CALIFORNIA DEPARTMENT OF WATER RESOURCES

Electricity Supply and Strategic Reliability Reserve – Investment Plan

CEC Business Meeting, June 16, 2023

Present By: Jorge Luis Quintero

ESSRRP Background

- Acts as a backstop for the state of California by providing incremental power during extreme events
- Critical balance between:
  - supporting electric reliability while being a prudent steward of state funds
  - mitigating project risk
  - being cognizant of local communities
  - continuing efforts to prioritize zero- and low-emission technologies

California Benefits from ESSRRP

- Acts as insurance policy and safeguards the statewide electrical grid
- Provides additional energy reserves during extreme and combined events (heat events, wildfires, and drought)
- Helps to avoid power shortages and outages for millions of Californians balanced with affordability
- Supports California's transition to a clean energy future

Investment Plan Requirement

- Water Code Section 80710, subdivision (h) directs DWR to prepare and present at a commission business meeting a plan detailing:
  - Terms
  - Costs
  - Scope

Investment Plan Setup

- Divided into two sections:
  - investments committed to after October 31, 2022;
  - anticipated future investments.

Investments Committed

- Professional Services
  - Bureau Veritas North America Inc
- Capacity Agreements
  - Ormond Beach Power, LLC
  - AES Alamitos, LLC
  - AES Huntington Beach, LLC

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 in accordance with the equipment's/materials contract requirement.

– Terms:

- February 1, 2023 to February 5, 2026

– Costs:

- Up to $6,000,000

Capacity agreements

- Pursuant to AB 180, AB 178, and AB 205, DWR may fund, reimburse, or compensate electric generating facilities pending retirement to retain their future availability.
- At the recommendation of the Statewide Advisory Committee on Cooling Water Intake Structures (SACCWIS), which includes the CEC, CPUC, and CAISO, DWR is including 2,859.3 MW of once-through cooling units into the ESSRRP because "[e]nabling DWR to contract with existing resources will allow the state to address reliability concerns and populate the Strategic Reserve more expeditiously and with more certainty while it works to secure additional resources."[1]
- Furthermore, the CAISO, CEC, and CPUC clarified that resources would not be considered resource adequacy resources since that "would lead to increased use of once through cooling as well as increased air emissions, which AB 205 seeks to limit."[2]
- These resources, in coordination with the CAISO, will only be used to address extreme events.

[1]Statewide Advisory Committee on Cooling Water Intake Structures. (2022, September 30). 2022 Special Report. 2022 Special Report of the Statewide Advisory Committee on Cooling Water Intake Structures. http://www.swrcb.ca.gov/water_issues/programs/ocean/cwa316/saccwis/docs/drpt031912.pdf
[2]Tesfai, Leuwam, et al. "Use of the Once-Through Cooling Power Plants in the Strategic Reserve." *www.caiso.com*, 30 Nov. 2022, http://www.caiso.com/Documents/Nov30-2022-JointLetter-CaliforniaStateWaterResourcesControlBoard-Use-Once-ThroughCoolingPowerPlants-StrategicReserve.pdf

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	Use during extreme events, 1/1/24 - 12/31/26	Up to $558
AES Alamitos, LLC	Alamitos Units 3, 4, and 5	1,141.2		Up to $529
AES Huntington Beach, LLC	Huntington Beach Unit 2	226.8		Up to $106
	Total:	2,859.3		Up to $1,200

[1]Term – Contingent on the SWRCB extending the OTC compliance deadline and not a resource adequacy resource.
[2]Costs - 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)
- Other activities

Clean, zero-emission generation RFI

- Broadly consider commercial generation technologies that do not use fossil fuels, can be quickly deployed, and reliably generate during extreme events.
- Available at:
  - https://caleprocure.ca.gov/event/3860/0000026938
- Deadline for submission of responses to RFI
  - By 5:00 PM P.T. on July 14, 2023.

Energy storage systems RFI

- Broadly consider storage systems across different commercial technologies that can be quickly deployed and discharge energy during extreme events.
- Available at:
  - https://caleprocure.ca.gov/event/3860/0000027365
- Deadline for submission of responses to RFI
  - By 5:00 PM P.T. on August 7, 2023.

Fossil fuel-powered generation RFI

- In case of insufficient responses in the other two RFIs
  - Would seek technologies that at minimum meet CARB's statewide Distributed Generation (DG) Certification Program standard, or similar
- Available at:
  - https://caleprocure.ca.gov/event/3860/0000027523
- Deadline for submission of responses to RFI
  - By 5:00 PM P.T. on August 18, 2023.

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 has voluntarily declined to pursue any diesel generation ahead of the Water Code deadline of July 31, 2023

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