

PJM Proposal for Energy Efficiency Resources

Pete Langbein

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- Energy Efficiency is a "good thing"
- Energy Efficiency in the capacity market construct can be considered "uplift" to load
 - The aggregate load forecast has been lowered to include the impact of energy efficiency
 - There is no evidence that the amount of EE that is purchased and installed will change if EE Providers no longer receive money from load through the wholesale capacity market construct
 - There is no support that the revenue from the capacity market goes to the consumer to make EE more affordable and change their decision process



PJM Proposal - Modify the definition of energy efficiency (eliminate payments for happenstance)

- Energy Efficiency in the capacity market should only include EE that is purchased and installed because the EE revenue received from the wholesale market and provided to the consumer caused the EE to be purchased and installed.
 - If the EE Provider does not cause the EE to be purchased and installed then it does not qualify
 - An EE Provider should not be permitted to simply claim EE that naturally occurs
 - If I buy a high efficiency AC, an EE Provider should not be able to claim unless they
 can demonstrate that they caused the purchase of the high efficiency AC (from the
 revenue received from the capacity market)
 - the purchase of manufacturing or retail sales data for energy efficient products or contractor EE installations does not qualify as an EE Resources.
- This is the similar concept used for retail energy efficiency programs
 - Gross savings (all EE savings including those that occur naturally) vs Net savings (EE savings as a result of utility program)

Why should consumers pay for something that would have occurred anyway



Focused EE capacity market participation

- RPM participation
 - [status quo] Continue current "addback" process to avoid reliability issues and allocate cost to load to pay EE Providers
 - Recognize EE for 1 year (installment period = DY-1)
 - Help account for 1 year delay in Peak Load Contribution (PLC) and associated LSE cost reduction
 - Annual (avoid issues with summer EE and winter resource combination)
 - Impacts price
 - Winter resource included in addback (annual market)
 - Focus participation on BRA only
 - Capacity for load is procured based on initial forecast
 - Avoid more add backs for a DY (PJM load forecast used for IA may be lower but PJM will be required to buy EE and use the add back)
- FRR participation
 - Eliminate participation since it has never been used and amount is simply added back the FRR obligation (no reason to include in the FRR plan)
 - Note: EE may continue to participate in FRR service area and be included in RPM.

PJM Proposal



- M&V Plans are submitted prior to auction based on estimated EE savings (nominated ICAP)
- Post Installation M&V Reports ("PIMV" Report) are submitted prior to DY and determine actual EE savings (nominated ICAP)
- EE Savings per measure = (Baseline kW EE measure kW) * operational factors
 - Based on average savings during defined performance hours
- EE Savings = EE Savings per measure * # verified installations
- Baselines
 - Current usage based on what is currently installed. This is used for retrofit when current equipment is still fully operational. Current baseline is not based on a study.
 - Standard usage based on most stringent standard or practice in place at the time of the installation



- Accurate savings based on actual "measurement" and "verification"
 - Avoid subjective process and the potential for self selection bias ("cherry picking")
- Leverage existing studies where possible to help manage cost
- Ensure all calculations and associated baseline are transparent and can be clearly mapped back to the source.
- Simplify the process where possible



PJM Proposal - M&V (revised)

- M&V Plan is a plan based on estimates.
 - TRMs may be used to develop estimates but may only be used for PIMV Report based on below.
- PIMV report determines the actual nominated ICAP which is based on actual verified installations, codes/standard practice prior to the installment period and operational factors based on studies that meet the requirements below. Approval of the M&V plan does not mean approval of PIMV report.
- Studies used to determine operational data (coincidence factors or any other factor used to determine savings when comparing the baseline to the installed equipment) shall be based on measured information within 5 years of the start of the installment period unless otherwise approved by PJM. All studies used must meet the M18B statistical accuracy provisions.
 - Clarify Option 1 stipulated factors refer to operational data described above.
 Stipulated factors may not be used to verify installations
 - Remove Suboptions this language is redundant, there is already the ability for an EE Provider to propose another method.



PJM Proposal - M&V

- Installations (including upstream, midstream and downstream)
 - must be verified at each end use customer site to ensure the equipment was installed and operational in the associated PJM LDA. EE Provider to provide end use customer specific information (or other information as approved by PJM) for all installations if requested by PJM. Upstream and midstream must be able to demonstrate that savings were not claimed by downstream EE Provider.
- Officer Certification required for PIMV report



- EE no longer eligible to receive bonus payments and no longer subject to PAI penalty.
 - EE does not do anything different during a PAI (there is no "performance")
- Bilateral Transactions status quo but clean up language so it is clear EE Provider may only use unit specific transaction for EE sales (to ensure EE can only be used to replace EE commitments)
- Provide additional time for review and approve plans/reports
 - M&V plans due 50 days prior to auction instead of 30, PJM to notify in 25 days instead of 10, EE Provide to correct and resubmit 15 days prior
 - PIMV reports due 30 day prior to DY (instead of 15).
- Tariff and manual changes implemented for 26/27 BRA and 26/27 PIMV report (applicable to all qualified installation periods for such auction)





Presenter: Pete Langbein, peter.Langbein@pjm.com

Evaluation of Energy Efficiency Resources

Member Hotline (610) 666 – 8980 (866) 400 – 8980 custsvc@pjm.com

