

Proposed ICAP Buyer-Side Mitigation Modifications – Repowering and Replacement

Randy Wyatt

Market Product Specialist, Capacity Market Products

New York Independent System Operator

ICAPWG

May 8, 2014

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Topics - Repowering/Replacement

- ◆ **Follow up to April 28 ICAPWG meeting**
 - *Forecast Example*

- ◆ **Incremental Changes**
 - *Reuse of Non-Prime Mover Equipment*

- ◆ **Changes from March 3 Tariff Posting**
 - *23.4.5.7.7.1.3 – Reuse of Equipment*

- ◆ **Next Steps**

Spot Forecast for Repowering and Replacement

- ◆ **General Rule for Exiting Capacity Facilities (ECFs)**
 - The ISO will exclude MW associated with an ECF from the forecast
 - *When MW of Capacity of an ECF is less than or equal to the MW of Capacity of its Repowering or Replacement Examined Facility (RepowerEF or ReplaceEF) the total MW of Capacity of the ECF are excluded from the forecast for all Examined Facilities, or*
 - *When MW of Capacity of the ECF is greater than the MW of Capacity associated with its RepowerEF or ReplaceEF*
 - ONLY the MW of Capacity of the ECF equal to the MW of Capacity associated with its RepowerEF or ReplaceEF are excluded from the forecast used to evaluate all Examined Facilities other than that particular ReplaceEF, while
 - The total MW of Capacity of the ECF are excluded from the forecast used to evaluate its ReplaceEF

Example 1 – ECF MW \leq REF MW

Unit Y= 70 MW, a RepowerEF, associated with ECF Unit X = 30 MW

Unit K= 60 MW, a ReplaceEF, associated with ECF Unit L = 40 MW

Unit Z= 90 MW, another new facility in the Class Year.

No Expected Retirements

Existing Goldbook MWs of Capacity = 10000 MW

Y or K or Z

Forecasts

- ◆ Existing Facilities: 10000 MW
- ◆ Expected Retirements: (0 MW)
- ◆ Examined Facilities: $+Y+K+Z = 70+60+90 =$ 220 MW
- ◆ IF $ECF \leq$ associated REF MW: Remove ECF MW
 $X + L = 30 + 40 =$ (70 MW)
- ◆ If $ECF >$ associated REF MW,
 and forecast not for associated REF:
 Remove ECF MW = REF MW
 None
- ◆ Net forecast = $10000-0+220-100 =$ 10150 MW

Legend: ECF= "Exiting Capacity Facility", REF= "Repowering or Replacement Facility", ReplaceEF= Replacement Examined Facility

Example 2 – One Retirement; One

Repowering, One Replacement - both ECF MW > REF MW

Unit W = 10 MW, a RepowerEF, associated with ECF Unit X = 30 MW,

Unit M = 100 MW, a ReplaceEF, associated with ECF Unit N = 400 MW,.

Unit Z = 90 MW, another new facility in the Class Year.

Unit P = 50 MW, Expected Retirement

Existing Goldbook MWs of Capacity = 10000MW

- ♦ Existing Facilities: (including the ECF's X+N):
- ♦ Expected (noticed) Retirements:
- ♦ Examined Facilities: $+W+M+Z = 10+100+90 =$
- ♦ IF ECF < associated REF MW: Remove ECF MW
IF ECF > associated REF MW, and
forecast not for the associated ReplaceEF (Unit M),
remove only ECF MW = REF MW
RepowerEF Unit W
ReplaceEF Unit M
IF ECF > associate REF MW, and
forecast for the associate ReplaceEF (Unit M),
remove all ECF MW

<u>Unit Z Forecast</u>	<u>Unit M Forecast</u>
10000 MW	10000 MW
(50 MW)	(50 MW)
200 MW	200 MW
n/a	n/a
(10MW)	(10MW)
(100 MW)	n/a
n/a	(400 MW)

- ♦ Net forecast for Units Z & W: $10000-50+200-10-100 =$

10040 MW

- ♦ Net Forecast for unit M: $10000-50+200-10-400 =$

9740 MW

Legend: ECF= Exiting Capacity Facility, REF= Repowering or Replacement Examined Facility, ReplaceEF= Replacement Examined Facility

Example 3 – One Retirement and 2 Replacement Facilities with ECF MW > REF MW

Unit S = 10 MW, a ReplaceEF, associated with ECF Unit T = 30 MW,
Unit M = 100 MW, a ReplaceEF, associated with ECF Unit N = 400 MW,.
Unit Z = 90 MW, another new facility in the Class Year.
Unit P = 50 MW, Expected Retirement

Existing Goldbook MWs of Capacity = 10000MW

	<u>Unit Z Forecast</u>	<u>Unit S Forecast</u>	<u>Unit M Forecast</u>
♦ Existing Facilities: (including the ECF's T+N):	10000 MW	10000 MW	10000 MW
♦ Expected (noticed) Retirements:	(50 MW)	(50 MW)	(50 MW)
♦ Examined Facilities: +S+M+Z = 10+100+90 =	200 MW	200 MW	200 MW
♦ IF ECF < associated REF MW: Remove ECF MW	n/a	n/a	n/a
♦ IF ECF > associated REF MW			
Remove MW = ReplaceEF Unit S	(10 MW)	n/a	(10 MW)
Remove all of ECF Unit T	n/a	(30 MW)	n/a
Remove MW = ReplaceEF Unit M	(100 MW)	(100 MW)	n/a
Remove all of ECF Unit N	n/a	n/a	(400 MW)
♦ Net Z forecast : 10000-50+200-10-100 =	10040 MW		
♦ Net S Forecast: 10000-50+200-100-30=		10020 MW	
♦ Net M Forecast: 10000-50+200-10-400=			9740 MW

Legend: ECF= Exiting Capacity Facility, REF= Repowering or Replacement Examined Facility, ReplaceEF= Replacement Examined Facility

Reuse of Non- Prime Mover Equipment

- ♦ Stakeholders asked what if any restrictions exist on ECF non-prime mover equipment
 - *When non-prime mover equipment from an ECF is reused in a new Examined Facility (i.e., other than the Repowering or Replacement Examined Facility) in a Mitigated Capacity Zone, the NYISO will impute a cost for the reused equipment as if it were new when calculating the Unit Net CONE in the mitigation exemption test pursuant to section 23.4.5.7.2.*
- ♦ This restriction is to eliminate the potential for the reuse of Exiting Capacity Facility (ECF) Equipment to be used to lower the Unit Net CONE of future examined facility.
 - *The potential exists to realize cost advantages by reusing site infrastructure and balance of plant equipment from an ECF*
 - *These advantages should not be used to lower the offer floor of a mitigated unit or to secure an exemption outright*

Incremental Changes to 23.2 Definitions

- ♦ In section 23.2 For purposes of Section 23.4.5 of this Attachment H, “Unit Net CONE” shall mean localized levelized embedded costs of a specified Installed Capacity Supplier, including interconnection costs, and for an Installed Capacity Supplier located outside a Mitigated Capacity Zone including embedded costs of transmission service, in either case net of likely projected annual Energy and Ancillary Services revenues, as determined by the ISO, translated into a seasonally adjusted monthly UCAP value using an appropriate class outage rate. **When determining the Unit Net CONE of an Examined Facility, the cost associated with any equipment from an Exiting Capacity Facility shall be the cost of purchasing such equipment new.**

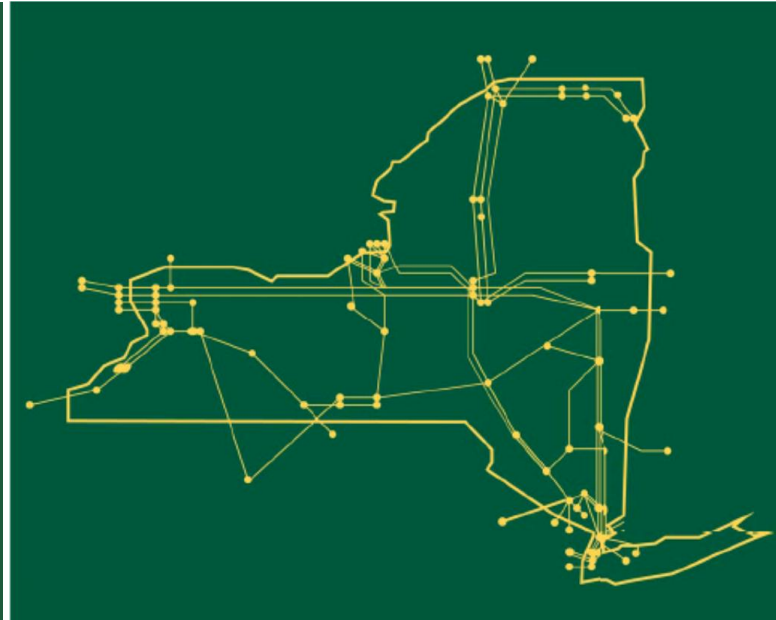
Tariff revisions

- ♦ MST Section 23.2
- ♦ MST Section 23.4

Next Steps

- ◆ May BIC

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