



**San Diego County
Water Authority**

Our Region's Trusted
Water Leader

San Vicente Energy Storage Facility Project Regulatory and Legislative Update

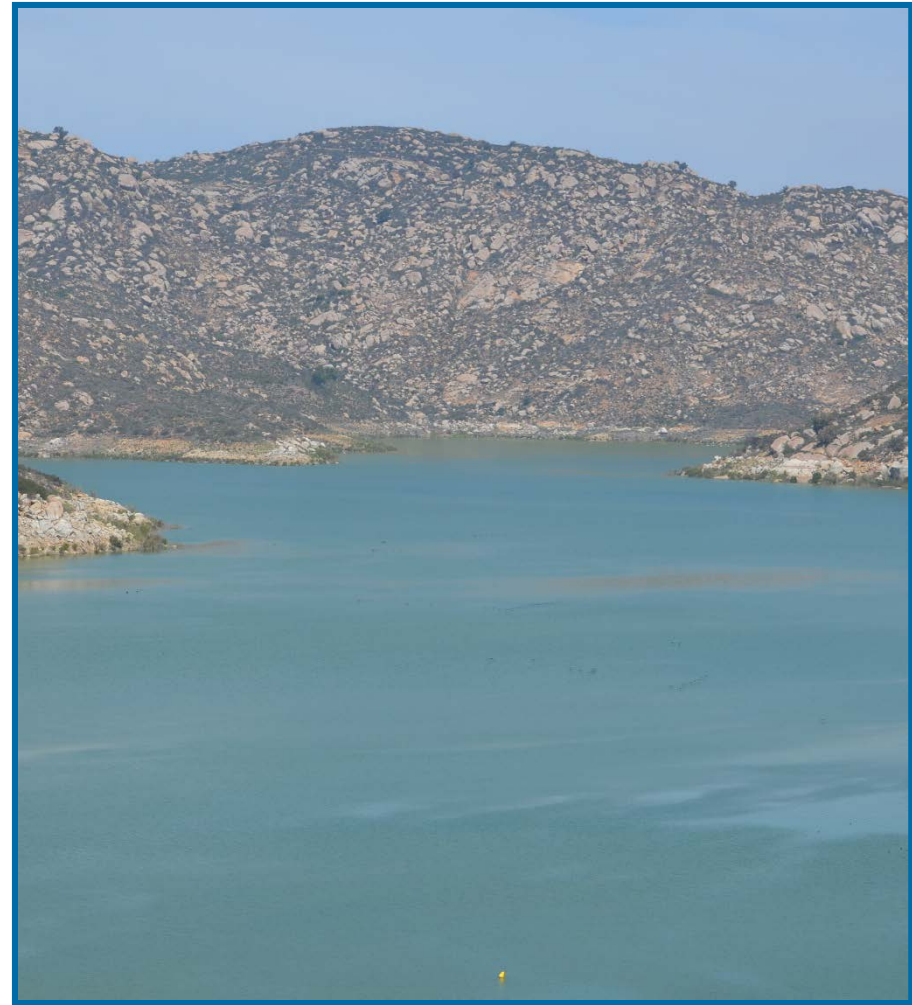
Engineering & Operations Committee

November 8, 2018

Neena Kuzmich
Principal Engineer

Agenda

- Regulatory Processes
- Federal Legislation
- State Legislation



Regulatory Processes

California Independent System Operator (CAISO)

- Interconnection Application
 - Submitted April 6, 2018
- Storage as a Transmission Asset (SATA) Proceeding
 - Issue Paper → Draft Proposal → Final Proposal
 - Approval by CAISO Board
- Transmission Planning Process



Regulatory Processes

California Public Utilities Commission (CPUC)

- Integrated Resources Planning Process (IRP)

Federal Legislative - Water Resources Development Act

- Signed by President on October 23
- FERC Preliminary Permit initial 4-year term
 - Allows one 4-year extension
 - Ability to add entities after permit issuance
- Water Authority issued letter on October 24
- FERC issued 4-year Preliminary Permit on October 29

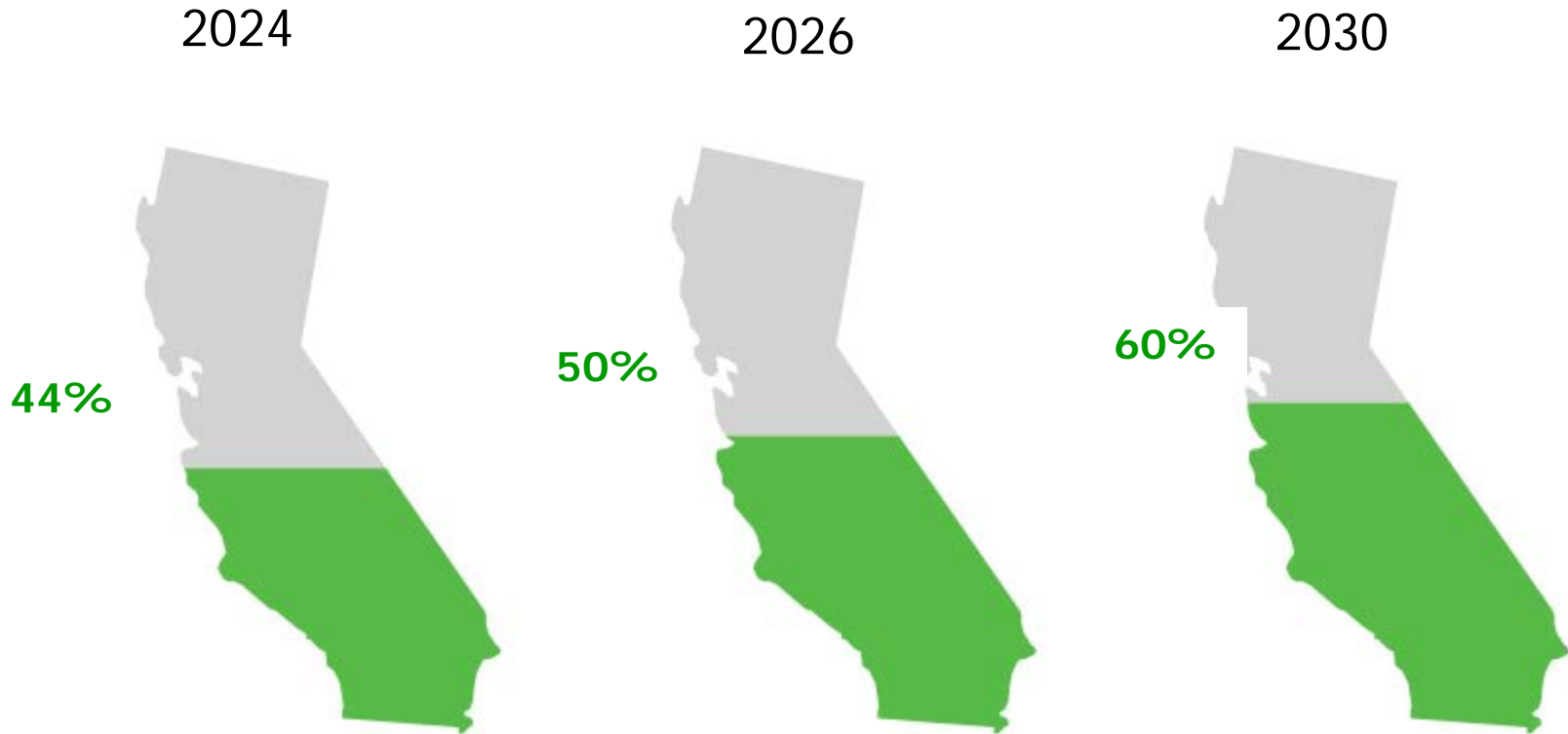


Governor Brown signs SB 100

- Increases from 50 percent to 60 percent renewable energy requirement in 2030
- 100% carbon free goal by 2045

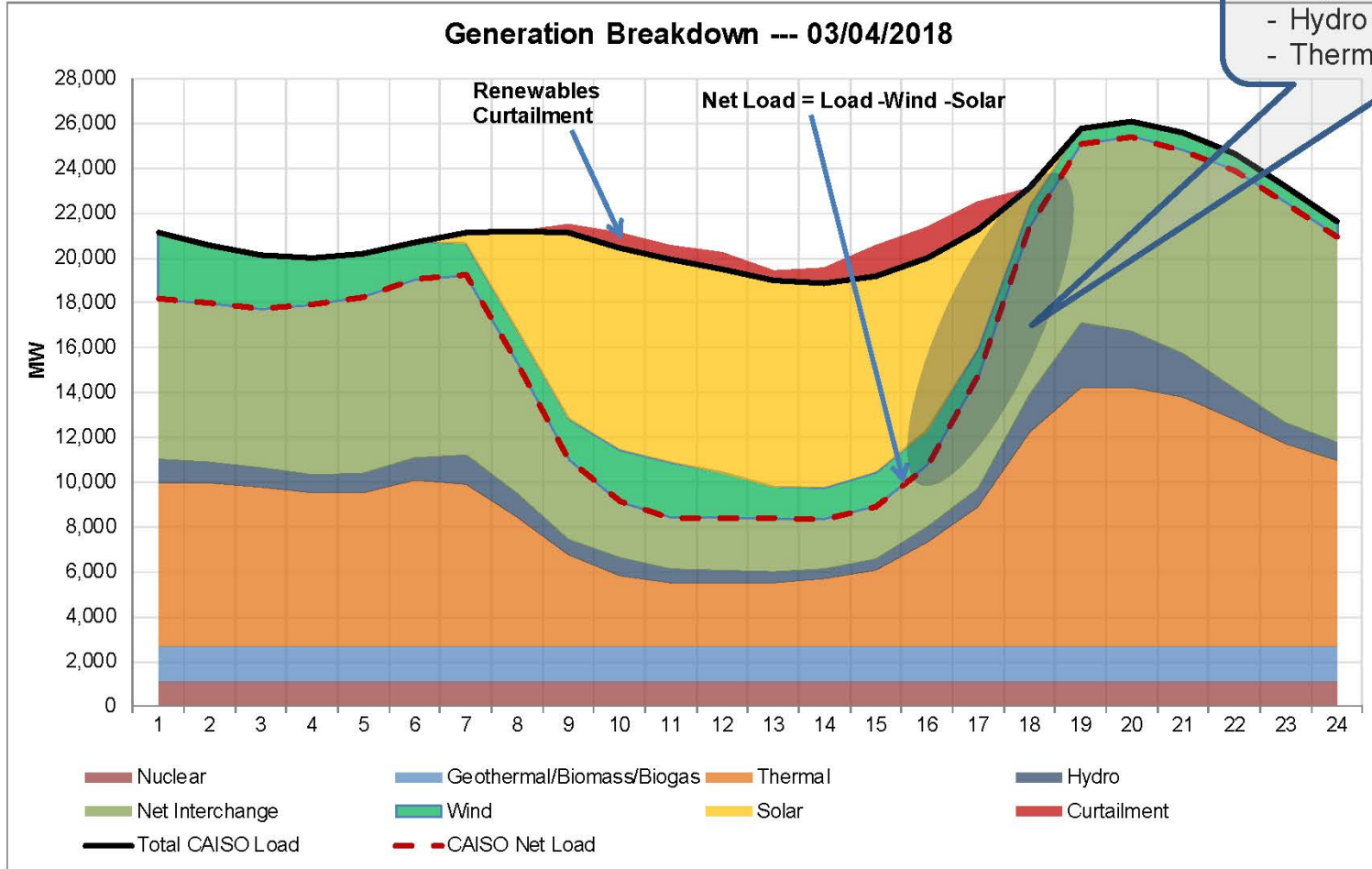


California Renewable Portfolio Standard (RPS)



State policy requires **60%** of electrical utilities' energy portfolios come from renewable energy resources, such as solar, by **2030**

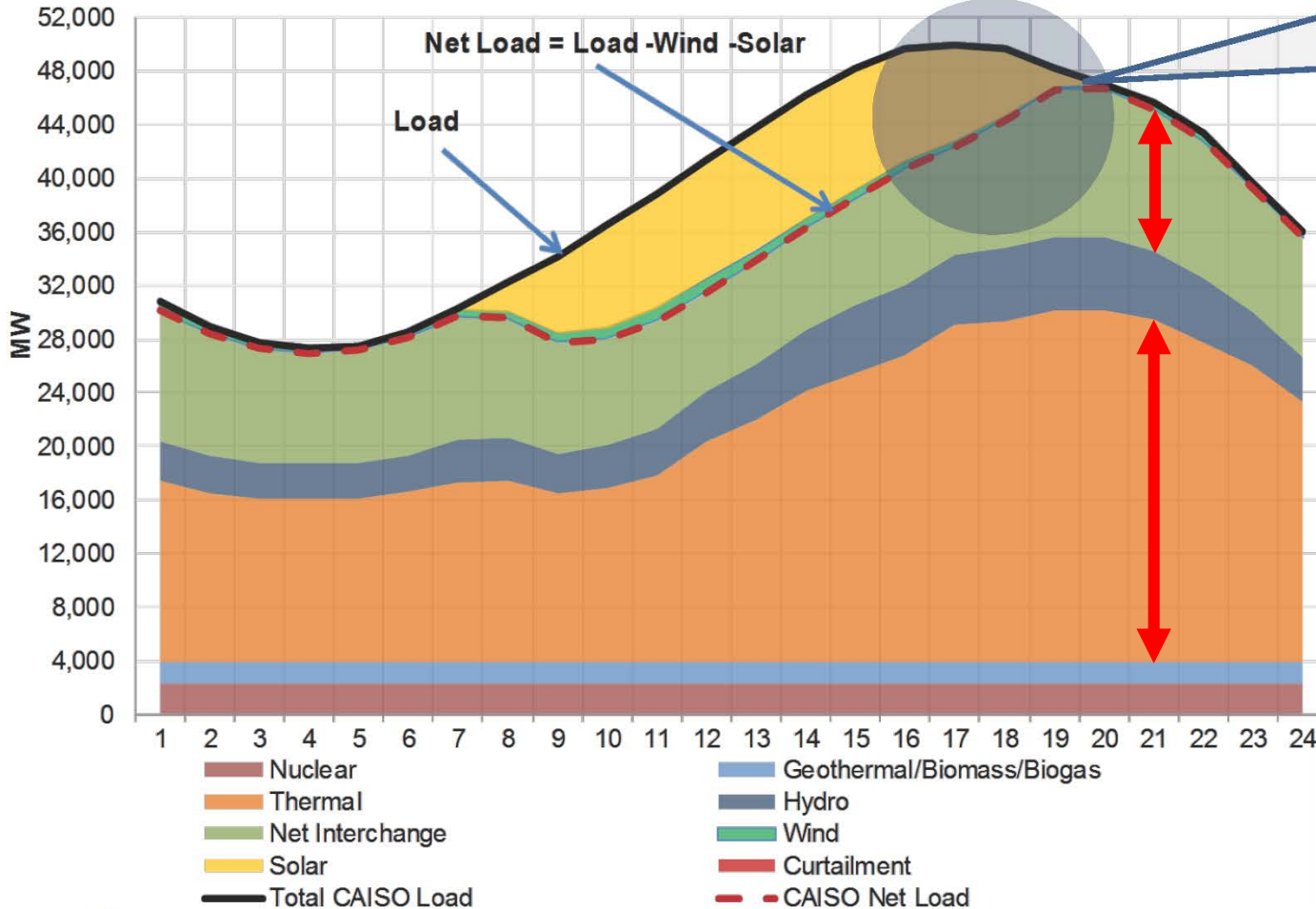
On Sunday, March 4, 2018 the maximum 3-hour upward ramp was 14,777 MW



- The CAISO markets economically optimized resources both internally and externally to meet demand
- Imports may or may not be available when needed to meet evening ramps
- Internal resources makes up about 64% of ramp
- Cannot rely on wind to meet ramps

In 2017, the CAISO peak load was 50,116 MW and occurred at 15:58:24 on Friday, September 1

Generation Breakdown --- 09/01/2017



- High temperatures along the coast
- Peak Load: 50,116 MW
- Peak net-load: 47,168 MW
- Peak load decreased by 2,948 MW
- Solar production decreased by 7,199 MW
- Net Load increased by 5,301 MW
- Essentially no wind

Regional Storage Benefits

- Provides long-term revenue stream to stabilize City and Water Authority water rates
- Fully use renewable energy (i.e. less curtailment)
- Generate carbon free or “clean” energy when renewable energy is not available
- Increase electrical grid reliability
- Reduce greenhouse gases by using more renewables
- Provide “on call” power

