Supplementary Information about ELCC Class Ratings calculated for DY 2027/28 – DY 2034/35

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Caveats about subsequent slides

- The following slides show the implied IRM/FPR values associated with the ELCC Class Ratings calculated for the period 2027/28 – 2034/35
- As stated when presenting the ELCC Class Ratings for the period, the IRM/FPR values are “for informational purposes” only
- The values are not and should not be interpreted as a PJM forecast of IRM/FPR. Rather, they are the outcome of running the ELCC model using a specific assumed resource portfolio for each delivery year in the period. Significant uncertainty surrounds each assumed resource portfolio.

Preliminary ELCC Class Ratings – DY 27/28 through DY 34/35

ELCC Class	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35
Onshore Wind	33%	28%	25%	23%	21%	19%	17%	15%
Offshore Wind	56%	47%	44%	38%	37%	33%	27%	20%
Fixed-Tilt Solar	6%	5%	5%	4%	4%	4%	4%	3%
Tracking Solar	8%	7%	7%	6%	5%	5%	5%	4%
Landfill Intermittent	55%	55%	56%	56%	56%	56%	56%	54%
Hydro Intermittent	40%	37%	37%	37%	37%	39%	38%	38%
4-hr Storage	52%	55%	51%	49%	42%	42%	40%	38%
6-hr Storage	61%	65%	61%	61%	54%	54%	53%	52%
8-hr Storage	64%	67%	64%	65%	60%	60%	60%	60%
10-hr Storage	73%	75%	72%	73%	68%	69%	70%	70%
Demand Resource	66%	65%	63%	60%	56%	55%	53%	51%
Nuclear	95%	95%	96%	95%	96%	96%	94%	93%
Coal	84%	84%	85%	85%	86%	86%	83%	79%
Gas Combined Cycle	80%	81%	83%	83%	85%	85%	84%	82%
Gas Combustion Turbine	63%	66%	68%	70%	71%	74%	76%	78%
Gas Combustion Turbine Dual Fuel	79%	80%	80%	81%	82%	83%	83%	83%
Diesel Utility	92%	92%	92%	92%	93%	93%	93%	92%
Steam	73%	74%	75%	74%	75%	76%	74%	73%

- Presented at the June PC Meeting
- Assumed Portfolio for 2025/26 was used as the starting point. Additions and deactivations from a vendor's forecast were then used to derive future deployment levels
  - Sustained addition of wind classes, solar classes, 4-hr storage class and solar-storage hybrid classes
  - Some coal units are assumed to deactivate. Negligible additions and deactivations in other Unlimited Resource classes
- Characteristics of additions are based on 25/26 membership of the ELCC Classes

ICAP, UCAP, and Demand for period 27/28 – 34/35

Delivery Year	Total ICAP (MW)	Total UCAP (MW)	Solved Peak Load	Forecasted Peak Load
2027/28	201,027	155,158	165,306	159,859
2028/29	204,723	155,778	165,949	162,972
2029/30	203,079	153,199	161,939	165,681
2030/31	208,725	153,625	163,288	167,873
2031/32	212,381	152,760	162,882	170,008
2032/33	218,786	154,039	165,383	172,109
2033/34	224,808	152,113	167,149	174,366
2034/35	230,286	148,432	168,549	176,822

- Total ICAP was estimated assuming that additions will obtain CIRs based on the average CIR to total nameplate in the respective ELCC Class per the 25/26 runs
- Total UCAP was estimated by running the ELCC analysis using the published ELCC Class Ratings
- Solved Peak Load refers to the annual peak load that the assumed portfolio can serve while meeting an LOLE of 0.1 days/year
- Forecasted Peak Load is the forecasted annual peak load published in the 2024 PJM Load Forecast
- **Starting in DY 2029/30 the annual peak load that the assumed portfolio can serve while meeting the LOLE criteria is less than the Forecasted Peak Load**

IRM, AUCAP Factor, FPR for period 27/28 – 34/35

Delivery Year	IRM (%)	AUCAP Factor	CBOT (%)	FPR
2027/28	20.1%	0.7718	1.5	0.9269
2028/29	21.9%	0.7609	1.5	0.9275
2029/30	23.9%	0.7544	1.5	0.9347
2030/31	26.3%	0.7360	1.5	0.9296
2031/32	28.9%	0.7193	1.5	0.9272
2032/33	30.8%	0.7041	1.5	0.9210
2033/34	33.0%	0.6766	1.5	0.8999
2034/35	35.1%	0.6446	1.5	0.8709

- The upward IRM trend shows a higher need of installed capacity to meet the LOLE criteria.
- At the same time, the downward AUCAP Factor trend reveals that the higher installed capacity has lower reliability value (AUCAP Factor = Total UCAP / Total ICAP)
- The above yields a downward FPR trend signifying that the reliability requirement changes are driven by supply side adjustments (i.e. lower reliability value of additions) rather than demand side adjustments (e.g. higher load uncertainty)

Potential UCAP Shortfalls for some DYs in period 27/28 – 34/35

Delivery Year	FPR	Forecasted Peak Load	Reliability Requirement (UCAP MW)	Total UCAP (UCAP MW)	Potential Shortfall (UCAP MW)
2027/28	0.9269	159,859	148,173	155,158	0
2028/29	0.9275	162,972	151,156	155,778	0
2029/30	0.9347	165,681	154,862	153,199	1,663
2030/31	0.9296	167,873	156,054	153,625	2,430
2031/32	0.9272	170,008	157,631	152,760	4,871
2032/33	0.9210	172,109	158,512	154,039	4,473
2033/34	0.8999	174,366	156,912	152,113	4,799
2034/35	0.8709	176,822	153,994	148,432	5,562

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