

Process Overview and Overseeing Grid Reliability

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Outline



- Process Overview of Generator Interconnections
- Process Overview of Transmission Delivery Service
- Facility Upgrades
- Back-Stop Siting Authority
- Overseeing Grid Reliability

General Process For Interconnection



1. Governed by Order 2003 and 2006
2. Customer Submits Request/Application
3. TP Assigns a Queue Position
4. TP Posts Request on OASIS
5. Feasibility Study Performed
6. System Impact Study Performed
7. Interconnection Facilities Study Performed
8. Optional Interconnection Study Performed?
9. Interconnection Agreement Signed and Filed

Transmission Delivery Service



- Governed by Order 888 (890) and pro-Forma OATT
- Separate from Interconnection Service (*i.e. separate queue, studies, and timelines*)
- Can be Requested at Same Time as Interconnection Separate

Order 888

Pro-Forma OATT



- Types of Delivery Service
 - Network
 - P-T-P
- Deliverables (*System-Impact-Study, Facilities Study, Service Agreement*)
- Timeline for Deliverables

General Process For Delivery Service



1. Customer Submits Request/Application
2. TP Assigns a Queue Position
3. TP Posts Request on OASIS
4. System Impact Study Performed
5. Facilities Study Performed
6. Service Agreement Signed and Filed

Facility Upgrades



- Obligation to Build on Part of TP
- Construction Schedule Settled in Interconnection and Service Agreements
- Construction Based on Best Efforts
- Costs assigned Based on Commission Policy (*higher of incremental or embedded system cost*)*

* some exceptions within RTOs

Facility Upgrades (Cont.)



- Upgrades to Existing Facilities
 - Faster Lead Time (In general)
 - Usually No ROW Issues
- New Facilities
 - Slower Lead Time (In general)
 - May Involve ROW Issues

FERC Back-Stop Siting Authority Under EPAct 2005



- Criteria To Be Met
 - Facilities Fall Within a Pre-Defined National Interest Electric Transmission Corridor (NIETC)
 - Facilities Must Relieve Congestion and Not Harm Reliability

Overseeing BPS Reliability



- Reliability Standards Development
- Compliance/Enforcement
- Physical and Cyber Security
- Investigation and Analysis
- Reports and Assessments

Approval of Grid Reliability Standards (Process)



- The ERO (NERC) or Regional Entity Files Proposed Reliability Standards with FERC
- FERC can Approve a Proposed Standard, Direct a Modification to a Proposed Standard, or Remand a Standard to the ERO or Regional Entity
- The Commission Must Give “due weight “ to the Technical Expertise of the ERO or interconnection-wide Regional Entity

Approval of Grid Reliability Standards (Recent Approvals)



- 3/16/2007 – Issued Final Rule on Mandatory Reliability Standards for the Bulk-Power System
 - Approved 83 Proposed Reliability Standards (*56 with modifications*)
 - Held 24 Standards Pending Further Information
 - Approved Standards Scheduled to Become Mandatory in June 4, 2007



Reliability Standards – Examples of Standards Affecting NPPs

- TPL-001, TPL-002, address system performance under single and multiple contingencies.
- TOP-002 – requires operating plans and procedures to ensure reliable operation (including meeting voltage limits) are met for single contingencies
- VAR-001 – addresses minimum voltages and voltage stability
- EOP-005 – establishes NPP as a priority in power restoration
- NUC-001-1 (In development) – addresses coordination between NPP operators and transmission entities to ensure nuclear plant safe operation and shutdown

Compliance/Enforcement



- ERO and Regional Entities (through delegation agreements) Will Provide First Level Enforcement of Reliability Standards (subject to Commission oversight)
- FERC has the ability to Independently Conduct Investigations and Enforcement Actions as Established in Order 672