

Quadrennial Review Issues

MRC/MC

September 25, 2025

IMM



Monitoring Analytics

Impact of Extended Project Schedule

- **Discussions with GE have resulted in the conclusion that the expected total project schedule should be extended from 37 months to 65 months**
- **This increases carrying costs and therefore increases Gross and Net CONE.**
- **These slides include the results of incorporating the longer project schedule.**

IMM Package

In a well designed market, prices should reflect underlying supply and demand fundamentals

Reference Resource

- **CT with dual fuel capability**
 - 65 month total project schedule start of development to COD
 - 100% bonus depreciation
 - The use of CC Gross CONE as the maximum price is a market design choice that is not well supported
- **Forward E&AS**

IMM Package

VRR Curve

- **Maximum price (Point A) should be set at $1.5 \times \text{Net CONE}$, not to exceed Gross CONE**
- **Point B should be $0.5 \times \text{Maximum Price}$**
- **Point C should be \$0**



IMM & PJM Gross and Net CONE

	IMM CT Gross & Net CONE (\$/MW-Day)					
	EMAAC	SWMAAC	Rest of RTO	WMAAC	COMED	RTO
Gross CONE (ICAP)	\$526	\$505	\$483	\$474	\$561	\$510
Forward E&AS	\$126	\$271	\$362	\$325	\$203	\$273
Net CONE (ICAP)	\$400	\$234	\$121	\$149	\$358	\$237
Gross CONE (UCAP)	\$665	\$639	\$611	\$600	\$710	\$645
Net CONE (UCAP)	\$506	\$296	\$153	\$188	\$453	\$300
VRR Curve						
a1) Gross CONE	\$665	\$639	\$611	\$600	\$710	\$645
a2) 1.5 x Net CONE	\$759	\$445	\$230	\$283	\$679	\$449
Point A (99% of RR, min of a1,a2)	\$665	\$445	\$230	\$283	\$679	\$449
Point B (101.5% of RR, 0.5 x Point A)	\$333	\$222	\$115	\$141	\$340	\$225
Point C (104.5% of RR, \$0)	\$0	\$0	\$0	\$0	\$0	\$0

	PJM CT Gross & Net CONE (\$/MW-Day)					
	EMAAC	SWMAAC	Rest of RTO	WMAAC	COMED	RTO
Gross CONE (ICAP)	\$596	\$608	\$590	\$592	\$679	\$613
Forward E&AS (67th percentile)	\$159	\$343	\$394	\$320	\$214	\$361
Net CONE (ICAP)	\$438	\$265	\$195	\$271	\$465	\$228
Gross CONE (UCAP)	\$754	\$769	\$747	\$749	\$860	\$776
Net CONE (UCAP)	\$554	\$336	\$247	\$343	\$589	\$289
VRR Curve						
a1) 1.15 x Gross CONE - 0.75 x Net E&AS	\$718	\$560	\$483	\$557	\$785	\$526
a2) 0.2 x Gross CONE	\$151	\$154	\$149	\$150	\$172	\$155
Point A (99% of RR, max of a1,a2)	\$718	\$560	\$483	\$557	\$785	\$526
Point B (101.5% of RR, 0.5 x Point A)	\$359	\$280	\$242	\$278	\$393	\$263
Point C (106.0% of RR, \$0)	\$0	\$0	\$0	\$0	\$0	\$0

	PJM CC Gross & Net CONE (\$/MW-Day)					
	EMAAC	SWMAAC	Rest of RTO	WMAAC	COMED	RTO
Gross CONE (ICAP)	\$752	\$761	\$757	\$754	\$860	\$777
Forward E&AS (67th percentile)	\$347	\$607	\$660	\$561	\$411	\$616
Net CONE (ICAP)	\$403	\$155	\$97	\$192	\$449	\$140
Gross CONE (UCAP)	\$928	\$939	\$934	\$931	\$1,061	\$959
Net CONE (UCAP)	\$498	\$191	\$119	\$237	\$555	\$173
VRR Curve						
a1) 1.15 x Gross CONE - 0.75 x Net E&AS	\$744	\$520	\$463	\$550	\$841	\$502
a2) 0.2 x Gross CONE	\$186	\$188	\$187	\$186	\$212	\$192
Point A (99% of RR, max of a1,a2)	\$744	\$520	\$463	\$550	\$841	\$502
Point B (101.5% of RR, 0.5 x Point A)	\$372	\$260	\$231	\$275	\$420	\$251
Point C (106.0% of RR, \$0)	\$0	\$0	\$0	\$0	\$0	\$0

IMM Gross CONE with 65 month construction schedule and 100% bonus depreciation.

IMM forwards as of August 1, 2025.

COMED CT Gross CONE is levelized over 15 years. All other Gross CONE values are levelized over 20 years.

CT Unit Details

	Combustion Turbine
Model	GE Frame 7HA.03 CT
Description	CT with evaporative coolers, wet compression, SCR for NOx reduction, CO converter, and dual fuel capability
Configuration	1 × 0
Dual-Fuel Capability	Yes
Firm Gas Transportation Contract	No
ICAP by CONE Area (MW)	438 / 435 / 425 / 432 / 427
Net Heat Rate (Btu/kWh)	9,065
Equivalent Availability Factor (EAF)	88.9%
Depreciation	100% bonus depreciation
VOM	\$5.30/MWh VOM = \$0.40/MWh consumables + \$4.90/MWh major maintenance
Capacity Factor Limited	No
Construction Build Time	65 months

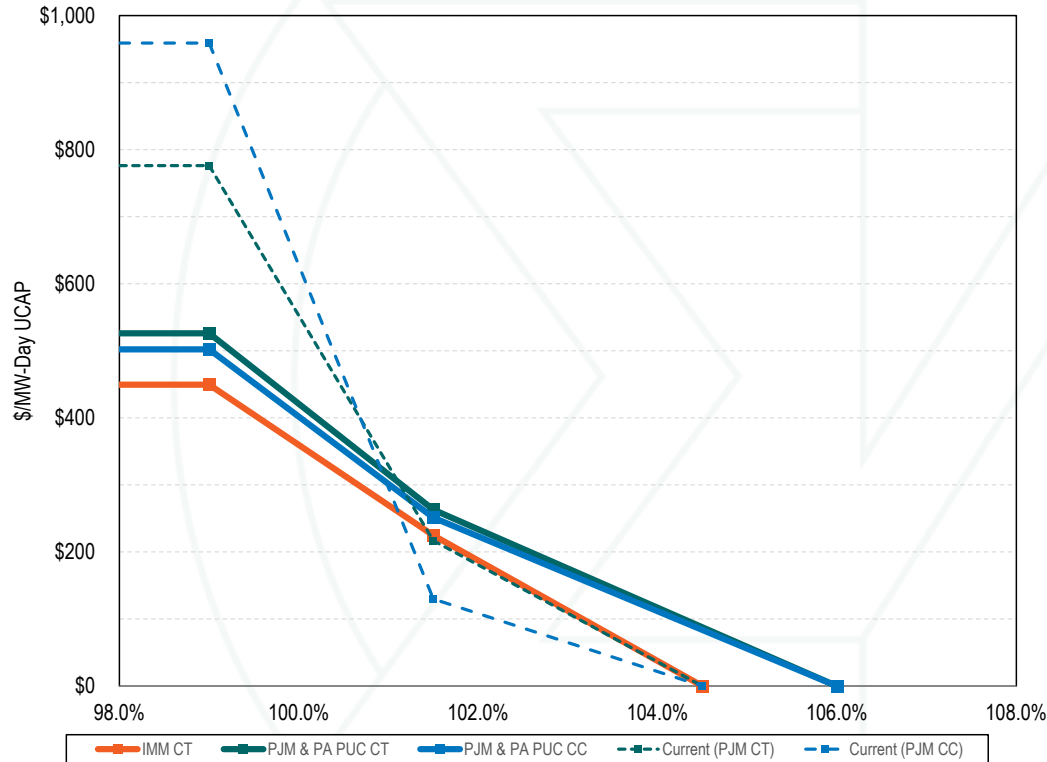
Key Differences in Gross CONE

- **Drawdown schedule**
 - IMM drawdown schedule built bottom up.
 - PJM drawdown schedule built top down.
- **GE payments**
 - IMM pays GE pre shipment payment in a single payment made 6 months prior to CT shipment.
 - PJM pays GE pre shipment payments equally distributed.
- **Other developments costs**
 - IMM development in first 12 months, EPC and GE payments in middle months, startup and commissioning in last 6 months.
 - PJM pays development and startup costs through the entire project schedule.

Key Differences in Gross CONE

- **Bonus depreciation per OBBBA tax law revisions**
 - **IMM**
 - 100% bonus depreciation used in year 1
 - **PJM**
 - 40% Bonus/60% 7-year straight-line depreciation for CT
 - 25% Bonus/75% 10-year straight-line depreciation for CC
 - **Brattle cap on first year depreciation is: \$792M**
 - **IMM first year depreciation using 100 percent bonus depreciation for a CT is: \$552M**
 - IMM bonus depreciation consistent with Brattle cap

VRR Curve



IMM

Point A (99% of RR, min of Gross CONE, 1.5x Net CONE)
 Point B (101.5% of RR, 0.5x Point A)
 Point C (104.5% of RR, \$0)

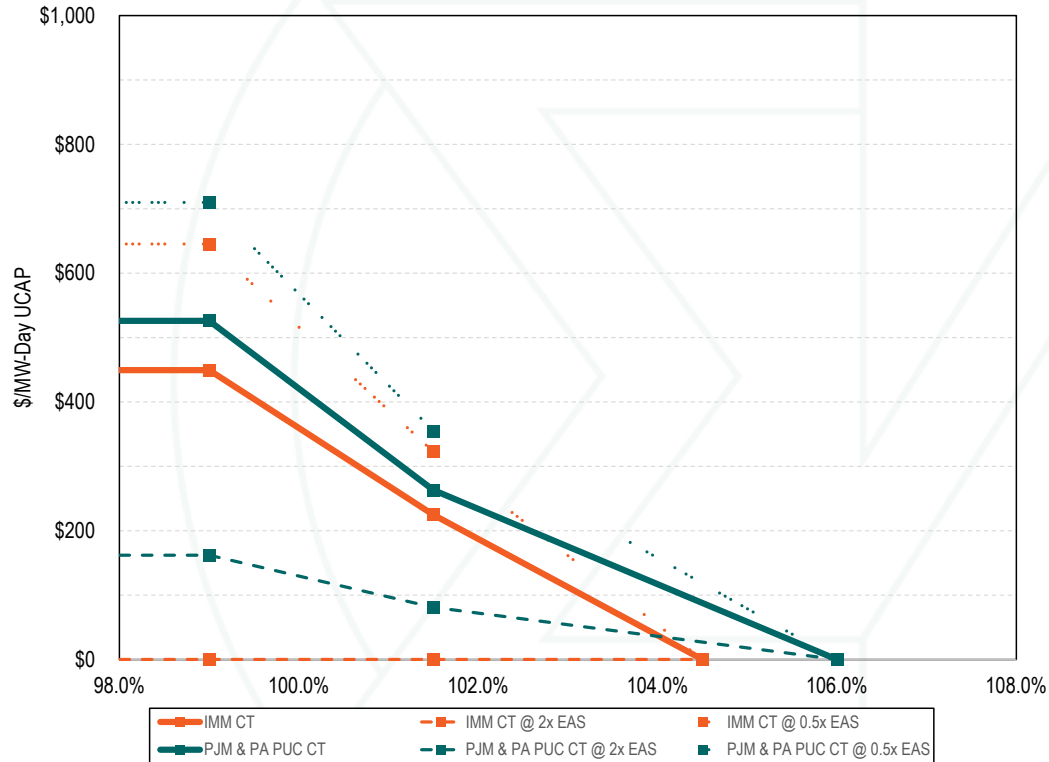
PJM & PA PUC

Point A (99% of RR, max of 1.15x Gross CONE - 0.75x Net E&AS, 0.2x Gross CONE)
 Point B (101.5% of RR, 0.5x Point A)
 Point C (106.0% of RR, \$0)

Current

Point A (99% of RR, max of Gross CONE, 1.75x Net CONE)
 Point B (101.5% of RR, 0.75x Net CONE)
 Point C (104.5% of RR, \$0)

VRR Curve Sensitivity



IMM

Point A (99% of RR, min of Gross CONE, 1.5x Net CONE)
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 Point C (104.5% of RR, \$0)

PJM & PA PUC

Point A (99% of RR, max of 1.15x Gross CONE - 0.75x Net E&AS, 0.2x Gross CONE)
 Point B (101.5% of RR, 0.5x Point A)
 Point C (106.0% of RR, \$0)

Current

Point A (99% of RR, max of Gross CONE, 1.75x Net CONE)
 Point B (101.5% of RR, 0.75x Net CONE)
 Point C (104.5% of RR, \$0)

Estimated Cost*

	Price Coordinate of Point A on RTO's VRR Curve (\$/UCAP MW)	Estimated Cost to Customers (\$/Year)
2026/2027 BRA	\$329	\$16,124,370,889
IMM CT	\$449	\$22,014,926,113
PJM & PA PUC CT	\$526	\$25,766,075,547
PJM & PA PUC CC	\$502	\$24,590,437,119
Current (PJM CT)	\$776	\$38,012,309,172
Current (PJM CC)	\$959	\$46,976,552,186

*Estimated cost is based on clearing quantity in the 26/27 BRA under the assumption that the clearing price would be set by the RTO's flat portion of the VRR curve.

Core Issue

- **Broader goal is to address underlying issue/cause of tight supply-demand conditions in the capacity market.**
- **The current conditions are not the result of organic load growth.**
- **The current conditions in the capacity market are almost entirely the result of load additions from data centers, both actual historical and forecast**
- **This is not a reason to introduce cost of service regulation through an accelerated/distorted version of reliability backstop**
- **The solution includes:**
 - **Planning queue for large load additions**
 - **Large new loads should be added only if they can be served reliably**
 - **Requirement for large loads to bring your own generation**

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