



New Jersey Capacity Issues - Technical Conference

In the Matter of the New Jersey Board of Public Utilities Review of the State's Electric Power and Capacity Needs - Docket No. E009110920

June 24, 2010

EDECA Resulted in a Major Shift in the Planning Paradigm -- Old Paradigm



- New Jersey's integrated electric utilities built or contracted for capacity
- Capacity was in many cases remote from load (Keystone, Conemaugh, Salem, Hope Creek) as New Jersey load centers are not suitable for baseload facilities
- Transmission was built primarily to meet load growth and to accommodate remote generation additions
- Customers bore the cost of capacity additions over the entire term of the life of the plant or contract without regard to energy market conditions or the level of capacity surpluses
- Capacity additions, including NUG contracts, thought to be economic at the time, in retrospect proved to be a burden on customers

EDECA Resulted in a Major Shift in the Planning Paradigm -- New Paradigm



- Generators build capacity based on market signals
- Customers pay market prices as they evolve over time
- Generators, not customers, bear the risk of the economics of new capacity without regard to market conditions or capacity surpluses
- PJM plans transmission as required to maintain reliability and enhance economics through the Regional Transmission Expansion Plan (RTEP)

The New Paradigm Is Working



- From 1999 to 2008 over 3500 MW of new capacity was added in New Jersey including three large combined cycle plants
- RPM provides price signals that will encourage further additions when economic to do so
- As implemented by PJM all existing capacity faces seller mitigation and there is no market power in the Reliability Pricing Model (RPM) auctions
- For the first time since the 1980s major high voltage transmission is being added as a result of PJM's RTEP process that will maintain/enhance reliability and have the ancillary effect of reducing congestion

Markets Work Differently than Centrally Planned Solutions



- In a planned solution utilities and stakeholders agree on the capacity solution and build at captive customer risk as to long term economics
- In a market investors respond to price signals and develop capacity at their own risk
- A market can be expected to have more variable prices and to have somewhat lagged responses but produce a more efficient and lower cost solution as investors carefully weigh risks
- A planned solution can be expected to have more stable prices but produce a less efficient and higher cost solution as decisions are made with the backstop of assured recovery (examples are NUG contracts)

RPM Provides Price Signals that Induce a Market Response



- There have been seven RPM auctions and all have cleared near to or below the calculated new entry cost and provided more capacity than needed to meet the PJM reliability target ¹
- In only one auction has Northern PS cleared as a separate LDA – this is the only instance where a New Jersey LDA has exceeded the EMAAC price – (an LDA is a Local Deliverability Area and EMAAC consists of New Jersey, Delaware and Philadelphia)
- While prices have risen in the most recent RPM auction to near the calculated cost of new entry, prices are virtually identical throughout MAAC (aka classic PJM) and capacity is more than adequate for reliability purposes
- RPM prices will cause investors to consider building where needed and to continue to operate existing generation
- RPM prices have elicited a significant amount of Demand Response that also helps meet reliability needs and is a check on prices
- While some generators may have business models that require long term contracts there are generators willing and able to finance new capacity in response to RPM price signals and to take market risk

¹ The only exceptions involve SWMACC in early RPM auctions and PEPCO/DPLSouth in recent auctions. Additionally, the RTO cleared above the new entry cost in 2010/11, but capacity was adequate.

BGS Helps to Facilitate the New Paradigm



- Generators considering entry know that once in the market they will have demand for multi-year hedges from BGS suppliers reducing their risks
- Customers receive 3 year rolling average prices smoothing out market variability
- This smoothing is accomplished without customers bearing any long term risk and with having BGS rates reflecting market prices
- BGS provides a careful balance between hedging volatility and reflecting market prices which enables retail competition
- Long term contract prices can move away from market and would potentially not meet the EDECA requirement that BGS prices reflect market prices

How Would Long Term Contracts for New Capacity with Cost Recovery from Other than Market Sources Fit with the New Paradigm?



- Long term contracted capacity supported by customers may lower the RPM price for a short time, however, such contracts would make competitive generators reluctant to add capacity at their own risk, and in the intermediate to longer term would reduce reliability and increase RPM prices
- These contracts could also accelerate retirements and resulting in reduced reliability and higher RPM prices
- Market forces will break down if there is ratepayer supported new capacity additions that are perceived to be interfering with market price signals and receiving preferential treatment
- If new capacity is added via long term customer supported contracts, eventually the only viable entry will be that underwritten by customers – and this will need to be all customers not just BGS customers

Summary Overview



- New Jersey and other states in the region have moved from a centrally planned approach to capacity and reliability to a market approach
- The market approach combined with PJM's RTEP is working – capacity has been more than adequate and RPM prices are below calculated cost of new entry
- The market approach avoids customers from acting as co-signers on generator financing and can be expected to produce a more efficient and lower cost outcome over time
- The market approach has stimulated Demand Response
- A move away from a market approach will be irreversible and will result in a chronic shift of generation investment risk back to customers