

RENEWABLE POWER AND RESOURCE ADEQUACY PURCHASES

PRESENTER – LORI MITCHELL

June 4, 2019 – Item 7.1



RECOMMENDATION

1. Increase the authority for the purchase of power supply products for calendar years 2019 and 2020
2. Authorize the Director to negotiate and execute long-term Power Purchase Agreement (PPAs) for renewable projects in coordination with CAO and subject to approval by the Risk Oversight Committee
3. Authorize the Director to negotiate and execute medium to long-term contracts for Resource Adequacy (RA) products in coordination with CAO
 - All power purchases subject to Risk Management Policy and the appropriation of funds. Payment is not made until 30 days after power is delivered.

FULLY PURCHASE POWER SUPPLY FOR 2019 & 2020

Calendar Year	Current Authority	Proposed New Authority	Increase Amount	Reason
2019	\$226 M	\$245 M	\$19 M	Higher load than originally forecasted
2020	\$222 M	\$302 M	\$80 M	Higher load and to procure 100% instead of 90% of need

Month	Actual Load Served (kWh)	Load Estimate (kWh)	% Load Served to Load Estimate
Sep 18	7,296,646	5,330,080	136.90%
Oct 18	10,836,762	11,451,575	94.63%
Nov 18	10,200,454	10,193,231	100.07%
Dec 18	10,053,295	10,547,488	95.31%
Jan 19	11,095,207	11,145,385	99.55%
Feb 19	141,114,912	113,968,735	123.82%
Mar 19	281,026,840	251,005,184	111.96%
Apr 19	279,926,516	262,812,620	106.51%
	751,550,631	676,454,298	111.10%

BENEFITS OF LONG-TERM CONTRACTS

- Best practice is to build a diversified portfolio with different
 - Durations
 - Types of resources
- For renewables, long-term contracts are typically cheaper than short-term contracts
 - Potential savings:
 - Solar: 30-45%
 - Wind: 20-55%
- State Law: requires at least 65% of renewable purchases from contracts of 10 years or longer



COLLABORATION WITH OTHER CCAS

- CCAs are collaborating on renewable purchases to lower costs, e.g., MBCP and SVCE
- EBCE is similar in size to SJCE and serves similar customers. EBCE is slightly ahead on program rollout
- Muni code 4.12.225: Allows for joint purchasing agreements entered into by the city and one or more public agencies
- SJCE is working with EBCE on three solar energy long-term contracts; jointly negotiating and if approved will contract independently with portions of the solar projects.



RFO PROCESS



- SJCE also has issued industry standard RFO's for long-term renewable contracts and received competitive offers
- RFO was sent to hundreds of market participants,
 - all entities that asked to be included and known market participants
 - posted the solicitation on SJCE's website
 - social media platforms
- Included clear evaluation criteria (value, project viability, experience, etc.)
- Standard industry contracts such as the Edison Electric Institute (EEI)

LONG-TERM RENEWABLE CONTRACTS

- Up to 450 megawatts (MW) of renewable resources for the period between 2020 and 2043
- Up to \$1.08 billion in Total; \$50 million per year
- In 2023, would provide over 1,000 GWh per year of renewable power of the 2,700 GWh per year required
- Allows SJCE to achieve the Climate Smart San José goal of 100% GHG-free power by 2021 in a cost-effective manner



RESOURCE ADEQUACY MARKET

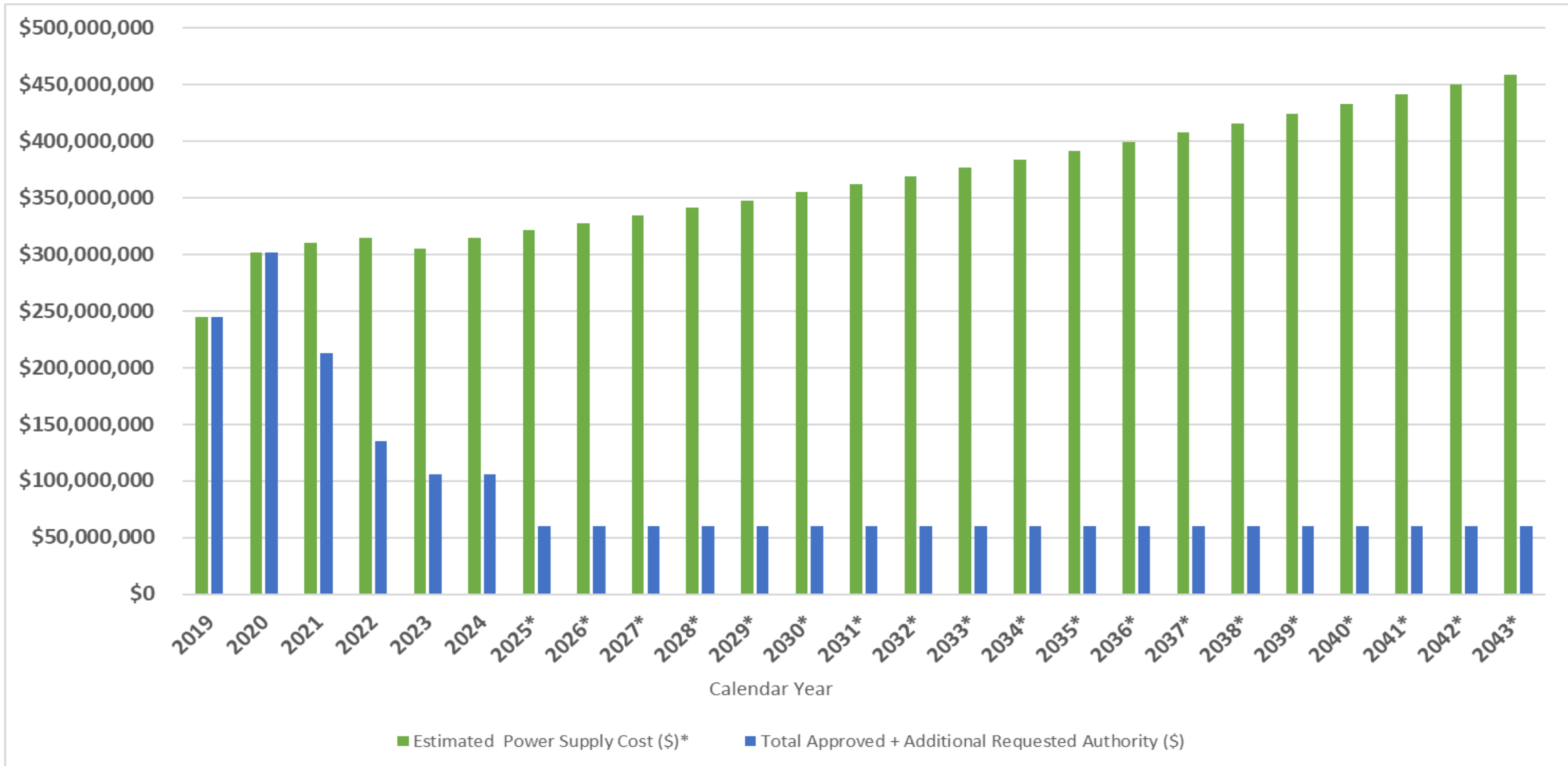
- Bulk of RA supplies in California are controlled by the Investor Owned Utilities (IOUs) and a few Independent Power Producers (IPPs)
- IOUs not required to sell excess RA supply to other load serving entities in a timely manner or offer fair prices and terms
- Supplies remain limited and prices are increasing
- Sellers are looking for longer term contracts
- CPUC may apply penalties if SJCE fails to procure the required amount and types of RA

RESOURCE ADEQUACY CONTRACTS

- Authority to purchase up to \$451 million in RA over the next 20 years:
 - Fully procure all required RA for the next 5-7 years
 - Meet market needs, sellers are looking for medium and long term contracts
 - Pilot battery storage and other innovative technologies that could help reduce reliance on natural gas plants in San José and across the state
- Contract: EEI Agreement or the WSPP Agreement with modifications approved by the City Attorney



TOTAL AUTHORITY & EXPECTED POWER COSTS





QUESTIONS?