

ELCC Accreditation Methodology: Update on Sensitivity Analyses

ELCCSTF

May 30, 2025

- The following slides provide results for two additional sensitivities:
 - These sensitivities are the result of combining sensitivities previously presented at the June 22 ELCCSTF (<https://www.pjm.com/-/media/DotCom/committees-groups/task-forces/elccstf/2025/20250522/20250522-item-02---elcc-accreditation-methodology-update-on-sensitivity-analyses---pjm-presentation.pdf>)
 - Sensitivity 9: Combine sensitivities 1, 3, and 4
 - Sensitivity 10: Combine sensitivities 3, 4, and 5

9. “NoPV1WSE & No93 & Align”

ELCC Class	Base (%)	NoPV1WSE + No93 + Align (%)	Difference (%)
10-hr Storage	78	97	19
4-hr Storage	56	87	31
6-hr Storage	65	95	30
8-hr Storage	69	93	24
Coal	83	87	4
Demand Response	88	108	20
Diesel Utility	91	95	4
Fixed-Tilt Solar	10	23	13
Gas Combined Cycle	75	94	19
Gas Combustion Turbine	62	93	31
Gas Combustion Turbine Dual	78	95	17
Hydro Intermittent	38	35	-3
Landfill Intermittent	51	56	5
Nuclear	95	95	0
Offshore Wind	67	28	-39
Onshore Wind	39	13	-26
Steam	74	88	14
Tracking Solar	13	34	21

Metric	Base	NoPV1WSE + No93 + Align	Diff
FPR	0.9335	1.0547	0.1212
IRM (%)	18.8	17.3	-1.5
LOLH Winter %	78.2	10.6	-67.6
Avg. AUCAP Factor	0.7858	0.8991	0.1133

- Decrease in overall system risk (IRM drops and system is less tight)
- Large majority of LOLH is in the summer season
- Class ratings significantly increase and are consistent with a system with majority of risk in summer

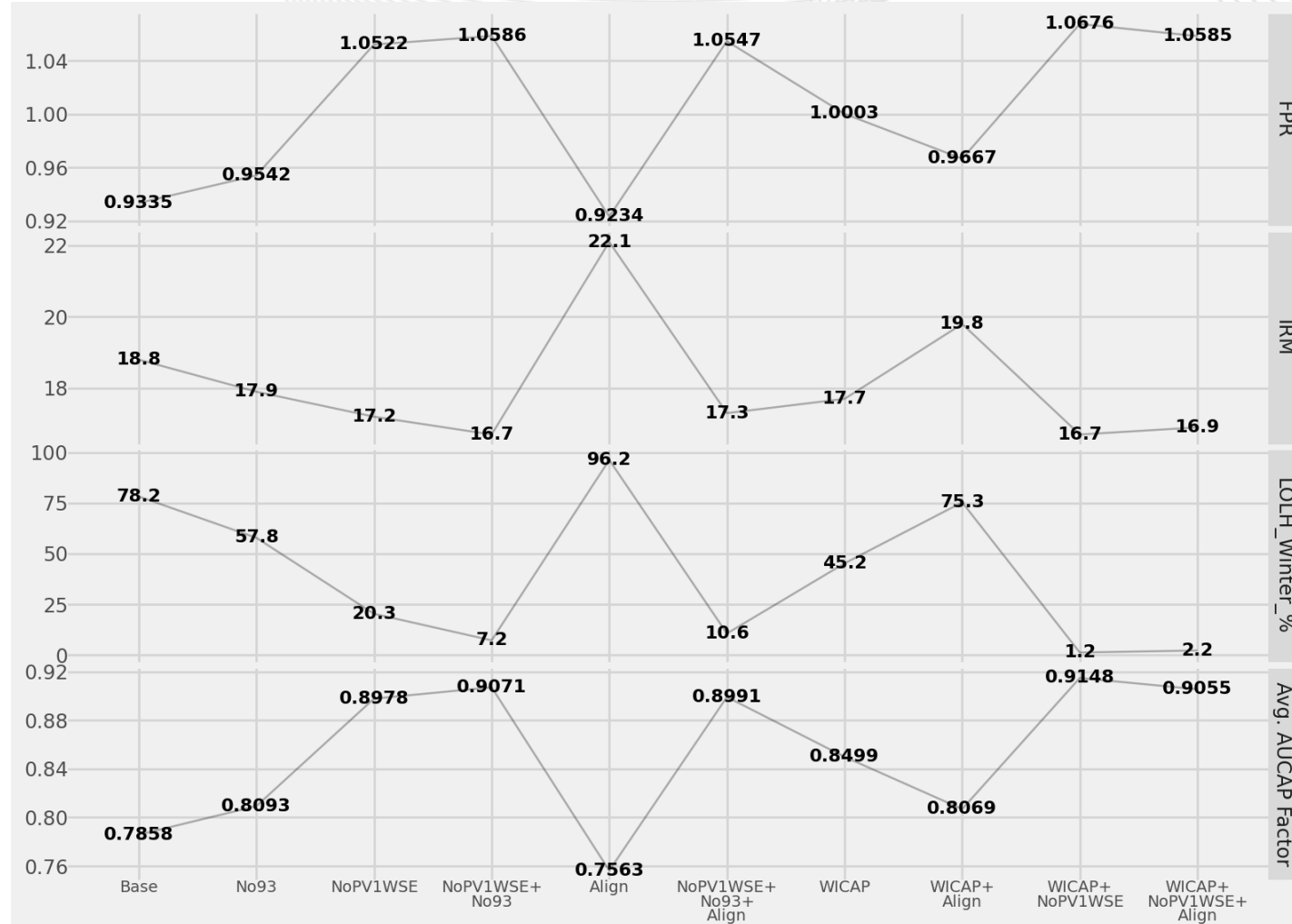
10. “WICAP & NoPV1WSE & Align”

ELCC Class	Base (%)	WICAP + NoPV1WSE + Align (%)	Difference (%)
10-hr Storage	78	97	19
4-hr Storage	56	86	30
6-hr Storage	65	96	31
8-hr Storage	69	93	24
Coal	83	87	4
Demand Response	88	109	21
Diesel Utility	91	95	4
Fixed-Tilt Solar	10	26	16
Gas Combined Cycle	75	95	20
Gas Combustion Turbine	62	95	33
Gas Combustion Turbine Dual	78	96	18
Hydro Intermittent	38	35	-3
Landfill Intermittent	51	56	5
Nuclear	95	95	0
Offshore Wind	67	24	-43
Onshore Wind	39	11	-28
Steam	74	88	14
Tracking Solar	13	38	25

Metric	Base	WICAP + NoPV1WSE + Align	Diff
FPR	0.9335	1.0585	0.125
IRM (%)	18.8	16.9	-1.9
LOLH Winter %	78.2	2.2	-76.0
Avg. AUCAP Factor	0.7858	0.9055	0.1197

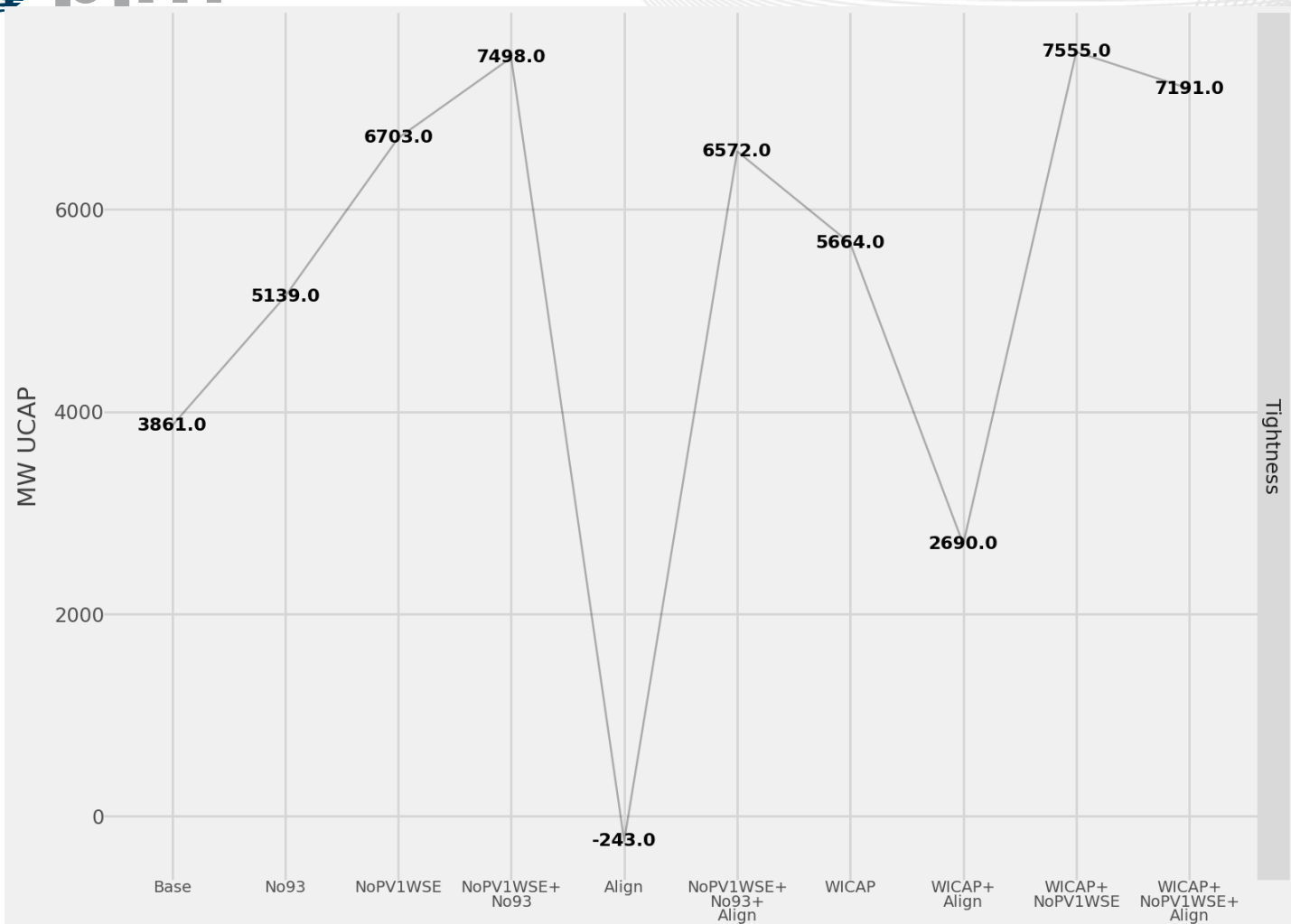
- Decrease in overall system risk (IRM drops and system is less tight)
- Almost of LOLH is in the summer season
- Significant class ratings increases (except for wind)

Comparison of All Sensitivity Results



Note that the above graph does not include the “Extend historical weather back to 1970s” sensitivity. Based on previous analysis, the results of such sensitivity would show a higher FPR, IRM and LOLH Winter Share than those shown above as well as a lower Avg. AUCAP Factor.

Comparison of Tightness for All Sensitivity Cases



Tightness Calculated as:

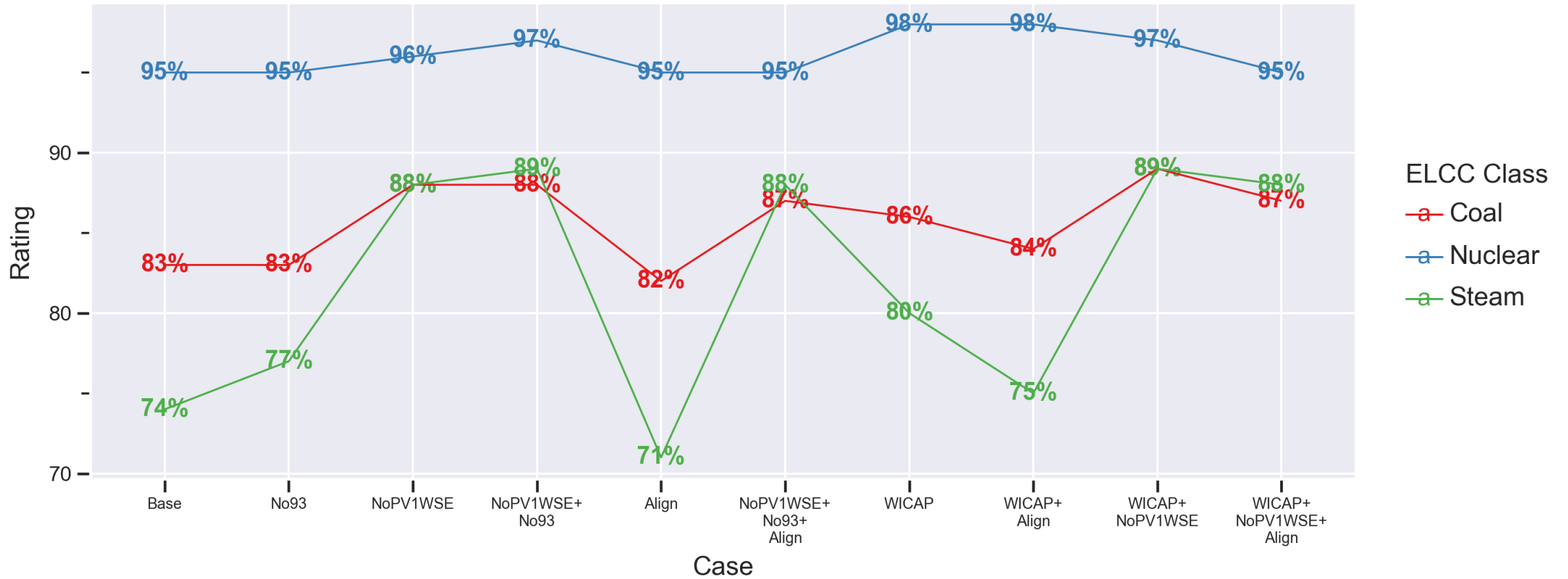
Total AUCAP in Case *minus*
(26/27 Forecasted Peak Load
times FPR of Case)

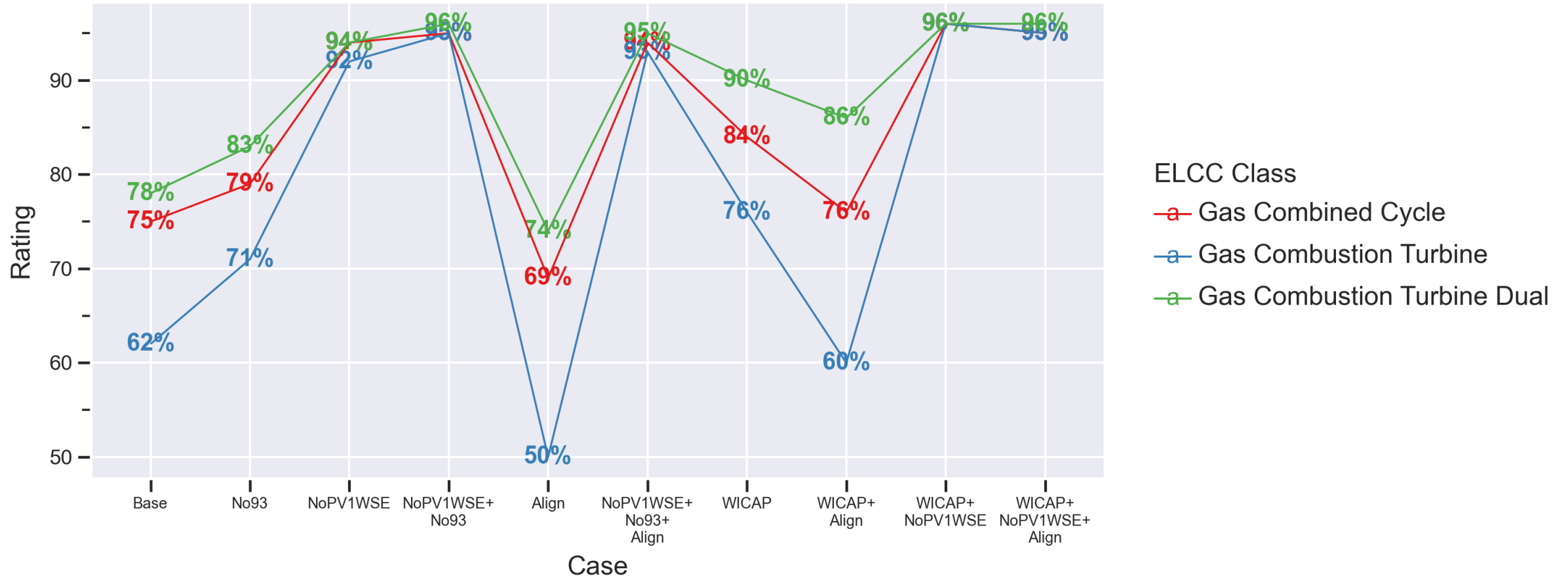
26/27 Forecasted Peak Load =
158,937 MW

Note that this graph does not include the “Extend historical weather back to 1970s” sensitivity. Based on previous analysis, the results of such sensitivity would show a lower Tightness metric than those shown in the graph.

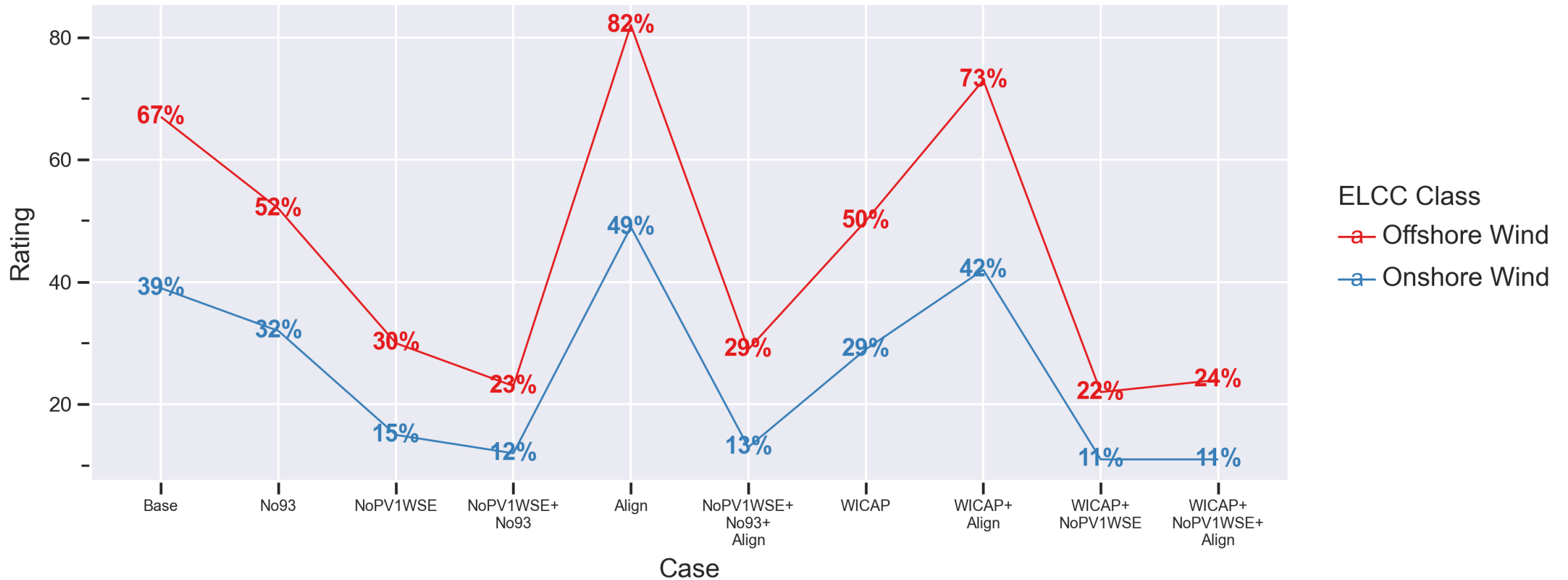
Please note that the tightness metric provided in the above graph is based on the total UCAP modeled in the analysis relative to an estimate of the RTO reliability requirement and should only be used to inform and understand the relative impact of these sensitivities on supply/demand tightness. These values are not an estimate of supply/demand tightness that may be observed in the actual RPM auctions

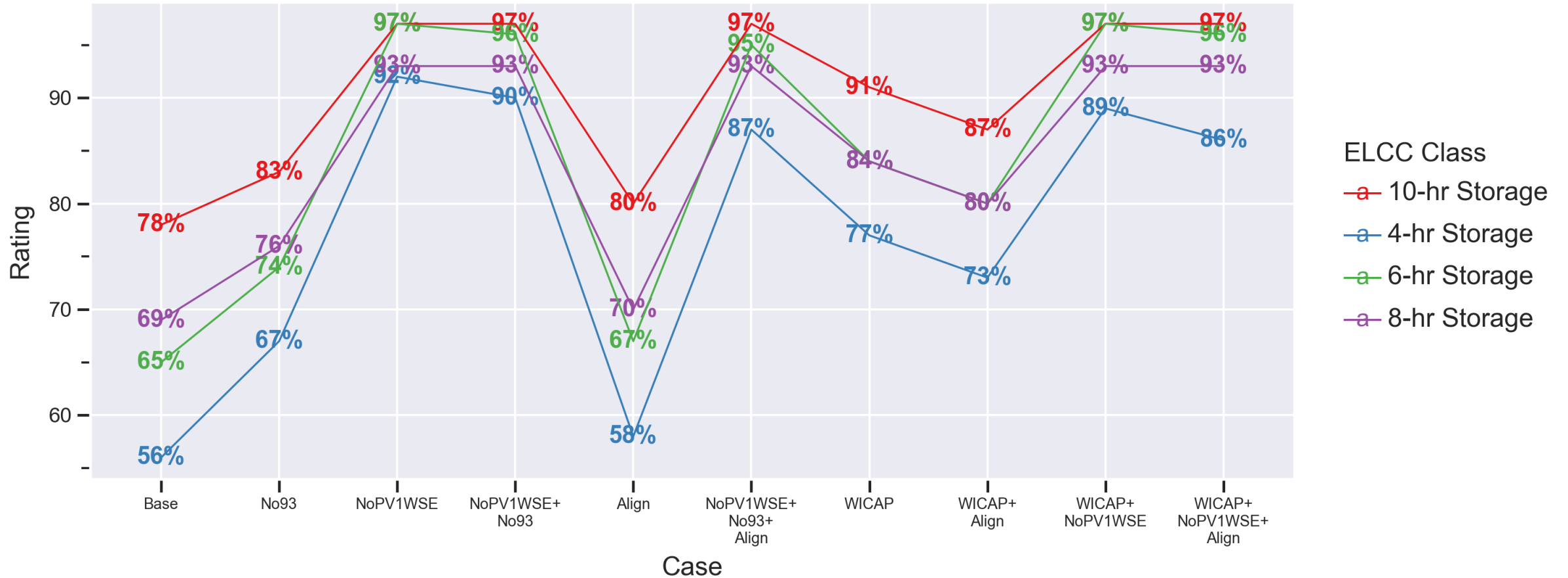
Appendix

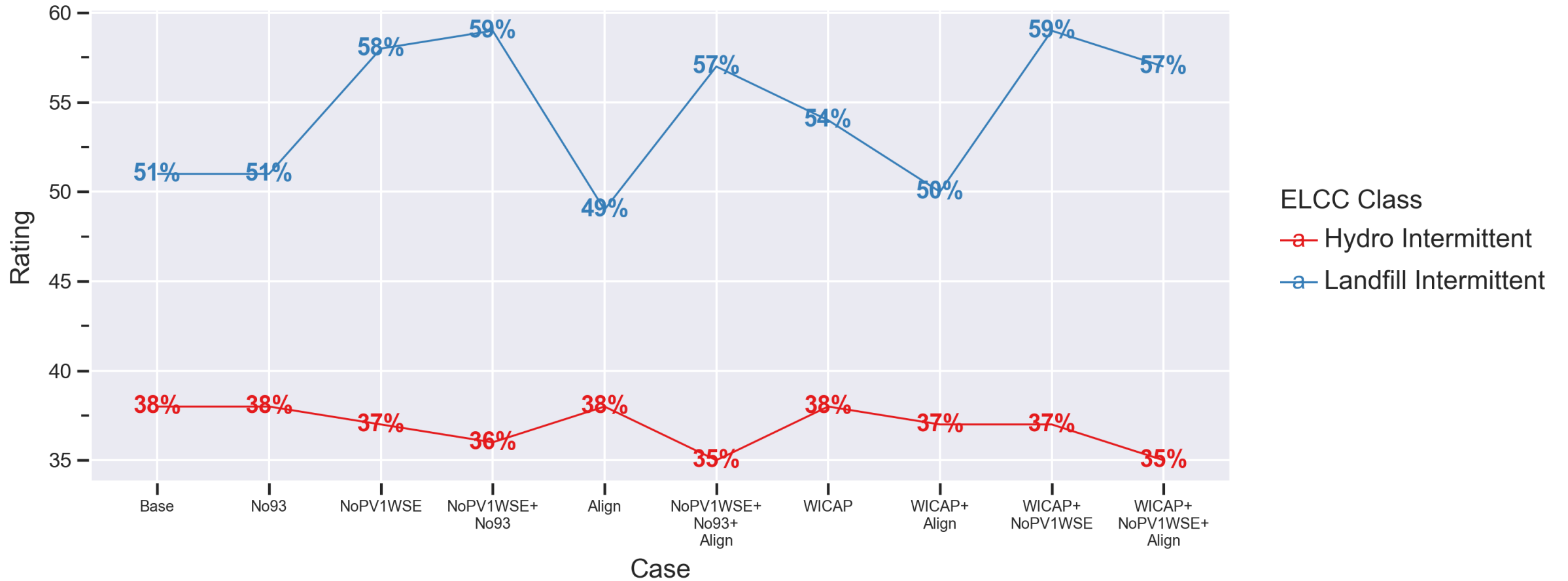


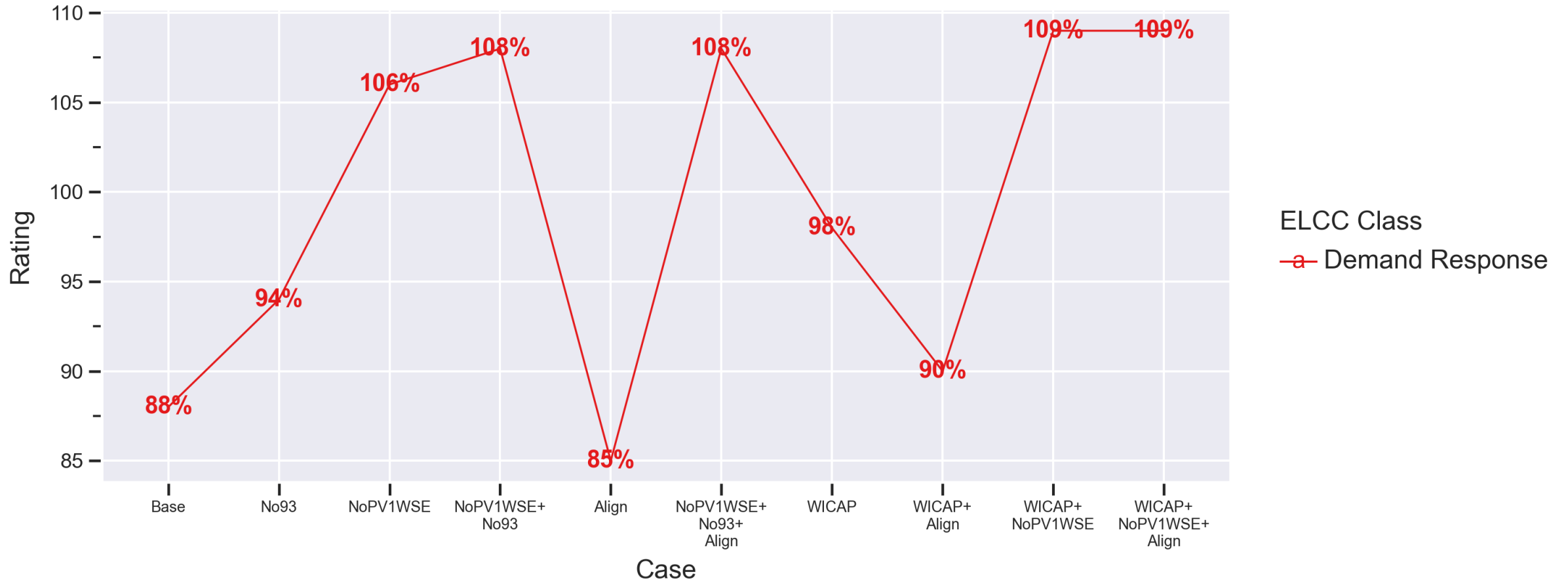












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**ELCC Accreditation Methodology:
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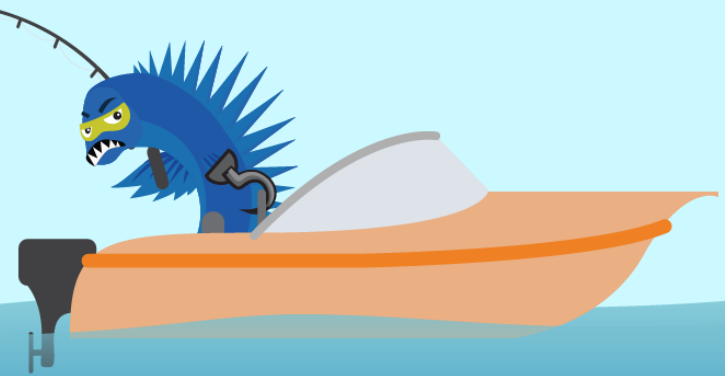
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