

PJM Regional Transmission Planning Experience

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- Ongoing and cyclical
- 15 year planning horizon
- RTEP issued each year



- Baseline analysis
- Interconnection analysis
- Coordinated planning w/ adjacent areas



Board-Approved Backbone Solutions





Planning Process Uncertainty

- Generation Interconnection Volumes and Project Withdrawals
 - As many as 125 requests over 6-month queue during 2007/08
 - 88% queue drop-out rate on a per MW basis
- Substantial Number of Wind Projects, particularly in Western PJM
- Substantial Merchant Transmission Withdrawals to NY in the queue
 - Significant west-to-east transmission required for deliverability
 - Impacts snowball through all subsequent projects
- Reduction in Demand Forecast Due to Economic Downturn
- Penetration of Demand Response
- Generation Retirement 18,000 MW of at-risk generation



Generation Queue Request Volumes



Active Generation in Queue



2009 Load Forecast vs. 2008 Load Forecast



7

1







- Reliability Criteria The Bright Line Test Requirement
- Interaction With State Siting Proceedings
- Result
 - Required in service date oscillates year to year
 - State proceeding delays / case withdrawal
 - Risk of future reliability challenge and market intervention

PATH - Amos to Kemptown



- Added to the RTEP in 2007 to resolve multiple overloads on 500 kV facilities across the central Pennsylvania / Allegheny Mountain corridor
- Need for the project assumed the TRAIL line is placed in-service by June 2011
- Based on the 2009 RTEP the Amos – Kemptown project is required to resolve widespread thermal and reactive problems starting June 1, 2014





PATH – 2009 RTEP Thermals







- Project driver: Thermal and reactive criteria violations
- Required in-service date based on the 2008 RTEP was June 1, 2013
- Updated analyses done as part of the 2009 RTEP shows that the required in-service date for the project can be deferred until June 1, 2014

