

**UNITED STATES OF AMERICA
BEFORE THE
ENVIRONMENTAL PROTECTION AGENCY**

Federal Plan Requirements for Greenhouse	}	
Gas Emissions From Electric Utility	}	
Generating Units Constructed on or Before	}	Docket No. EPA-HQ-OAR-2015-0199
January 8, 2014; Model Trading Rules;	}	
Amendments to Framework Regulations	}	

COMMENTS OF PJM INTERCONNECTION, L.L.C.

PJM Interconnection, L.L.C. (“PJM”), hereby respectfully submits these Comments in response to the rulemaking issued by the Environmental Protection Agency (“EPA”) on October 23, 2015, in this docket (“Proposed Rule”), proposing a federal plan to implement the greenhouse gas (“GHG”) emission guidelines for existing fossil fuel-fired electric generating units (“EGUs”) as finalized on August 3, 2015, by the EPA as the Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units (colloquially referred to herein as “Clean Power Plan Emission Guidelines” or “EGs”).

In addition to the comments submitted here, PJM is also a party to joint comments submitted on behalf of the Midcontinent Independent System Operator, Inc., PJM, and Southwest Power Pool indicating support for a series of additions to the proposed rule to ensure that appropriate reliability reviews are part of the development of a Federal Plan (“FP”) on the front end and that a targeted “Reliability Safety Valve” is available during the Plan’s implementation to address unforeseen reliability issues that cannot be addressed through normal operations under the FP.

I. PJM’S ROLE IN GRID OPERATIONS, PLANNING AND MARKETS

PJM is a Federal Energy Regulatory Commission (“FERC”) approved “Regional Transmission Organization” that coordinates the transmission of wholesale electricity in all or

parts of Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia and the District of Columbia. Acting as a neutral, independent party, PJM operates a competitive wholesale electricity market and manages the high-voltage electricity grid in its region to ensure bulk power reliability for more than 61 million Americans. Also, PJM's region-wide commitment of resources on a day-ahead basis and dispatch in real time operations, region-wide resource adequacy construct, and long-term regional planning process provides a broad, interstate perspective that identifies the most effective and cost-efficient improvements to the transmission system to ensure reliability and economic benefits on a system-wide basis.

II. COMMENTS

A. Reliability Safety Valve Proposal

As noted above, PJM is a party to joint comments submitted on behalf of other similarly situated grid operators, indicating support for a targeted "Reliability Safety Valve" to be available during the Plan's implementation to address unforeseen reliability issues that cannot be addressed through normal operation under the FP. As noted in those comments, consistent with that generalized view, those comments offer the following recommendations to improve the FP in terms of consistency with electric system reliability:

- Requiring reliability reviews during the development of a FP;
- Coordinating the timing and scope of FP reliability reviews with reliability reviews of other relevant SPs and/or FPs, as practical, and;
- Including an appropriately structured reliability safety valve ("RSV") mechanism to address unanticipated immediate reliability impacts.

B. ERC Tracking and Compliance System

PJM supports the comments submitted by PJM Environmental Information Services, Inc. (“PJM EIS”), a wholly-owned subsidiary of PJM Technologies, Inc. which is a subsidiary of PJM Interconnection. PJM EIS was formed in 2005 to own and administer the Generation Attribute Tracking System (“GATS”). The GATS provides a single, integrated regional system for state regulatory agencies and market participants that supports the emissions-disclosure requirements and renewable portfolio standards of states in the PJM region. It not only ensures accurate accounting and reporting of generation attributes but, through the use of renewable energy credits, provides the basis for a robust market for electricity from renewable sources.

As stated in the PJM EIS comments, PJM EIS has implemented many changes to GATS to accommodate the evolving needs of the states, and can similarly implement changes needed to support 111(d) compliance. The EPA should allow states the option of using the existing REC tracking systems as an alternative and complement to an EPA-administered system.

C. Requirement of a Power Purchase Agreement for Resource Crediting Across State Lines

Under the Proposed Rules, the EPA has set forth criteria for the issuance of ERCs and the tracking of ERC’s in multi-state regions where generation in one state may, or likely is, offsetting load in another state. In particular, the EPA has specified if the resource provider is located in a state with a mass-based plan, for eligible renewable energy capacity, the provider can only be credited in a rate-based state or rate-based multi-state system if the provider can demonstrate that the generation was produced to meet electricity load in a state with a rate-based plan by providing documentation of a power purchase agreement (“PPA”) or other delivery contract.

From the perspective of an integrated RTO that encompasses several states (such as PJM), demonstration of “intent to deliver” into a neighboring state should not require documentation of a PPA. In short, generation bidding in PJM is designed to be deliverable and serve all demand in the PJM region as a “pool,” as opposed to a direct correlation of “source” to “sink” which could be evidenced by the existence of PPA. The requirement to provide this one-to-one correlation between source and sink in the PJM region, and other multi-state systems, is unnecessary and could actually serve as a market limitation. Moreover, within an RTO, PPAs are not the exclusive means for renewables to deliver to their customers---the renewable resource can bid the output of its unit into the market with the benefits going to all load. As a result, in RTO markets such as PJM’s, PPAs are essentially financial contracts rather than physical obligations for delivery. For this reason, attempting to “tie” an ERC to what is, in essence, a financial contract does not necessarily trace the unit’s operation to its ultimate customer. It is for this reason, that PJM EIS has developed tracking systems that validate tradable credits already used by the states within the PJM region to assess compliance with Renewable Portfolio Standard policies without tying specific resources to specific loads for energy delivery. Accordingly, PJM would offer that a demonstration of deliverability in the form of a PPA or other delivery contract may be useful in those states that are not included in an organized, interregional market, or for those resources that are located within an inter-regional market, but intend to sell to a neighboring area outside of the region, but should not be a requirement for resources offering for deliverability into a multi-regional system.

PJM appreciates that the EPA is concerned about the tracking and trading of ERCs to avoid “double counting” of resources credits. However, PJM suggests that the potential for “double-counting” of resource capacity can be mitigated by the use of a centralized tracking system that

can incorporate rules relating to the eligibility of trading and application of ERCs in any given circumstances. As noted previously, states with centralized tracking systems can be useful repositories to ensure that resource capacity is accounted for, verified, and traded appropriately.

D. Eligibility of New Technologies to Receive ERCs

The EPA has proposed to limit the issuance of ERCs to specified categories of renewable energy resources based upon the resources' quantification of renewable energy potential for the best system of emission reduction.¹ Currently, the EPA has identified that wind, solar, geothermal and hydro power, along with certain classification of nuclear units, are included as technologies that are eligible to receive ERCs, but sought comment on whether there should be an avenue to add new technologies to the list of eligible resources over time.

PJM believes that rather than EPA certifying or approving of new technologies on a case by case basis, that EPA should define a set of criteria that any new technology must adhere to in order to be able to generate ERCs regardless of whether it is zero emitting or low emitting. Herein, PJM recommends the set of criteria be the following: 1) The new technology has revenue quality metering that would satisfy ISO/RTO settlement requirements or billing requirements for utilities operating in non-RTO regions; 2) For low emitting resources, emissions can be measured by CEMS or easily verified through EPA approved EM&V protocols; and 3) For zero emitting resources a one-time verification that there are no fossil fuels being consumed or combusted as part of the generating technology.

Such a generalized mechanism will further encourage market driven innovation without the need for a technology-by-technology specific evaluation process that could easily require

¹ ENVIRONMENTAL PROTECTION AGENCY 40 CFR Part 60 [EPA-HQ-OAR-2013-0602; FRL-9930-65-OAR] RIN 2060-AR33 Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units <https://www.gpo.gov/fdsys/pkg/FR-2015-10-23/pdf/2015-22842.pdf>, pp 64894-64904.

technology specific protocols that could take extra time. With simple and upfront criteria, developers of innovative technologies are free to concentrate on the task of bringing the technologies to market as soon as possible to take advantage of the market-driven incentives for technology development that generates ERCs. In this way, the upfront criteria proposed by PJM can help unleash the innovation and cost savings we have observed in other emissions trading regimes while ensuring the technologies can deliver what they promise and minimizing administrative burdens.

E. Timing of ERC Distributions

The EPA has also proposed to issue ERCs for ERC generating entities once per year. While the agency notes that the issuance of ERCs in this manner is consistent with other programs it administers, and, as such there is some value in consistency among programs, PJM would suggest that the timing of ERC distributions occur on more than an annual basis. PJM strongly urges EPA to have ERCs issued as frequently as possible, which would have multiple advantages for states opting for a rate-based trading regime. First, issuance of ERCs on a more frequent basis provides more liquidity for ERC trading through direct bilateral transactions or through third-party market makers in much the same way as is currently done for allowances or ERCs in local air-shed areas. Second, more frequent issuance provides more up-to-date information on the supply and demand balance for ERCs to allow for better price formation for ERCs. Third, with better price formation for ERCs, generation resources can better reflect the costs (revenues) associated with ERCs in their energy market offers in ISO/RTO markets or in bilateral energy transactions in non-RTO regions, which leads to more efficient wholesale power markets and more reliable bulk power operations.

At a minimum, the issuance of ERCs can occur at least quarterly, consistent with the updated CEMS data and other operation data submitted to EPA by fossil resources greater than 25 MW and available through publicly available databases. Along with metering and appropriate EM&V information provided by zero emitting resources eligible to generate ERCs and other low-emitting fossil resources less than 25 MW to the relevant ERC tracking system, this would seem to be straightforward. However, PJM strongly urges monthly issuance of ERCs. PJM knows this is feasible as PJM EIS already certifies Renewable Energy Certificates (“RECs”) and other generation certificates on a monthly basis based on revenue quality generation meter data for all resources within the PJM footprint through GATS. For fossil resources like combined cycle gas units that generate ERCs, the most recent annual emissions rate data can be used to generate ERCs on a monthly basis, and then can be true-up quarterly as the most recent CEMS data becomes available. This true-up is no different than the interim time period for affected resources to true-up their accounts for allowances or ERCs to show compliance after the end of the compliance period.

To this end PJM urges EPA require language in the State Plans and Federal Plan (to the extent the Federal Plan issued has a rate-based trading option) that all resources generating ERCs provide revenue quality meter data along with any required EM&V information to the relevant ERC tracking system by no later than 5 business days following the end of a calendar month along with the most recent monthly CEMS emissions rate data (if applicable) for the purposes of certifying and creating ERCs. Moreover, each resource generating ERCs should submit all quarterly CEMS data (as applicable) concurrent with submission to EPA to allow the creation of ERCs to be “true-up” for the actual emissions rate data for the quarter in which the ERCs were recently created.

PJM believes these data reporting requirements recommended above to increase the frequency of ERC issuance are quite straightforward and are essentially already being done today in the PJM EIS GATS. PJM's recommendations would require little, if any, extra work for the administrators of the ERC tracking system while providing immense benefit to the states and resources operating under an emission rate trading mechanism, and to system operators responsible for maintaining reliable operations.

F. Approval/Remand of State Plans Based on the Model Rules

In the Proposed Model Rules, the EPA has proposed to establish the conditions and terms upon which it will approve state plans, including the processes for remand, conditional approval and amendment of the same utilizing set completeness criteria. This proposed completeness criteria includes, among other things a "legal" review which includes evidence that the state has adopted the plan in the state code or body of regulations, that the state has necessary legal authority to adopt and implement the plan, and evidence that the state followed all the procedural requirements in conducting and completing the adoption/issuance of the plan, as well as a technical review that will include descriptions of facilities, description of the plan approach and geographic scope and demonstration that each emission standard is quantifiable, non-duplicative, permanent, verifiable and enforceable.

While it may be an implicit requirement as part of the proposed completeness criteria, PJM would suggest that the EPA make explicit that reliability reviews, and determinations of "no adverse impact," by an applicable ISO/RTO operating in the affected state(s) be a condition of approval of an individual state plan. The reliability review would provide information to EPA as to whether the plan raises any significant reliability concerns that cannot be addressed within the compliance period or, equally important, whether adoption of the plan by state A may have an

adverse reliability impact on state B which is not addressed and resolved in state A's plans. In short, EPA should avoid approaching its review and approval of each state's plan with blinders as to the impact on neighboring states and regions given the interconnected nature of the grid. Plans which the RTO/ISO or reliability authority have indicated could have an adverse impact on State B, which was not adequately addressed and resolved in the plan, should be remanded for further work. As EPA is here defining what constitutes an acceptable state plan, this reservation of authority to remand and consider interstate impacts needs to be established at this early juncture to avoid later disputes as to the rightful scope of EPA's review and remand authority.

A reservation of authority to review the interstate impacts of a state plan as they impact reliability is well grounded in law. In Section 111(d), Congress explicitly directed the Administrator, in reviewing and approving state plans, to take into account "energy requirements". Although in a command and control regime such a review would be limited to plant operations, given the broad interpretation of Best System of Emissions Reductions (BSER) to apply to the entire energy system, a look at reliability impacts in neighboring states and regions is entirely appropriate. EPA need not decide this issue on its own. Rather, as indicated in the comments submitted by FERC, FERC is willing to provide comments on the reliability aspects of individual state plans so as to provide an independent federal agency's check on the submission from the relevant reliability authority as to the nature of the reliability issues which could be implicated if state A's plan is approved. PJM urges EPA to make this clarification and reservation of its remand authority, after receiving input from RTOs/ISOs, relevant reliability authorities and FERC on both the individual state and interstate reliability impacts of a given state plan.

G. Rate-based Versus Mass-based Federal Plans

In developing the Proposed Rules, the EPA has signaled that it may finalize a single-approach (*i.e.*, rate-based or mass-based) for every state for which it adopts a Federal plan, given the benefits of a broad-trading program, and has invited comment on which approach should be selected if the EPA ultimately decides to utilize a single approach.² The decision to undertake a mass-based or rate based approach should not be decided merely on which of the two may be theoretically best. Rather, the choice of a mass-based or rate-based FP should be determined with reference to the prevailing choice undertaken by surrounding states which are interconnected and actively trade with the state at issue. For example, if the overwhelming majority of states within the PJM region have chosen a mass based approach, the choice of a rate based approach for a single state through the FP process would diminish rather than enhance opportunities for trading of allowances. For this reason, PJM urges EPA not to express a definitive choice in the rule but instead address this issue on a case by case basis by choosing a plan which maximizes trading and recognizes the existence of established markets in which the affected state participates, and minimizes reliability issues, before deciding the best choice.

III. CONCLUSION

PJM appreciates the opportunity to comment on the draft FP and respectfully requests that the EPA consider these comments in this rulemaking proceeding.

² ENVIRONMENTAL PROTECTION AGENCY 40 CFR Parts 60, 62 & 78 [EPA-HQ-OAR-2015-0199; FRL 9930-67- OAR] RIN 2060-AS47 Federal Plan Requirements for Greenhouse Gas Emissions From Electric Utility Generating Units Constructed on or Before January 8, 2014; Model Trading Rules; Amendments to Framework Regulations <https://www.gpo.gov/fdsys/pkg/FR-2015-10-23/pdf/2015-22848.pdf>, pp 64968-64969.

Respectfully submitted,

/s/ Robert V. Eckenrod

Robert V. Eckenrod

Senior Counsel

Craig Glazer

Vice President – Federal Government Policy

PJM Interconnection, L.L.C.

2750 Monroe Blvd.

Audubon, Pennsylvania 19403

robert.eckenrod@pjm.com

Dated: January 21, 2016