is the ownership of the land and appropriate zoning for power plant operation. Other advantages may exist but will require further investigation to confirm. Typically in instances of "repowering" generation plants, most of the existing facility is demolished rather than refurbished as the old plant equipment is mismatched to that of a modern plant in terms of size, condition, controls, efficiency, etc. Conversely, reuse of an existing site may have certain disadvantages to a greenfield site such as proximity to a natural gas pipeline since there is no existing natural gas pipeline into Albright. Accordingly, we will continue to consider the merit of site reuse before equipment removal/site demolition would occur.

In the example below, we provide an illustrative comparison of a greenfield to existing generation site for a combined cycle plant. We assumed a savings of \$20 million on owner furnished equipment, elimination of land purchase, a \$7.8 million (50%) reduction of electrical interconnection cost, a \$4 million increase (one additional mile) in gas interconnection cost for the existing generation site. These items in addition to others led to an estimated \$32 million

savings (5% savings) from using the existing generation site compared to the greenfield site. We believe this is the order of magnitude of potential savings of reusing a site.

Combined Cycle Capital Costs for 2015/16

Net Summer ICAP 656 MW

	\$millions		\$/kW	
	Greenfield ¹	Existing Generation Site ²	Greenfield ¹	Existing Generation Site ²
Plant Proper Costs				
EPC Contract	334.9	334.9	510.5	510.5
Owner Furnished Equipment	173.0	153.0	263.7	233.2
Sales Tax	18.3	17.6	27.9	26.8
Owners Costs				
Land	3.2	-	4.9	-
Emission Reduction Credits	1.6	1.6	2.4	2.4
Gas Interconnection ³	23.5	27.5	35.8	41.9
Electric Interconnection	15.5	7.8	23.6	11.8
Net Start-up Fuel Costs	2.6	2.6	4.0	4.0
Mobilization and Start-up	2.8	2.8	4.3	4.3
Project Development	8.0	8.0	12.2	12.2
Financing Fees	5.8	5.8	8.8	8.8
Owner's Contingency	17.4	16.6	26.5	25.3
Total Overnight Costs	606.6	578.1	924.7	881.3
Interest During Construction	35.4	33.7	54.0	51.4
Total Capital Costs	642	612	979	933

Potential Cost Savings Existing Generation Site 5%

¹ The source for the greenfield combined cycle cost is "Cost of New Entry Estimates For Combustion Turbine and Combined Cycle Plants in PJM", August 24, 2011, Report prepared by the Brattle Group for PJM.

² For comparison, it is assumed that for the existing generation site, owner furnished equipment costs are reduced by \$20 million, land purchase costs are eliminated, electrical interconnection cost is reduced by 50%, and that the gas pipeline cost is increased by \$4 million (as a result of longer pipeline length.)

³ Based on a recent project price quote, we adjusted the pipeline cost per mile upward from \$2.5 million/mile to \$4 million per mile in both cases. (Brattle estimated \$2.5 million per mile.)

QUESTION 4

4. We ask for the Companies' evaluation of whether, considering the proposed EPA Regulations, the life of an existing coal plant could be extended by the installation of new, more efficient, equipment without being subject to the carbon emission limitations that would be applicable to new coal plants. If such life extension would allow an existing plant to operate without the carbon restrictions, would there be merit in keeping existing coal plants at least on a standby or "mothballed" status to enable the future retrofitting of the plant that would allow it to burn coal more efficiently, but without the added expenditure for carbon capture and storage. Furthermore, we would like to know whether the Companies plans for the deactivation of the three plants would remove them from the pool of "existing" coal-fired plants and unavailable for future retrofitting without carbon emission restrictions that might become applicable to new coal-fired power plants. If so, have the Companies considered any alternative plans to maintain the availability of the plants as "existing plants" until the federal regulations regarding the treatment of new and/or existing coal-fired power plants is clearer.

RESPONSE:

The EPA rule on CO₂ emissions proposed in March 2012 ("Proposed CO₂ Rule") ostensibly regulates new sources and not existing sources. Though EPA attempted to exclude reconstructed or modified units from the scope of this rule it is unlikely that such units will be excluded in the future due to additional rulemaking or litigation. If Mon Power were to mothball the three plants and then return them to service at a later time, application of the Proposed CO₂ Rule would depend on the extent of modifications made to the units. Significant modifications to the boilers or combustion infrastructure would likely constitute a "major modification" and trigger the new source performance standards (thereby precluding their classification as "existing" plants) and require installation of carbon capture technologies. The threshold limit under the Proposed CO₂ Rule is 1000 lbs per MWh. That limit will likely allow new gas combined cycle units to avoid carbon capture since their rate of CO₂ emission is less. However, conversion of a coal unit to a natural-gas fired facility generally results in a higher emission rate of about 1200-1300 lb, thereby requiring carbon capture technologies.

In sum, the prospect of CO₂ emission limits has been among the factors weighing against the continued operation of the existing plants. However, the main factors in deciding to deactivate the plants were the age and lack of efficiency of the plants, along with the Mercury and Air Toxic Standards rule, that make continued operation of the plants cost prohibitive due to the pollution control equipment that would be needed to achieve regulatory compliance. For these reasons, Mon Power does not see merit in mothballing the plants.

Ms. Sandra Squire
June 1, 2012
Page 7

Conclusion

The Companies provide this information in their continuing effort to assist the Commission in its understanding of the planned plant deactivations and to confirm that the Companies have evaluated this matter thoroughly and properly before coming to a decision on deactivation.

Please file this letter and provide copies to the appropriate parties at the Commission. Please also handle the sealed envelope, which includes an original and six copies of Confidential Exhibits 1 and 2, in accordance with your office's procedures for such materials. We also ask that you date stamp the extra copies provided and return them with our messenger. As always, we appreciate your assistance in this matter.

Very truly yours,



Christopher L. Callas

CLC/mrv
Enclosures

c: John Auville (w/enc.)
Mary Anne Maul (w/enc.)
Derrick P. Williamson (w/enc.)

Jacqueline Lake Roberts (w/enc.)
Susan J. Riggs (w/enc.)
Gary A. Jack (w/enc.)