

Pipeline and Power Generation Coordination

PJM Capacity Performance



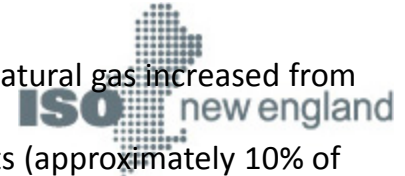
- Winter 2013/14 up to 22% of generation unavailable
- Comparable rate of outages during winter 2015/2016 would likely prevent PJM from meeting its peak load requirements
- Gas only generators must have some combination of firm transport, firm commodity and storage or equivalent to provide flexible operation during peak gas-usage conditions

FERC Order 809 – Final Rule to Improve Gas-Electric Coordination



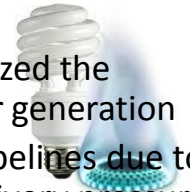
- Recognizes increased reliance on natural gas for power generation
- Timely nomination cycle moved from 11:30 a.m. to 1:00 p.m. Central Clock Time (CCT)
- Adds third intraday nomination cycle to help shippers schedule changes in demand
- Continued efforts through NAESB for exploring potential for faster, computerized scheduling

ISO New England



- NE power generated using natural gas increased from 15% in 2000 to 44% in 2015
- Aging coal and nuclear plants (approximately 10% of installed generation capacity) will be retired
- RFP for 500 to 2,000 MDth/d of gas transport, storage or LNG capacity issued by MA/RI EDC's
- Anticipate similar RFP's for CT, NH, possibly ME
- *"It doesn't matter whether it's the Kinder Morgan pipe or any other pipe, as long as we get the supply into the region"* – ISO-NE CEO Gordon van Welie (1/20/16)

Working Together



- FERC, PJM and ISO-NE have recognized the increased reliance on gas for power generation
- Power plants pose challenges to pipelines due to large, non-ratable flows, higher delivery pressures, quick start-ups/shutdowns
- ***Suggest pipeline companies and ISO/RTO's work together to better understand each other's limitations and requirements and ensure adequate infrastructure is in place to provide reliable power in the future***