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Powering Strong Communities

The Future Capacity Market and Electricity Market Reform

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APPA Members

- 1,400+ public power utilities
- Retail service in 49 states
- Very large to very small systems
- *Median* size: 1,977 meters
- 14.4% of all sales to electric consumers
- One-third of power is purchased
- We are strongest when we work together!



Public Power Capacity Market Perspective

- Not-for-profit entities with an obligation to serve load.
- Goals:
 - Retain ability to self-supply without impediments.
 - Mitigate price volatility and unreasonable costs.
 - Minimize complexity and avoid frequent rule changes.
- **Public power generally aligned with states, consumer advocates, end-use customers and renewable supporters.**

Eastern Capacity Market* Concerns

- Mandatory participation
- Frequent rule changes
- No differentiation among resource types or valuation of attributes
- Volatile prices
- Excess procurement
- **Minimum Offer Price Rule/Buyer-Side Mitigation**
- Capacity Performance (PJM)/Performance Incentives (ISO-NE)

*PJM Interconnection, ISO-New England, New York ISO

Resources Clearing ISO-NE & PJM Auctions (Unforced Capacity, Renewables Derated)

ISO-NE, 2018 Forward Capacity Auction (2021-22 Delivery Year)

Total = 35,000 MW

Solar = 86 MW (0.2% of total), Wind = 132 MW (0.4% of total)

EE & DR = 3,600 (10% of total)

New Resources = 688 MW (2% of total), 21 MW solar, 1 MW wind

PJM, 2018 Base Residual Auction, (2021-22 Delivery Year)

Total = 163,000 MW

Solar = 570 MW (0.3%), Wind = 1,416 (0.9%)

EE & DR = 14,000 (8.5% total)

New Resources = 1,400 (0.9 %) 2017/18 auction = 6,300 MW

Minimum Offer Price Rule

- Capacity market tariffs include “Minimum Offer Price Rule” or “Buyer-Side Mitigation” to address “buyer-side market power.”
- Places a minimum threshold on offers from new resources.
- Initially *not applicable to self-supply in PJM and ISO-NE*. (PJM also exempted state-sponsored resources for reliability purposes.)
- Only applicable to new natural-gas fired resources in PJM, but all resources in ISO-NE and lower part of NYISO.
- *Risk of Paying-Twice*
 - If a resource does not clear, an equal amount of capacity must be purchased by the Load-Serving Entity to meet its capacity obligation.

State Actions & Capacity Market Drama

Restructured states have sought to achieve a different resource mix than that produced by reliance on capacity and energy markets, resulting in ongoing efforts through the courts and at FERC to protect prices.

First Round: State-sponsored RFPs for new natural gas plants (CT, NY, NJ and MD).

Response: Tightening of MOPR rules in PJM; PJM-like MOPR in ISO-NE; stricter interpretation of BSM rules in NYISO.

Second Round: Zero Emissions Credits to existing nuclear power plants (NY, IL, NJ, CT); contracts for new renewable energy; offshore wind requirements.

Response: Merchant generator calls for expansion of the MOPR to existing resources; efforts to “accommodate” state-sponsored resources (ie, ISO-NE “CASPR”); **FERC finds PJM’s capacity market to be unjust and unreasonable because of “price suppression” caused by state programs.**

Will Price Support for Merchant Generation Bring Benefits?

- Primarily Natural Gas/Fuel Security and Diversity Concerns
- Higher Cost of Capital
- Non-Firm Contracts/Adequate Pipeline Capacity Concerns
- Price and Fuel Cost Projections May not Materialize
- Increase in Merchant Along with Surplus Capacity
- Is Risk Really Shifted Away from Consumers?

Why are the Capacity Markets Not Making Anyone Happy?

- No unified goal among the market participants and stakeholders.
- Capacity markets treat each megawatt the same vs. states and public power interest in specific types of resources.
- Complexity and frequent rule changes.
- Merchant developers seeking to achieve higher prices through market rule changes.
- FERC torn between promotion of merchant generator model and accommodation of states.
- RTOs expressing concerns about “fuel security” and heavy reliance on natural gas.

APPA Proposal

- Transition mandatory capacity markets to residual, voluntary market.
- Near-term procurement close to the delivery year.
- Primary procurement of capacity through a portfolio of contracts.
- No buyer-side mitigation.
- Load-serving entities subject to resource adequacy requirements with penalties for non-compliance.
- Public power continues to self-supply unimpeded, subject to resource adequacy requirements.
- Retail choice states will expand resource procurement, such as through integrated resource planning requirements or portfolio standards fulfilled by LSEs or direct procurement.

INTERESTING GENERATING CAPACITY DATA

What Has Been Built Recently?

Eastern RTO New Capacity: 2016-17, Net Summer Capacity

	Hydro-power	Natural Gas	Solar	Storage	Wind	Other	Total	% of RTO Capacity
MW of Net Summer Capacity								
PJM								
Contracts/CS			560.4	7.0	172.8	9.7	749.9	9.8%
Ownership	44.0	1,402.7	101.8			6.0	1,554.5	20.4%
Merchant	-	4,778.3	34.7	48.3	462.0	-	5,323.3	69.8%
% of Merchant		89.8%	0.7%	0.9%	8.7%	0.0%	100.0%	
Total	44.0	6,181.0	696.9	55.3	634.8	15.7	7,627.7	100.0%
% of PJM	0.6%	81.0%	9.1%	0.7%	8.3%	0.2%	100.0%	
ISO-NE								
Contracts/CS	3.6	12.8	196.3	2.6	412.1	11.3	638.7	89.3%
Ownership	-	2.0	41.6	2.0	-	14.7	60.3	8.4%
Merchant	-	-	-	16.2	-	-	16.2	2.3%
Total	3.6	14.8	237.9	20.8	412.1	26.0	715.2	100%
% of ISO-NE	0.5%	2.1%	33.3%	2.9%	57.6%	3.6%	100.0%	
NYISO								
Contracts/CS			63.8		77.7		141.5	94.5%
Ownership			3.0			5.3	8.3	5.5%
Total			66.8	-	77.7	5.3	149.8	100.0%
% of NYISO			44.6%		51.9%	3.5%	100.00%	

QUESTIONS AND FEEDBACK?

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