PJM Nuclear Generation Owners User Group Charter BACKGROUND

Nuclear Operating License Holders within the PJM Region (listed below) have formed a "User Group". In this environment where various states have deregulated the generation of electricity, certain Nuclear Regulatory Commission (NRC) licensing and related technical issues need to be addressed by Nuclear Operating License Holders, with PJM, North American Electric Reliability Corporation (NERC) (or any successor organization) and regional reliability councils (RFC and SERC), PJM Transmission Owners, other PJM Members and INPO. The need exists for PJM to maintain familiarity with nuclear industry issues surrounding nuclear plant operation, each plant's transmission design basis, and performance. As highlighted by NRC discussions with FERC, NERC, and PJM, there are many planning design and operational issues that are unique to nuclear generation which must be well understood. For these reasons, the Nuclear Operating License Holders within the PJM Region initiated the formation a PJM User Group in accordance with the PJM Operating Agreement rules for creating a User Group.

At each meeting, a leader from each Nuclear Operating License Holder Nuclear staff as well as personnel from the Transmission Owners and PJM will discuss such issues. Any PJM Member is invited to attend the meetings.

CHARTER

1) Define and implement the required relationship between PJM, NERC/regional reliability councils, Nuclear Operating License Holder and transmission owner/local control centers relative to issues such as: reliable operation, black start, plant Final Safety Analysis Report (FSAR) issues, and design/control of the Bulk electric system.

NERC Standard NUC-001 *"Nuclear Plant Interface Coordination"* specifies the coordination required between Nuclear Plant Generator Operators and Transmission Entities for the purpose of ensuring nuclear plant safe operation and shutdown. PJM Manual 39, as approved and implemented, represents an agreement, or one of the agreements, among the applicable NUC-001 covered entities that reflects the mutually agreed upon NPIRs and documents how the NPGOs and Transmission Entities shall address and implement the NPIRs.

2) Include all Nuclear Operating License Holders within the PJM control areas as official User Group voting Members in the development, review of procedures and protocols to ensure that issues are adequately addressed.

3) Reconcile and amend PJM/reliability councils' design and operations policy with each plant's Final Safety Analysis Report (FSAR). Work with PJM RTO, NERC/reliability councils, PJM Transmission Owners, and other appropriate parties to gain a common understanding of the changes required. With sufficient advance notice to obtain timely approvals, propose modifications to each FSAR as necessary or propose PJM/reliability councils' design or operations policy modifications as necessary.

4) Nuclear/Regional Transmission Organization policy issues, actions and recommendations should be discussed. These issues, actions and recommendations should be coordinated with industry groups as necessary.

5) Operating License holders shall be proactive and participate in this new world of RTOs/ISOs, FERC regulations, and NERC/regional reliability councils' grid reliability standards. The User Group shall address two key issues: a) transmission system reliability, and b) consistency and timing of transmission grid modification approvals with FSAR design basis modifications (as deemed necessary).

6) Provide the necessary communication infrastructure, an open PJM forum for discussion, and means to proactively resolve such issues.

PJM Nuclear Generation Owners/Operators User Group Rules of Procedures

The following rules of order and expected User Group meeting protocols were established and agreed to: Meeting protocol will be generally informal. When necessary, Roberts Rules of Order will be followed.

On issues requiring a vote, each nuclear unit operating license within PJM carries one vote. (e.g., A Nuclear Operating License Holder may hold more than one license as more than one nuclear unit may be owned by the same Nuclear Operating License Holder.) However, the maximum number of votes any one voting member may cast is four. The voting representative will be chosen by the Nuclear Operating License Holder. A minimum of two thirds of the possible votes is required to carry a proposed motion. A three quarters vote is required in order to forward an issue to the PJM Members

Committee. If the PJM Members Committee does not adopt a recommendation or proposal the User Group submits, the User Group on a nine-tenths vote may forward the recommendation or proposal to the PJM Board. Chairman and Vice Chairman will serve one year terms which will rotate among the voting members. The Vice Chairman will become the chairman at the end of the chairman's term. The Chairman is responsible to designate a Secretary for each meeting.

A simple majority of the members is required to be present to constitute a quorum and to approve meeting minutes. Any materials requiring a vote must be sent out for review at least one week in advance of the meeting. Draft meeting notes and future meeting Agendas will be posted on the PJM website for review. Final meeting notes will also be posted on the PJM website. The NGO Secretary will forward all such materials to PJM for posting.

Votes per member, based on nuclear operating licenses per member (as of March 17, 2016):

- Exelon: 4 votes
- FirstEnergy: 4 votes
- AEP: 2 votes
- Talen: 2 votes
- PSEG: 3 votes
- Dominion: 4 votes

Based on these figures, 10 out of 19 votes are needed for a simple majority; 13 out of 19 votes are needed for a twothirds vote; 15 out of 19 votes are needed for a three-quarters vote; and 18 out of 19 votes are needed for a nine-tenths vote.

NGOUG Members:	Nuclear Power Stations/Units in PJM
Exelon Nuclear	Calvert Cliffs 1
Exelon Nuclear	Calvert Cliffs 2
Exelon Nuclear	Oyster Creek
Exelon Nuclear	Three Mile Island
Exelon Nuclear (ComEd)	Braidwood 1
Exelon Nuclear (ComEd)	Braidwood 2
Exelon Nuclear (ComEd)	Byron 1
Exelon Nuclear (ComEd)	Byron 2
Exelon Nuclear (ComEd)	Dresden 2
Exelon Nuclear (ComEd)	Dresden 3
Exelon Nuclear (ComEd)	LaSalle 1
Exelon Nuclear (ComEd)	LaSalle 2
Exelon Nuclear (ComEd)	Quad Cities 1
Exelon Nuclear (ComEd)	Quad Cities 2
Exelon Nuclear (PECO)	Limerick 1
Exelon Nuclear (PECO)	Limerick 2
Exelon Nuclear (PECO)	Peach Bottom 2
Exelon Nuclear (PECO)	Peach Bottom 3
FirstEnergy Nuclear Operating Co	Davis-Besse
FirstEnergy Nuclear Operating Co	Perry
FirstEnergy Nuclear Operating Company (DUQ)	Beaver Valley 1
FirstEnergy Nuclear Operating Company (DUQ)	Beaver Valley 2
Indiana Michigan Power Co (AEP)	Donald C Cook 1

Revision Feb 18, 2012 – Added First Energy units to Nuclear Power Station List.

History Jan 17, 2013 – Reference to NUC-001 "Nuclear Plant Interface Coordination" and Manual 39 included in the Charter.

Jul 7, 2016 – Votes per member added; votes to send issue to PJM Board changed from eight tenths to nine tenths; plant ownership changes identified.

Indiana Michigan Power Co (AEP) Talen Energy PSEG Nuclear LLC PSEG Nuclear LLC PSEG Nuclear LLC Virginia Electric & Power Co (DOM) Virginia Electric & Power Co (DOM) Virginia Electric & Power Co (DOM) Donald C Cook 2 Susquehanna 1 Susquehanna 2 Hope Creek Salem 1 Salem 2 North Anna 1 North Anna 2 Surry 1 Surry 2