



California ISO

Final 2025 Availability Assessment Hours (AAH) Study

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Availability assessment hours: Background and purpose

- Concept originally developed as part of the ISO standard capacity product (SCP)
 - Maintained as part of Reliability Service Initiative – Phase 1 (i.e. RA Availability Incentive Mechanism, or RAAIM)
- Determine the hours of greatest need to maximize the effectiveness of the availability incentive structure
 - Resources are rewarded for availability during hours of greatest need
 - Hours determined annually by ISO and published in the BPM
 - See section 40.9 of the ISO Tariff

Methodology overview of system/local availability assessment hours

- Used CEC IEPR data accounting for DST shift
 - Hourly average load
 - By hour, by month
 - Years 2024-2027
 - Top 5% of load hours within each month using an hourly load distribution
- For 2025, the ISO proposes no changes to the AAH from last year with a three season approach

The ISO proposes continued use of three seasons for AAH

- For 2025, the ISO proposes three seasons for AAH:
 - HE17-HE21 for winter: Jan – Feb, Nov – Dec
 - HE18-HE22 for spring: Mar – May
 - HE17-HE21 for summer: Jun – Oct
 - Watching winter months for shift to HE18-22 for 2026 and 2027

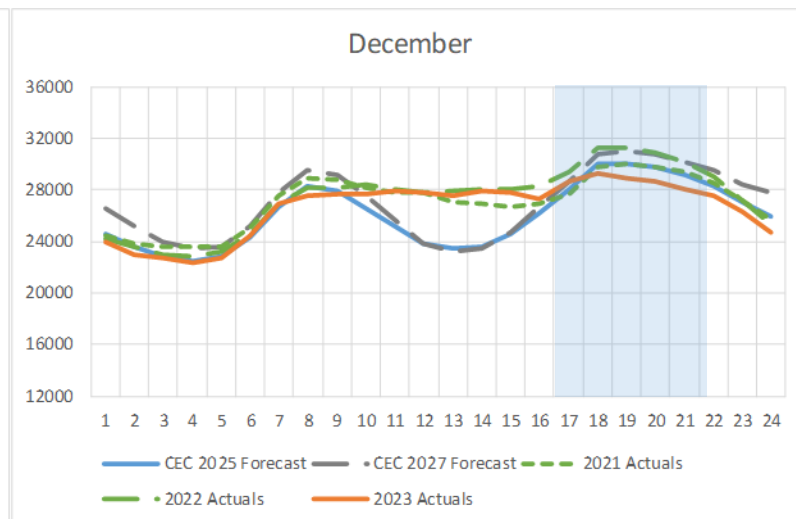
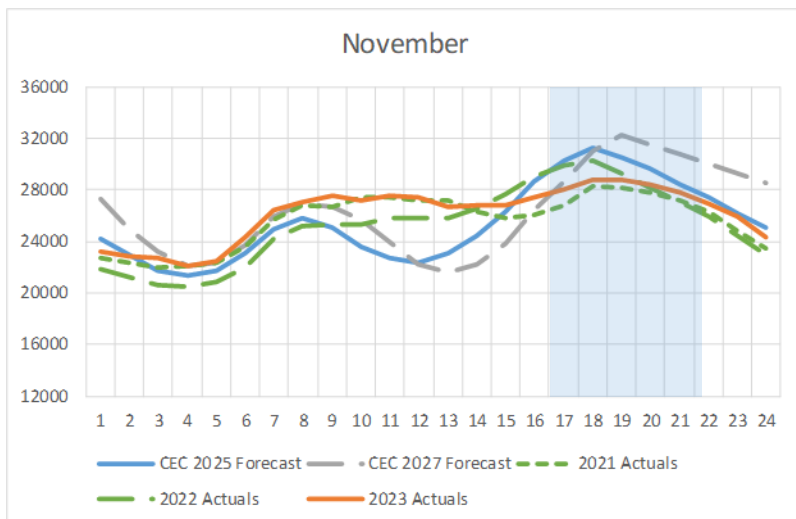
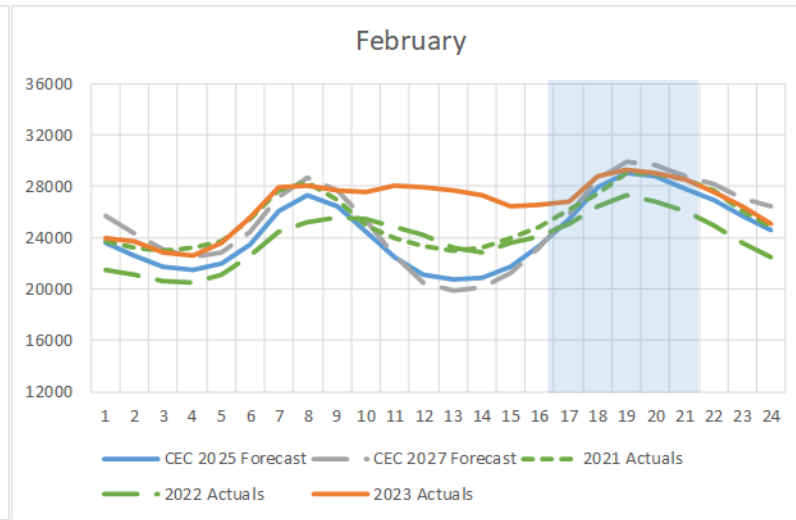
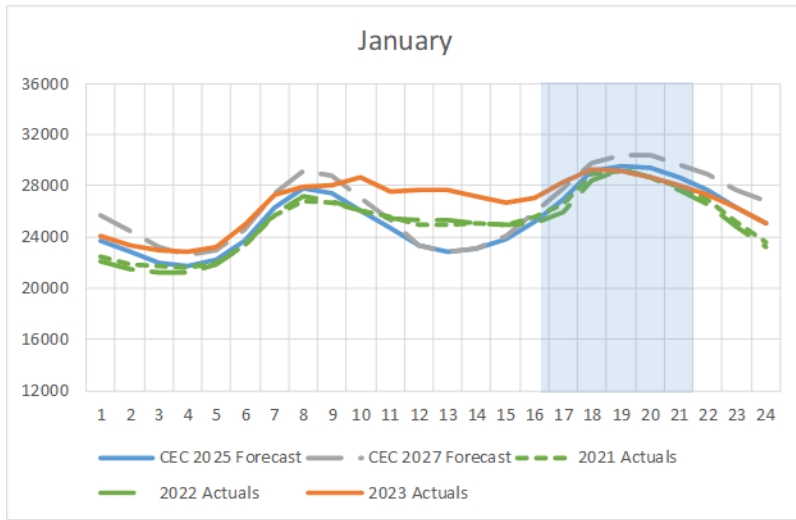
2023 actual frequency of top 5% of load hours

Hour	15	16	17	18	19	20	21	22	23	Season	
MONTH	Jan			2	12	13	6	2		Winter	
	Feb				7	8	8	5		Winter	
	Mar				2	7	10	8	2	Spring	
	Apr				3	3	10	9	5	2	Spring
	May			2	4	5	7	10	6	3	Spring
	Jun	1	1	2	2	4	8	8	8	2	Summer
	Jul		3	5	9	9	8	3			Summer
	Aug	1	3	7	8	8	7	3			Summer
	Sep		3	4	9	8	6	5	1		Summer
	Oct	1	4	7	8	8	6	2	1		Summer
	Nov			5	16	9	6				Winter
	Dec			6	11	10	6	3			Winter
Total	3	14	40	91	92	88	58	23	7		

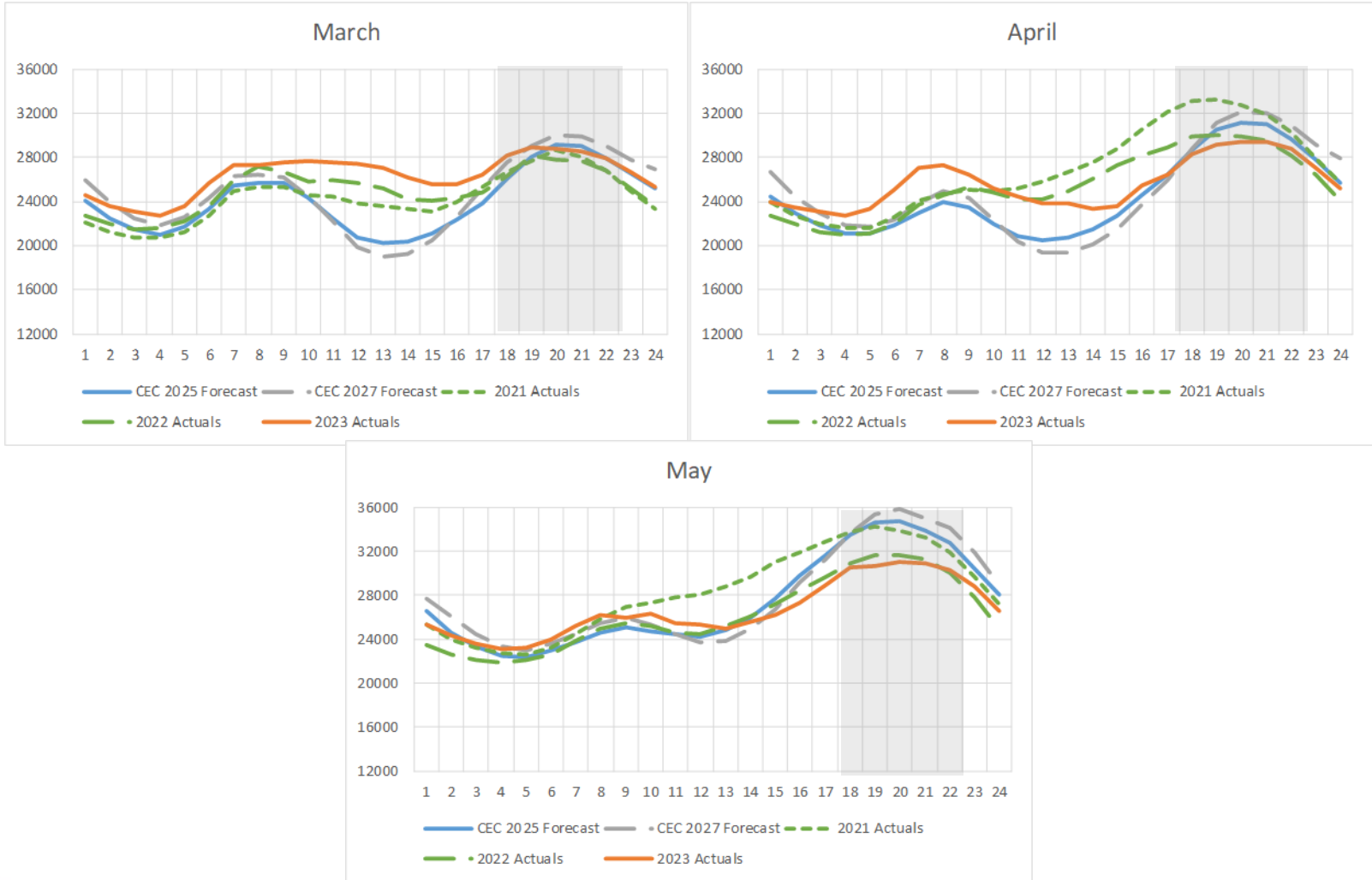
2025 forecast frequency of top 5% of load hours

Hour	15	16	17	18	19	20	21	22	23	Season	Recommendation	
MONTH	Jan			8	17	10	2			Winter	HE17-HE21	
	Feb			1	18	12	2			Winter	HE17-HE21	
	Mar					5	15	13	4	Spring	HE18-HE22	
	Apr				2	5	8	11	8	2	Spring	HE18-HE22
	May		1	2	3	6	8	9	6	2	Spring	HE18-HE22
	Jun	1	2	3	5	8	7	6	4		Summer	HE17-HE21
	Jul	1	3	4	7	9	7	4	2		Summer	HE17-HE21
	Aug		3	5	10	11	7	1			Summer	HE17-HE21
	Sep	2	3	5	7	8	6	3	2		Summer	HE17-HE21
	Oct		2	4	7	10	7	5	2		Summer	HE18-HE22
	Nov		1	3	13	14	4	1			Winter	HE17-HE21
	Dec				13	17	6	1			Winter	HE17-HE21
Total	4	15	26	76	128	97	58	28	4			

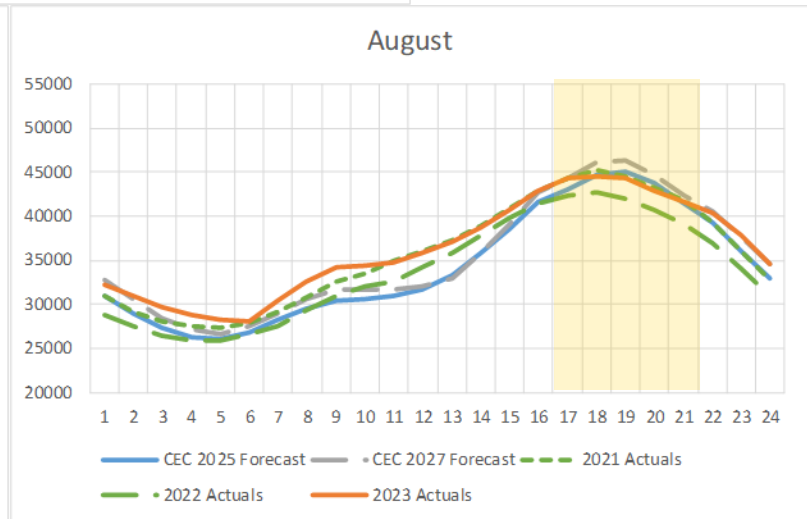
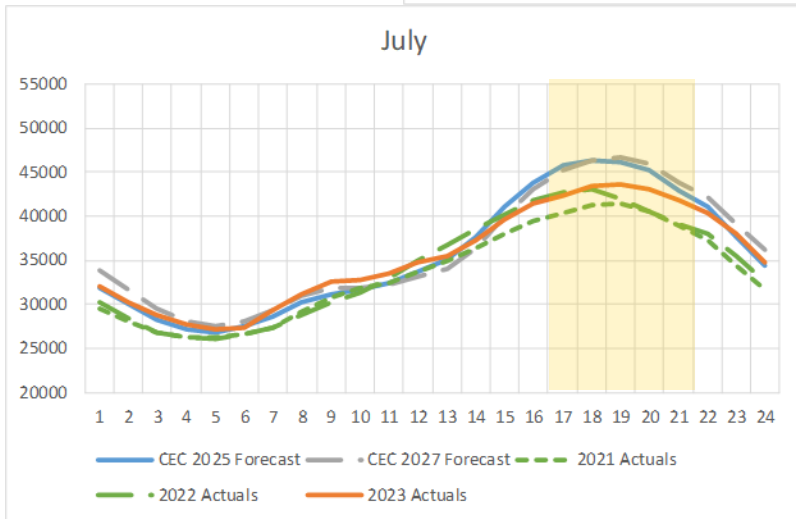
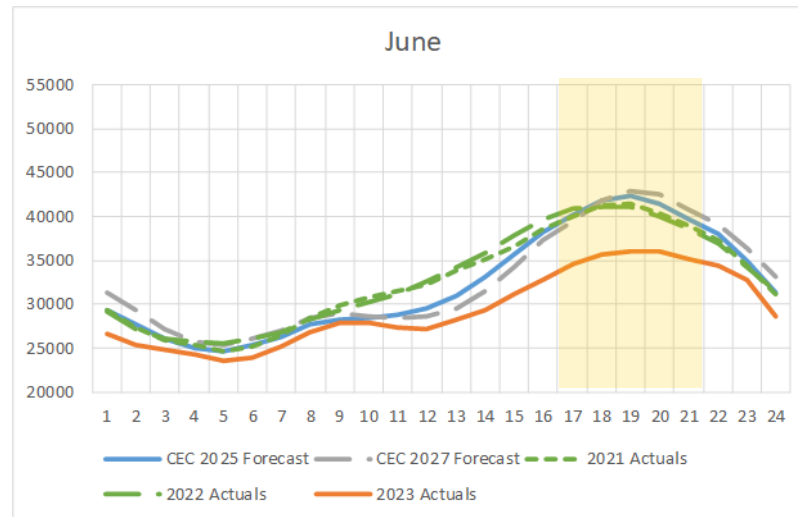
Forecast vs. actual in winter months



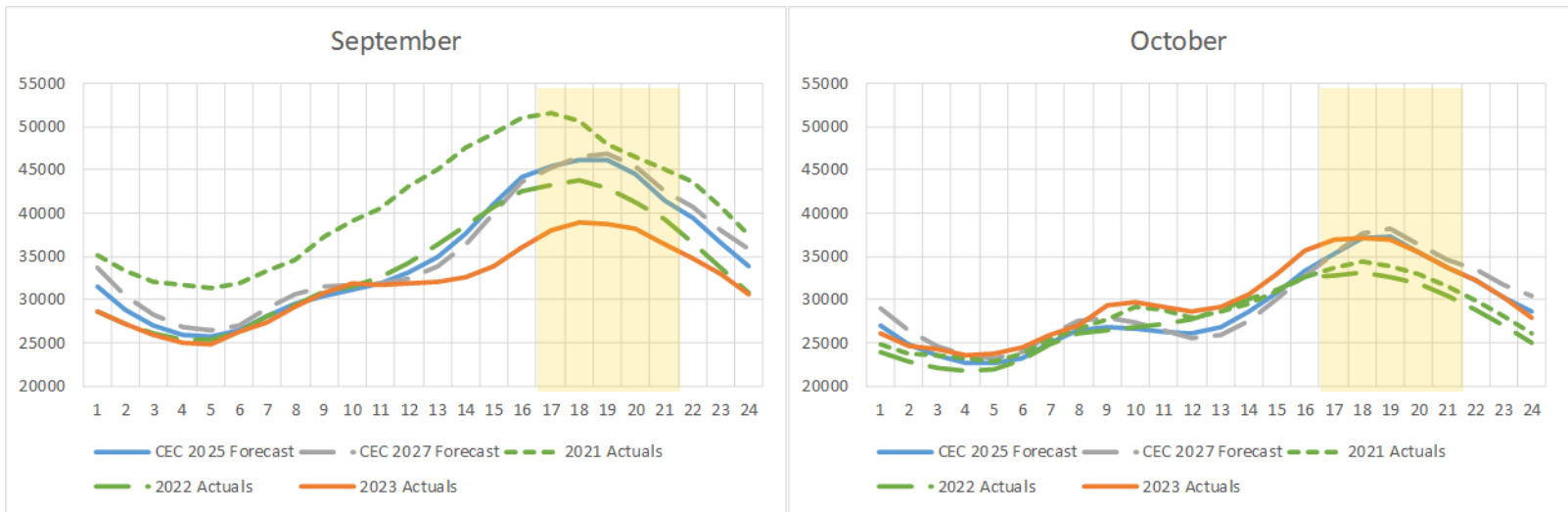
Forecast vs. actual in spring months



Forecast vs. actual in summer months



Forecast vs. actual in summer months



Availability assessment hours final recommendation

Summer and Winter Season Final Recommendation

January – February, June - December

Year	Start	End
2024 (Final)	HE 17	HE 21
2025 (Final)	HE 17	HE 21

Spring Season Final Recommendation

March – May

Year	Start	End
2024 (Final)	HE 18	HE 22
2025 (Final)	HE 18	HE 22

Availability assessment hours advisory recommendation

Summer Season Final Estimates

June - November

Year	Start	End
2026 (Estimate)	HE 17	HE 21
2027 (Estimate)	HE 17	HE 21

Spring and Winter Season Final Estimates

January – May, December

Year	Start	End
2026 (Estimate)	HE 18	HE 22
2027 (Estimate)	HE 18	HE 22

- Estimates for 2026, 2027 include a shift of January, February, and December to HE18-22 for based on CEC forecast
 - November remains in summer season estimate

Reliability Requirements; Section 7 – BPM Updates Needed

2025 System and Local Resource Adequacy Availability Assessment Hours

Analysis employed: Top 5% of load hours using average hourly load

Spring: March 1 – May 31

Availability Assessment Hours: 5pm – 10pm (HE18 – HE22)

Summer: June 1 - October 31

Availability Assessment Hours: 4pm – 9pm (HE17 – HE21)

Winter: January 1 – February 28, November 1 – December 31

Availability Assessment Hours: 4pm – 9pm (HE17 – HE21)

2025 Flexible Resource Adequacy Availability Assessment Hours and must offer obligation hours

Flexible RA Capacity Type	Category Designation	Required Bidding Hours	Required Bidding Days
January – February			
November – December			
Base Ramping	Category 1	5:00am to 10:00pm (HE6-HE22)	All days
Peak Ramping	Category 2	2:00pm to 7:00pm (HE15-HE19)	All days
Super-Peak Ramping	Category 3	2:00pm to 7:00pm (HE15-HE19)	Non-Holiday Weekdays*
March – August			
Base Ramping	Category 1	5:00am to 10:00pm (HE6-HE22)	All days
Peak Ramping	Category 2	4:00pm to 9:00pm (HE17-HE21)	All days
Super-Peak Ramping	Category 3	4:00pm to 9:00pm (HE17-HE21)	Non-Holiday Weekdays*
September – October			
Base Ramping	Category 1	5:00am to 10:00pm (HE6-HE22)	All days
Peak Ramping	Category 2	3:00pm to 8:00pm (HE16-HE20)	All days
Super-Peak Ramping	Category 3	3:00pm to 8:00pm (HE16-HE20)	Non-Holiday Weekdays*