• **Types of applications:**
  – Attachment N – new generation and uprates to existing generation
  – Attachment S – merchant transmission requests
  – Attachment Y – new generation, less than 2 MW synchronous, 5 MW inverter and not seeking Capacity Interconnection Rights (CIRs)
  – Attachment BB – inverter based generation no larger than 10kW
  – Attachment EE – Upgrade Request (IARR request)
  – Attachment FF – Long term firm request
Interconnection Process Overview

Queue open → Build model → Feasibility Study → Customer review report and return Impact Study Agreement → Impact Study

Customer review report and return Facility Study Agreement → Facility Study → Customer review report and return ISA/WMPA (CSA) or UCSA → PJM prepare CSA [Required only if CSA not tendered with ISA]

Customer review and return CSA → Remaining timeline defined by ISA/WMPA milestones, CSA/UCSA schedule and rights to suspend
• High level, initial evaluation of project

• Customer can select a primary and secondary Point of Interconnection (POI)

• Estimates are desk-side level estimates (no field evaluation)
• Refinement of Feasibility Study results

• Generation customer must select a single POI (if two were evaluated in the Feasibility Study)

• Analysis incorporates any changes that occurred since the Feasibility Study analysis was performed

• Estimates are still desk-side
Feasibility Study (Long Term Firm - Initial Study (no reinforcements identified); Not performed for Upgrade Requests)

- Long Term Firm Transmission Service
  - Receives initial study
    - PJM identifies flowgates which may be impacted by service
    - No involvement with Transmission Owners
    - No reinforcements or costs identified
  - PJM performs an initial impact study review after customer returns impact study agreement (might be before queue close)
    - Provides costs to customers for reinforcements

- Upgrade Requests (IARR)
  - No studies before System Impact Study Phase

- All other types of projects
  - Initial review of constraints, specifying reinforcements, cost estimates, time to construct reinforcements
Current Queue Process

- **Impact Study** (Start of analysis for Upgrade Requests)
  - Long Term Firm Transmission Service
    - Receives updated impact study
  - Upgrade Requests (IARR)
    - First study performed
  - All other types of projects
    - Refinement of feasibility study
• Studies intended to be evaluated in coordinated queue

• Current individual processes for the transmission service and IARR requests do not provide customers with study refinements similar to other projects in queue
• Rules for upgrades which are estimated to cost less than $5 million
  – PJM must determine if any project in the queue adds load to the element which is overloaded at the end of the queue to assign cost allocation to all customers who add load
  – Requires PJM to wait for end of queue to begin to study projects
  – Reduces the potential that a single customer will fund a reinforcement by themselves
• Attempt to move projects through process quicker by determining that no Tariff facilities are affected
  – Requires PJM to wait for end of queue to begin to study projects
  – Moves customers to a Wholesale Market Participation Agreement if project is qualified for the Alternate Queue and avoids re-tools
• Less than $5M and Alternate Queue
  – Requires PJM to wait for end of queue to begin to study projects

Look for ways to restructure rules to reduce delays in obtaining results for smaller generation projects
Next Steps

- Problem statement
- PC sub-group