Final 2024 Availability Assessment Hours 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 described in previous slides to obtain:
  - Hourly Average Load
    - By Hour, by month
    - Years 2022-2026
  - No adjustments made to CEC IEPR for AAH analysis
- Calculated:
  - Top 5% of Load Hours within each month using an hourly load distribution
  - Years 2024 – 2026
- Last year the ISO proposed the addition of Spring season

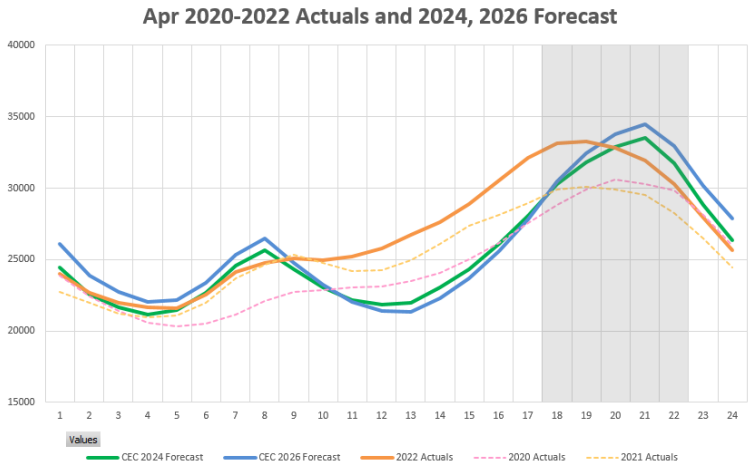
The ISO proposes adding May to the spring AAH season

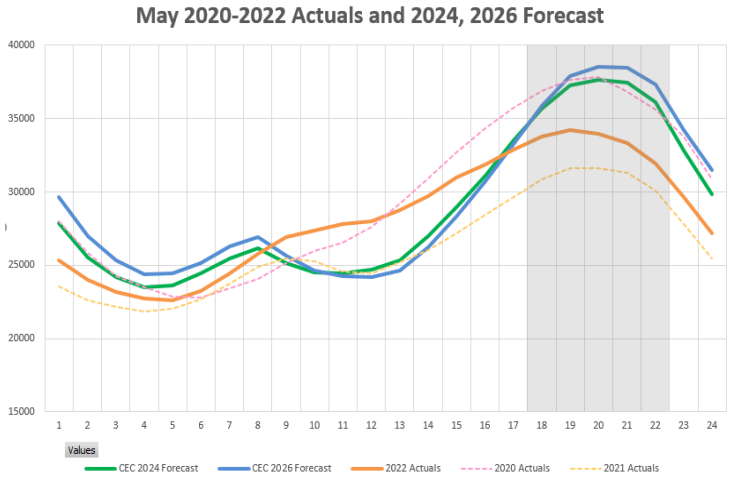
- Last year the ISO proposed the addition of a spring season with AAH hour-ending 18-22
- Load actuals still support the months of March and April having a later top 5% of load hours, with the addition of May

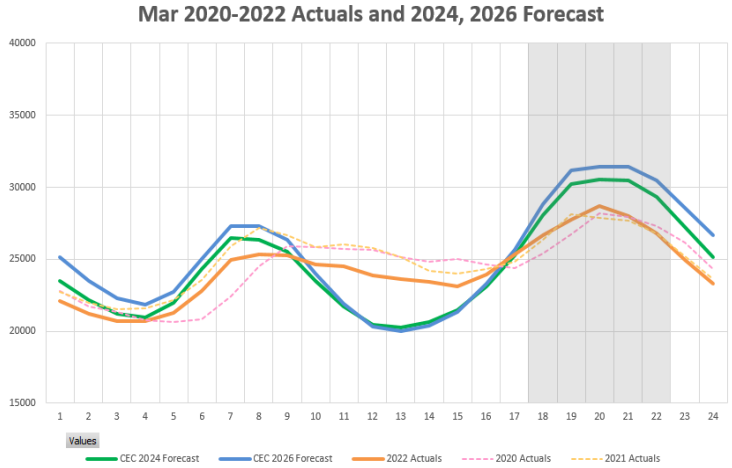
Month	Season
Jan	winter
Feb	winter
Mar	spring
Apr	spring
May	spring
Jun	summer
Jul	summer
Aug	summer
Sep	summer
Oct	summer
Nov	winter
Dec	winter

	Hour	7	8	9	10	11	13	14	15	16	17	18	19	20	21	22	23
MONTH	Jan											10	***18***	7	2		
	Feb	2	2									2	***17***	6	3	1	
	Mar											2	12	***16***	5	2	
	Apr							1	2	2	2	3	4	***8***	***8***	4	2
	May							1	1	2	3	4	6	***8***	***8***	3	1
	Jun									4	7	***8***	7	7	3		
	Jul								1	3	5	9	***10***	6	3		
	Aug									3	6	***13***	10	3	2		
	Sep						1	2	3	***6***	***6***	***6***	5	4	3		
	Oct									4	6	***9***	***9***	8	1		
	Nov				1	1						***13***	***13***	8			
	Dec		1	1								***11***	***11***	7	5	1	
	Grand Total	**2**	**3**	**1**	**1**	**1**	**1**	**4**	**7**	**24**	**35**	**90**	**122**	**88**	**43**	**11**	**3**

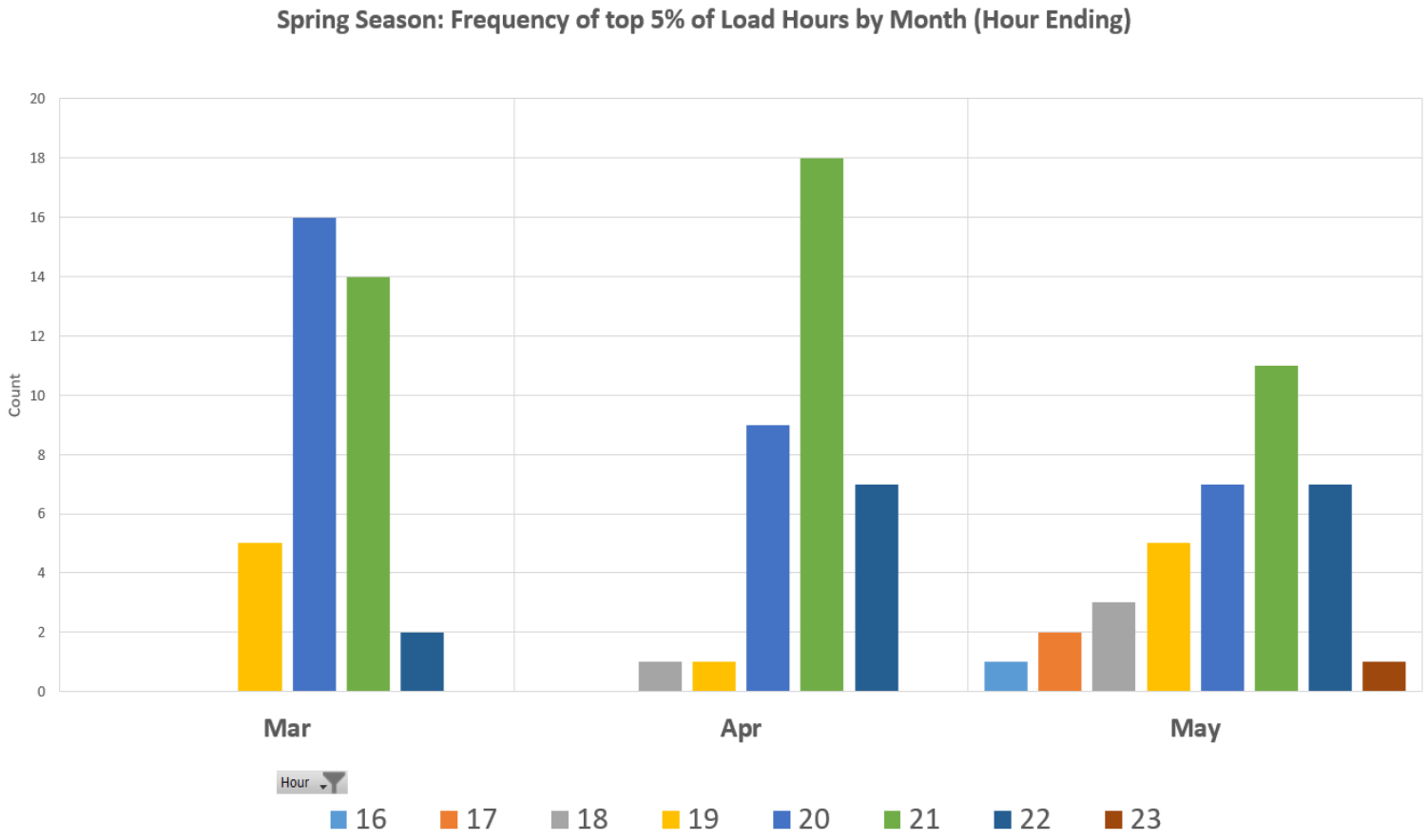
CEC forecast and previous actuals still indicate a shift in top load hours for March and April, as well as May



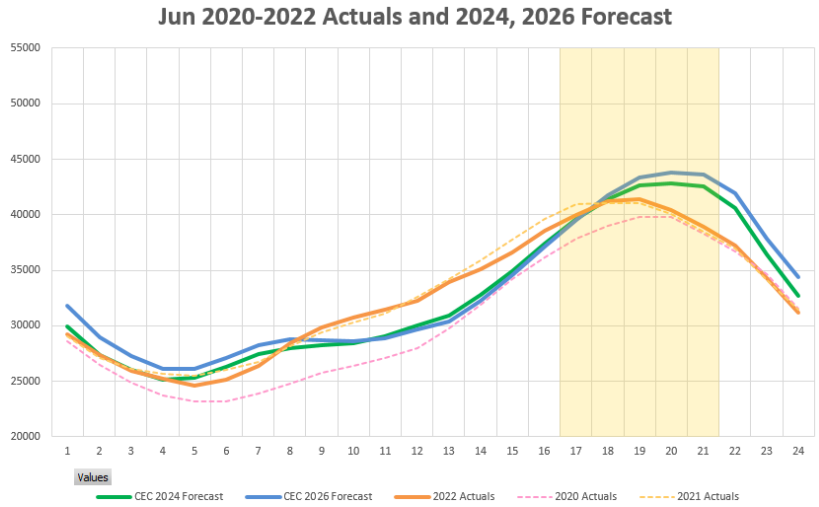


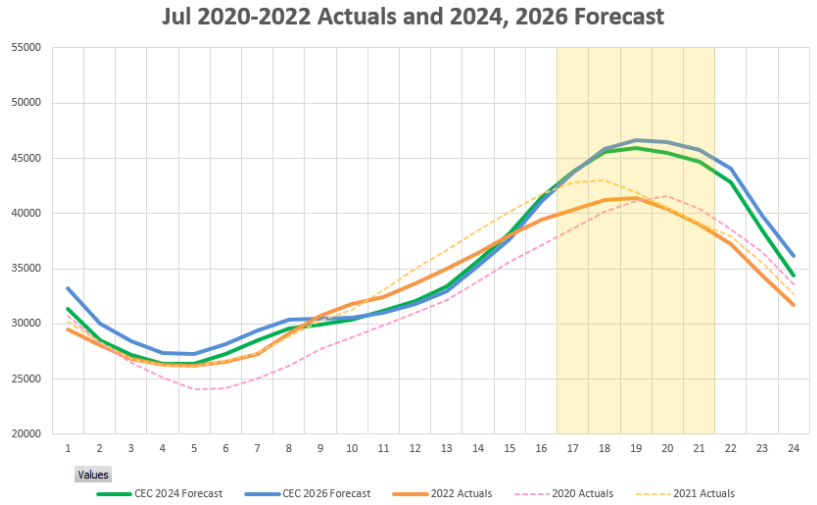


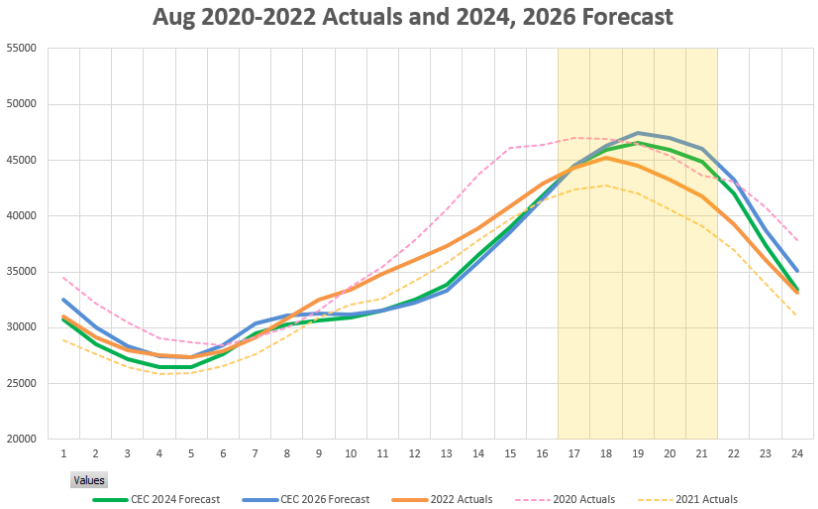
Spring Season
2024 top 5% of load hours (HE)

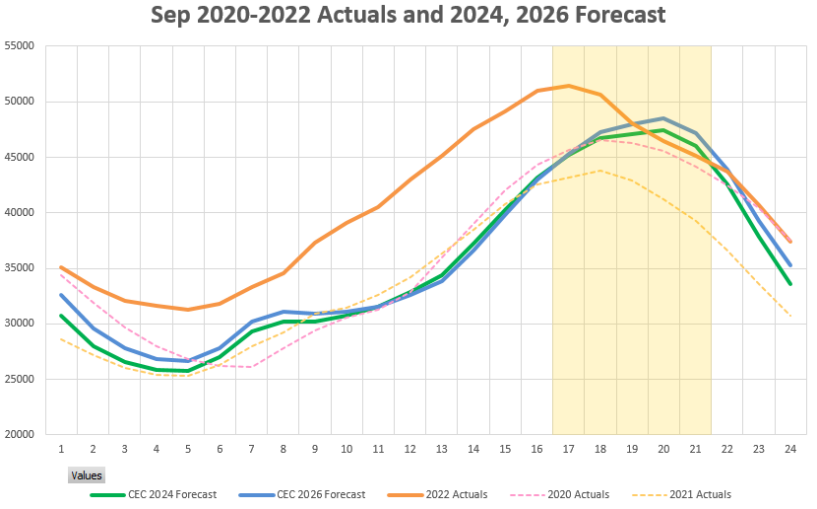


Summer seasonal load shapes and proposed AAH

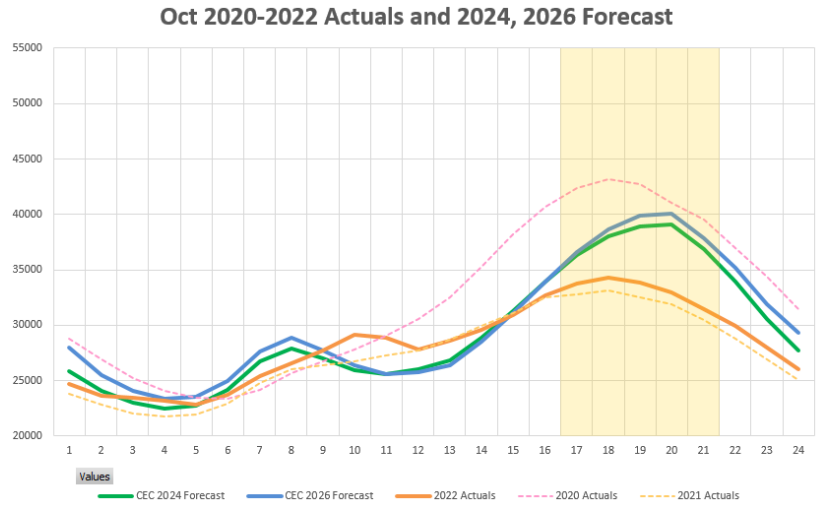




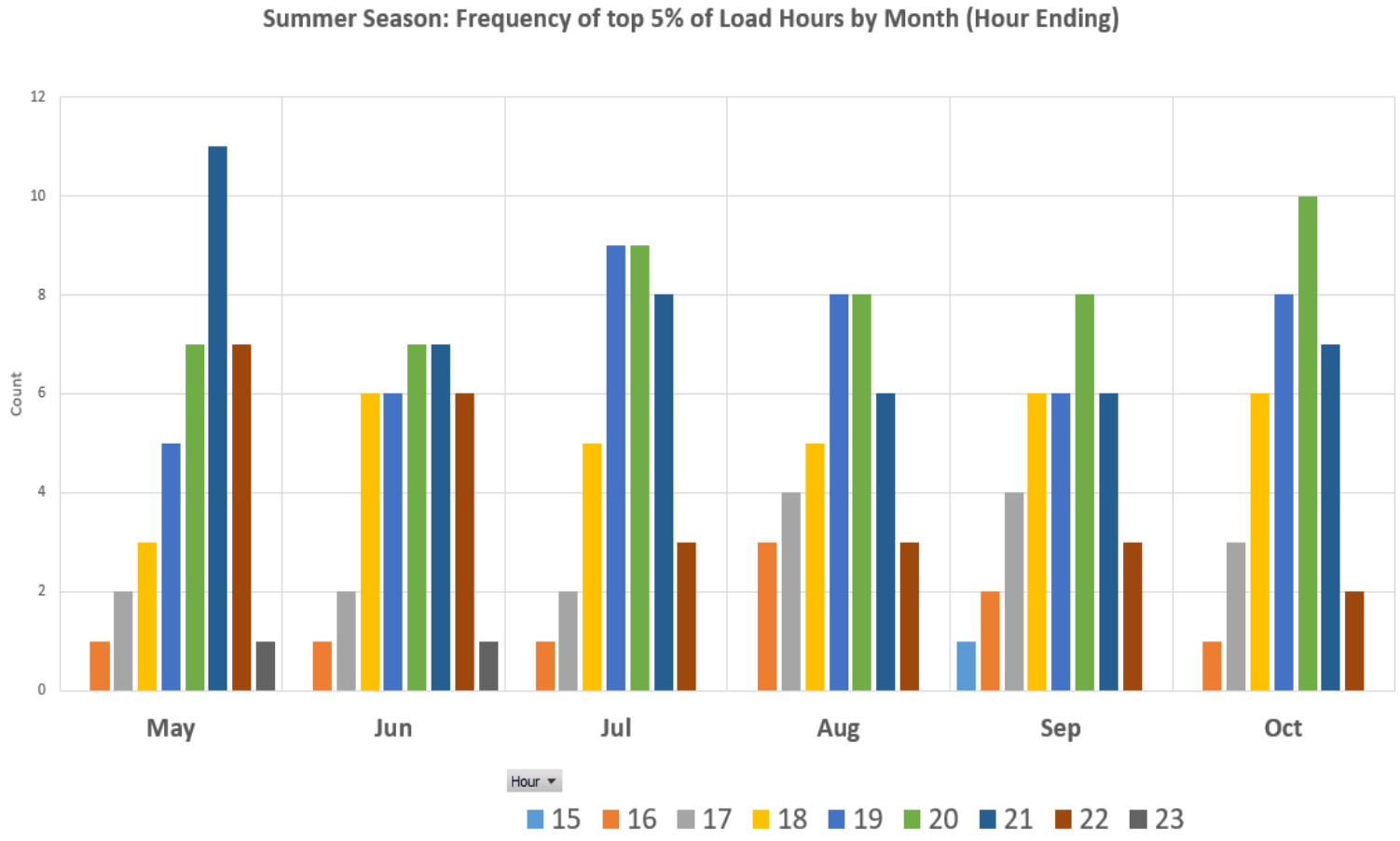




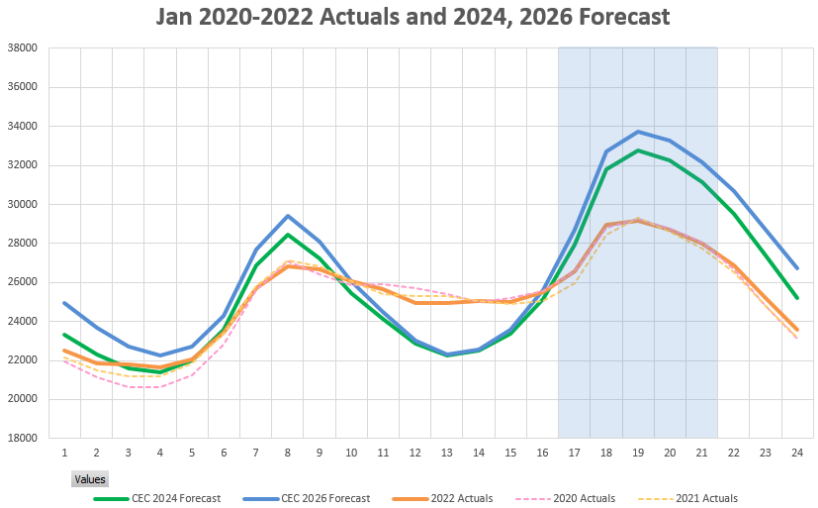
Summer seasonal load shapes and proposed AAH cont.

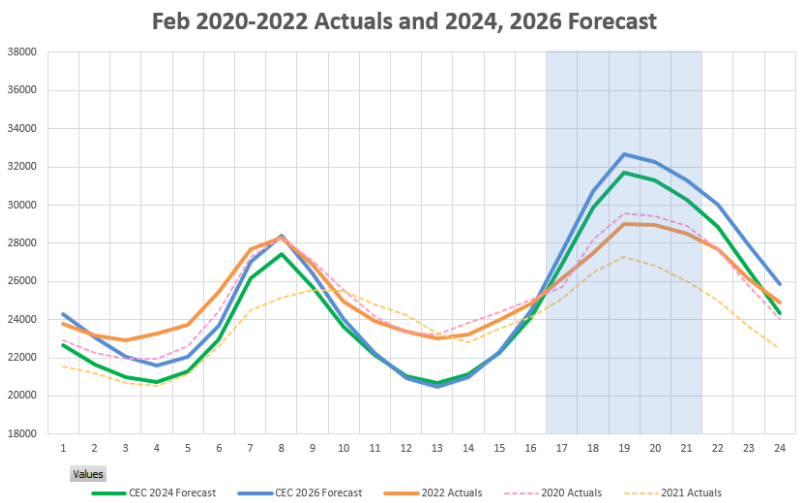


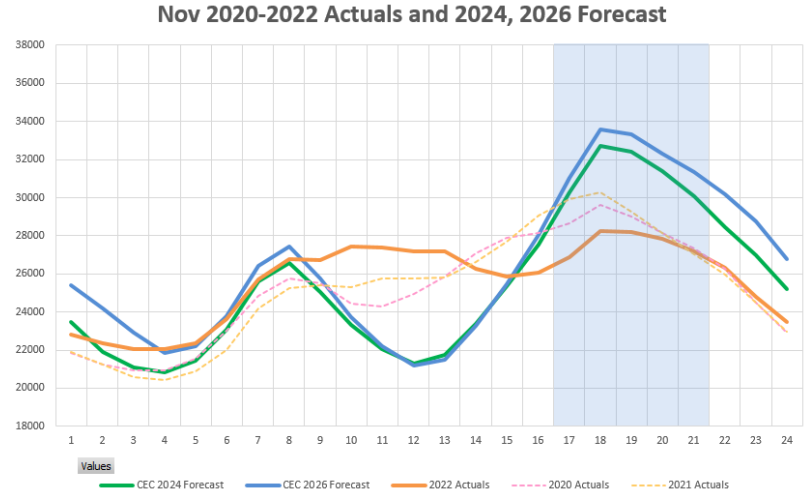
Summer Season
2024 top 5% of load hours (in HE)

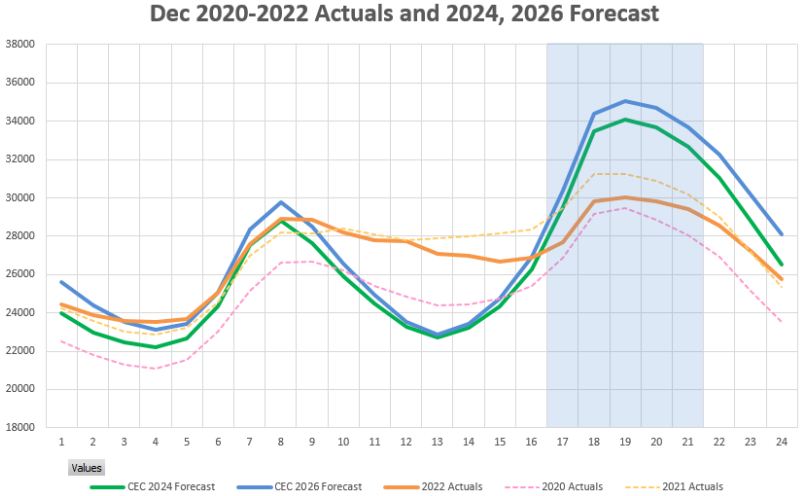


Winter seasonal load shapes and proposed AAH

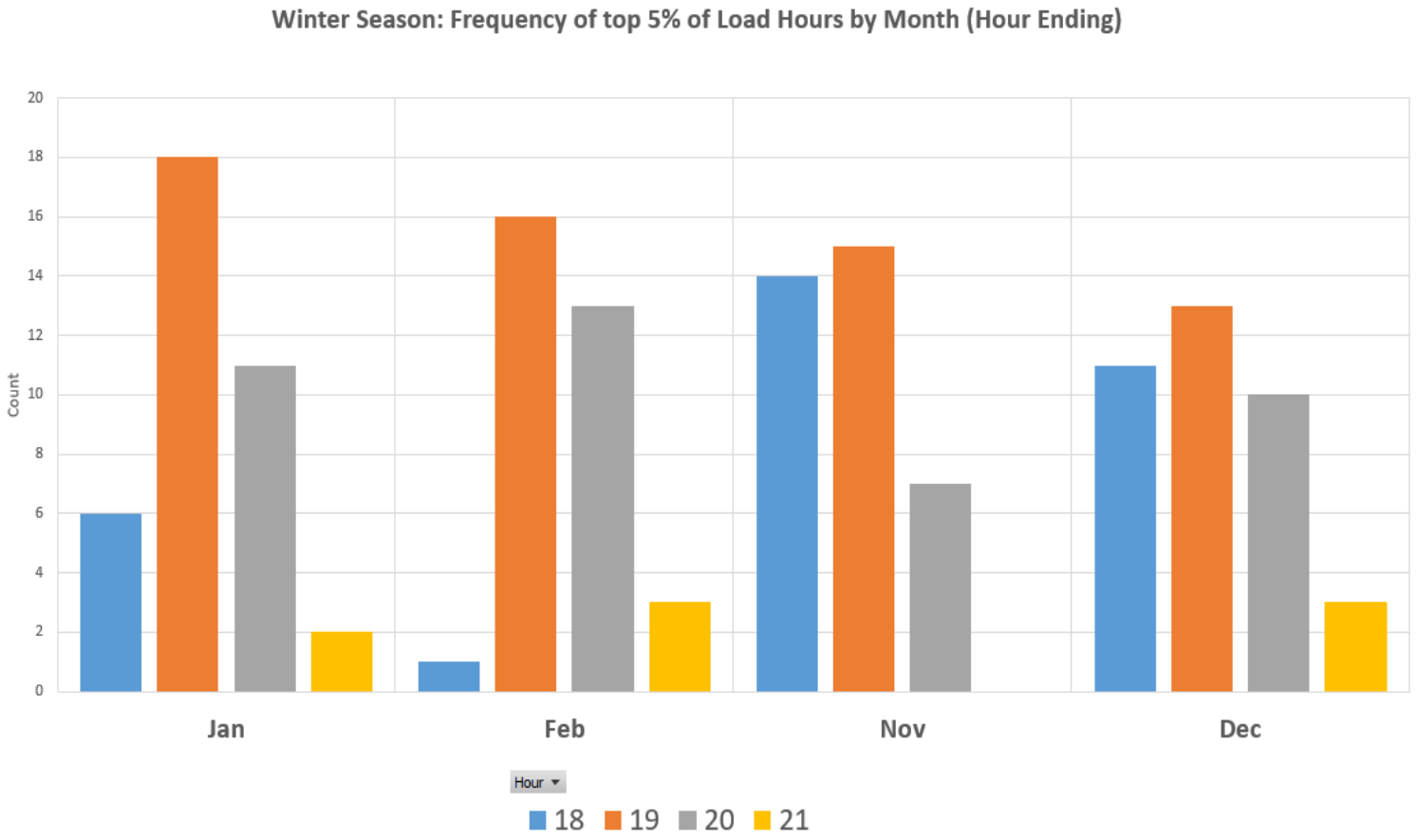








Winter Season
2024 top 5% of load hours (HE)



Availability assessment hours final recommendation

Winter and Summer Season Final Recommendation

Jan-Feb, Nov-Dec; Jun-Oct (also includes May for 2023)

Year	Start	End
2023 (Final)	HE 17	HE 21
2024 (Final)	HE 17	HE 21
2025 (Estimate)	HE 17	HE 21
2026 (Estimate)	HE 17	HE 21

Spring Season Final Recommendation

Mar-Apr for 2023; Mar-May for 2024-2026

Year	Start	End
2023 (Final)	HE 18	HE 22
2024 (Final)	HE 18	HE 22
2025 (Estimate)	HE 18	HE 22
2026 (Estimate)	HE 18	HE 22

Reliability Requirements; Section 7 – BPM Updates Needed

2024 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: November 1 - February 28

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

2024 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*