



Mid-Atlantic/Southeast Regional Wind Energy
Institute Annual Meeting
Panel on Off-Shore Wind
PJM Introductory Comments

October 13-14, 2008
Alexandria VA.

- PJM strives for robust energy and capacity markets attractive for resource entry
 - Day ahead and real time energy markets
 - 3 year forward commitment capacity market with annual and periodic residual auctions

- PJM RTEP Planning provides the reliable and efficient Transmission System
 - Annual Baseline and Market Efficiency plan
 - After Baseline system is set, Interconnection Request cost responsibility is established.

- 4 Interconnection Request queues per year
- Average 18 month queue/study cycle
- Studies define required transmission and customer responsibility for:
 - Attachment Facilities, Local Upgrades, Network Upgrades

- Feasibility, Impact, Facility Studies
- A few process highlights:
 - Choice of capacity and/or energy status
 - Wind Capacity value = 13%
 - On entering queue, demonstrate site control
 - Proposal: wind turbine changes allowed to commencement of stability work
 - Proposal: Wind ridge layout 3 acres/MW default (3 MW turbines)
 - Proposal: Wind area layout 10 acres/MW default (3 MW turbines)

- Joint Coordinated System plan (JCSP)
 - Pursuant to existing coordination agreements
 - Other participants also invited
 - Scopes have varied annually to meet needs
 - 2008 JCSP is PJM, MISO, MAPP, SPP, TVA, NY, NE
- Scope:
 - 5% wind energy penetration in 2024 (current queue)
 - 20% wind energy penetration in 2024
 - DOE wind data used for siting
 - Develop high degree of market efficiency transmission
 - 2018 reliability analysis
- Status:
 - December completion (www.jcspstudy.org)

- Eastern Wind Integration Transmission Study (EWITS)
- NREL study using updated DOE wind siting data
- Same footprint as JCSP
- Wind penetration scenarios
 - 20% - regional siting no off shore
 - 20% - local siting with off shore
 - 20% - hybrid
 - 30% - combines 20% regional and local
- Analysis underway – spring 2009 completion
- Dave_corbus@nrel.gov

- JCSP and EWIT develop conceptual transmission scenarios
 - Helpful to define and quantify the issues
- How do these transition from concepts?
 - Address cost allocation issues
 - Address siting issues
 - Engage States and regional planning processes