Division of Operations and Maintenance
Maintenance Management

Senate Bill 1020

SWP's Pathway to 100% Clean Energy by 2035

Water Commission Meeting

June 21st, 2023

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Agenda

- Senate Bill 1020 Summary
- SWP's Pathway to a 100% Clean Energy Power Portfolio
  - Renewable Energy Procurement Plan
  - SWP's Future Resource Mix
- Potential Challenges
- Considerations

Senate Bill (SB) 1020 - Summary

Signed by the Governor and chaptered in September 2022, SB 1020 sets a requirement of a renewable and zero-carbon power portfolio by December 31, 2035 for state agencies and the State Water Project (SWP).

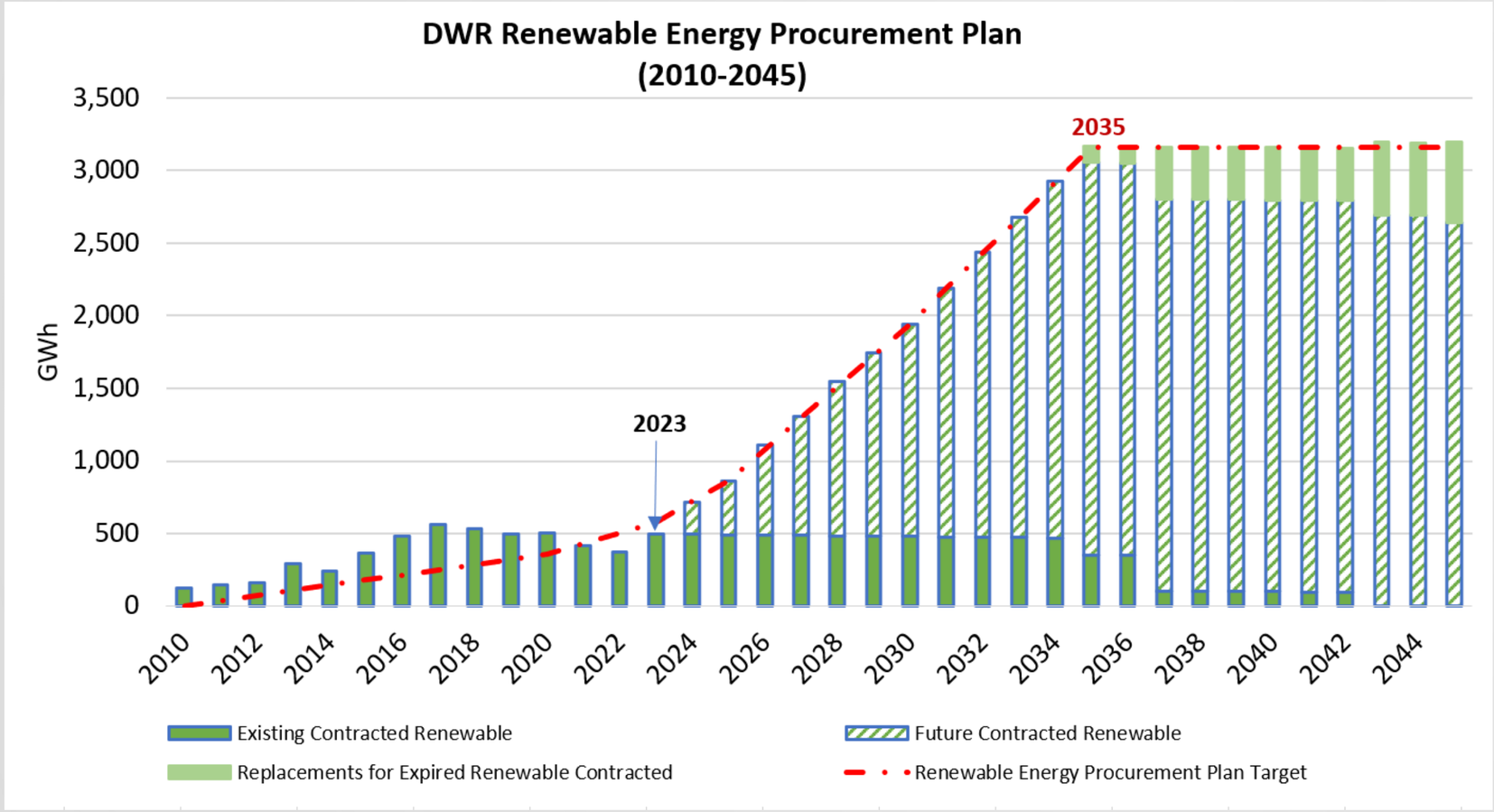
SB 1020 also sets requirements or limitations on what qualifies as an eligible resource that can be counted towards SWP's power portfolio. In accordance with SB 1020, eligible renewable energy and zero-carbon resources shall be:

1. newly developed or constitutes incremental production from existing resources and will reach an initial Commercial Operation Date on or after January 1, 2023.

2. located within California or have a first point of interconnection to a California balancing authority area.

3. on SWP property or properties if interconnected behind-the-meter to service its load.

SWP's Renewable Energy Procurement Plan



The Renewable Energy Procurement Plan (REPP) is SWP's plan to incrementally reduce SWP Greenhouse Gas emissions by transitioning from thermal and unspecified energy to renewable resources to meet its demand.

SWP structured the REPP to incrementally increase procurements as the renewable energy market matures so that total operations emission is zero by 2035.

SB 1020 does not specify interim targets/milestones – Annual targets within the REPP are not hard targets and actual procurements may be in smaller or larger amounts and/or shifted from year to year.

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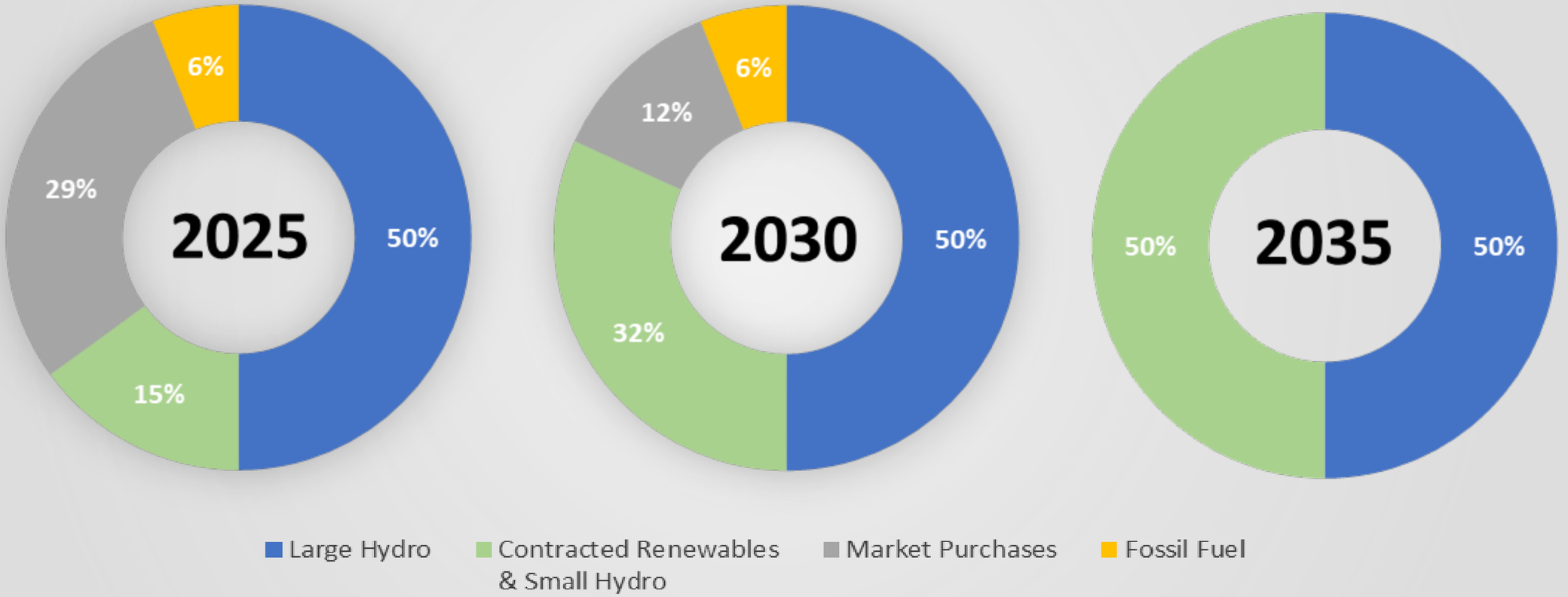
SWP's Future Resource Mix

SWP currently has approximately 179 MW of Renewable capacity in its portfolio.



SWP will need about 700-900 MW of additional Clean Energy Resources capacity to meet the SB1020 target.

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Potential Challenges

Between 2021-2023 renewable generation contract prices have increased by about 30% in the U.S., this is attributed to:

Trade Policies and Tariffs

- Anti-dumping duty and countervailing duty to prevent lower cost imports from undercutting local businesses and the local economy.

Other Challenges to Renewable Development

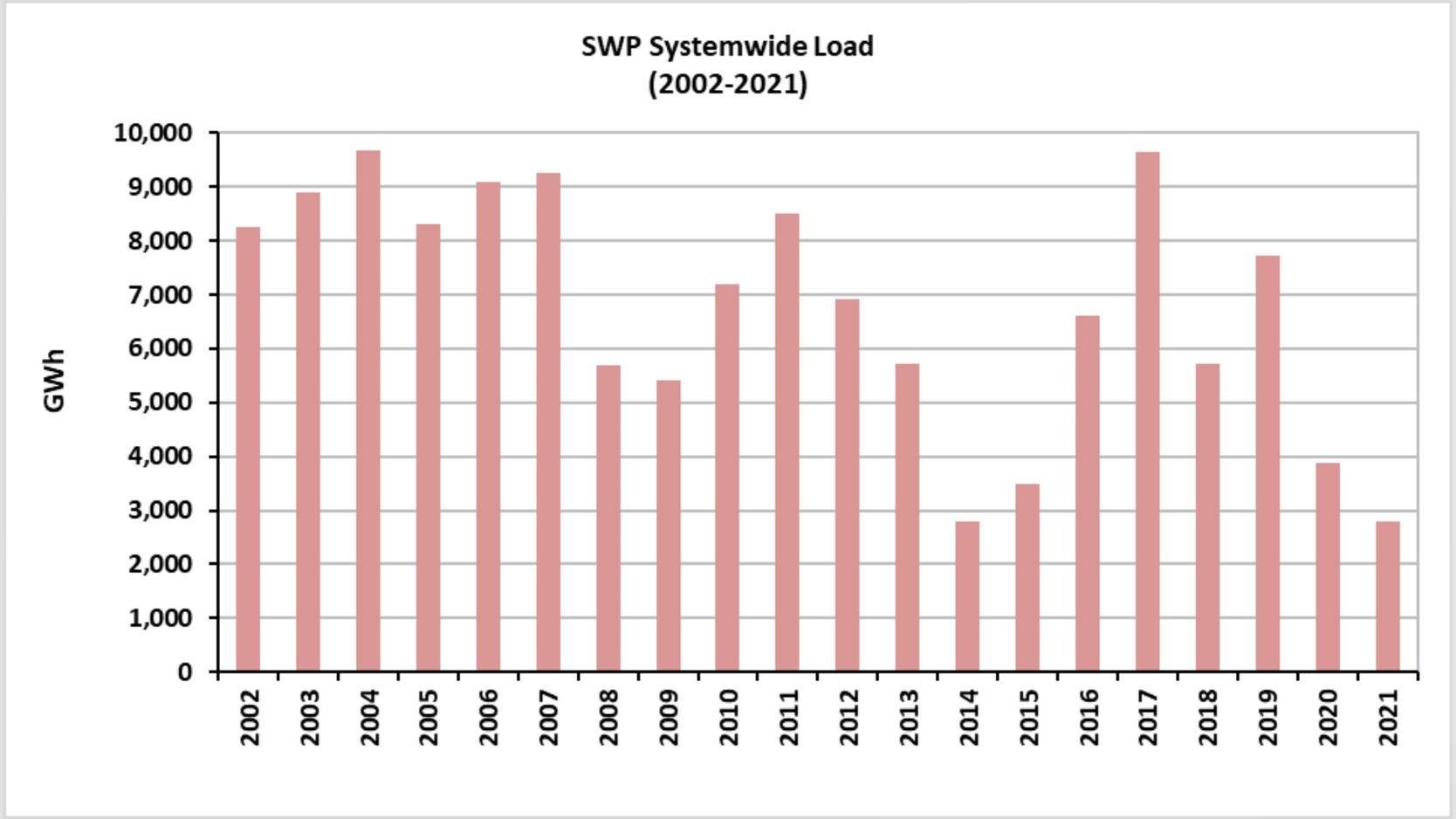
- Inflation, high interest rates, and lingering impacts of the pandemic on labor shortages and supply chain disruptions. It is uncertain when these conditions will improve, however, they are major drivers in recent price increases.
- With Europe increasing their renewable energy targets, the lead time for importing from European suppliers has increased. Meanwhile, it can take years for U.S. solar suppliers to meet domestic requirements.

Interconnection Queue

- Potential delay of the online dates of renewable projects. California Independent System Operator's (CAISO's) queue requests have tripled, from 113 per year to 373 received in Cluster 14 – which opened in April 2021.

It is uncertain if or when prices will return to 2019-2020 renewable contract prices.

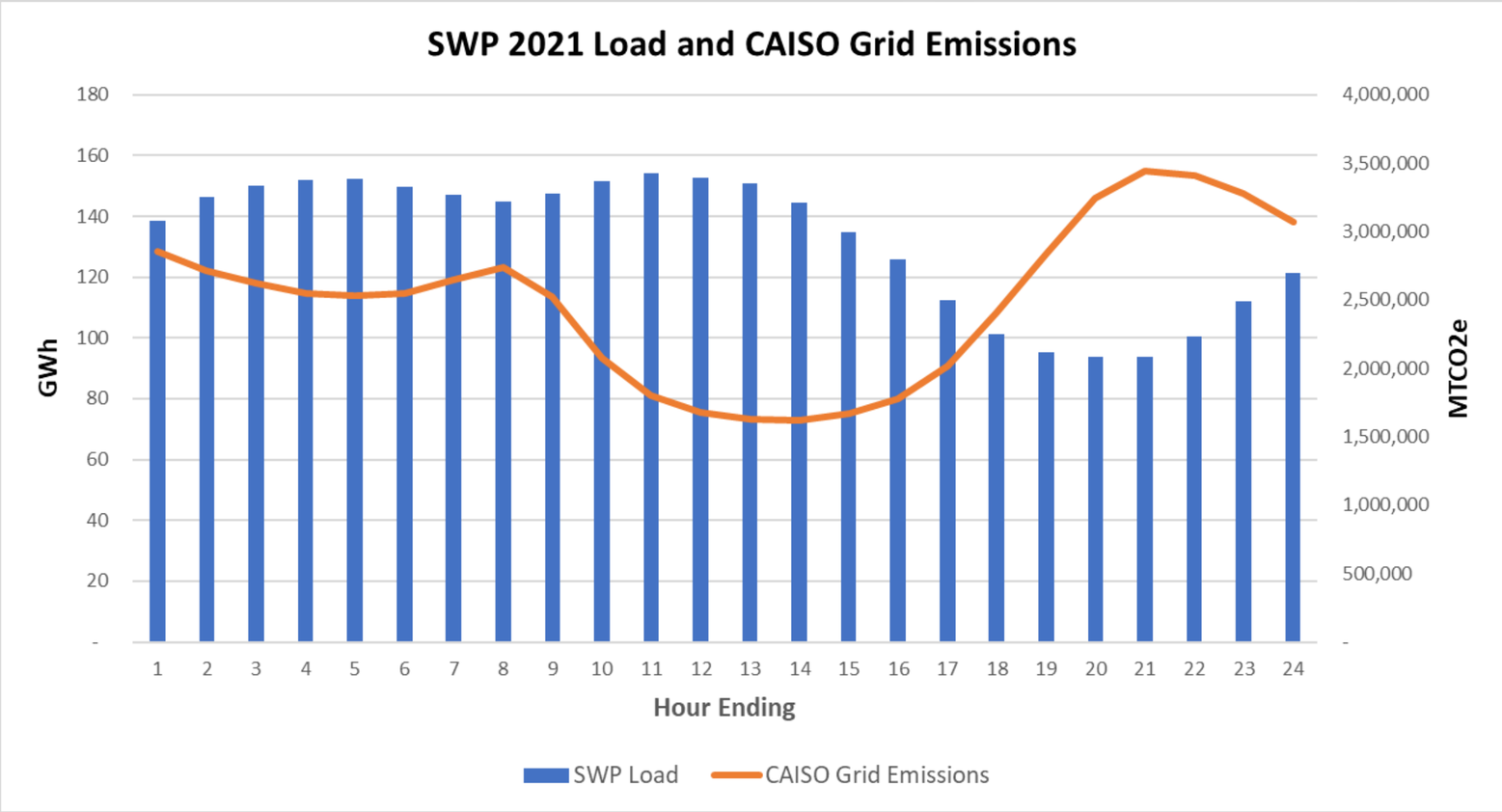
Considerations



SWP's load demand can swing from year to year…this graph shows the historical load demand of the SWP from 2002-2021.

- Setting the right target to meet a 100% clean energy portfolio can be difficult.
- Under procurements can result in not meeting the target.
- Over procurements leads to increased costs to our water customers.

Considerations



SWP load is operated, when feasible, to consume energy when renewable energy is abundant, and away from hours when higher fossil fuel generation is dispatched.

As the California Independent System Operator (CAISO) grid becomes greener, this would further reduce SWP's carbon footprint.

Thank You

Questions?