

Item 6: Electricity Supply Strategic Reliability Reserve – Investment Plan

CEC Business Meeting, August 9, 2023



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Statewide Water and Energy

California Benefits from the Strategic Reliability Reserve

- Supports California's transition to a clean energy future and continued aggressive procurement of clean resources
- Acts as an insurance policy and safeguards the statewide electrical grid as climate change-induced extreme heat, drought, flood, and wildfire are increasing in frequency and intensity
- Helps to avoid power outages for millions of Californians balanced with affordability



DWR's Electricity Supply Strategic Reliability Reserve Program (ESSRRP)

- ESSRRP broadly covers three types of activities:
 - extends the operating life of electric generating resources planned for retirement;
 - contracts for and/or constructs new supply-side assets; and
 - supports procurement for imported energy above resource adequacy requirements
- Water Code Section 80710(h) directs DWR to prepare and present the terms, costs, and scope of ESSRRP's investment plan committed to after October 31, 2022



Commitments: *Professional Services*

Bureau Veritas North America Inc

– Scope:

- Provides quality assurance inspection services to assure quality during manufacturing, procurement, design, installation/construction, and repair/refurbishment of equipment and materials.

– Terms:

- February 1, 2023 to February 5, 2026

– Costs:

- Up to \$6,000,000



Commitments: *Capacity Agreements*

- Based on Statewide Advisory Committee on Cooling Water Intake Structures (SACCWIS) recommendation for reliability
- Used to address extreme events such as extreme heat, drought, flood, and wildfire
- Comparison of current operations versus DWR ESSRRP

Under resource adequacy program

- 24/7 must offer obligation
- Annual capacity factors:
 - 2% Ormond Beach
 - 5% Alamitos/Huntington Beach



Under DWR ESSRRP

- Default is "off"
- Will be used to address extreme events at the direction of the CAISO and maintenance as approved by DWR & CAISO



Capacity agreement details

Counter-party	Scope	MW	Term ¹	Costs (million) ²
Ormond Beach Power, LLC	Ormond Beach Units 1 and 2	1,491.3	1/1/24 - 12/31/26	Up to \$558
AES Alamitos, LLC	Alamitos Units 3, 4, and 5	1,141.2	1/1/24 - 12/31/26	Up to \$529
AES Huntington Beach, LLC	Huntington Beach Unit 2	226.8	1/1/24 - 12/31/26	Up to \$106
Total:		2,859.3		Up to \$1,193

¹Term – Contingent on the SWRCB extending the OTC compliance deadline and not a resource adequacy resource.

²Costs - Conservative estimate of the facility being called to run often and meeting all of its bonus targets under the terms of the agreement with no penalties incurred.



Anticipated Future Investments

- Requests for information (RFI) for commercial technologies that can be quickly deployed and reliably provide electricity during extreme events and does not compete with existing procurement
 - Clean, zero-emissions generation that do not use fossil fuels
 - Energy storage systems across different commercial technologies
 - Fossil-fuel power generation, if the other two categories do not provide sufficient responses but would seek technologies that at minimum meet CARB's statewide Distributed Generation (DG) Certification Program standard, or similar



Other activities

- State Power Augmentation Program (SPAP)
 - Extend existing contracts to maintain the availability of 120 MW at Roseville (60 MW) and Yuba City (60 MW) for use during extreme events
 - Equipped with Selective Catalytic Reduction emissions control technology and capable of running on a blend of hydrogen in the future
 - Terms and cost are pending
- Diesel generation
 - DWR voluntarily declined to pursue any diesel generation ahead of the Water Code deadline of July 31, 2023



DWR Recommendation

- Approve the Investment Plan Report for the Electricity Supply Strategic Reliability Reserve Program and
- Provide written notice of the approval of the investment plan to the Joint Legislative Budget Committee.

