



California ISO

Media Briefing: Summer 2023 Reliability Outlook

May 24, 2023



Today's Speakers

- Christine Hironaka, Deputy Cabinet Secretary, Office of the Governor
- Vice Chair Siva Gunda, California Energy Commission
- Neil Millar, Vice President of Transmission Planning & Infrastructure Development, California Independent System Operator
- President Alice Reynolds, California Public Utilities Commission



Vice Chair Siva Gunda





Results Summary

With improved hydro conditions, increased capacity and 2,800 MW of back-up contingency resources secured for use in the event of an extreme event, no electricity shortfalls are expected in 2023.

Scenario	Projected September 2023 Estimated Surplus or Need for Contingencies
Under Expected Demand	~ 2,350
2020 Equivalent Event	~ -250
2022 Equivalent Event	~ -1,850

Green is surplus, red is shortfall before contingencies.
Shortfalls do not include coincident catastrophic fire risk.

Note: Going into summer 2022, the forecasted shortfalls under **2020 and 2022 equivalent** event would have been **3,000 and 7,000 MW**, respectively.



2023 Summer Outlook Media Briefing

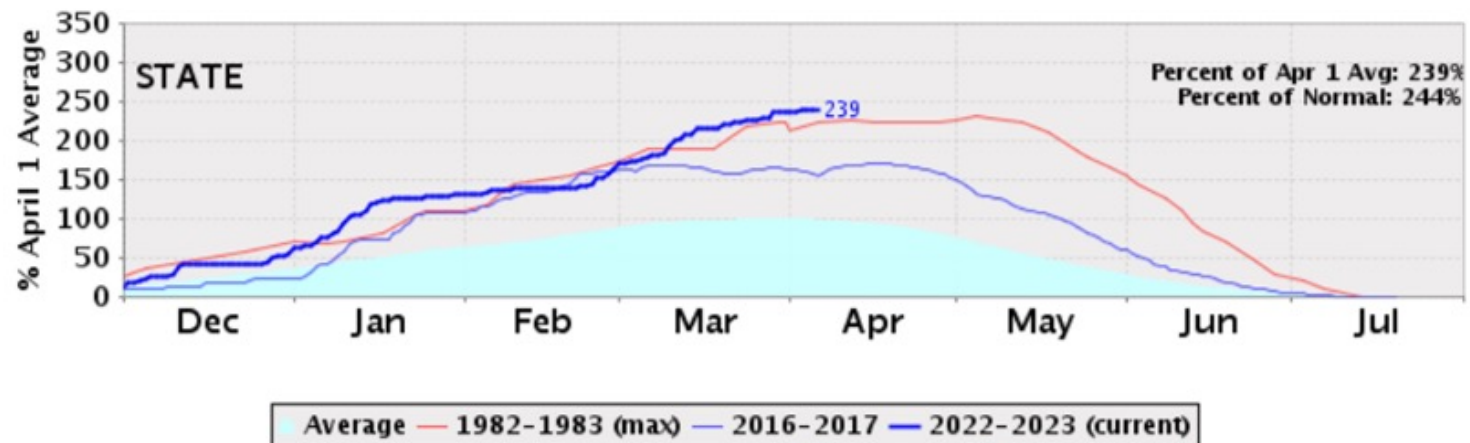
Neil Millar
Vice President
Infrastructure and Operations Planning
Wednesday, May 24, 2023

The ISO is showing considerable improvement in the resource situation driven off of new resources and high hydro conditions

- New resource development is continuing through the summer:

Resource Type	Incremental Installed Capacity Between Sept 1 2022 and <u>June 1, 2023</u>	Incremental Installed Capacity Between Sept 1 2022 and <u>Sept 1, 2023</u>
Wind	518	518
Solar	2,478	3,774
Battery Storage	2,293	4,302

- Hydro conditions are tracking to record highs:



Statewide Percent of average to date

244.0%

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The improved resource situation more than offset modest increases in CEC load forecasts

CEDU 2022 Planning Forecast for ISO Balancing Authority Area

	Forecast for 2023	Last year's forecast for 2022
1-in-2 forecast	46.8 GW	46.3 GW
1-in-5 forecast	48.8 GW	48.3 GW
1-in-10 forecast	49.9 GW	49.4 GW

In 2022, while the actual peak demand reached 52,061 MW in 2022 – a 1-25 year event (weighted 3-day temperature using 28 years of weather data).

Key observations for 2023:

- Overall 2023 conditions have improved significantly due to:
 - Addition of over 3,000 MW storage supply
 - Beneficial hydro conditions
- Resource fleet expected to exceed 1-in-10 planning target
 - Margin of about 200 MW surplus scheduled online by June 1
 - Margin of about 2,300 MW scheduled by September 1
 - Note estimated 1,700 MW capacity shortfall in 2022
- Grid remains vulnerable to high loads and availability of imports during widespread heat events, especially in late summer
- Hours of most vulnerability are declining and continue to shift to hours after sunset
- Strategic reserves have been mobilized through state efforts to safeguard against extremes



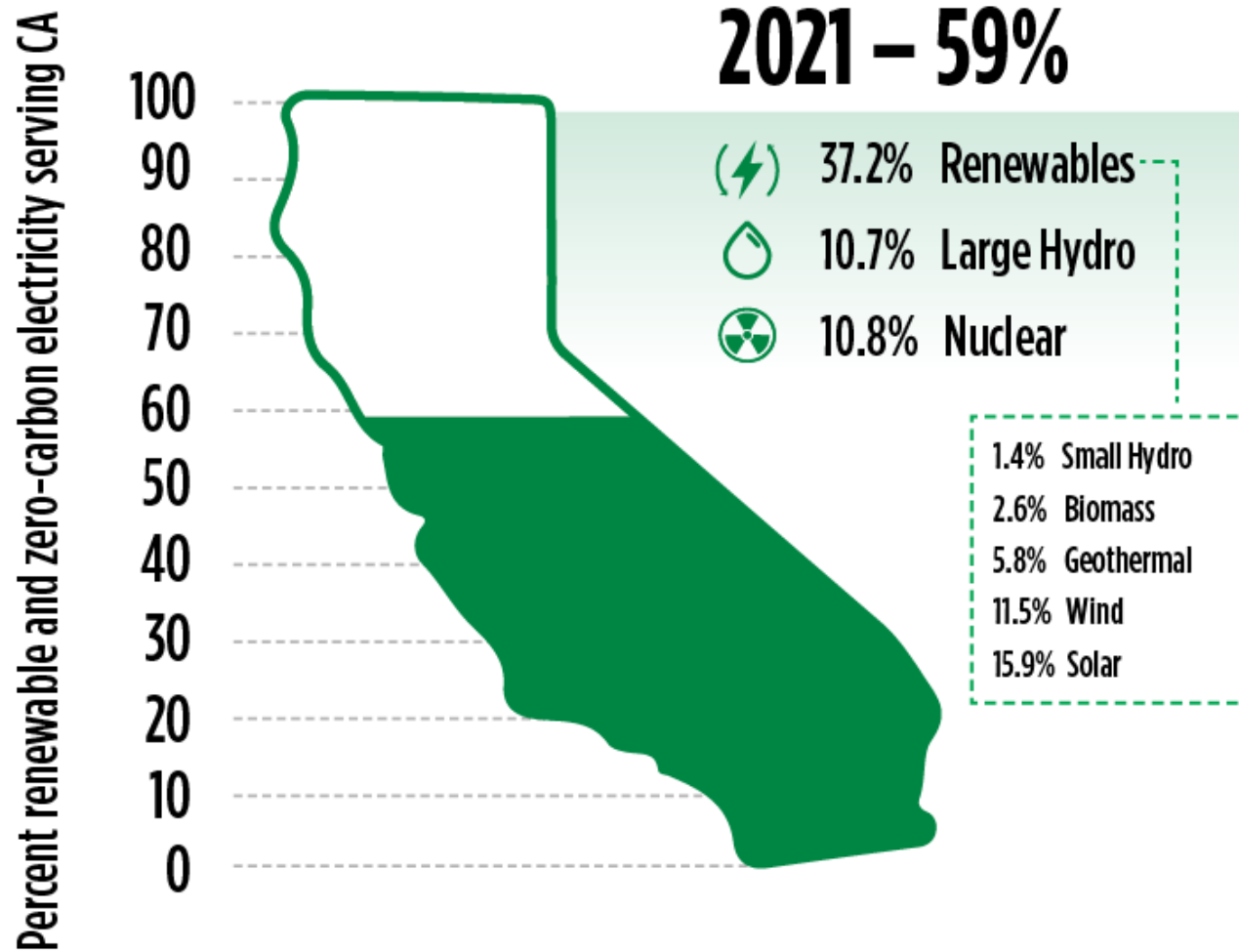
Vice Chair Siva Gunda





California's Progress Toward 100% Clean Electricity by 2045

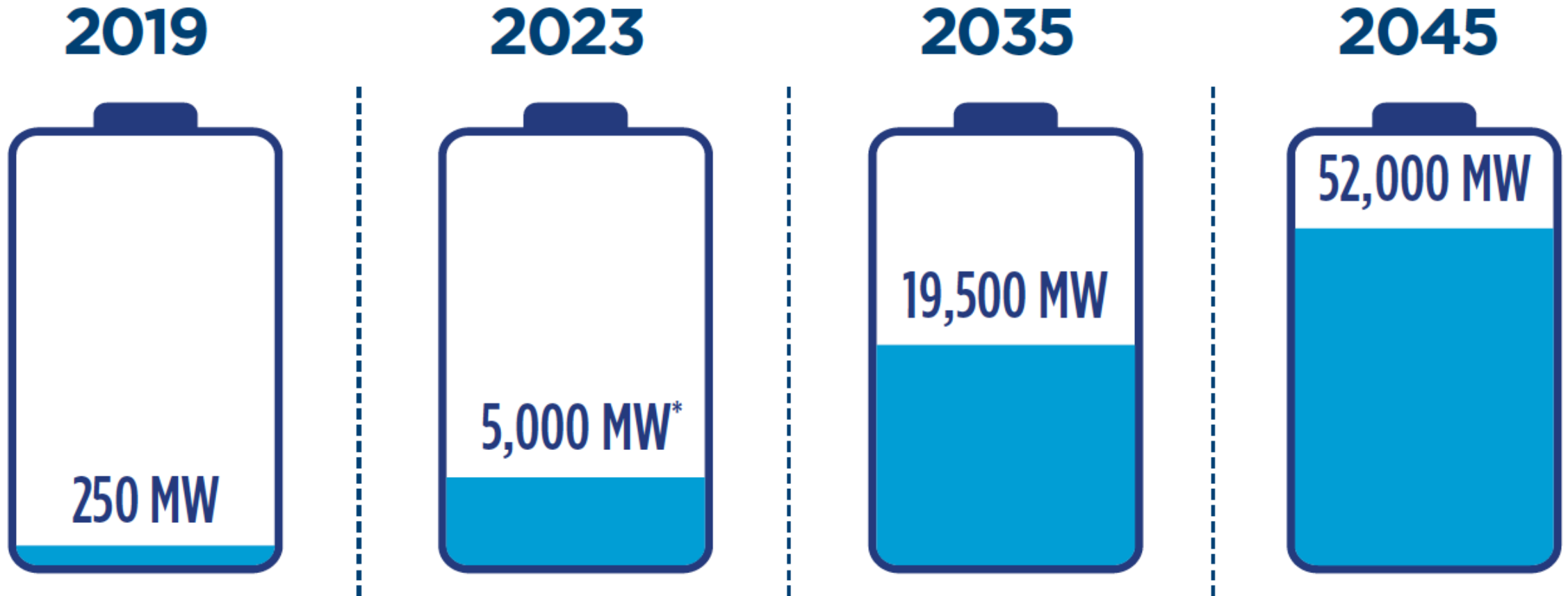
Under Embargo Until Thursday, May 25, 2023 at 11:00 a.m.





California's Growing Battery Storage Capacity

Under Embargo Until Thursday, May 25, 2023 at 11:00 a.m.

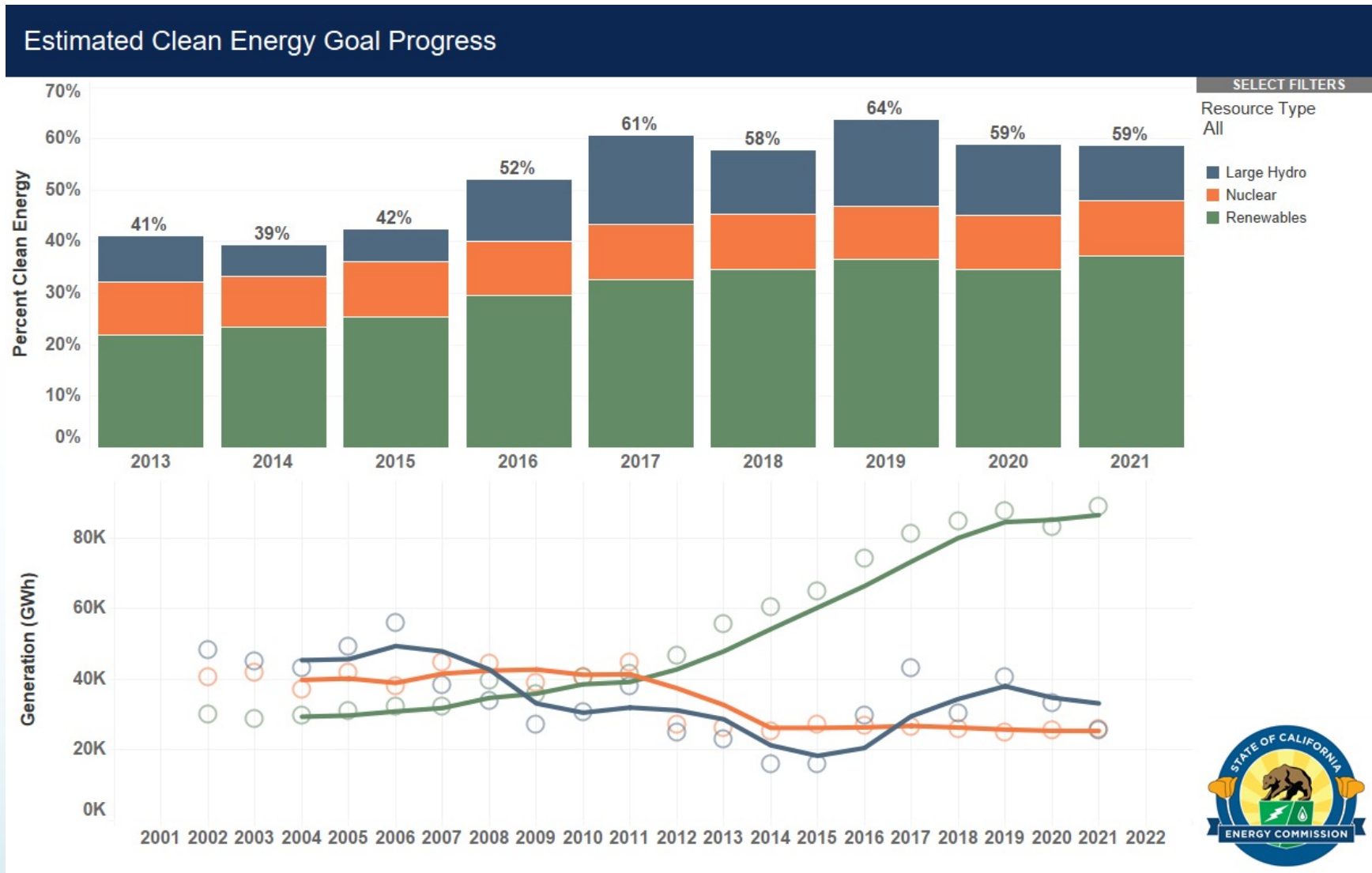


*Projected as of June 1, 2023 based on California ISO interconnection queue.



New Interactive Dashboards Available

Under Embargo Until Thursday, May 25, 2023 at 11:00 a.m.





Questions?

