Attachment A

Annual Capacity Market

Randy Wyatt

Market Product Specialist, Capacity Market Products

New York Independent System Operator

ICAP Working Group

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KCC

Overview

Background

- **The advance notice period of generating units not being available for a peak in a next Summer Capability Period may not be sufficient to allow timely identification, design, and implementation of efficient solutions to resulting reliability needs**
  - ***PSC requires mothball/retirement notification period of 180 days for generators ≥ 80MW and 90 days for <80 MW***
  - ***The forward components of NYISO's existing capacity market are not mandatory or physical, providing little if any insight to potential future retirements***

Concept Review

- **Assess the concept of an annual capacity market that requires units to make a mandatory one year financial commitment in order to participate in the ICAP market**
- **Evaluate different auctions dates and horizon periods and determine whether any of the annual capacity market concepts is an efficient and effective approach:**
  - ***To confirm that a given resource will be in the market for a specific future Summer Capability Period***
  - ***To address identified resource adequacy or other system needs that arise due to the exit of the resource.***

Annual Market Design Concepts

Design 1: A similar market structure to the existing ICAP Market

- *Summer and Winter Capability Period Auctions become mandatory, and both would be run immediately consecutive to each other in March before the Summer Capability Period*
- *Spot reconfiguration auctions one time per month; no other monthly auctions*
- *Suppliers must identify the physical capacity (specific units and associated MW) in all auctions*

Design 2: Similar to Design 1 above, except :

- *Change the capability year to November – October, i.e., run the Winter and following Summer Capability Period Auctions immediately consecutively in September before the Winter Capability Period*

Design 3: Similar to Design 1 above, except :

- *Change to a 12 month horizon period to provide additional advanced notice that a given generating resource will not be in the market*
- *Run the immediately consecutive auctions in April instead of March, which would provide time for the NYISO to utilize a newer Gold Book load forecast in setting the target MW in the forward auctions*

Auction Timing Summary

						Existing Capability Yr.						
						Summer1			Winter1		Summer2	Winter2
Auction Type	Horizon Period (mos.)	Commit-ment Period (mos.)	Summer 2 Out of Market notice (mos.)	Mar	Apr	May - Aug	Sep	Oct	Nov - Apr		May - Oct	Nov - Apr
Existing Capability Period Auction - Summer	1	6	0	S								
Existing Capability Period Auction - Winter	1	6	0				W					
#1 - Annual Capacity Auction - March	1	12	0	S/W								
#2 - Annual Capacity Auction - September	1	12	7				W/S					
#3 - Annual Capacity Auctions - April - Similar to Design 1, with a one year horizon period	12	12	12		S/W*						commitment	periods

Legend: S= Summer Auction, W=Winter Auction, = Horizon Period, = Summer Commitment Period, = Winter Commitment Period

* shifted the Auction from March to April to get the benefit of the new Gold Book load forecast.

Notes to table:

- Auction Out of Market notice column is the number of months that the auction precedes the Summer2 Capability Period, provided that the commitment period includes the Summer2 Capability Period
- PSC mandated notice of retirements ≥ 80MW is 6 months, and 90 days for <80 MW
- The advanced notice that a unit will not be available for the next summer capability period is the greater of the auction out of market notice and PSC retirement notice period except
  - *When the unit buys out of its obligation in a spot reconfiguration auction*
  - *When a cleared resource becomes ICAP Ineligible, resulting in a shorter time period*

Market Design Concepts – Pros and Cons

- **Design 1 – Existing Market Structure with mandatory immediately consecutive Summer and Winter Capability Period Auctions in March**
  - ***Pros***
    - **Incremental change to existing market structure**
    - **Summer1 and Winter1 auctions run back to back in March resulting in a 12 month financial commitment**
  - ***Cons***
    - **The commitment period for this auction does not include the summer after next; *i.e.,* Summer2, and hence this auction:**
      - Does not increase the notice period of the PSC mandated retirement notice period, and therefore it will not enhance the ability to identify efficient and effective solutions to address system needs that may arise from a unit not being in the market
    - **Resource can buy out of its Summer1 and Winter 1 obligations in the reconfiguration (spot) auctions, *i.e.*, the generator is not physically committed to run**

Market Design Concepts – Pros and Cons

- **Design 2 – Existing Market Structure with mandatory immediately consecutive Winter and Summer Capability Period Auctions in September**
  - ***Pros***
    - **Financially commits a resource to being in the market during the next Summer Capability Period, i.e. Summer2**
    - **May provide 7 months advance notice for the first month of the next Summer Capability Period, and 12 months advance notice for the last month**
  - ***Cons***
    - **7 months advance notice is only 1 month more than the existing 6 Month PSC mothball/retirement notice requirement for generators ≥ 80 MW**
    - **Resource can buy out of its obligation in the reconfiguration auctions, so it does not increase the time to identify efficient and effective solutions to system needs arising from the resource not being in the market**
    - **Changes Capability Year to November – October which is further out of synch with ISO-NE and PJM than the present one month difference**
    - **Changes internal planning and operations processes and timelines**

Market Design Concepts – Pros and Cons

- **Design 3 – Annual Market Structure Similar to Design 1, but with a one year horizon period**
  - ***Pros***
    - Creates 12 month forward look from date of auction, double the PSC mothball/retirement notification period for resources ≥80MW
    - Financially commits a resource to being in the market during the Summer Capability Period after next, i.e. Summer2
  - ***Cons***
    - Risk in the load forecast increases as the horizon period is increased, and will be reflected in the market with higher prices (all other things being equal)
    - One year horizon period may not allow sufficient time to address the reliability needs that might result from an unanticipated removal of a resource
    - Only 6 months more advance notice than current PSC retirement notification for units >80MW, only a marginal improvement
    - Resource can buy out of its physical obligation in the reconfiguration auctions, so it does not increase the time to identify more efficient and effective solutions to system needs arising from the resource not being in the market

Conclusions

- **Annual Capacity Market, without a forward horizon period is unlikely to provide sufficient enhanced visibility to what resources will be participating in the next peak Capability Period (Summer2) to warrant the change in market design**
  - ***At best, the annual capacity market structure will provide only 1 month additional notice over the existing PSC notice requirement***
  - ***An additional 1 month notice is unlikely to provide sufficient additional time to explore options and take actions to address the removed resource***
  - ***Benefits do not seem to be commensurate with the cost***

- **An Annual Capacity Market structure could be designed with a sufficient horizon period to provide enough time to enable system or resource changes to be made to address the reliability or system needs resulting from an unanticipated loss of a resource**
  - ***The Design 3 one year horizon period may not allow sufficient time to address reliability needs resulting from unanticipated loss of a resource***

- **All Annual Market structures would necessarily require reconfiguration auctions, which would allow resources to buy out of their physical commitment, eliminating the advance notice and, in turn, not enhancing the opportunity to identify, design, and implement efficient solutions to reliability needs resulting from the unanticipated loss of a resource**

- **Moving from the existing ICAP market design to an Annual Market Structure with a 12 month commitment period does not substantially increase notice period for generator retirements**

Questions/Comments/Suggestions

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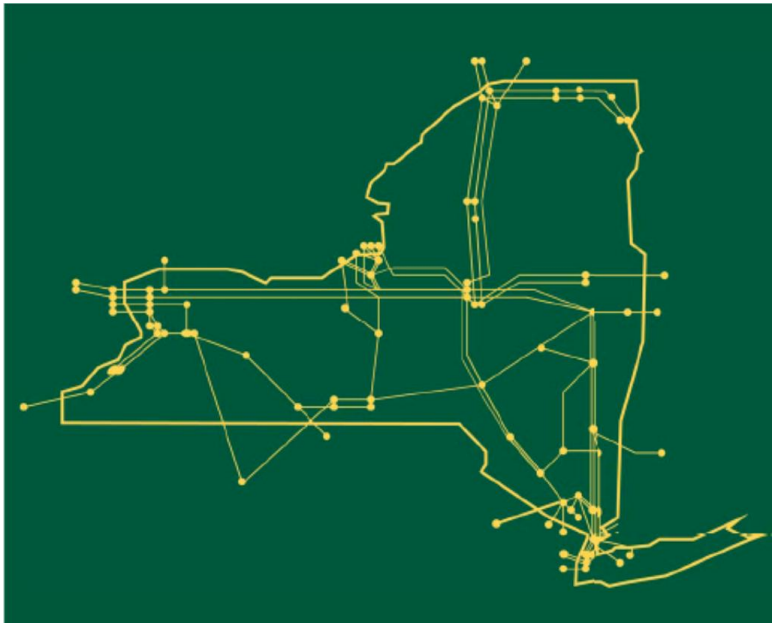

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