



California ISO

# **Final Availability Assessment Hours Technical Study for 2019**

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# Overview

- Overview of methodology used for system/local availability assessment hours
  - 2019 final availability assessment hours
  - 2020-2021 draft availability assessment hours

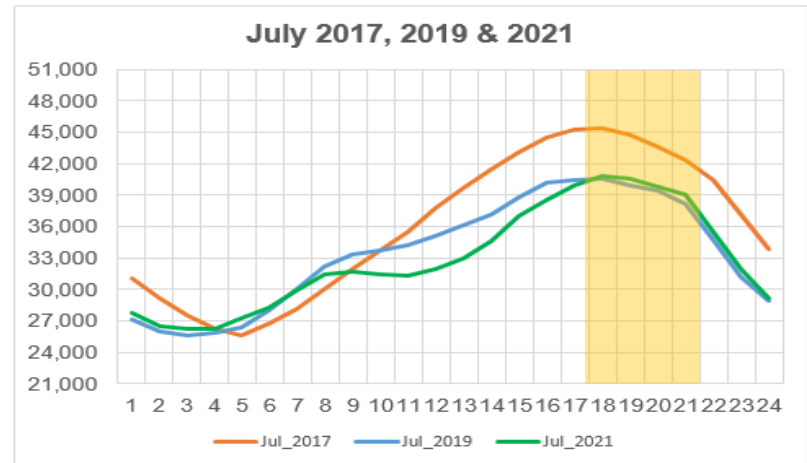
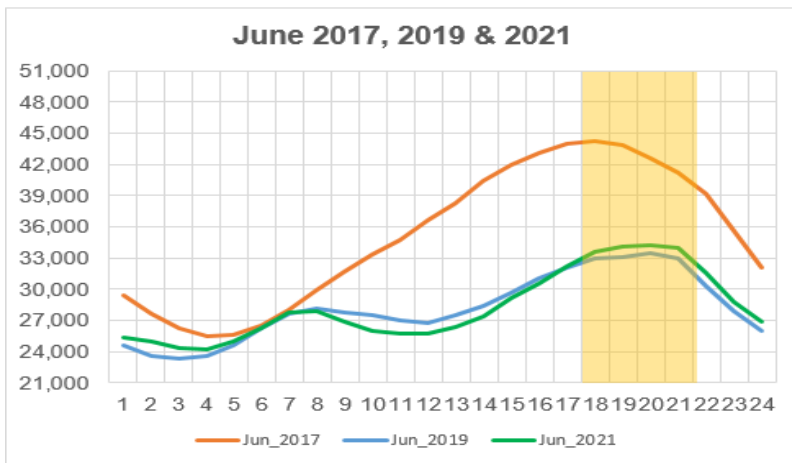
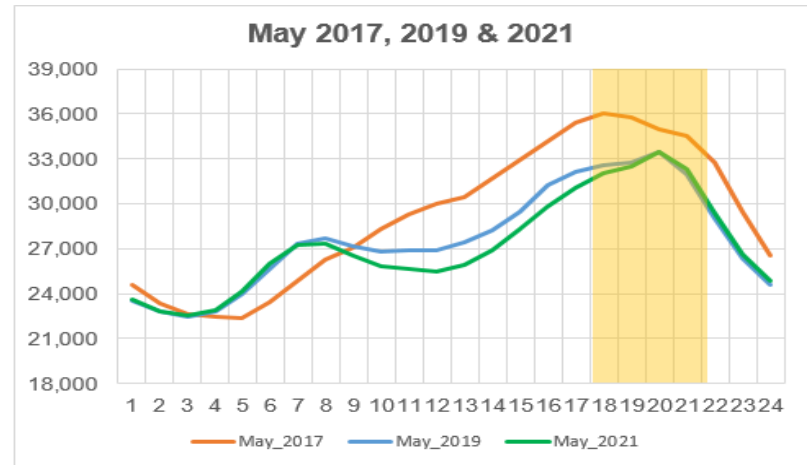
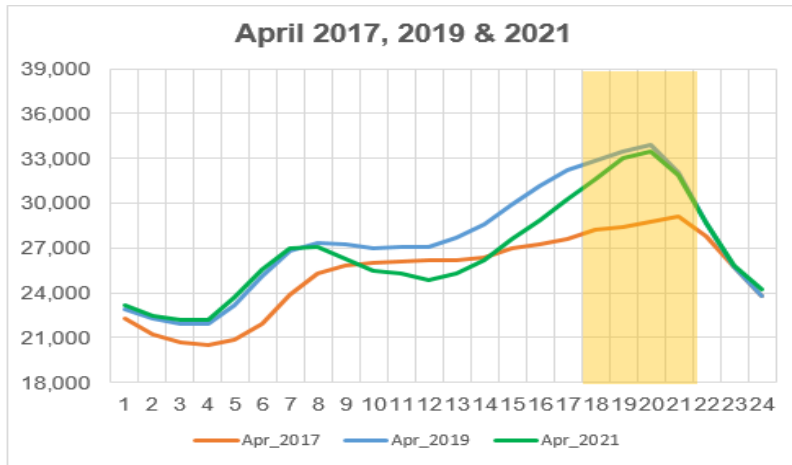
# Availability Assessment Hours- Background and Purpose

- 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

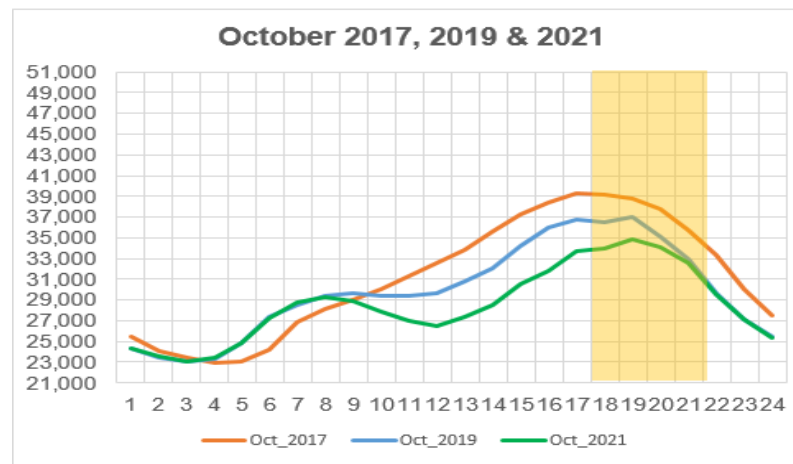
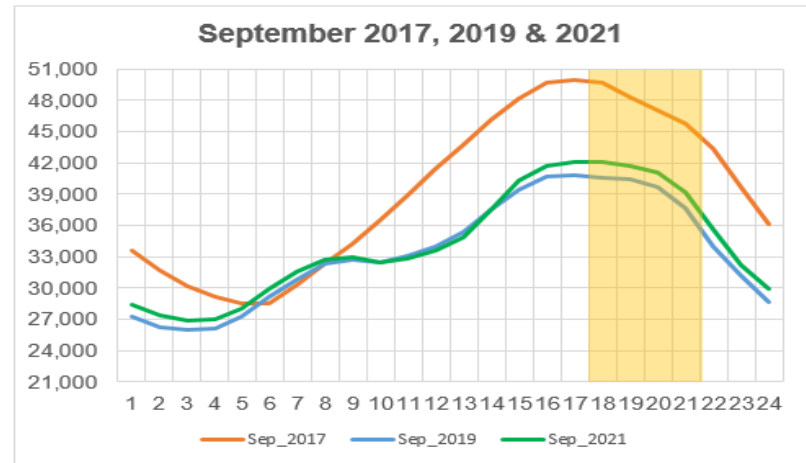
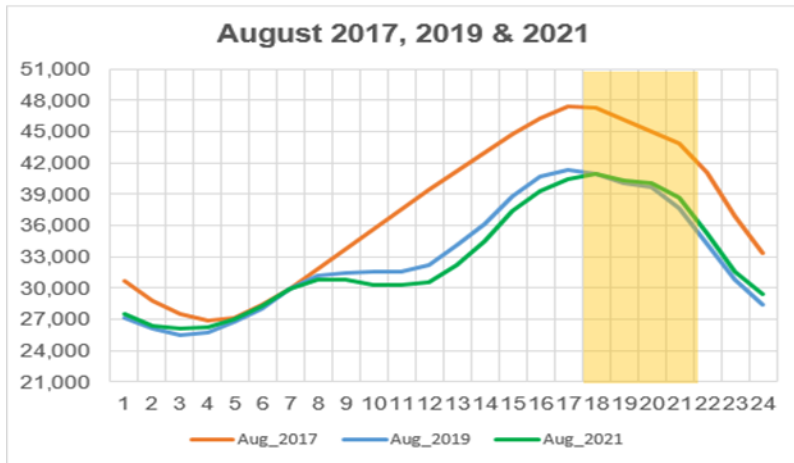
# Methodology Overview of System/Local Availability Assessment Hours

- Used data described in previous slides to obtain:
  - Hourly Average Load
    - By Hour
    - By Month
    - Years 2017-2021
- Calculated:
  - Top 5% of Load Hours within each month using an hourly load distribution
  - Years 2017 through 2021

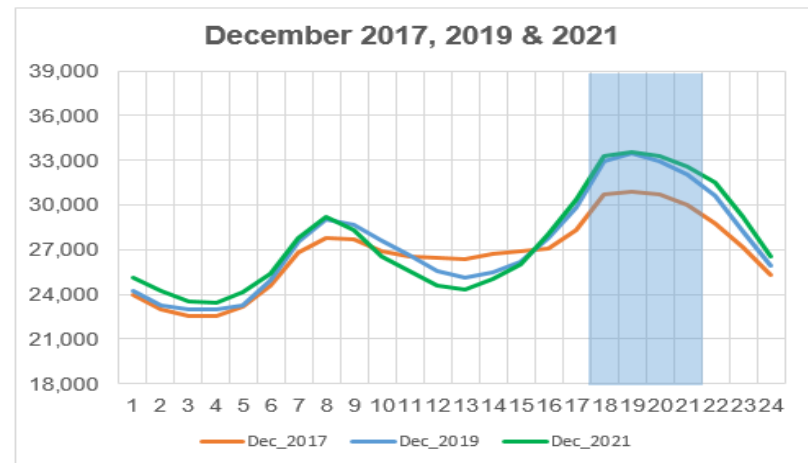
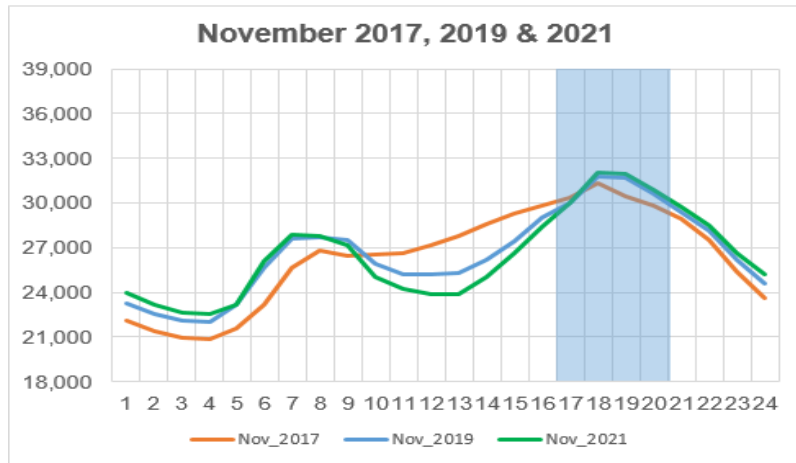
# Expected Load Shape Evolution: Summer Season:



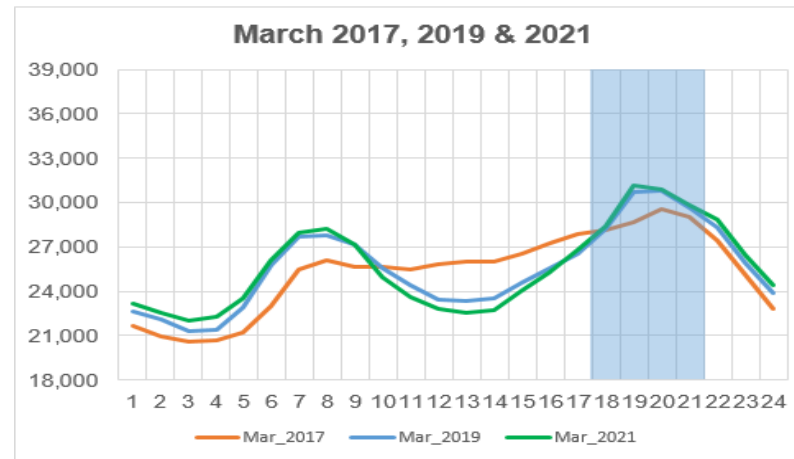
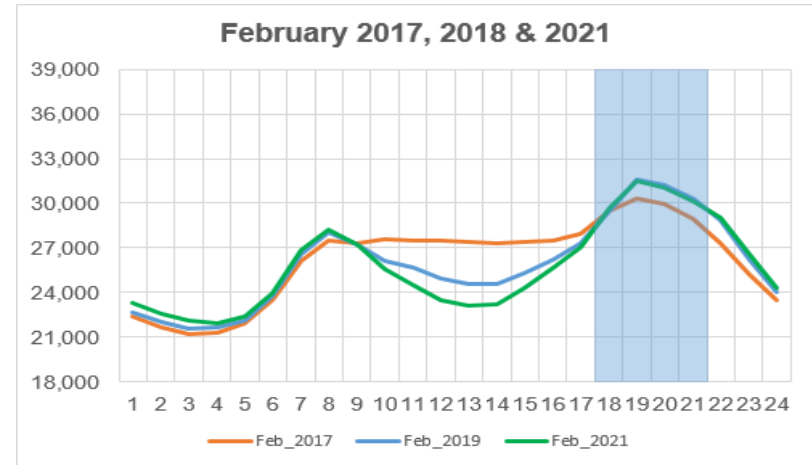
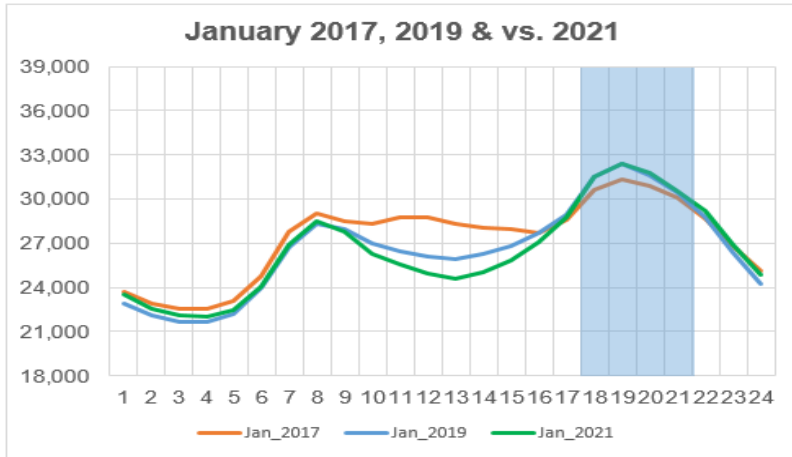
# Expected Load Shape Evolution: Summer Season



# Expected Load Shape Evolution: Winter Season

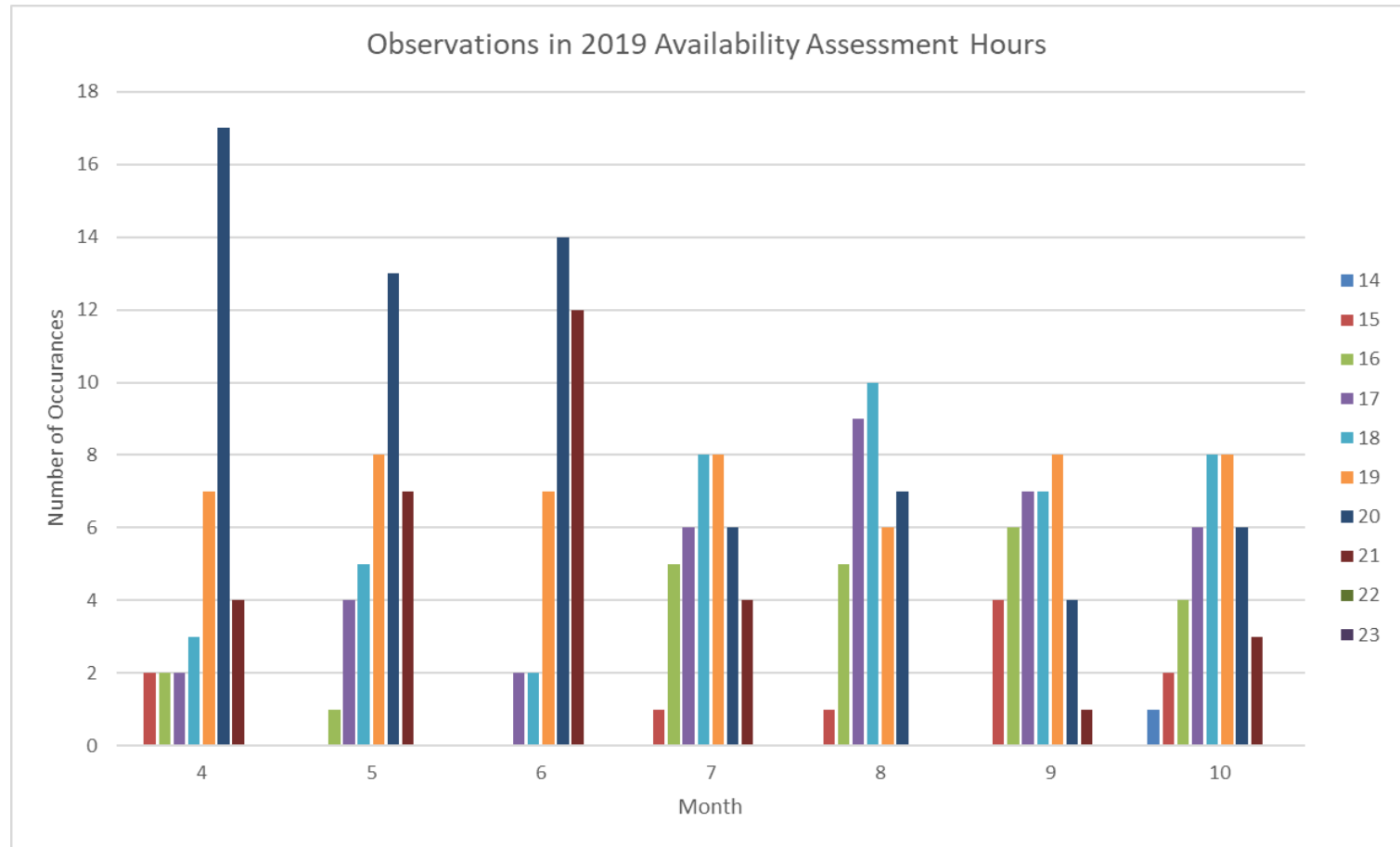


# Expected Load Shape Evolution: Winter Season

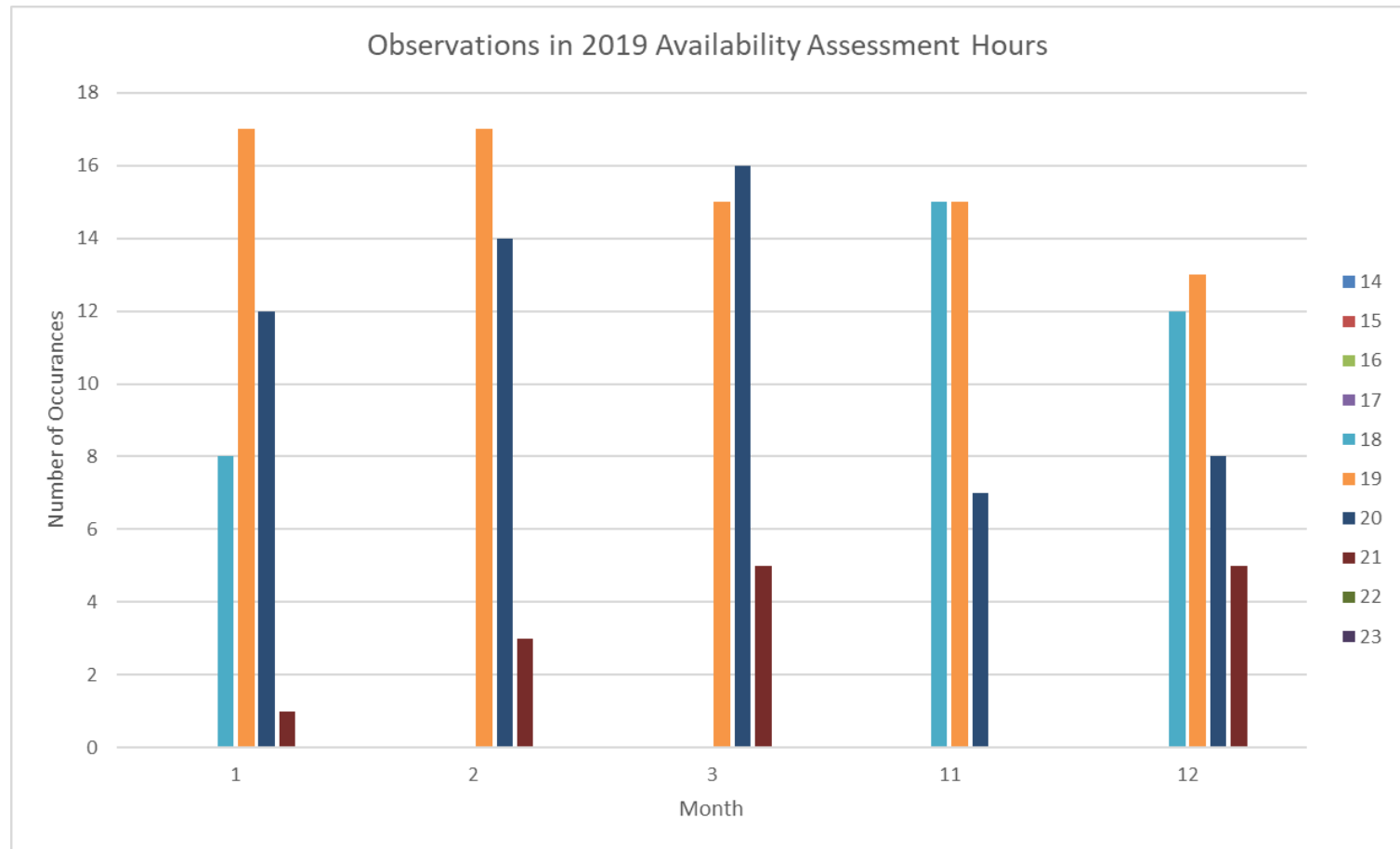




# Summer Season



# Winter Season



# Availability Assessment Hours Draft Recommendation

## Winter Season Draft Recommendation

Year	Start	End
2017 (Final)	HE 17	HE 21
2018 (Final)	HE 17	HE 21
2019 (Final)	HE 17	HE 21
2020 (Estimate)	HE 17	HE 21
2021 (Estimate)	HE 17	HE 21

## Summer Season Draft Recommendation

Year	Start	End
2017 (Final)	HE 14	HE 18
2018 (Final)	HE 17	HE 21
2019 (Final)	HE 17	HE 21
2020 (Estimate)	HE 17	HE 21
2021 (Estimate)	HE 17	HE 21

# Reliability Requirements Business Practice Manual; Section 7

## **2019 System and Local Resource Adequacy Availability Assessment Hours**

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

Summer – April 1 through October 31

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

Winter – November 1 through March 31

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

# Questions

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