UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

American Wind Energy Association	**)**	**Docket No. RM15-21-000**

JOINT COMMENTS OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION, THE MIDCONTINENT INDEPENDENT SYSTEM OPERATOR, INC., THE NEW YORK INDEPENDENT SYSTEM OPERATOR, INC. AND PJM INTERCONNECTION, L.L.C. ON PETITION TO REVISE GENERATOR INTERCONNECTION RULES AND PROCEDURES

The California Independent System Operator Corporation ("CAISO"), the Midcontinent Independent System Operator, Inc. ("MISO"), the New York Independent System Operator, Inc. ("NYISO"), and PJM Interconnection, L.L.C. ("PJM") (collectively, the "Joint Filing Parties") respectfully submits these supplemental comments in response to the June 19, 2015, petition ("Petition")[1] by the American Wind Energy Association ("AWEA") requesting that the Commission commence a rulemaking proceeding to revise provisions of its *pro forma* Generator Interconnection Procedures ("Pro Forma GIP") and *pro forma* Large Generator Interconnection Agreement ("Pro Forma GIA").[2]

The Joint Filing Parties support comments submitted by the ISO/RTO Council in this proceeding ("IRC Comments"), particularly with respect to the IRC's suggestion that the Commission in the first instance, should allow each ISO/RTO to continue to address specific issues in each of its regions. For the reasons described in the IRC Comments and comments submitted by individual ISOs and RTOs, a regional approach would be more efficient and would

[1] *American Wind Energy Association*, Petition for Rulemaking of the American Wind Energy Association to Revise Generator Interconnection Rules and Procedures, RM15-21-000 (June 19, 2015) ("AWEA Petition").

[2] The Joint Filing Parties are also submitting comments on specific issues of relevance to their individual regions in separate filings.

more directly address AWEA's specific concerns than a rulemaking to implement *pro forma* reforms to interconnection procedures that have already undergone different variations driven by regional stakeholder processes over many years. To the extent the Commission determines a need to implement reforms in response to AWEA's concerns, the Joint Filing Parties urge the Commission to consider these supplemental comments.

I. COMMENTS

Should the Commission, in response to AWEA's petition, determine that the interconnection process requires nationwide reform, the following issues should be addressed instead of the narrowly-focused concerns and proposals offered by AWEA. Specifically, if the Commission considers methods by which interconnection studies could be performed more quickly, under more rigid requirements, or with more final and binding results, consideration of these issues may better achieve those goals.

A. Limitations on Project Modifications

While a number of the concerns expressed by AWEA relate to perceived delays in the interconnection study process, AWEA fails to recognize that such delays can be driven in large part by project modifications proposed by Developers. Developers propose modifications throughout the interconnection process, ranging from minor equipment manufacturer changes to major configuration changes. The study of such changes to determine whether or not they are Material Modifications can be quite time consuming. If the goal is to reduce the time required to perform interconnection studies, the Commission should consider the impacts of such modifications on study schedule.

Specifically, it may be necessary for the Commission to re-examine which modifications rise to the level of a "Material Modification." The *pro forma* interconnection procedures provide that a Material Modification "shall mean those modifications that have a material impact on the cost or timing of any Interconnection Request with a later queue priority date."

While certain modifications may not impact other Interconnection Requests, they may be so extreme that they should be subject to a new Interconnection Request in order to fully evaluate whether the modified project can reliably interconnect to the transmission system. In the event that a project makes modifications, but remains in interconnection queue, studies will likely take significant additional time.

In addition, the Commission could consider implementing guidelines on how often Developers can request project modifications, including modifications necessarily resulting from suspensions. Such modifications, which frequently occur very late in interconnection processes, can cause significant delay and rework for Transmission Providers and Transmission Owners. These delays affect all parties, not just the offending Interconnection Customer, and should be minimized to prevent unnecessary hindrances to other projects. The CAISO, for example, received 94 modification requests in 2014 (compared to 83 Interconnection Requests).[3] That number does not even include modifications allowed following initial study results.[4] The practical meaning of these figures is that, on average, every project in the interconnection queue will request a modification *at least once* while in queue. And these modifications are not trivial. They generally consist of extensions to commercial operation dates, substantial technical

[3] The CAISO publishes an annual report on the number, length, and accounting of interconnection modifications. *See* https://www.caiso.com/Documents/2014ModificationAssessmentAccountingReport.pdf.

[4] *See* Section 6.7.2.2 of Appendix DD of the CAISO tariff.

changes, and point-of-interconnection changes, the impacts of which must be studied and mitigated for the rest of the queue.

In addition, Developers often request modifications to the primary fuel the generator is expected to use. Even after executing an Interconnection Agreement, Developers submit requests to change the project to convert from the originally requested fuel type to another. These changes can have interconnection queue study and market implications. Significant modifications (such as changes in fuel type) are not adequately addressed in the *pro forma* interconnection procedures. The Joint Filing Parties believe that Commission guidance would be appropriate as to whether significant modifications such as wholesale changes in the type of fuel can be grounds to require a new Interconnection Request or whether such changes are still sanctioned under an existing Interconnection Agreement.

B. Limiting the Impact of Speculative Interconnection Requests

The Commission has recognized that speculative projects that unnecessarily clog interconnection queues interfere with efficient queue administration.[5] Experience has revealed that projects in an interconnection queue occasionally slow or completely halt their progress toward completion of the interconnection process and Commercial Operation, in some circumstances due to events outside of their control. Some regions have sought to address this issue within their procedures. However, to the extent that that the Commission prioritizes the speed for study completion over flexibility, those procedures likely will need to be revisited.

[5] *See Midwest Indep. Transmission Sys. Operator*, 138 F.E.R.C. P61,233, 62 (2012) at P 30 (noting that one of the overall goals of interconnection queue reform is "discouraging speculative or unviable projects from entering the queue, getting projects that are not making progress towards commercial operation out of the queue, and helping viable projects achieve commercial operation as soon as possible").

Some projects seek to continue through the interconnection queue at a snail's pace, continually suspending or requesting extensions of their Commercial Operation Date. The CAISO interconnection queue, for example, currently has 26 proposed projects with on-line dates scheduled at least a *decade* after their Interconnection Requests. Seventeen percent of the CAISO's proposed 270 projects have on-line dates seven years after their Interconnection Requests. This has the potential to have several undesirable consequences. First, the longer a project sits in the interconnection queue after the completion of its studies, the greater the likelihood that events unfold that would degrade the inputs and results from the Facilities Study. This, in turn, adversely impacts the accuracy of information to be included in the Interconnection Agreement, which relies in large part on the results of the Facilities Study. Second, in some regions, lingering projects hoard transmission capacity, deliverability, and bus positions that future, viable interconnection projects could use. While the NYISO has recently implemented queue improvements to address these concerns, the other Joint Filing Parties believe that both developers and Transmission Providers in their regions could benefit from further Commission guidance on how such delays should impact later queued projects, especially if the delay in Commercial Operation is because of circumstances beyond the control of the Interconnection Customer.

C. Requirement that Developers Timely Respond to Information Requests

Just as AWEA's Petition fails to account for Developers' role in study delays, it also fails to account for the role of Developers and third-party vendors in studies' becoming stale and inaccurate. For example, Transmission Providers often struggle to obtain appropriate modeling

data for the generator in a timely manner.[6] In those instances where an Interconnection Customer is relying upon a vendor or third-party to provide information required to respond to a Transmission Provider's request for unit configuration information (so as to provide further information needed to complete studies), the question of who is responsible for such delay or how such a delay impacts other projects has not been sufficiently addressed through prior Commission policy.

At times, Developers are largely non-responsive to requests for additional information. Moreover, some required data is outside the control of the Developer. As manufacturers enhance their equipment, the model parameters used in the interconnection studies often become inaccurate requiring significant work, by the ISO/RTO, to work with manufacturers to get the models to work properly. The work with the manufactures can take significant time and lead to delays in studies.

The Joint Filing Parties believe this issue (along with potential solutions) is worthy of consideration. Right now, interconnection provisions associated with data deficiencies are ill-defined. In some cases, the only relief available under the applicable procedures is to remove the project from the interconnection queue. Technical review of the issue and development of solutions could be helpful to address these situations and avoid delay in the interconnection process.

[6] Among the required modeling data Developers frequently fail to provide in a timely manner are: collector system configuration, feeders' parameters - required for power flow modeling; updated dynamic model (for vendorspecific models); clarification for some dynamic model variables and settings; example stability plots illustrating generators' dynamics response; and validation data for the dynamic models.

D. Guidance Regarding the Involvement of Affected Systems[7]

The Joint Filing Parties have seen a number of projects propose to interconnect on a tie line between one region and a neighboring region. Sometimes the project enters the interconnection queue for both regions and sometimes it does not. Regardless of which queue the project enters, coordination with affected systems (transmission owners and ISOs/RTOs outside the ISO/RTO in which the project is interconnecting) is crucial in such situations. Involvement of transmission owners from the neighboring control area, as well as involvement of the other ISO/RTO, is critical to obtaining all the required study inputs (*e.g.*, contingency lists from the neighboring ISO/RTO, breaker-level diagrams not available for affected portions of the transmission system in the neighboring control area).

The Commission should also consider requirements that the tariff associated with the region in which a project is interconnecting should address adherence to timelines and requirements in the tariffs of affected systems. For example, if a Developer impacts an affected system and that affected system performs studies indicating the need to construct upgrades, the tariff of the region in which the project is interconnecting should clearly require that the Developer meet the provisions of the affected system's tariff related to required studies, agreements and construction of upgrades. The consequence of failing to respect the affected system's requirements should be withdrawal from the queue of the interconnecting region.

Finally, ISOs/RTOs, Developers, and Transmission Providers would benefit significantly from Commission guidance on interacting with affected systems that are not FERC

[7] For purposes of these comments, "affected system" refer to neighboring ISO/RTOs' systems and affected transmission owners located outside of the control area in which the project seeks to interconnect.

jurisdictional. While such affected systems are subject to reliability standards, their sovereign nature often leaves Developers with little if any recourse when disputes arise.

II. CONCLUSION

WHEREFORE, the Joint Filing Parties respectfully ask that the Commission continue to allow for regional flexibility in proposing and implementing proposed modifications to each region's interconnection procedures, as necessary, and reject AWEA's petition to mandate major uniform changes to all existing regional tariffs that have been approved by the Commission. To the extent the Commission finds it appropriate to initiate a rulemaking to consider reforms that would impact a previously-approved modification in an ISO or RTO's interconnection procedures, the Joint Filing Parties ask that the Commission consider the above suggestions and in all cases continue to allow for flexibility in the implementation of any changes to those existing processes.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding in accordance with the requirements of Rule 2010 of the Rules of Practice and Procedure, 18 C.F.R. §385.2010.

Dated at Rensselaer, NY this 8th day of September, 2015.

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