

Queue Process Challenges

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- High level, initial evaluation of project
- Customers receive indications of impacts to the system
 - No reinforcements, costs, or time to construct
- Customers have 30 days to evaluate results and sign a System Impact Study Agreement (SISA)

Note: Discussions which follow relate to requests which may not be granted through review of ATC

- Current studies performed
 - Initial Study
 - Indication of potential impacts (not all inclusive in some cases)
 - No costs
 - System Impact Study
 - Impacts, costs, time to construct identified (desk side estimates)
 - Processed quickly (if possible)
 - Studied while other projects may be in Feasibility Study phase
 - May result in identification of constraints which will be removed in later studies due to other projects in queue withdrawing

- Current studies performed (continued)
 - Facilities study
 - Transmission Owners begin “on the ground” work
 - Reinforcement requirements reviewed
 - Re-tool of System Impact Study
 - Performance of Facilities Study difficult due to significant potential for change in impacts

- Problems with current process
 - One study to develop reinforcement plan and cost estimates before Facilities Study
 - Provides reduced opportunity to review alternatives or ancillary impacts
 - Pushes customers to larger commitments (Facilities Study Deposit) more quickly
 - Provides short amount of review time for customer between first identification of costs and Facilities Study

- Benefits with current process
 - One study to develop reinforcement plan and cost estimates before Facilities Study
 - Allows customer the opportunity to move forward more quickly if no impacts identified (limited possibility due to interaction with other projects in queue which may still be at Feasibility Study phase)

- Possible solution
 - Add Feasibility Study phase after Initial Study
 - Requires changes to PJM Tariff
 - Parts IV and VI (Queue Studies)
 - Likely requires changes to Parts II and III (Transmission Service)
- Alternatives
 - Retain current process
 - Other alternatives?

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- Benefits with current process
 - One study to develop reinforcement plan and cost estimates before Facilities Study
 - Allows customer the opportunity to move forward more quickly if no impacts identified (Potential interaction with other projects in queue which may still be at Feasibility Study phase)

- Possible solution
 - Add Feasibility Study phase
 - Requires changes to Parts IV and VI of the PJM Tariff
 - Would not preclude ability of projects to move more quickly if limited interaction with other projects in queue are identified

- Alternatives
 - Retain current process
 - Other alternatives?

- Current studies performed
 - Feasibility Study
 - PJM and Transmission Owners “screen” based on Alternate Queue criteria
 - If projects pass “screen” then PJM provides WMPA and remaining studies are obtained from Transmission Owners
 - If projects fail “screen” then normal queue studies continue (Feasibility Study, Impact Study, Facilities Study)
 - Phases of study may be combined if impacts are limited

- Problems with current process
 - “Screen” criteria requires queue to be closed (6 month queue)
 - Evaluation of “screen” criteria requires load flow studies with all projects in queue modeled

- Benefits with current process
 - Evaluation against criteria, when completed and passed, removes need for project to be evaluated in potential re-tools of queue
 - Allows customer the opportunity to move forward more quickly if criteria met

- Possible solution
 - Evaluate projects against the criteria at three month intervals
 - Evaluate projects against the criteria at some other interval
 - Both require changes to Part IV of the PJM Tariff, and Manual 14A

- Alternatives
 - Retain current process
 - Remove alternate queue screening
 - Other alternatives?

- Reinforcement costs <\$5 million allocated to all projects in a queue which add load to the violation defining the need for the reinforcement
 - Projects which do not overload the element, but add load prior to a project overloading the element, have cost allocation

- Problems with current process
 - Criteria requires queue to be closed (6 month queue)
 - Evaluation of this cost allocation criteria requires load flow studies with all projects in queue modeled

- Benefits with current process
 - Customers not subject to larger costs when their project in the first to cause a violation. Under old rules, and rules for >\$5M reinforcements, the first project to cause a violation has 100% cost responsibility (until projects contribute and then they reimburse the first project after the reinforcement is built)

- Possible solution
 - Evaluate projects against the criteria at three month intervals
 - Evaluate projects against the criteria at some other interval
 - Both require changes to Part IV and VI of the PJM Tariff, and Manual 14A

- Alternatives
 - Retain current process
 - Remove alternate queue screening
 - Other alternatives?

Appendix

- Criteria
 - project cannot be connected to a PJM monitored transmission facility as defined in PJM Manual M-03
 - project cannot be an uprate or addition to an existing facility
 - project distribution factor for any PJM monitored transmission facility may not exceed 5 percent and the MW impact of the project cannot be greater than 1 percent of the element rating
 - project may not connect to the same Point of Interconnection as any other project
 - aggregate impact of all projects connecting on any individual radial connection to a PJM monitored transmission facility shall not exceed 1 percent of line rating

- Reinforcement costs <\$5 million allocated to all in a queue which add load to the violation defining the need for the reinforcement
 - Projects which do not overload the element, but add load prior to a project overloading the element, have cost allocation
 - See below for example of cost allocation for <\$5 million upgrades

Project	Loading added to element	Final element load	Cost Allocation?
A	Yes	95%	Yes
B	No	95%	No
C	Yes	102%	Yes
D	Yes	115%	Yes

- Revision #1: p.12; Reworded first sub-bullet under Possible Solution