

American Municipal Power

Capacity Market Reform

This template is being provided in addition to the options matrix to help stakeholders provide their high-level design concepts in context with all Key Work Activities. This may cover all or parts of the RASTF key work activities and seasonal capacity and should focus on design objectives and solution options. We are still in the solution options phase of CBIR. Therefore, this should not be proposals or packages at this time.

Concept Overview

A high-level summary to add context needed to help stakeholders understand your high-level design concept.

Conceptual Resource Adequacy Market Design that addresses the following key guiding principles:

- A sustainable market design to procure all required capacity to maintain **[at least a 1-in-10]** level of reliability standard on behalf of all loads.
- Reduces the administrative burden that restricts flexibility.
- Market signals that account for risk and supply choice preferences to minimize out of market costs.
- Recognize reliability attributes and delivery capability of the evolving generation mix of new and retiring resources.
- Recognize that exogenous events are a reality.
- Maintain inter-relationship with energy and ancillary service markets
- Recognize that states have different, if any, renewable targets that should require LSEs to procure certain types of capacity.

How does your concept address reliability needs?

See principles listed above.

How do you frame the definition of a capacity product in your concept?

At this time, redefinition of the capacity product is likely necessary to make the energy transition successful. Definition of a capacity product may now need to incorporate reliability attributes and deliverability constraints, therefore obligations and penalties for performance must be aligned properly to the product definition. The following high-level design concepts address these new requirements:

- Reliability Attributes (Load Following, Fast Start, Fuel Neutral)

American Municipal Power

- ELCC Accreditation
- Capacity Market Must Offer Obligations

American Municipal Power

Key Work Activity 2 - Reliability Risk and Risk Drivers

Determine the types of reliability risks and risk drivers to be considered by the capacity market and how they should be accounted for.

Option 1	Option 2	Option 3
Reliability Attributes (Load Following, Fast Start, Fuel Neutral)	<i>Review probabilistic analysis to determine reliability targets</i>	
Requirements for Option	Requirements for Option	Requirements for Option
<i>Use this area to describe whether the option has any critical dependencies with other key work activities or is incompatible with another option or concept.</i>		

American Municipal Power

Key Work Activity 3 - Procurement Metric and Level

Determine the desired procurement metric and level to maintain the desired level of reliability.

Option 1	Option 2	Option 3
<i>Review Brattle Report VRR recommendations</i>	<i>Short Term Reliability Targets</i>	
Requirements for Option	Requirements for Option	Requirements for Option
<i>Use this area to describe whether the option has any critical dependencies with other key work activities or is incompatible with another option or concept.</i>	Obligations of Capacity Resources	

American Municipal Power

Key Work Activity 4 – Performance Assessment

Determine the performance expected from a capacity resource.

Option 1	Option 2	Option 3
Requirements for Option	Requirements for Option	Requirements for Option
<i>Use this area to describe whether the option has any critical dependencies with other key work activities or is incompatible with another option or concept.</i>		

American Municipal Power

Key Work Activity 5 – Qualification and Accreditation

Determine the qualification and accreditation of capacity resources.

Option 1	Option 2	Option 3
ELCC Accreditation	ELCC for thermal resources	
Requirements for Option	Requirements for Option	Requirements for Option

American Municipal Power

Key Work Activity 6 – Obligations of Capacity Resources

Determine the desired obligations of capacity resources.

Option 1	Option 2	Option 3
Capacity Market Must Offer Obligations		
Requirements for Option	Requirements for Option	Requirements for Option
Qualification and Accreditation Procurement Metric and Level		

American Municipal Power

Key Work Activity 7 – Enhancements to the Capacity Procurement Process

Determine if there are needed enhancements to the capacity procurement process.

Option 1	Option 2	Option 3
<p>Length of the capacity procurement process</p> <ul style="list-style-type: none"> • Consider less than 3-year procurement, Annual Residual Auction (ARA) • Reference: Nov2017 AMP proposal at CCPSTF 	<p>Locational Resource Reliability Requirement Procurement</p> <ul style="list-style-type: none"> • LSEs procure capacity via self-supply, RFPs, bilateral transactions, exchanges, etc. 	
<p>Requirements for Option</p>	<p>Requirements for Option</p>	<p>Requirements for Option</p>
<p>Dependencies with Seasonal Capacity Procurement</p>	<p>Procurement Metric and Level</p>	

American Municipal Power

Seasonal Capacity Construct

Items related to a seasonal capacity market construct.

Option 1	Option 2	Option 3
<p>Seasonal Capacity Construct with a mix of annual and sub-annual capacity requirements.</p> <ul style="list-style-type: none"> • Annual requirement to pre-determined amount. • Sub-annual requirements include four (4) seasons • 3-year forward design (unless changed in other RASTF discussions) • Sum of LOLE across all months ≤ 0.10 Annual LOLE • Generation can offer: Annual Capacity (would clear first) • Any uncleared capacity that has a must offer requirement must participate in the subannual auctions • Annual capacity sets ceiling price for monthly auctions • Option 1: Annual Capacity clears relative to a vertical line based on the VRR curve pegged at $IRM + X\%$ (e.g., Point B on VRR curve). Monthly capacity procured via declining clock auction. Quantity cleared based on quantity between Point B and Point C on VRR curve 		

American Municipal Power

<ul style="list-style-type: none"> Option 2 6/20/2022 7 • Quantity of capacity procured based on remaining requirement between the “baseload” quantity cleared in the BRA and the sub-annual period’s peak (either monthly or quarterly) plus reserves • Sub-annual capacity would clear based on declining clock auction 		
Requirements for Option	Requirements for Option	Requirements for Option
Procurement Metric and Level		

American Municipal Power

Key Work Activity 9 – Supply-side Market Power Mitigation Rules

Determine if supply-side market power mitigation rules in the capacity market need to be enhanced.

Option 1	Option 2	Option 3
MSOC defined by a unit specific algorithmic, verifiable method. No default value.		
Requirements for Option	Requirements for Option	Requirements for Option
<i>Use this area to describe whether the option has any critical dependencies with other key work activities or is incompatible with another option or concept.</i>		