

BEN GRIFFITHS | NEPOOL MARKETS COMMITTEE | OCTOBER 15-16, 2025

Ensuring Market-Relevant COPT Values in the Transition to the Prompt Auction Era

Adjusting the Capacity Offer Price Threshold Formula for CCP 19

A surgical change to the COPT for CCP 19

- Recall the discussion at the September MC,
 - The Capacity Offer Price Threshold or COPT (née DDBT), sets a price threshold below which capacity suppliers can submit a capacity offer without requiring an in-depth review by the IMM
 - The ISO proposes that the COPT for CCP 2028–29 will be based on pricing information from FCA 18; information which will be four years old
 - A 4-year old market price is **not** the best indicator that the region has of system conditions in 2028
 - To remedy, we had proposed to set the COPT using the most up-to-date Annual Reconfiguration Auction price (ARA 3; March 2027), rather than FCA 18
- Based on Committee feedback, we propose to simplify our proposal and fix the **COPT price for CCP 2028–29 at \$4.984/kWm**
 - This value is the simple average of four inputs: the actual clearing prices from the two ARAs held in Summer 2025 and the implied Common-Value Components for those same auctions
 - These values are revised downward slightly from the \$5.12/kWm value we previously shared with the committee, based on various feedback, corrections, and updates
- This fixed COPT would *only* apply to ACA 19. The amendment preserves the broader tariff framework and leaves the general COPT formula unchanged for future auctions

We need to do something

- The CAR-PD proposal must be robust and able to stand on its own at the time of filing. A COPT built on four-year-old data does not meet that standard
 - LS is sympathetic to the view that CAR-PD is a steppingstone toward a seasonal market. That said, seasonal market approval is not assured and there is a reasonable chance ACA 19 will be conducted under the rules in this CAR-PD filing
- The ISO's proposal will produce a COPT for CCP 2028-29 that is, admittedly, a number—but a number that is logically unsound
 - The shift from a forward auction (with descending clock) to a prompt auction (with sealed bid) makes FCA 18 and ACA 19 conceptually incompatible
 - It doesn't make sense to have a COPT which mixes and matches components from the current forward regime and a new prompt one
- Our proposed approach, relying on a fixed COPT for CCP 2028-29, helps with the transition to a prompt market

ARAs indicate tightening conditions

- Two ARAs were run in the summer of 2025. Recent market outcomes have:
 - Prices above \$5.00/kWm, significantly higher than the base auctions associated with these delivery periods
 - ~30% less surplus over Net ICR in ARAs compared to base auctions

Auction	RoP Clearing Price (\$/kWm)	Net ICR (MW)	Clearing Quantity (MW)	Surplus over Net ICR (MW)
CCP 2026/27				
FCA 17	\$3.580	30,305	31,370	1,065
ARA 2	\$5.000	30,600	31,330	730
Dif	+\$1.420	+295	-40	-335
CCP 2027/28				
FCA 18	\$2.590	30,550	31,556	1,006
ARA 1	\$5.129	30,415	31,106	692
Dif	+\$2.540	-135	-449	-314

Data Sources:

ICR values: https://www.iso-ne.com/static-assets/documents/2016/12/summary_of_historical_icr_values.xlsx
Base Auction Results: <https://www.iso-ne.com/about/key-stats/markets#fcaresults>
Clearing Prices and Quantities for ARA 2: <https://www.iso-ne.com/transform/csv/fcmara?cp=2026-27&ara=ARA2>
Clearing Prices and Quantities for ARA 1: <https://www.iso-ne.com/transform/csv/fcmara?cp=2027-28&ara=ARA1>

Common Value Component Methodology

- As discussed at length by Calpine at recent MC meetings, CVC represents the expected value of scarcity revenues under PFP. The CVC formula, producing a value in \$/kWm units, is:

$$CVC = \frac{\text{Balancing Ratio} \times PPR \times \text{Scarcity Hours}}{12,000}$$

- To estimate the implied CVC for the ARAs, we need values for the expected Balancing Ratio, PPR, and expected number of scarcity hours:
 - **PPR:** for CCPs 26/27, 27/28, and 28/29, the PPR is fixed at **\$9,337/MWh**
 - **Balancing Ratio:** we rely on the **84.9%** “peak load” ORTP BR, calculated as part of the 2020 Net CONE reset. The ORTP BR is meant to reflect the system “as is”, with +791 MW of surplus, rather than “at criterion.” This BR excludes shortages due to transient and winter scarcity conditions.
 - **Scarcity Hours:** Estimates of expected peak load scarcity hours are derived from ISO’s published *Expected Annual Hours of System Operating Reserve Deficiencies*, paired with the corresponding system surplus from each relevant ARA (see appendix). Unlike the ORTP analysis, we exclude 1.4 hours of scarcity related to transient and winter scarcity conditions.

Data Sources:

ORTP BR, Winter & Transient Hours : Slides 11 and 14 https://www.iso-ne.com/static-assets/documents/2020/10/a00_iso_presentation_scarcity_hours_and_balancing_ratios.pptx

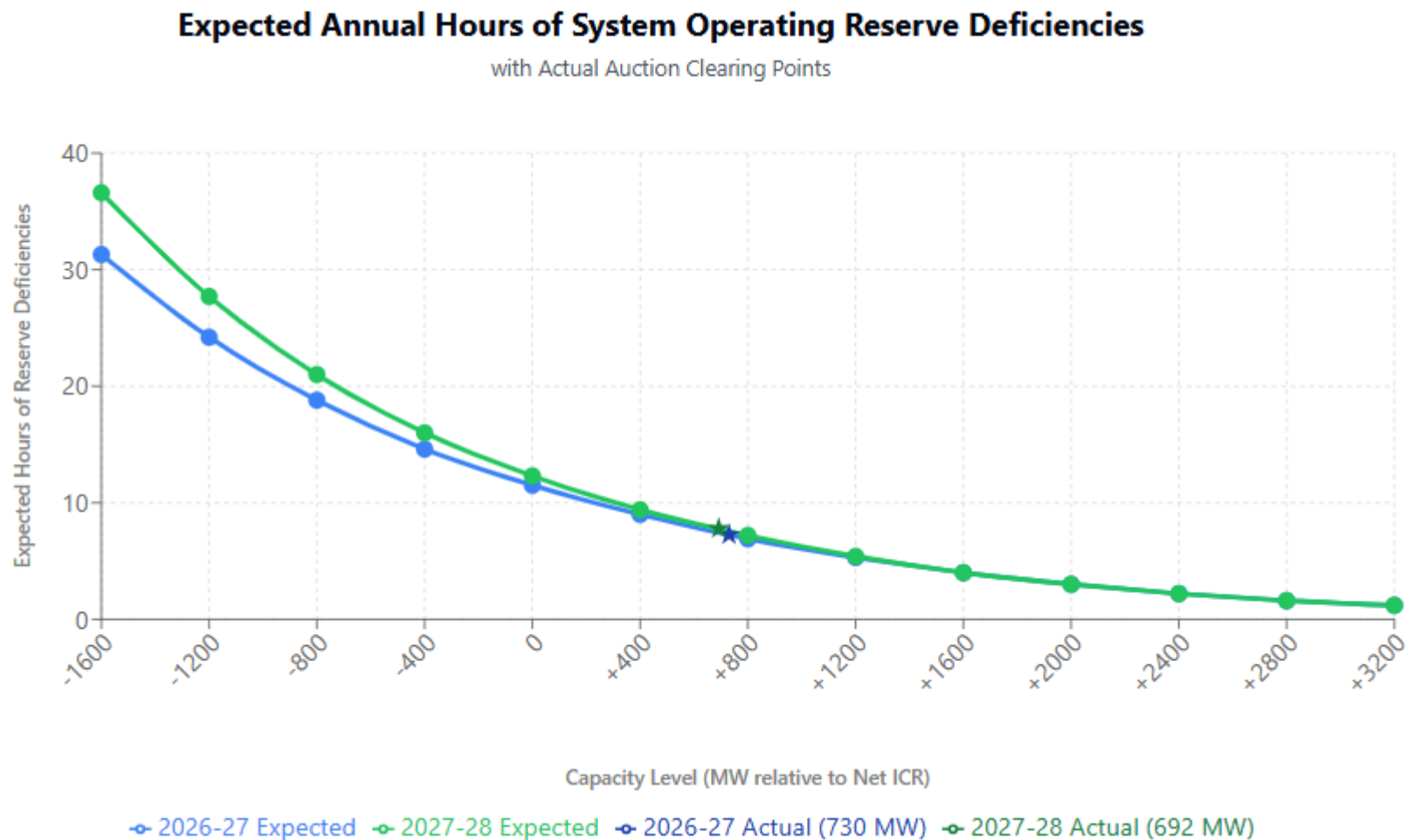
Expected Scarcity Hours & Resulting CVCs

ARA-2 (CCP 2026/27)

- Assuming linear interpolation, +730 MW yields 7.265 hours of “peak load” scarcity
- CVC = \$4.799/kWm

ARA-1 (CCP 2027/28)

- Assuming linear interpolation, +692 MW yields 7.582 hours of “peak load” scarcity
- CVC = \$5.009/kWm



Final COPT for CCP 2028–29 = \$4.984/kWm

- The simple average of clearing prices and CVCs is \$4.984/kWm

Auction	ARA Clearing Price (\$/kWm)	CVC (\$/kWm)
CCP 2026/27	\$5.000	\$4.799
CCP 2027/28	\$5.129	\$5.009
4-Value Average	\$4.984	

- Both CCPs have differences of less than 5% between observed prices and CVC opportunity costs
- Convergence demonstrates that the proposed COPT value is both simple and robust
 - Alignment suggests that CVC framework accurately captures the economic forces driving auction clears
- Prices and CVC indicate that the market expects tighter conditions with higher level of scarcity than the base auctions run in 2023 and 2024
 - Intuitively makes sense given news around delays in new resources, suggesting the system is getting tighter, as well as the June 24, 2025 PfP event showing significant exposure even for generally good performing resources

A surgical change to the COPT for CCP 19

ISO Proposed Language:

III.A.22.2.1. Capacity Offer Price Threshold.

(e) For the purpose of determining a preliminary value of the Capacity Offer Price Threshold for the Annual Capacity Auction associated with the Capacity Commitment Period beginning on June 1, 2028, the “immediately preceding Annual Capacity Auction” shall mean the Forward Capacity Auction associated with the Capacity Commitment Period beginning on June 1, 2027.

Amendment Language strikes all of III.A.22.2.1(e) and replaces it with a single sentence setting the COPT for CCP 2028–29

III.A.22.2.1. Capacity Offer Price Threshold.

(e) The final value of Capacity Offer Price Threshold for the Annual Capacity Auction associated with the Capacity Commitment Period beginning on June 1, 2028 is \$4.984/kW-month. ~~For the purpose of determining a preliminary value of the Capacity Offer Price Threshold for the Annual Capacity Auction associated with the Capacity Commitment Period beginning on June 1, 2028, the “immediately preceding Annual Capacity Auction” shall mean the Forward Capacity Auction associated with the Capacity Commitment Period beginning on June 1, 2027.~~

Conclusion

- The CAR-PD proposal should be robust and able to stand on its own *at time of filing*. A COPT relying on four-year old data does not achieve this goal
 - LS is sympathetic to view that the CAR-PD design is a steppingstone to an eventual seasonal market. That said, approval of a seasonal market is not assured and there is a reasonable chance that ACA 19 will be run using the rules including in the present CAR-PD filing
- Adjusting the COPT for CCP 2028–29 using a blend of ARA and CVC values reflects a more timely view of demand, supply, and reliability conditions. It also provides clarity and certainty for market participants without engendering the overall CAR-PD market design
- This is a one-time, targeted fix that it preserves the broader tariff framework and leaves the general COPT formula unchanged for future auctions, however much other changes are warranted

Peak Load Expected Scarcity Hours by CCP

**Table 1: Estimated Annual Hours of System Operating Reserve Deficiencies
for 2026-2027 CCP**

Capacity Level	Expected	5/95	50/50	95/5
Net ICR + 3,200 MW	1.2	0.5	1.0	2.7
Net ICR + 2,800 MW	1.6	0.6	1.3	3.5
Net ICR + 2,400 MW	2.2	0.8	1.9	4.6
Net ICR + 2,000 MW	3.0	1.1	2.6	6.0
Net ICR + 1,600 MW	4.0	1.6	3.5	7.6
Net ICR + 1,200 MW	5.3	2.3	4.8	9.7
Net ICR + 800 MW	6.9	3.4	6.3	12.4
Net ICR + 400 MW	9.0	4.8	8.1	15.7
Net ICR	11.5	6.2	10.4	19.7
Net ICR – 400 MW	14.6	8.0	13.3	25.2
Net ICR – 800 MW	18.8	10.3	17.2	31.9
Net ICR – 1,200 MW	24.2	13.3	22.6	39.7
Net ICR – 1,600 MW	31.3	17.7	29.6	49.7

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Net ICR + 3,200 MW	1.2	0.5	1.0	2.6
Net ICR + 2,800 MW	1.6	0.6	1.4	3.6
Net ICR + 2,400 MW	2.2	0.8	1.9	4.6
Net ICR + 2,000 MW	3.0	1.1	2.7	6.1
Net ICR + 1,600 MW	4.0	1.7	3.7	7.7
Net ICR + 1,200 MW	5.4	2.5	5.0	10.0
Net ICR + 800 MW	7.2	3.5	6.5	13.0
Net ICR + 400 MW	9.4	4.9	8.6	16.8
Net ICR	12.3	6.7	11.2	21.5
Net ICR – 400 MW	16.0	8.9	14.9	27.3
Net ICR – 800 MW	21.0	11.5	19.7	35.2
Net ICR – 1,200 MW	27.7	15.7	26.4	44.5
Net ICR – 1,600 MW	36.6	21.8	35.2	56.5

Data Sources:

2026-27: https://www.iso-ne.com/static-assets/documents/2022/11/iso_memo_on_operating_reserve_deficiency_information_for_ccp_2026_2027.pdf

2027-28: https://www.iso-ne.com/static-assets/documents/100014/iso_memo_on_operating_reserve_deficiency_information_ccp_2027_2028.pdf