ACCCE
AMERICAN COALITION FOR CLEAN COAL ELECTRICITY

April 25, 2017

UNITED STATES OF AMERICA BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

State Policies and Wholesale
Markets Operated by ISO New England.,
New York Independent System Operator.,
And PJM Interconnection, L.L.C. Docket No. AD17-11-000

RE: Comments by Paul Bailey, President and CEO, ACCCE, on Electricity State Policies and Wholesale Markets Operated by ISO New England., New York Independent System Operator, And PJM Interconnection, L.L.C.

The American Coalition for Clean Coal Electricity (ACCCE) appreciates the opportunity to participate in the May 1-2, 2017 Technical Conference to discuss certain matters affecting wholesale energy and capacity markets operated by the Eastern Regional Transmission Organizations (RTOs) and Independent System Operators (ISOs). ACCCE is a national trade organization whose mission is to advocate on behalf of the coal fleet and coal-fired electricity. Our members include electricity generators, coal producers, railroads, barges, and equipment manufacturers. The following highlights our views on steps that must be taken to preserve the coal fleet, thereby ensuring grid reliability and resilience.

Summary We appreciate the work that PJM has done, so far, towards making the electricity grid reliable. At the same time, it is essential that steps — some of which we highlight below — be taken to avoid the retirement of more coal-fired generating capacity in PJM, as well as nationwide. These steps would make the electricity grid more reliable, more resilient, more fuel diverse, and, ultimately, more protective of public safety and health. All things considered, we prefer re-regulation by the states, unless sensible market reforms can be adopted quickly.

Coal-fired generation is necessary to ensure a reliable and resilient electricity grid Baseload coal-fired generation is critical to maintaining the reliability and resilience of the electricity grid. The considerable reliability and

resilience advantages of baseload coal-fired generation include on-site fuel storage (an average 85-day stockpile of coal), firm fuel contracts, established track record, in-place infrastructure, and 24/7 availability.

Two recent examples of the need for baseload coal-fired generation include PJM's request for the B.L. England power plant to remain open for an additional two years, instead of retiring by the end of April 2017, after PJM concluded the plant was needed for grid reliability.[i] In B.L. England's case, a controversial gas pipeline was delayed by environmental opposition. Furthermore, DOE recently granted a last-minute exemption under the Federal Power Act for the Grand River Dam Authority to continue operating one of its coal-fired generating units (without MATS controls) because of an electricity shortage in Oklahoma. The Southwest Power Pool stated, "Without sufficient reactive power support, electric system reliability is at risk because excessive voltage could force transmission lines offline, consequently leading to other reliability problems."[ii]

These instances typify the need for baseload coal-fired generation to serve as an insurance policy against unlikely events that have extreme consequences, such as polar vortex conditions, rupture of a major natural gas pipeline, or other such disturbances.

A large amount of coal-fired electric generating capacity is retiring Nationwide, one-third of the U.S. coal fleet — almost 99,000 megawatts (MW) — has either retired or announced plans to retire.[iii] These retirements total 572 generating units located in 43 states. For perspective, the generating capacity represented by these coal retirements is equivalent to shutting down more than the entire electric generating capacity of California (75,000 MW) or four times the generating capacity of Virginia (25,000 MW).[iv] Three-fourths of these retirements have been attributed by the owner/operators to EPA policies. In the PJM region alone, 121 coal-fired generating units (20,100 MW) have retired, and owners have announced their intentions to retire 23 more units (8,930 MW).

The cost of complying with EPA policies is a major reason for coal retirements Coal-fired power plants had spent $120 billion on emissions controls through 2016.[v] As a result, SO_2, NO_x, and PM emissions have been reduced by 92% per kilowatt-hour since 1970.[vi] From 2012 through 2016, emission control expenditures nationwide totaled some $25 billion. Over the same five-year period, seven PJM states invested a total of $2.3 billion in emission controls.[vii] In addition, we estimate the possible expenditure of $7 billion or more in the PJM region to comply with EPA's rules for Coal Combustion Residuals and Effluent Limitations Guidelines.[viii] These investments by the coal fleet are difficult, if not impossible, to recover under current PJM market rules.

Steps must be taken to minimize further coal retirements We expect EPA to rewrite or withdraw a number of environmental regulations that are causing, or could cause, more coal retirements. These regulations include, but are not limited to, the Clean Power Plan, Coal Combustion Residuals rule, Effluent Limitations Guidelines rule, Cross State Air Pollution Rule, Regional Haze requirements, New Source Performance Standards, and New Source Review. Policy changes by themselves are necessary but not sufficient to preserve the coal fleet.

We urge FERC to work closely with EPA to enable both agencies to understand the consequences of environmental investments and plant upgrades, and the relationship between those investments and the revenue electricity generators receive from electricity market payments. If revenues are not sufficient to cover environmental compliance costs and upgrades, coal units are not economic to operate. It is also important that FERC ensure grid operators take into account the impacts of environmental policies in their markets.

Besides consideration of EPA regulations, other potential steps involve the continued proliferation of out-of-market solutions, commonsense market reforms that value the unique advantages of coal-fired generating capacity, or re-regulation by the states who would then make their own determination as to the value of coal, as well as other resources. Each of these options has its own advantages and disadvantages. We believe that re-regulation by the states is preferable, unless serious market reforms can be adopted quickly.

Re-regulation by the states has certain advantages ACCCE believes that vertically-integrated utility models — whereby states maintain control over resource mix and resource adequacy — would help to preserve baseload coal-fired generation. The advantages of re-regulation by the states include:

- Regulatory mechanisms that ensure recovery of fixed costs, such as investments for environmental compliance and plant upgrades.
- Regulatory mechanisms that provide certainty unlike restructured markets which make it difficult to make long-term investments because of uncertainty over revenues.
- Longer-term electricity price stability for consumers and businesses.

At the same time, we recognize there are complications with this approach.

Alternatively, FERC policy changes within the deregulated markets also could help preserve coal-fired generation Numerous changes are necessary in order to create a level playing field among resources, improve market efficiency, and enhance the reliability and resilience of the electricity grid. Two areas that need immediate attention are as follows:

Capacity Markets – The structure of capacity markets is causing unnecessary coal plant retirements. Prices are being suppressed by resources that receive subsidies or payments outside the competitive market. Coal-fired generators are not receiving sufficient revenue through capacity markets to cover fixed costs, including environmental compliance costs (see earlier discussion), nor is coal-fired generation being valued properly based on its advantages relative to other resources. In addition, large federal subsidies and state renewable portfolio standards tilt the playing field against coal-fired generators. For example, federal subsidies for renewables totaled some $15 billion in FY 2013, compared to $1.1 billion for coal.[ix]

Resilience – The resilience attributes of the coal fleet are not being compensated adequately in the market. We commend PJM for recognizing the need to establish criteria for resilience and incorporate resilience into planning by grid operators. In its report, PJM states, "While PJM itself studies many of these extreme contingencies and events, there are no triggers for taking action outside a failure."[x] PJM also states that its new Capacity Performance model does not address resilience. PJM concludes that industry-wide action is needed. ACCCE agrees and recommends that FERC take a lead role in establishing resilience criteria and work with NERC, grid operators, and other federal agencies on this matter.

Also, ACCCE recommends that FERC consider establishing various levels of firm service and associated products. For example, firm on-site fuel supply (85-day supply of coal) is superior to firm gas service, and coal generators should be compensated at a higher level for providing this resilience attribute.

Again, ACCCE appreciates the opportunity to offer its perspective.

Respectfully submitted,

/s/

Paul Bailey

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[i] Annalee Armstrong and Lauren Bellero, "PJM Wants 2 Old Coal Units to Run Longer," SNL, April 20, 2017, (https://www.snl.com/InteractiveX/article.aspx?ID=40346738&KPLT=4)

[ii] Bob Matyi, "DOE issues emergency MATS exemption for coal-fired unit in Oklahoma, " SNL, 4/18/2017, (https://www.snl.com/InteractiveX/article.aspx?ID=40346738&KPLT=4)

[iii] ACCCE, *Retirement of Coal-Fired Electric Generating Units*, February 25, 2017.

[iv] EIA, *Electric Power Monthly with Data for February 2017*, April 25, 2017.

[v] Energy Ventures Analysis, Inc., *Capital Investments in Emission Control Retrofits in the U.S. Coal-fired Generating Fleet through the Years – 2016 Update*, January 26, 2016.

[vi] EIA, *Electric Power Monthly with Data for December 2015*, February 2016; EPA, *National Air Pollutant Emissions Trends, 1900-1998*; EPA National Emissions Inventory; EPA Air Markets Program Division database query (June 27, 2016).

[vii] Energy Ventures Analysis, Inc., *Capital Investments in Emission Control Retrofits in the U.S. Coal-fired Generating Fleet through the Years – 2016 Update*, January 26, 2016. Investments were as follows: Pennsylvania $1.3 billion, Ohio $668 million, Virginia $312 million, Maryland $46 million, West Virginia $11 million, Delaware $1.2 million, and New Jersey $1.1 million.

[viii] We estimate compliance costs within the range of $120/kw - $230/kw based on cost information from five electricity generators. Applying that range to the coal fleet in the PJM region (61,000 MW), we estimate potential costs in the range of $7 billion to $14 billion.

[ix] EIA, Direct Federal Financial Interventions and Subsidies in Energy in Fiscal Year 2013, March, 2015.

[x] PJM Report, "PJM's Evolving Resource Mix and System Reliability Report", March 30, 2017, (https://www.snl.com/InteractiveX/article.aspx?ID=40346738&KPLT=4)