DOCKETED	
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2021 Summer Readiness – July Update

IEPR Joint Agency Workshop on Summer 2021 Electric and Natural Gas Reliability

July 8, 2021

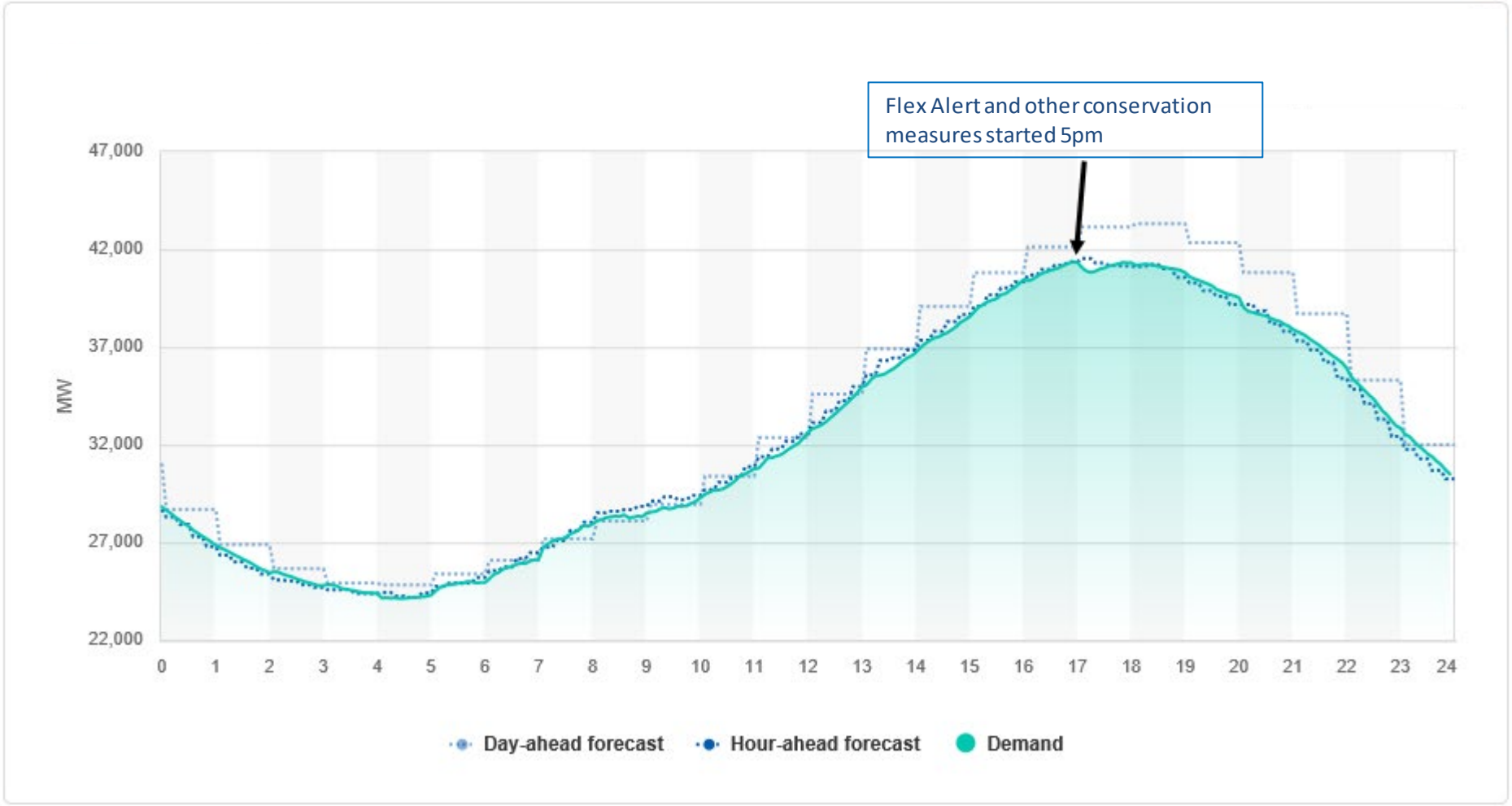
Update Overview

- June 15-22 Heat Event Recap
- Changes to Demand and Supply Since May
- Preliminary Analysis of Fire Risk

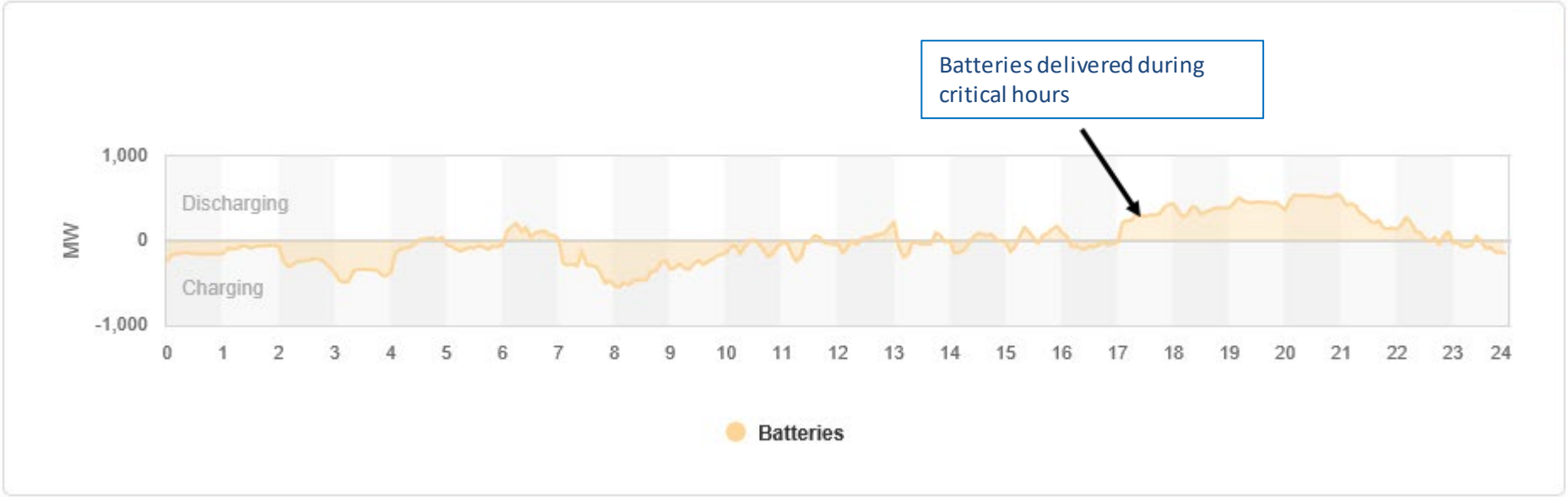
June 15 – 22 Heat Event Recap

- Heat event called by CAISO
  - Included record temps in CA and heat dome over AZ/NV
  - CAISO issued first 2021 Flex Alert for June 17 & 18
- Conditions compounded by drought and loss of gas plant capacity of 2200 MW
- Agencies executed contingency plan
  - Daily coordination at principal and technical levels
  - Triggered additional planned contingency measures
- Avoided outages and the need for an RDRR event

Effective Public Response



New Batteries Performed Well



Hourly Stack Analysis

- CEC stack analysis scenarios provide awareness of the summer reliability outlook
  - Uses CAISO NQC list to represent each generator. Individual generator month-ahead RA showings are confidential
- Monthly individual generator RA showings provide the best information on committed supply
  - CAISO presented a stack analysis utilizing monthly RA showings to provide context for the CPM Significant Event solicitation

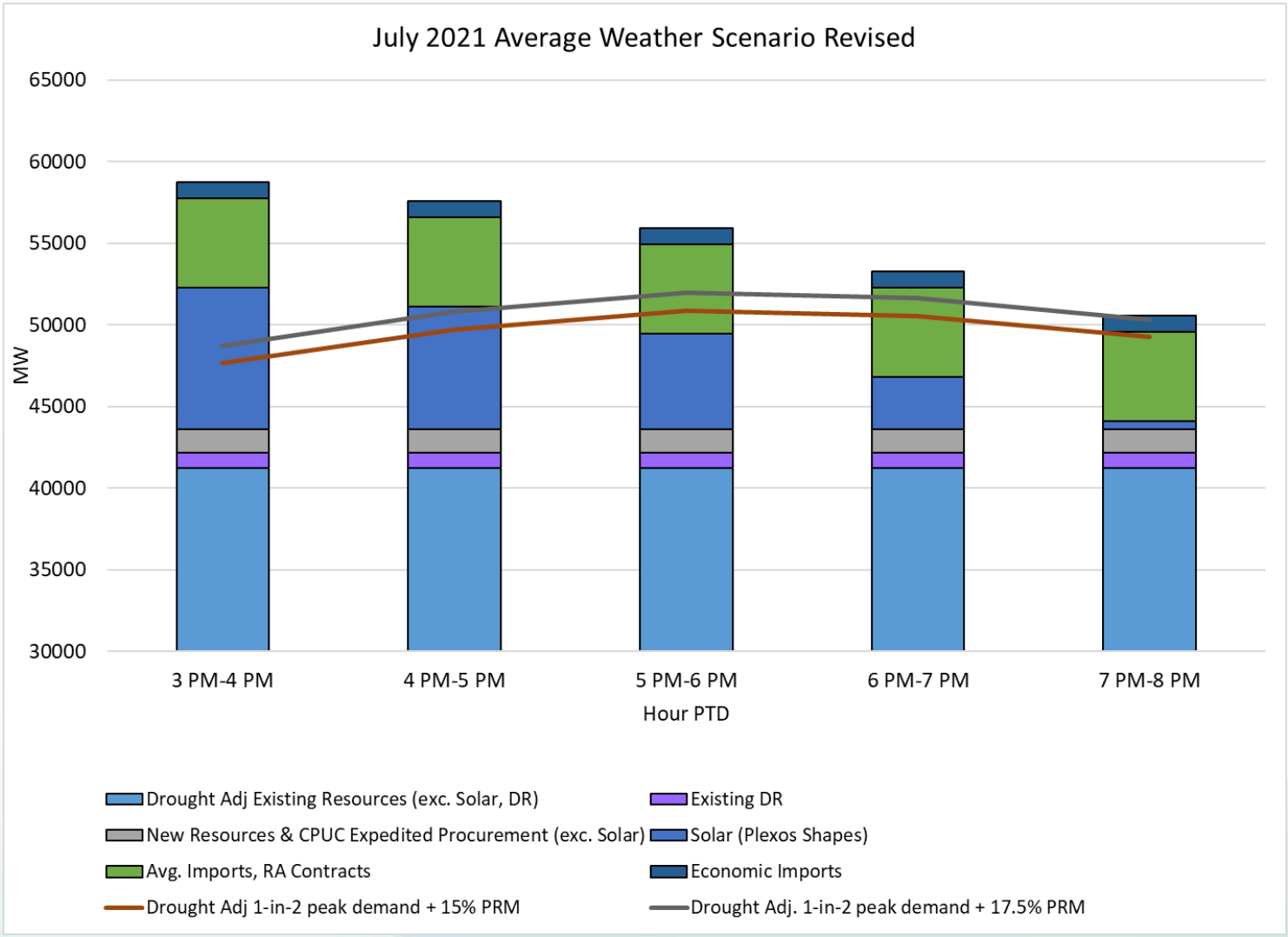
	CEC Stack Analysis	CAISO CPM Stack Analysis
Purpose	Develop scenarios to provide situational awareness of the summer reliability outlook	Provide context for the CPM Significant Event solicitation
Supply Stack Source	NQC List	Monthly RA Showings

Changes to Demand and Supply Since May

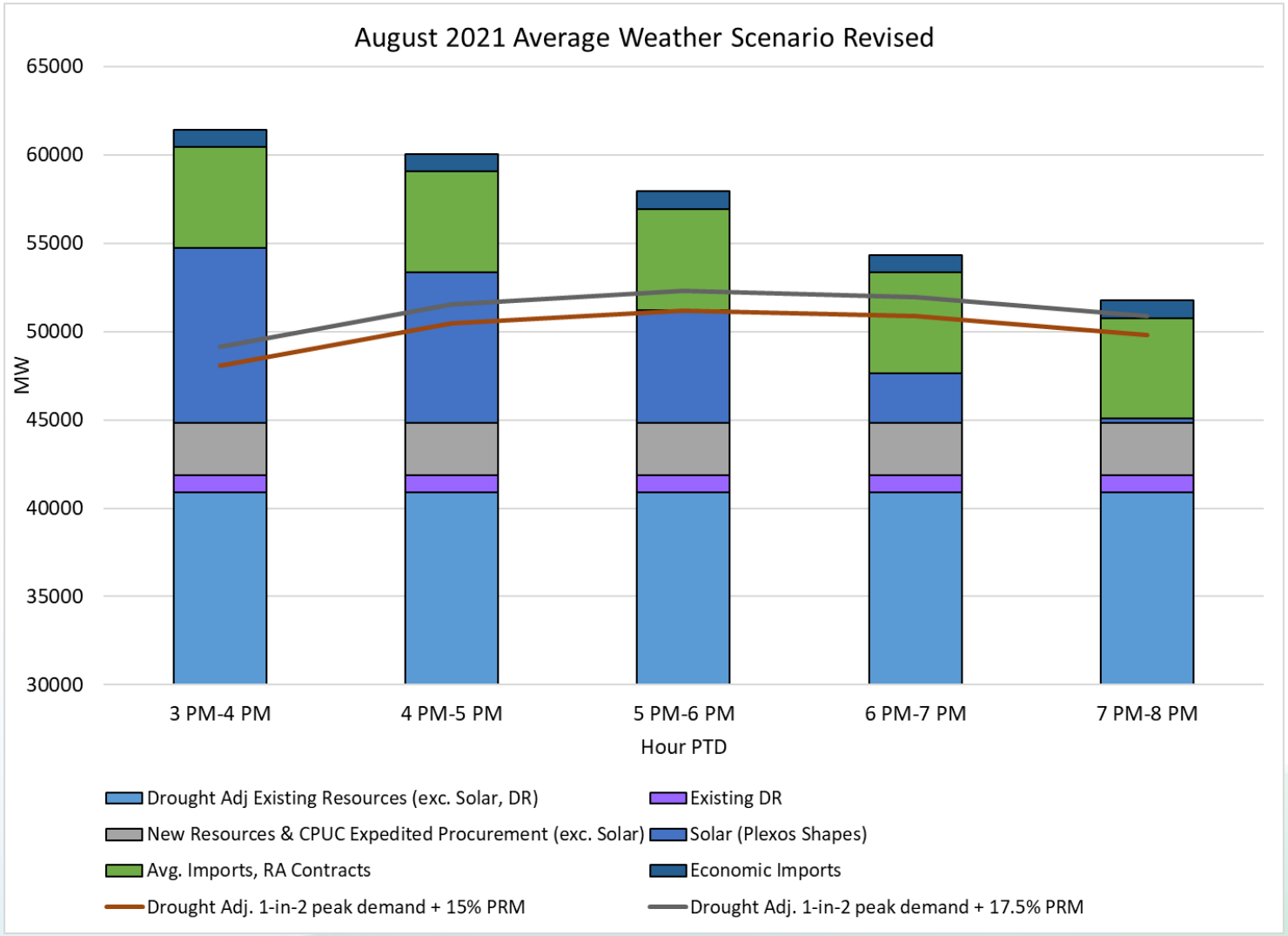
- Demand
  - Net decrease of over 200 MW from reduced pumping loads

- Supply
  - Decrease hydro capacity projections by ~ 1,000 MW
  - Updates to RA import from projections to actual showings
    - Increase of 137MW for July and decrease of 393 MW for August
  - Loss of other capacity
  - ~600 MW in plant outages in July
  - ~200 MW to ~500 MW procurement delays in August and September

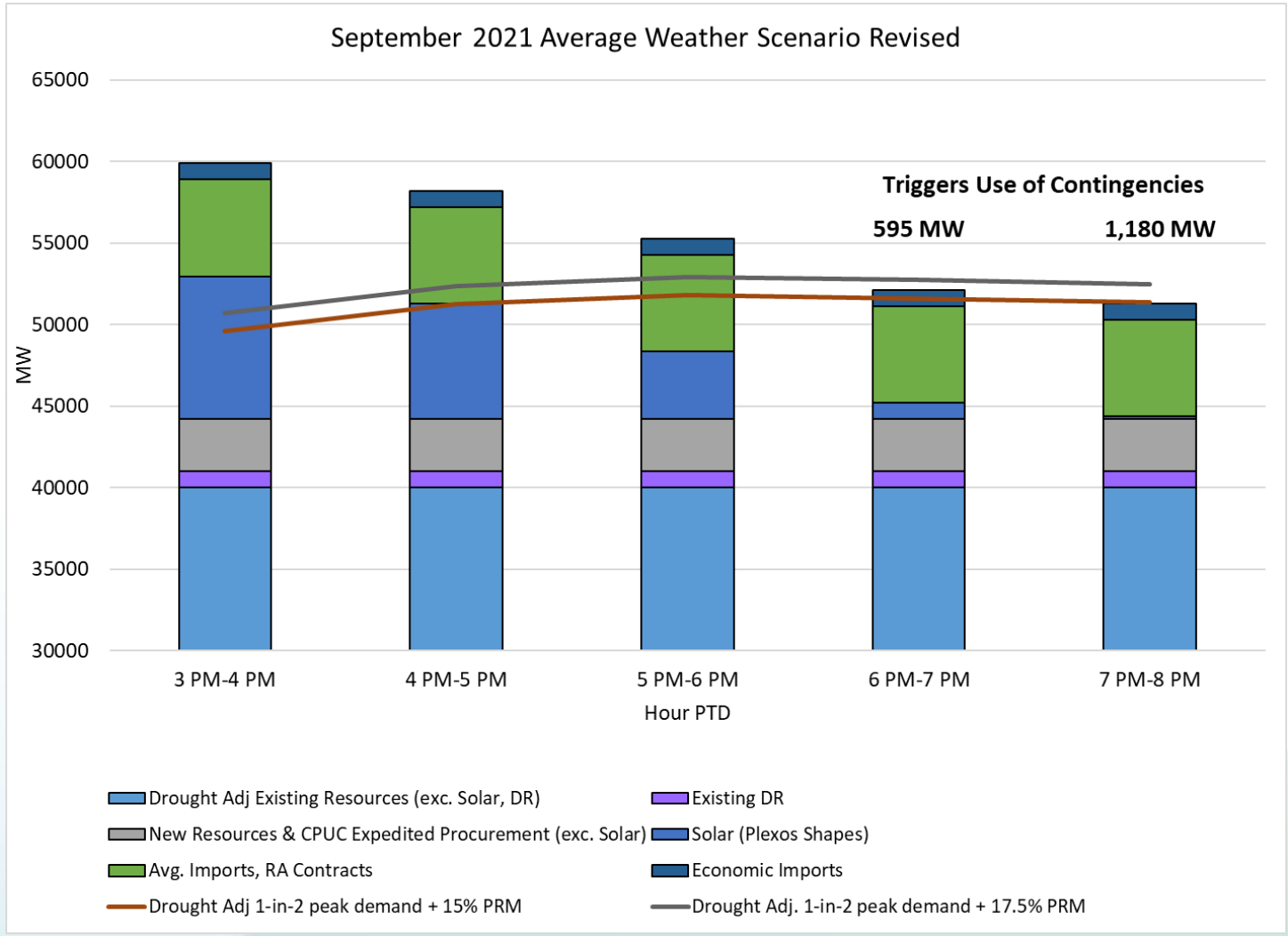
Revised Outlook Under Average Weather Conditions – July 2021



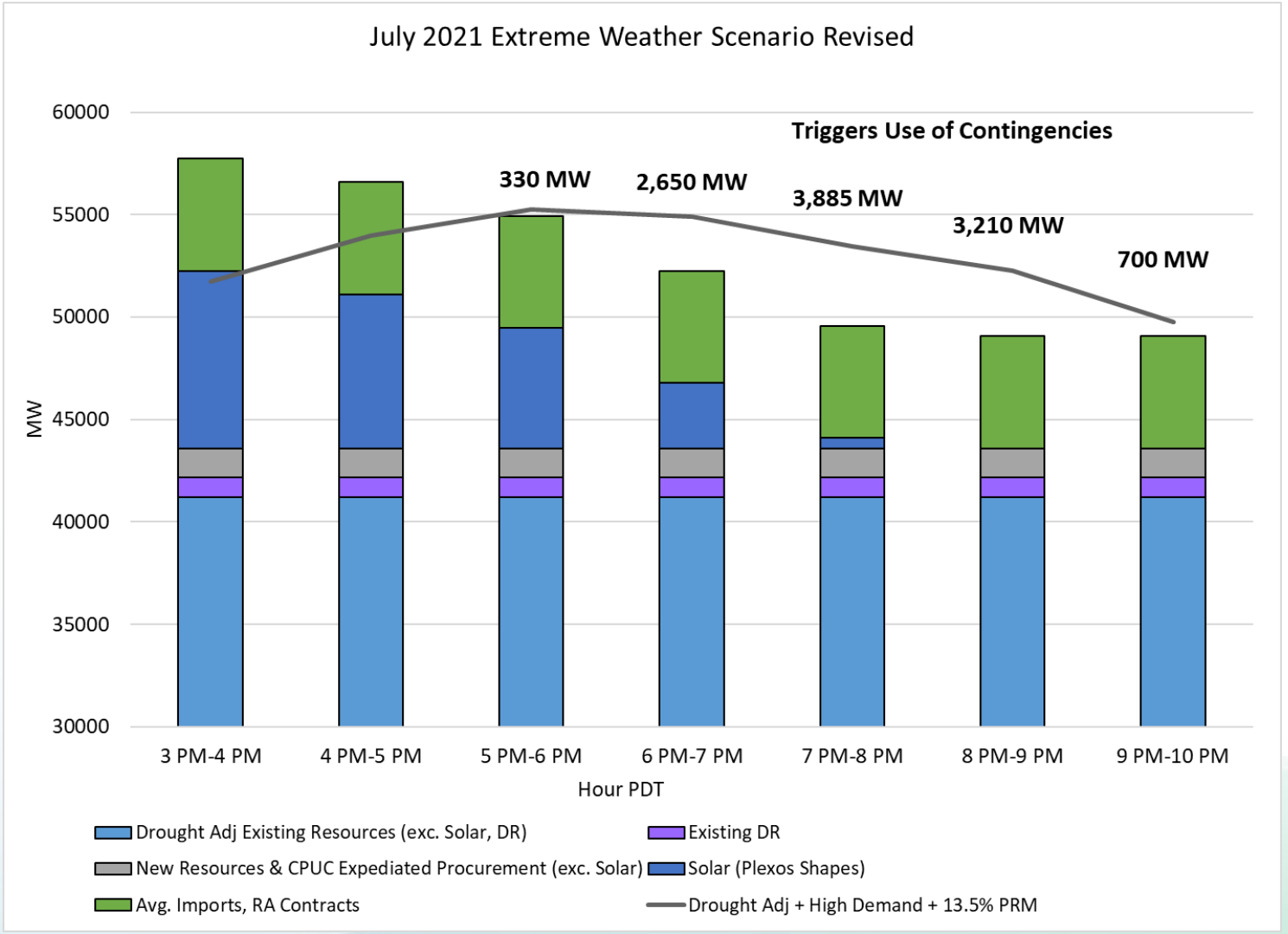
Revised Outlook Under Average Weather Conditions – Aug 2021



Revised Outlook Under Average Weather Conditions – Sept 2021



Outlook Under Extreme Weather Conditions – July 2021



- Assumes extreme demand & conservative resource assumptions
- Does not include contingencies

Outlook Under Extreme Weather Conditions – Aug 2021

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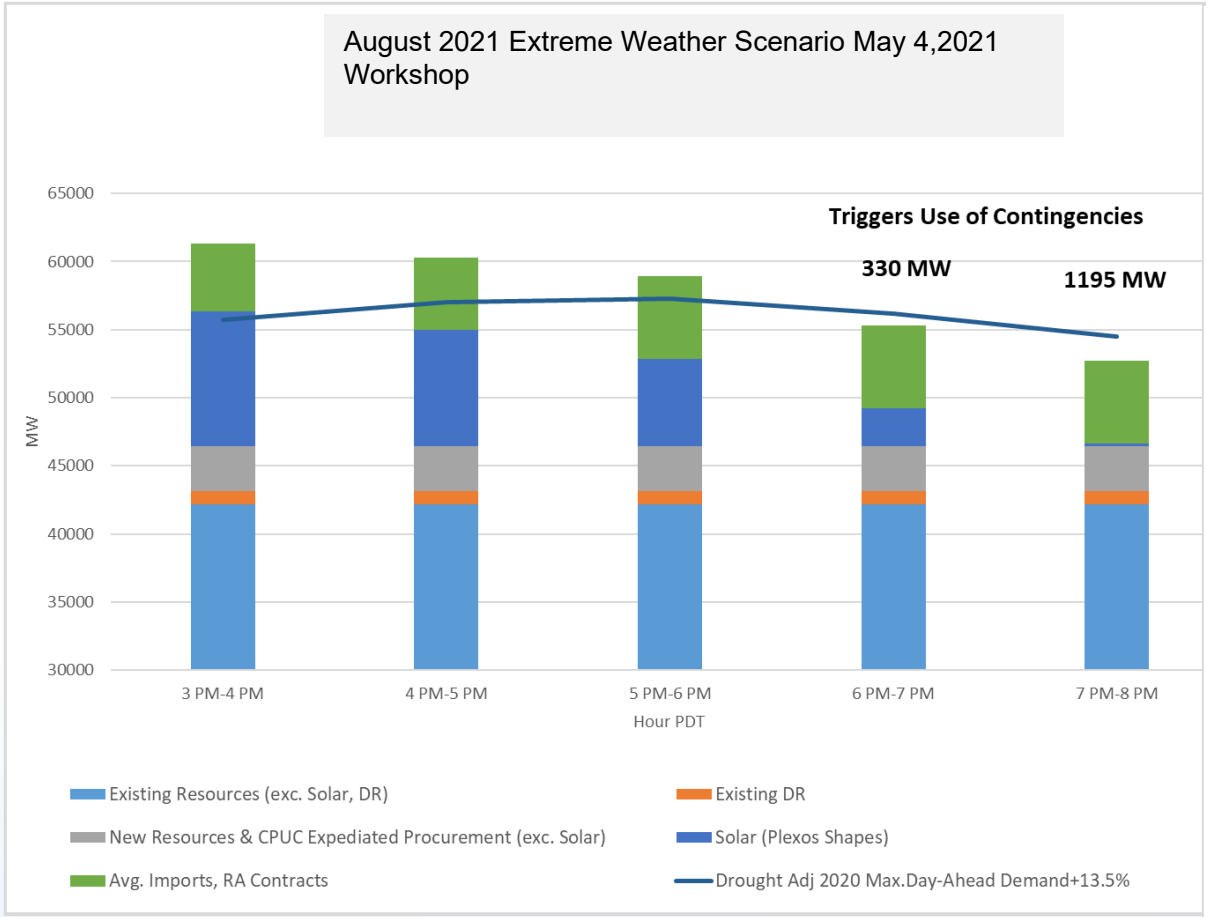

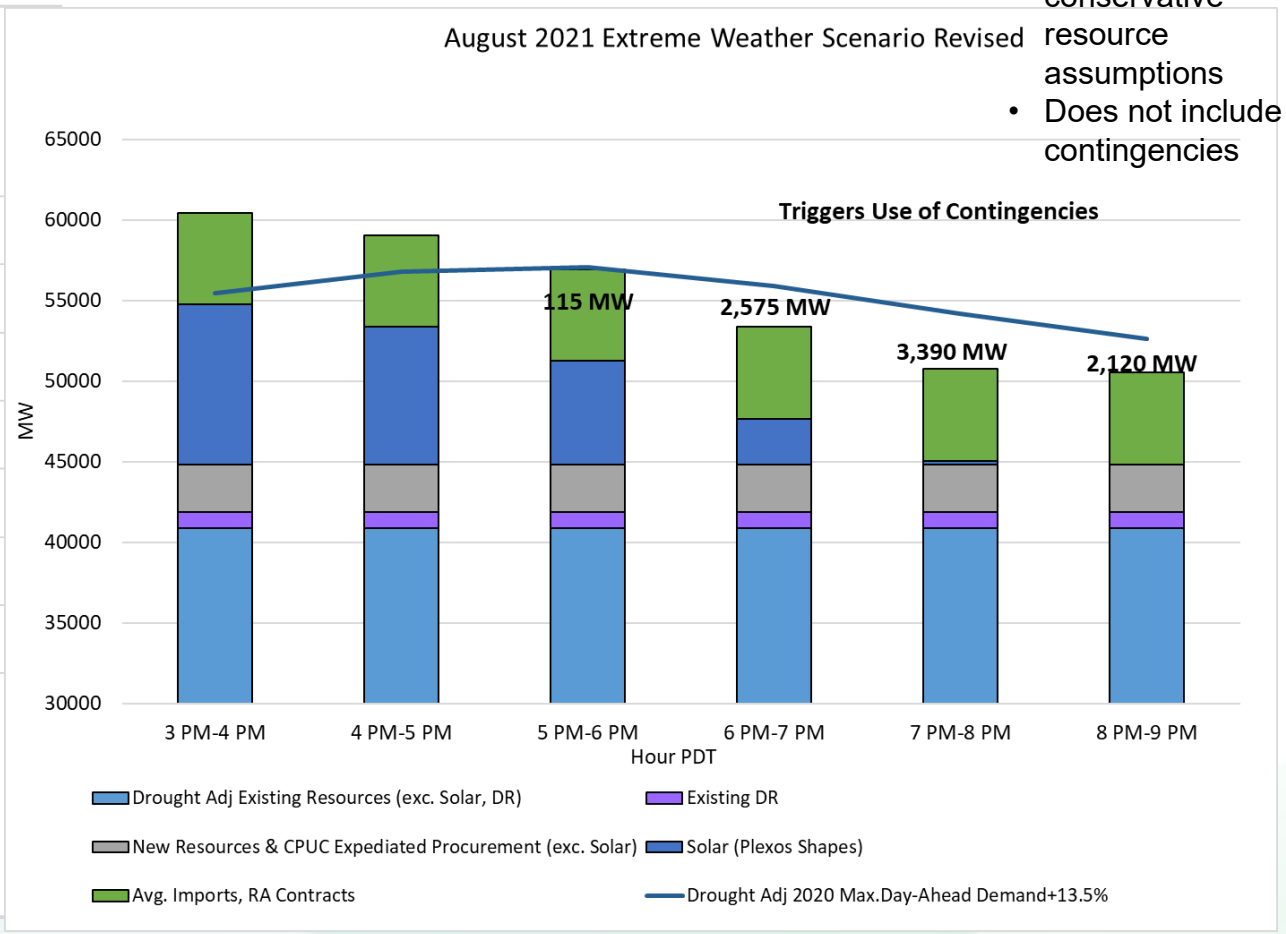

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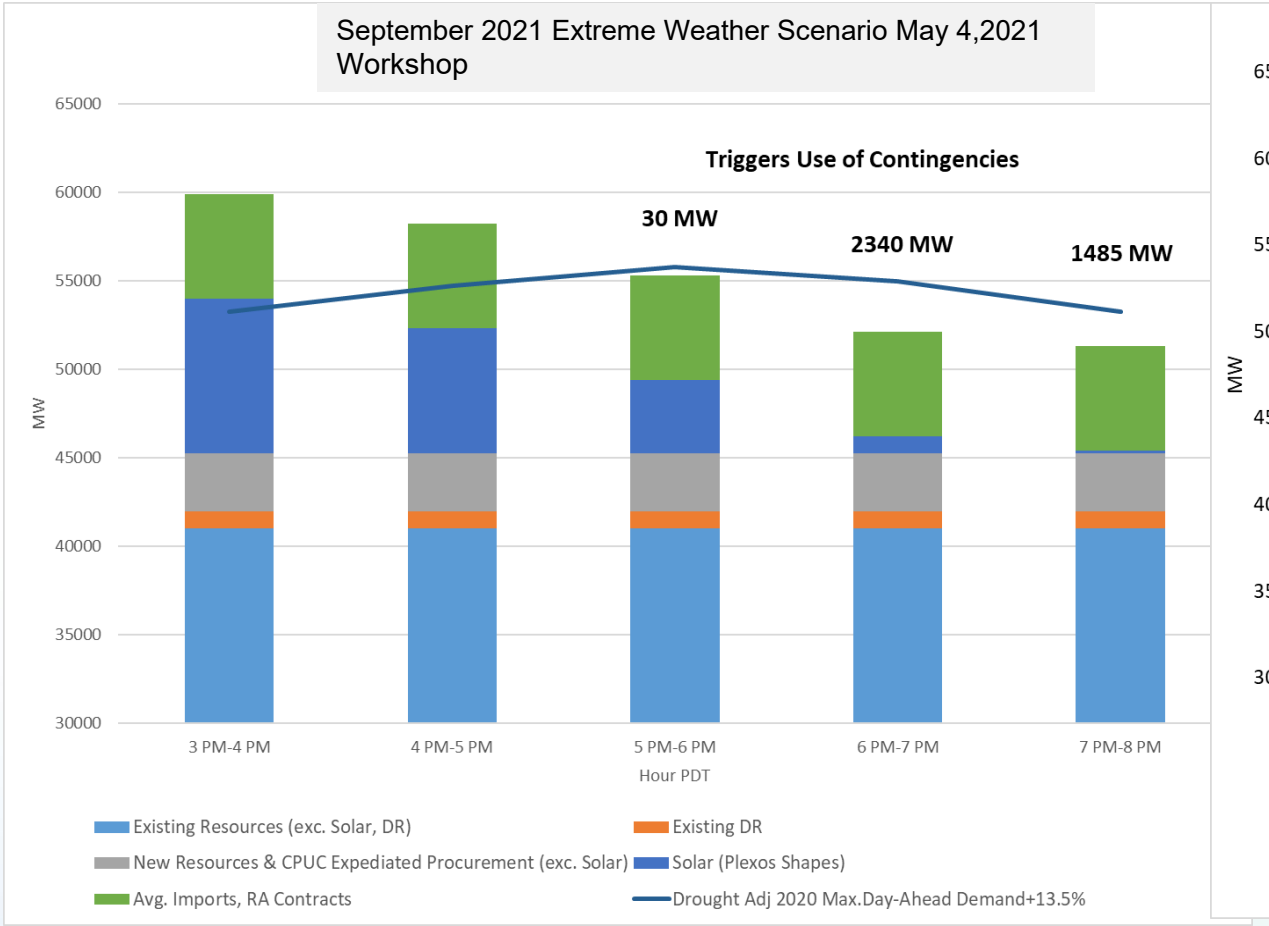
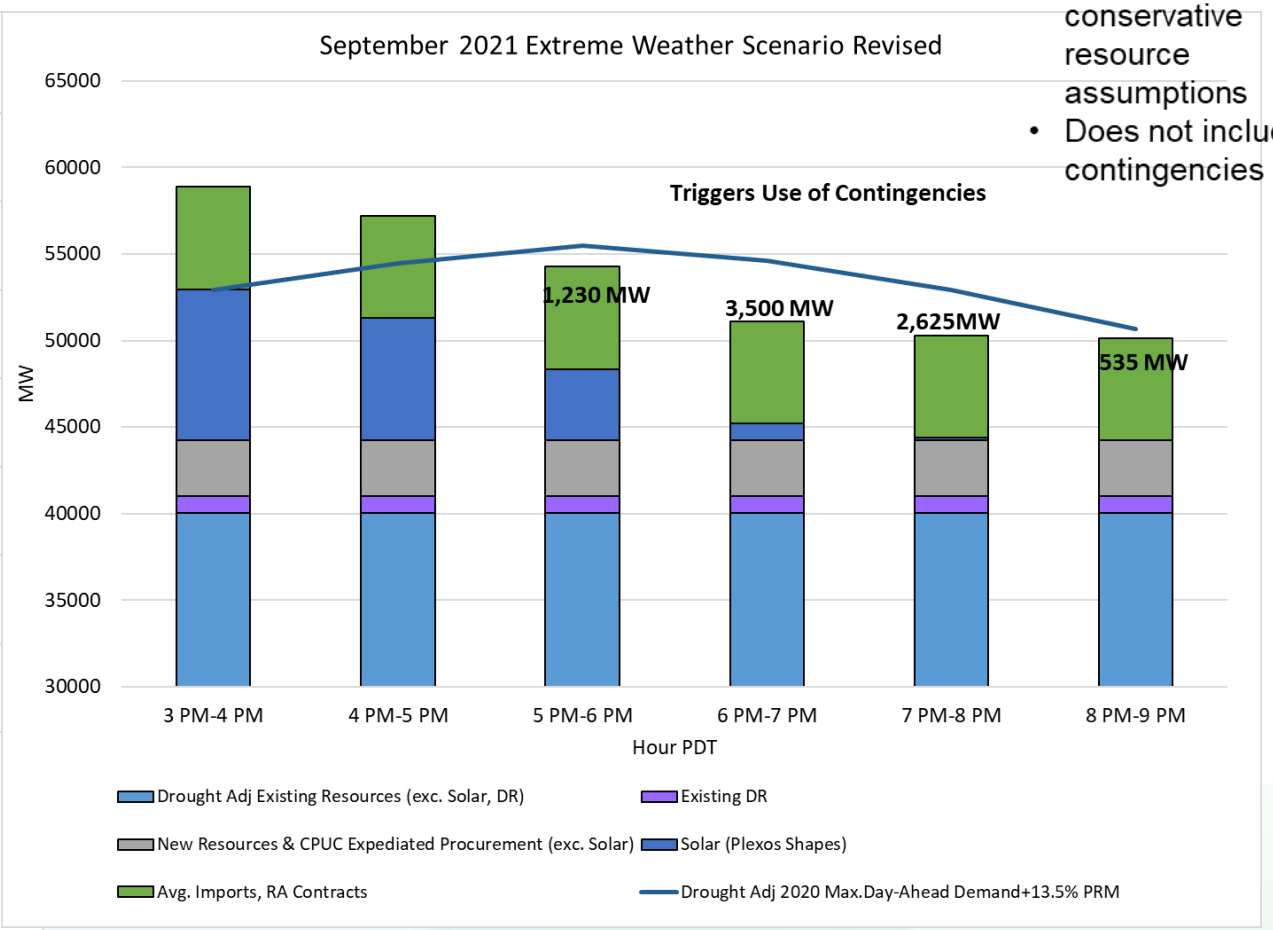




Example Contingencies

Description
Voluntary Customer Conservation (Flex Alert)
Additional Generation and Load Reductions
Capacity Procurement Mechanism
Emergency Load Reduction Program
Imports from Other California Balancing Authorities & Neighboring states
Increased Output from Thermal Fleet

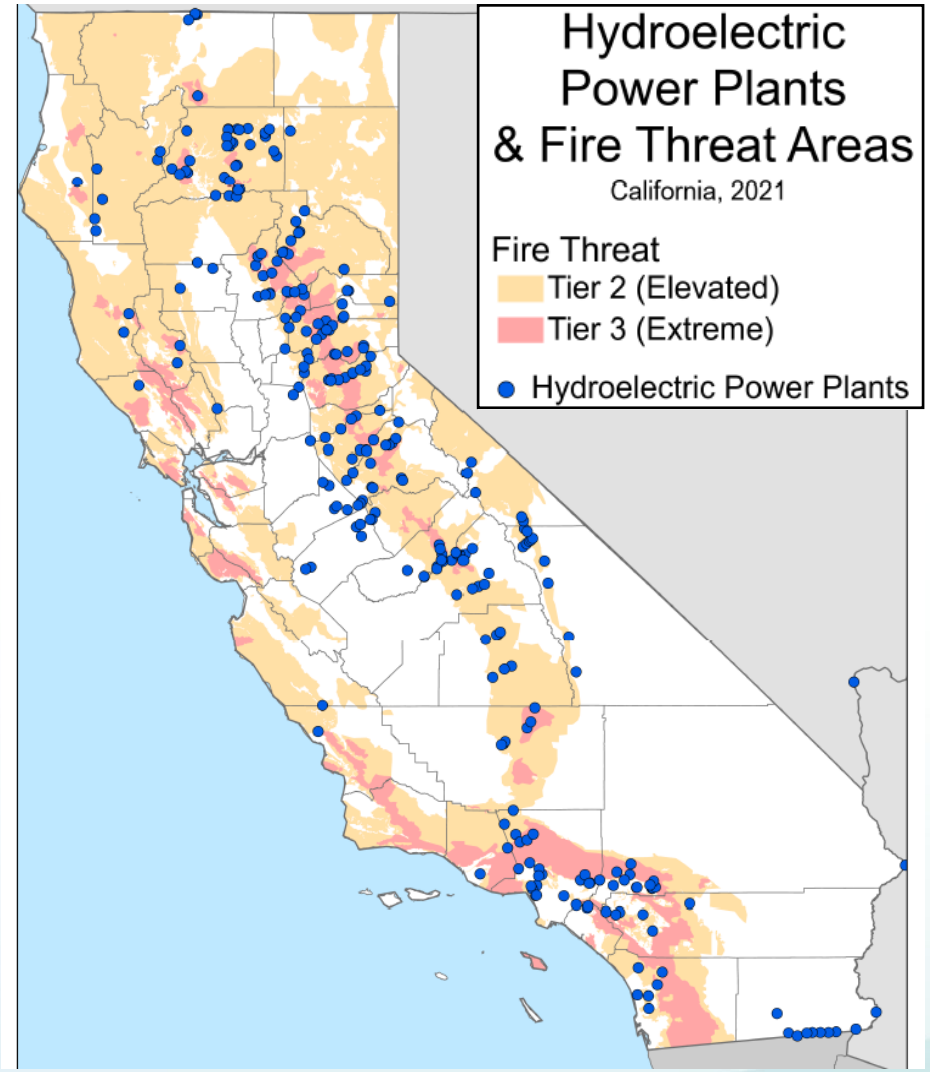
Preliminary Analysis of Fire Risk

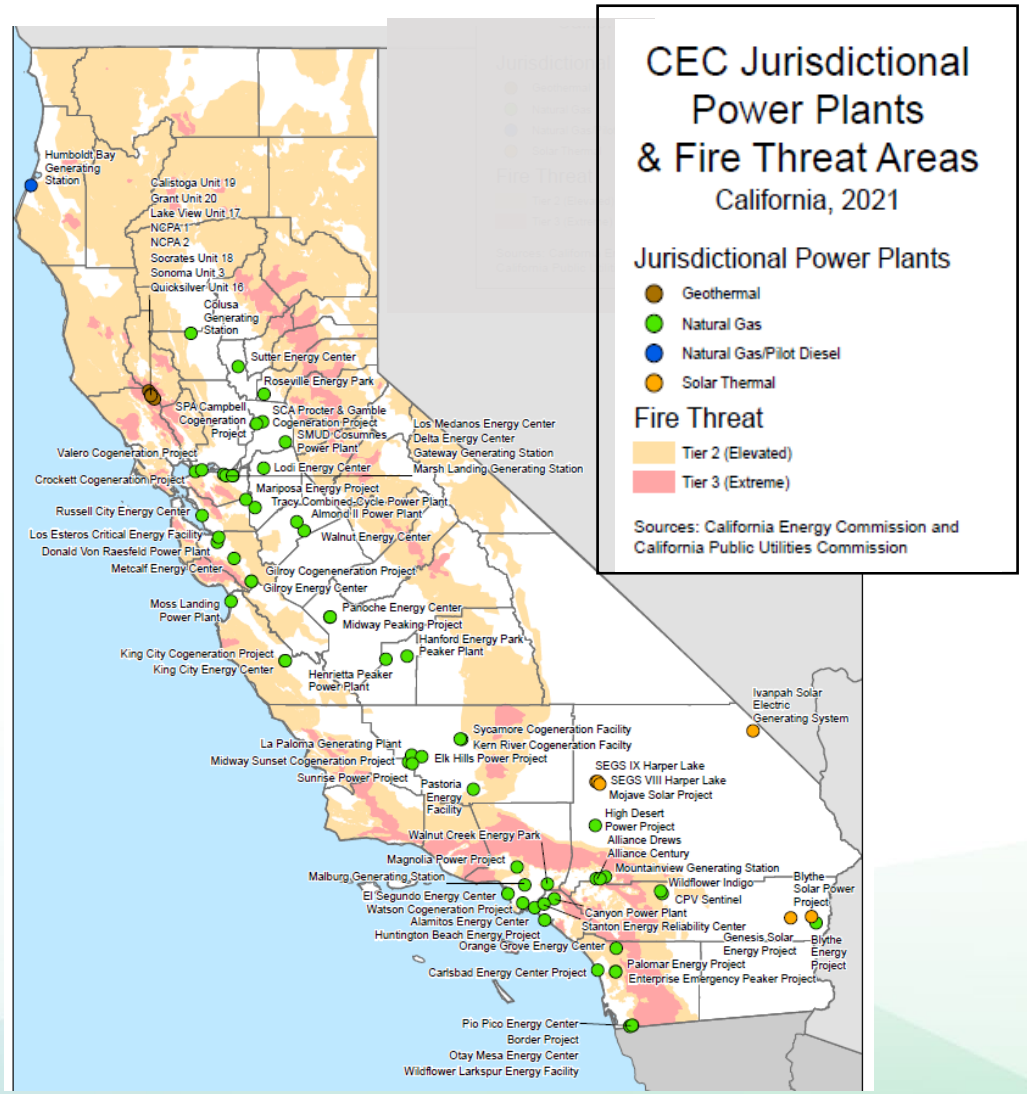
- CEC-jurisdictional fossil-gas, geothermal and solar-thermal power plant fleet has relatively low wildfire risk.
  - Majority (64) are in developed or open areas with low wildfire risk
  - 12 jurisdictional plants are in areas Tier 2 or 3 fire risk areas and have plans and systems to enhance resilient operation
    - 8 of the 12 are located in the Geysers Geothermal area.
    - 4 of the 12 are located in San Diego County

- Most of the 288 hydroelectric power plants are in high fire-threat areas

- Staff monitoring statewide fire conditions to evaluate risk and impact to electric supply during the current drought

Preliminary Analysis of Fire Risk





Questions?