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# **Reliability Workshop Overview**

May 20, 2022

David Erne Energy Assessments Division



# **Workshop Overview**

- Summer Assessments (CEC & CAISO)
- TED Task Force Overview
- Supply Chain Panel
- Interconnection Panel



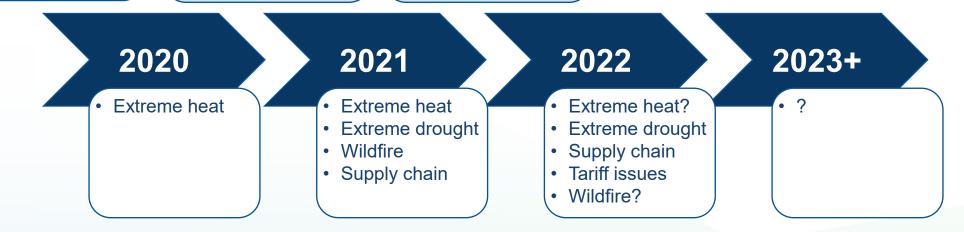


### **Compounding Reliability Risks**

Planning

- Historic conditions
- Average Climate Change Trends

- Begin to incorporate climate change uncertainty
- Increase effective PRM
- Identify Contingency Measures
- Re-assessing PRM
- Identifying need for a strategic reserve

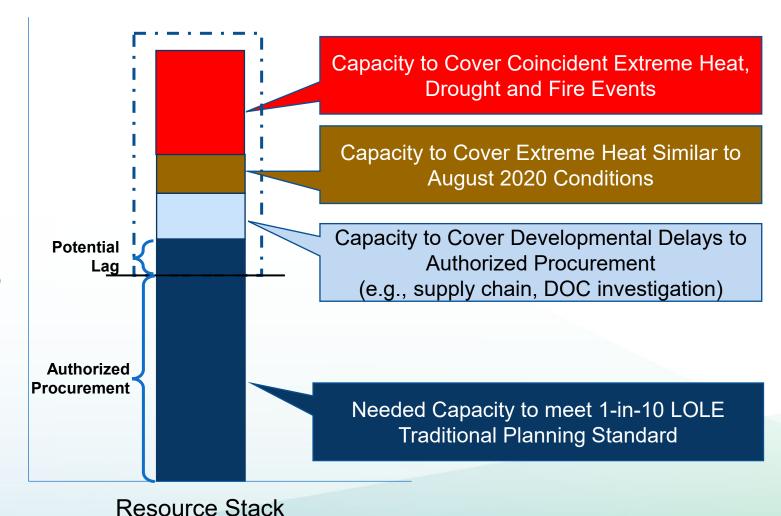


**Events** 



### **Reliability Impacts**

Capacity Needed During Coinciding Extreme Events



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## **Reliability Planning Coordination**

Consisting of GO, CEC, CPUC, DWR and CAISO To actively coordinate across three key sets of activities

# Planning & Authorization of Procurement

Goal: Ensure adequate procurement is in place considering climate change and state policies



#### Procurement Tracking, Risk Management and Mitigation

Goal: Actively track procurement projects, and assign interagency teams to mitigate barriers such as supply chain, interconnection, transmission, permitting etc.



# Recommend and Execute State Sponsored Contingencies & Actions

Goal: Proactively develop recommendations for state action as early as possible



### **Reliability Planning Actions**

# Planning & Authorization of Procurement

- Revised forecasts
- Unprecedented procurement
- Maximized demand
- Accelerated projects
- Delayed retirements



#### Procurement Tracking, Risk Management and Mitigation

 Tracking Energy Development Task Force



# Recommend and Execute State Sponsored Contingencies & Actions

- Identified contingencies
- Procured emergency generators

# Contingencies

#### **Operational**

- Coordination with other balancing authorities
- Increasing CAISO Generation Limits (may also require 202C)

#### Supply-side

- Temporary generators
- Efficiency improvements

#### **Demand-side**

- Flex Alert
- Shift DWR pumping loads
- Voluntary reductions by large users

Total estimated contingencies: ~2,000 MW



# **Estimated Impact on Energy Reliability**

Issue	2022	2025
Lag in incorporation of updated demand forecasts and policy goals in procurement targeting 1-in-10 traditional planning metric	1,700 MWs	1,800 MWs
Extreme weather and fire risks to energy assets not completely captured in a 1-in-10 traditional planning efforts	4,000 - 5,000 MWs	
Project Development Delay Scenarios (estimated)	600 MWs	1,600 - 3800 MWs

In total the risk in a coincidental situation could be 7,000MW in 2022 & 10,000MW in 2025



# Reliability in May Revise Budget

- Strategic Electricity Reliability Reserve
  - Strategic Reliability Infrastructure Assets (\$4.2B)
  - Distributed Electricity Backup Assets & Utility-Scale Assets Program (\$950M)
  - Demand Side Grid Support Program (\$295M)
- Planning Reserve Margins





# **Questions?**