



PJM Interconnection Improvements

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Concerns

- PJM's existing transmission capability that allows the economic interconnection of plants is strained
 - Costly upgrades hinder interconnection
- The interconnection process provides the transmission owner with no incentive to participate
 - Nothing goes into rate-base
 - Risks attendant with development
 - Use of scarce resources – human, capital, ROW
- Small upgrades can pile up to kill a project
- It takes too long!

First Ready First Served???

- Interconnection process is designed around two fundamental concepts:
 - First come first served
 - But-for pricing
 - if but-for the project the costs are unneeded, then project bears them
- A continuing problem are projects in the queue in expectation of their viability, not their current viability.
- Should we attempt to restructure the process so it becomes the units first **READY** to build and interconnect move to the front of the analysis?

Put New Generation Interconnection in RTEP

- In the past, generation development tied to transmission development
 - Mine-mouth and nuclear plants
- Interconnection could be part of Order 1000
 - PJM staff specifically excluded interconnection needs from Order 1000 evaluation
 - Includes reliability and market benefits, with a state option for public policy
 - Puts transmission development “entirely” on the back of new generation
 - Obvious areas in PJM would be offshore and renewable zones
- Successful elsewhere
 - CREZ in ERCOT
 - MVP in MISO
 - Tehachapi in CAISO

Local Interconnection Regions

- PJM had a good deal of excess transmission capability
 - Much of this has been absorbed in new development
- Some localities suffer from local issues
 - Many interconnection requests have numerous small issues
 - Not too much, but individually too much for a project to bear
 - Things like risers, wave traps, ring buss and other small improvements
- Local utilities are in best position to cure these problems
 - Review for locales where there are significant interconnections
 - Utility responsible to increase the over-head capability in those regions
 - Not everywhere, but regions of significant development
- Should be in the scope of a transmission owners normal asset management

New sources of funding

- Many believe the new administration will favor infrastructure and renewable investments
- Upgrades to transmission system would likely fall into this category
- PJM should support requests for Federal funding to be used for upgrades and interconnection of renewables
- This could play well with previous suggestions
 - Public-private partnerships

Cost allocation

- PJM has a severe form of cost allocation
 - If your project causes a modest overload, then you are responsible for the entire upgrade
 - Naturally subject to minimums and inter-project allocations
 - NOT a call for “ignoring” reliability issues
- Other means of allocating costs to the project:
 - Share of improvement
 - project uses upgrade for 20%, it funds 20%
 - Cost of service
 - Project pays a share of the cost of service for lines
 - “Tehachapi”
 - Project is built with the expectation that others will use and pay for the project