UNITED STATES OF AMERICA BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

PJM Interconnection, L.L.C. Docket Nos. ER15-2562-000

ER15-2563-000

Consolidated Edison Company of New York, Inc. v. EL15-18-001

PJM Interconnection, L.L.C.

Linden VFT, LLC v. PJM Interconnection, L.L.C. EL15-67-000

Delaware Public Service Commission and Maryland EL15-95-000

Public Service Commission v. PJM Interconnection,

L.L.C.

PJM Interconnection, L.L.C. ER14-972-003

PJM Interconnection, L.L.C. ER14-1485-005

(Not Consolidated)

Statement of Mark Ringhausen Vice President of Engineering Old Dominion Electric Cooperative

January 12, 2016 Technical Conference

On behalf of Old Dominion Electric Cooperative (ODEC), I want to thank the Commission and its Staff for the opportunity to speak today. The issues the Commission has identified for discussion are important to ensuring that the costs of new transmission facilities within PJM are reasonably allocated among customers. Resolving these cost allocation concerns is also important to promoting greater long-term certainty in the cost allocation mechanisms used within PJM. ODEC also wishes to commend PJM for submitting its matrix well in advance of this technical conference. The PJM Matrix provides a useful framework for discussing the issues identified by the Commission in its November 24 Order.

By way of introduction, ODEC is a generation and transmission electric cooperative based near Richmond, Virginia serving eleven distribution cooperative members in Virginia, Maryland, and Delaware. ODEC is a transmission-dependent utility in PJM, although we also own a small amount of transmission, and, thus ODEC is also a PJM Transmission Owner.

As a PJM Transmission Owner, ODEC participated in the development of the current PJM cost allocation methods, including use of solution-based DFAX, and ODEC supported those methods when they were filed with the Commission. I wish to emphasize that ODEC believes that solution-based DFAX continues to produce reasonable cost allocations for the overwhelming majority of PJM RTEP projects. Since solution-based DFAX went into effect in early 2013, however, ODEC has seen a small number of RTEP projects where the cost allocations produced by solution-based DFAX do not reasonably align with the customers that can be expected to benefit from the RTEP projects.

ODEC was directly impacted by these problems with solution-based DFAX when PJM approved several RTEP transmission projects associated with the Artificial Island in New Jersey. The Artificial Island projects are designed to resolve longstanding generator stability issues at the Salem and Hope Creek nuclear plants in southern New Jersey, yet almost 90 percent of the estimated \$275 million in project costs will be allocated to PJM's Delmarva Zone. Because ODEC is approximately 20 percent of the load in the Delmarva Zone, ODEC will pick up a significant portion of these Artificial Island project costs under the solution-based DFAX cost allocation method.

The RTEP projects for which solution-based DFAX has not produced reasonable results all fall within the small category of projects that generally do not address thermal or voltage-based reliability violations. The PJM Matrix shows that very few RTEP projects – less than six percent – fall into this category. The Artificial Island project falls within this subset of RTEP projects.

Reliability planning in PJM generally is based upon applying reliability planning criteria to detailed power flow models, so allocating the costs of RTEP projects through a flow-based model process like solution-based DFAX is logical when the project resolves a thermal or voltage reliability criteria violation identified by PJM's power flow models. But when a RTEP project addresses a need other than a flow-based thermal or voltage violation identified through PJM's transmission planning modeling process, there is not necessarily any relationship between the need for the upgrade and the customers who solution-based DFAX identifies as benefitting from the project.

Looking at the Artificial Island project, in particular, the primary component of this project is a 230 kV transmission line from southern New Jersey to Delaware. This 230 kV line will help resolve the generator stability issues at Artificial Island, but is not required to resolve any thermal or voltage reliability criteria violations, as might be caused by load growth in the Delmarva Zone. But because the stability problems at Artificial Island are attributable in part to limited transmission paths out of the Artificial Island area, it was all but inevitable that solution-based DFAX simply would allocate the costs of the new transmission line out of Artificial Island to the PJM transmission zone in which the new line happened to terminate. The results of solution-based DFAX, then, do

not signify any significant benefit to the Delmarva Zone from the new line that could justify the proposed cost allocation.

One of the questions raised by the Commission's November 24 Order is whether the category of projects for which solution-based DFAX may not be just and reasonable is "definable." ODEC believes that it is. The problem with using solution-based DFAX to allocate RTEP project costs arises where there is a disconnect between the reliability planning driver for a project and the use of the new project as measured by solution-based DFAX. In other words, the category of projects for which solution-based DFAX cannot be relied upon to provide a reasonable cost allocation can be defined based on planning drivers, which are transparent in the PJM planning process. The PJM Matrix itself is evidence that PJM can readily break out RTEP projects by reliability planning driver. RTEP project drivers are also provided to stakeholders in the PJM regional planning process, particularly through PJM's Transmission Expansion Advisory Committee.

Looking at the seven reliability project driver categories included in the PJM Matrix, ODEC does not believe it is reasonable to rely on solution-based DFAX for RTEP projects required by (1) stability violations, (2) short circuit violations, or (3) storm hardening. Solution-based DFAX may or may not result in just and reasonable allocations for operational performance upgrades, depending upon the nature of the underlying operational problem. If, for example, an operational performance upgrade is driven by thermal operation problems, albeit problems that do not rise to the level of a specific reliability planning criteria violation, then solution-based DFAX is appropriate. However, where operational performance upgrades are driven by non-flow-based criteria,

such as stability concerns, the project should be considered for an alternate allocation methodology.

That leaves the Commission's question of whether an alternative just and reasonable *ex ante* cost allocation methodology could be established for the categories of facilities where solution-based DFAX cannot be relied upon. ODEC is confident that an alternative methodology – or methodologies – can be developed. For a generator stability problem like Artificial Island, one potential alternative would be to allocate costs based on the relative proportion of economic benefits that result from a stability upgrade since a primary benefit of such a project is to increase the availability of a generator's output to provide capacity and energy to the PJM region.

Thank you. I look forward to questions and further discussion on these important issues.