

U-18197 Capacity Demonstration Technical Conference III

AGENDA

- 10:00 a.m. Consumers Energy
- 11:30 a.m. MPSC Staff
- Plans for July 10 Technical Conference
 - Final comments
- 12:00 p.m. Adjourn

Consumers Energy
10:00 a.m.

SRM Capacity Demonstration Technical Workgroup Meeting

June 2017



Timing of Demonstrations – 2017/18

- **Nov. 1:** Utility & Electric Distribution Company (EDC) Coincident Peak Demand forecasts to Midcontinent Independent System Operator (MISO)
- **Dec. 1:** Utility capacity demonstrations to Michigan Public Service Commission (MPSC)
- **Dec. 15:** EDCs provide Peak Load Contributions (PLCs) for Alternative Energy Suppliers (AESs) to MISO

- **Jan. 15:** AESs complete review/revise of PLCs
 - Obligations are “locked in”
- **Feb. 9:** AESs submit initial capacity demonstration to MPSC
 - Customer-by-customer basis
- **March 1:** MPSC makes determination on sufficiency
 - Should be contested case
- **March 9:** Load Serving Entity (LSE) Fixed Resource Adequacy Plans (FRAPs) due to MISO
- **March 28:** Beginning of Planning Resource Auction (PRA)

Timing – Future Years

- Early 2018 capacity demonstration covers planning years from 6/1/18 through 5/31/22
- Subsequent demonstrations cover fourth year out on rolling basis:

AES Demonstration Date	PY 2018-2019	PY 2019-2020	PY 2020-2021	PY 2021-2022	PY 2022-2023	PY 2023-2024	PY 2024-2025	PY 2025-2026	PY 2026-2027	PY 2027-2028	PY 2028-2029
Early 2018	Red	Red	Red	Red	Red						
Early 2019		Yellow	Yellow	Yellow	Red						
Early 2020			Yellow	Yellow	Yellow	Red					
Early 2021				Yellow	Yellow	Yellow	Red				
Early 2022					Yellow	Yellow	Yellow	Red			
Early 2023						Yellow	Yellow	Yellow	Red		
Early 2024							Yellow	Yellow	Yellow	Red	
Early 2025								Yellow	Yellow	Yellow	Red

Red = New Year(s) in Current Demonstration
Yellow = Existing Years Accounted for in Prior Demonstration(s)

Timing – Future Years

- If ROA load served by AES capacity returns to utility capacity, must be declared four years in advance:

Notification Date	Earliest Date at Which AES Load Can Return to Utility Capacity
September 1, 2018	June 1, 2023
September 1, 2019	June 1, 2024
September 1, 2020	June 1, 2025
September 1, 2021	June 1, 2026
September 1, 2022	June 1, 2027
September 1, 2023	June 1, 2028
September 1, 2024	June 1, 2029
September 1, 2025	June 1, 2030
September 1, 2026	June 1, 2031

Load Shift – Future

- Changes to load share may occur due to switching

	February 2020	Mid-2023	June 1, 2024
AES A	<ul style="list-style-type: none">2024-2025 Load Projection: 100 MW2024-2025 Capacity Demonstration: 100 MW	25 MW of load switches to AES B	<ul style="list-style-type: none">2024-2025 Actual Load: 75 MW2024-2025 Capacity Demonstration: 100 MW
AES B	<ul style="list-style-type: none">2024-2025 Load Projection: 100 MW2024-2025 Capacity Demonstration: 100 MW	25 MW of load switches from AES A	<ul style="list-style-type: none">2024-2025 Actual Load: 125 MW2024-2025 Capacity Demonstration: 100 MW

- AES A may sell up to 25 MW in PRA or bilaterally
- AES B must procure incremental 25 MW in PRA or bilaterally

Generation Change - Future

- Capacity of resource may increase or decrease before delivery year

	Early 2020	Mid-2023	June 1, 2024
AES X	<ul style="list-style-type: none">• 2024-2025 Load Projection: 100 MW• 2024-2025 Capacity Demonstration: 60 MW• 40 MW subject to capacity charge	<ul style="list-style-type: none">• 60 MW resource upgraded to 70 MW	<ul style="list-style-type: none">• 2024-2025 Actual Load: 100 MW• 2024-2025 Actual Capacity: 70 MW• 40 MW subject to capacity charge• 10 MW can be sold
AES Y	<ul style="list-style-type: none">• 2024-2025 Load Projection: 100 MW• 2024-2025 Capacity Demonstration: 60 MW• 40 MW subject to capacity charge	<ul style="list-style-type: none">• 60 MW resource derated to 55 MW	<ul style="list-style-type: none">• 2024-2025 Actual Load: 100 MW• 2024-2025 Actual Capacity: 55 MW• 40 MW subject to capacity charge• 5 MW must be purchased

- 40 MW subject to capacity charge does not change
- AES X may sell up to 10 MW in PRA or bilaterally
- AES Y must procure incremental 5 MW in PRA or bilaterally

Determination of Obligations

- All LSEs must meet their Planning Reserve Margin Requirement (PRMR)
- All LSEs must meet load-ratio share of Local Clearing Requirement (LCR) of Local Resource Zone (LRZ) 7 with resources located physically in LRZ 7
- MISO provides LCR & PRMR for years one, three, and 10
- MPSC can interpolate for other years

Importance of LCR

- Locational component of reliability established by FERC and MISO

- If LCR is not met:
 - All LSEs pay Cost of New Entry (CONE) of \$260/MW-day in MISO market
 - Loss of Load Expectation (LOLE) reliability standard (one day/10 years) is not met
 - All LSEs are exposed to increased risk of load shed

- All LSEs meeting load-ratio share of LCR on June 1, 2018, best ensures reliability and provides competitive non-discriminatory rates to all customers
- Without requirement, CE bundled customers continue subsidizing ROA capacity by up to \$174 million per year
 - CE generation fleet was built to serve bundled and ROA load
 - To ensure reliability, CE and the MPSC have secured local capacity rather than purely optimizing on cost
 - Without procuring load-ratio share of LCR, AESs are able to free-ride on these CE and MPSC actions, with cost impacts on CE bundled customers

- Applying LCR only to incremental capacity is not preferable
 - Very complicated to implement, subject to constant revision and assumptions debates
 - Continues discrimination between bundled and ROA customers, raising bundled customer rates
 - Inconsistent with legislative intent of PA 341 to have each LSE provide fair share of state's long run capacity needs

Determination of Resource Sufficiency

- Must be owned generation or firm PPAs
 - AESs should file PPAs before capacity demonstration deemed sufficient
- Planned generation must be verified 2 years out
 - MISO GIA process – evidence of progress
 - Construction agreements – contracts, invoices, etc.
- Up to 5% purchases in MISO PRA

May 11 Order Questions

- 13 issues raised by MPSC in Attachment A of May 11 Order, Case No. U-18197

- Year-to-year changes
 - LSEs may have to procure incremental capacity if short, or may sell excess capacity if long
- Mid-year changes
 - Capacity charge follows customer from supplier to supplier
 - Rationale for charge on whole-customer, not pro rata, basis

- It is necessary to track
- EDCs monitor changes in load among AESs through the PLC process at MISO, using meter data and reports of switching
- EDCs have ability to verify changes in load through this process

- Affidavit should be supplemented
- PPAs should be filed for MPSC audit and verification
- Generation can be captured in the MECT tool in the prompt year and verified by MPSC
- For future years, AESs cite to specific resources in demonstrations, which can be validated in prompt year through MECT tool

- Must qualify for capacity under MISO Tariff
- Proof follows same process as generation, through MECT tool
- DR and EE used to offset peak demand must be reported to EDC by Oct. 1 to be reflected in annual forecast to MISO
- Contracts/tariffs must be shown two years in advance, or DR and EE count towards 5% PRA cap

- Planned generation must be verified two years out
 - MISO GIA process – evidence of progress
 - Construction agreements – contracts, invoices, etc.
- If not verified, capacity credit is lost and must be replaced in PRA or bilaterally

- PRA doesn't tie to specific resources on a MW-load-to-MW-generation basis
- MISO optimizes PRA to ensure that LCR is met
- If an LSE relies on purchasing 5% of its obligations in PRA as part of four-year plan, only $(LCR/PRMR \times \text{MWs purchased in PRA})$ should count towards meeting LCR

- Process should be transparent and contestable, subject to appropriate confidentiality protections
- Utilities need to be informed and to adjudicate of issues which affect their potential capacity obligations
- Parties should be able to review and verify data
- Transparent review will help ensure a fair playing field

- MISO provides PRMR & LCR on an annual basis for years one, four, and 10
- MPSC can extrapolate with simple trend line

Specifying ROA Customers Not Served

- If an entity does not meet its capacity obligations in its capacity demonstration, then it should indicate which of its customers will be charged the SRM capacity charge and provided capacity by the utility in an amount equal to the AES's supply deficiency

- **Example:** AES meets 60% of its LCR obligation
- Treat AES as having enough capacity to serve 60% of its load, notwithstanding ability to meet PRMR
- 40% balance covered by utility

- Qualify DR as capacity resource under MISO Tariff
- Or, include DR program in agreement with customers
 - Provide documentation to MPSC
 - Modified peak demand must be provided to EDC for forecast to MISO
- May require installation of communications and other hardware
- Must perform when called on by MISO, or MISO may impose penalties

AES Shortages Four Years Forward

- If AES is short in any of four planning years Jun. 1, 2018 – May 31, 2022, amount of shortage is covered by utility
- **Example:** AES is short 5 MW in *any* of those four years; 5 MW of ROA load pays capacity charge starting June 1, 2018 for the term of the capacity charge
- AES responsibility for those 5 MW ceases June 1, 2018

APPENDIX

- **AES:** Alternative Energy Supplier
- **CONE:** Cost of New Entry
- **DR:** Demand Response
- **EDC:** Electric Distribution Company
- **EE:** Energy Efficiency
- **FRAP:** Fixed Resource Adequacy Plan
- **LCR:** Local Clearing Requirement
- **LOLE:** Loss of Load Expectation
- **LRZ:** Local Resource Zone
- **LSE:** Load Serving Entity
- **MECT:** Module E Capacity Tracking
- **MISO:** Midcontinent Independent System Operator
- **MPSC:** Michigan Public Service Commission
- **PLC:** Peak Load Contribution
- **PRA:** Planning Resource Auction
- **PRMR:** Planning Reserve Margin Requirement
- **ROA:** Retail Open Access
- **SRM:** State Reliability Mechanism
- **ZRC:** Zonal Resource Credit

MPSC Staff
11:30 a.m.

Next Steps

- July 10 – Technical Conference IV
- August 1 – Staff Report and Recommendations filed regarding the accomplishments achieved during the technical conference
- August 15 – Comments on Staff Report & Recommendations
- August 30 – Reply comments
- September 28 – Order for establishment of the capacity demonstration process