Electricity Supply Reliability Reserve Fund Progress Report

December 1, 2025

Department of Water Resources acknowledges the efforts and contributions made by leadership and staff members.

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I. Executive Summary

This December 2025 report details current activities undertaken by the Department of Water Resources' Statewide Energy Office (DWR SWEO) and funded by the Electricity Supply Reliability Reserve Fund (ESRRF) from June 1, 2025, through September 30, 2025. Please see prior reports for historical activities.

The following activities have taken place since the last report:

Table ES-1 below summarizes the total committed funds per project category, the disbursements for incremental activities between June 1, 2025, through September 30, 2025, and total cumulative disbursements.

Table ES-1: Current Activities Reporting Period Disbursement Summary

Project Category	Committed Funds	Disbursed 6/1/25 - 9/30/2025	Total Disbursed as of 9/30/2025
Contracted Program Support, Professional and Technical Services, and Equipment	$166,050,343	$925,863	$26,960,084
2023 – 2027 – Emergency & Temporary Power Generators > 5 MW	$333,957,842	$1,374,787	$265,245,325
Extended Operations of Retiring Facilities	$1,290,427,064	$128,002,435	$679,074,983
Total	**$1,790,435,249**	**$130,303,085**	**$971,280,392**

Summer 2025 Operational Overview

During this reporting period, no California balancing authorities issued an Energy Emergency Alert or similar reliability-based dispatch that would require ESRRF-funded assets to respond. This is in contrast to July and September 2024 when the state experienced prolonged heat, wildfire events, and reduced imports that posed potential risks to grid reliability. During those periods, the California Independent System Operator (CAISO) instructed certain ESRRF-funded units to start up and remain on standby to support grid reliability in three separate instances.

II. Background

In June 2022, Assembly Bill (AB) 205 (Committee on Budget, Chapter 61, Statutes of 2022), AB 178 (Ting, Chapter 56, Statutes of 2022), and AB 180 (Ting, Chapter 44, Statutes of 2021) were enacted and collectively established California's Strategic Reliability Reserve (SRR). The SRR provides funding to secure additional resources to address extreme events above and beyond traditional resource planning and procurement, such as the Resource Adequacy program. The SRR includes three distinct programs, two administered by the California Energy Commission (CEC) and one by DWR. CEC's Demand Side Grid Support (DSGS) Program provides incentives to reduce customer net energy load and provide backup generation during extreme events, and the Distributed Electricity Backup Assets (DEBA) Program incentivizes the construction of cleaner and more efficient distributed energy assets that would serve as on-call emergency supply or load reduction for the state's electrical grid during extreme events. DWR's Electricity Supply Strategic Reliability Reserve Program (ESSRRP), created under Division 29 of the Water Code, contracts with, for, and/or constructs new supply-side assets, extends the operating life of resources planned for retirement, and, in 2022 and 2023, reimbursed the above-market cost for imports beyond Resource Adequacy requirements. The ESSRRP is funded by the Electricity Supply Reliability Reserve Fund (ESRRF). The Water Code makes clear the powers, responsibilities, and funding established under Division 29 are separate and distinct from those for the State Water Project (Water Code Sections 80700, subd. (b), 80711, & 80720). The activities of the ESSRRP are carried out by the Statewide Energy Office (SWEO).

A. Reporting Period

Water Code Section 80730 requires DWR to submit regular progress reports for the ESRRF to the Joint Legislative Budget Committee, first due January 31, 2023, and then every May 1, August 1, and December 1 thereafter. Such reports shall include:

(a) Amount of funds expended;

(b) Purpose of funds expended;

(c) Status of actions funded;

(d) For new and expanded resources, the amount by megawatt, resource type, operational date, and expected lifetime of that capacity;

(e) The frequency at which resources funded by DWR have been used and the extent to which they complied with the requirements;

(f) In consultation with the California Air Resources Board, estimate or provide the best available information on the emissions of greenhouse gases, criteria air pollutants, and toxic air contaminants emitted by the resources funded by DWR over the period since the previous report; and

(g) Summary of contracts, grants, and loans issued.

This December 2025 report details current activities undertaken by DWR and funded by the ESRRF from June 1, 2025, through September 30, 2025.

III. Contracted Program Support, Professional and Technical Services, and Equipment

DWR entered into agreements for professional program and project management, construction and commissioning expertise, and other specialized technical services. SWEO utilizes these agreements to validate and secure viable electrical asset sites, provide services and expertise for site feasibility studies and support, program management, site and project management, and to meet the deadlines outlined in statute, beginning with Water Code Section 80710. Table 1 below provides a listing of each agreement's term, committed funds, disbursed funds prior to June 1, 2025, amounts disbursed this reporting period (June 1, 2025, through September 30, 2025), and the total cumulative disbursed amounts. The agreements listed below support multiple objectives and efforts under the ESSRRP.

Table 1: Contracted Program Support, Professional and Technical Services, and Equipment

Counterparty	Agreement Start Date	Agreement End Date	Committed Funds	Disbursed prior to 6/1/25	Disbursed 6/1/25 – 9/30/25	Total Disbursed
Bureau Veritas	02/01/2023	02/05/2026	$6,000,000	$839,331	$0	$839,331
EDF	12/1/2023	12/31/2027	$15,313,065	$382,262	$150,559	$532,821
EUCI	10/01/2024	09/30/2026	$49,999	$10,101	$0	$10,101
Kiewit Power Constructors, Co.	10/21/2022	10/20/2027	$120,000,000	$18,513,853	$162,329	$18,676,182
MID Spare Transformer	11/16/2023	12/31/2027	$2,607,294	$2,607,294	$0	$2,607,294
PG&E – Lodi	12/1/2023	12/31/2027	$2,381,345	$175,041	$49,113	$224,154
PG&E – MID	12/1/2023	12/31/2027	$2,391,345	$119,213	$75,468	$194,681
PG&E – TID	12/1/2023	12/31/2027	$2,317,295	$170,237	$60,928	$231,165
Qualus	01/01/2024	12/31/2026	$3,000,000	$42,081	$0	$42,081
Stantec Consulting Services, Inc.	07/29/2022	06/30/2027	$6,000,000	$299,785	$0	$299,785
Ulteig Operations, LLC	07/01/2022	06/30/2027	$6,000,000	$2,875,023	$427,466	$3,302,489
		Total	**$166,050,343**	**$26,034,221**	**$925,863**	**$26,960,084**

The Bureau Veritas North America, Inc (Bureau Veritas) agreement provides quality control and quality assurance inspection services for the manufacturing, procurement, design, installation/construction, and repair/refurbishment of equipment and materials in accordance with contract requirements. The EDF Trading North America LLC (EDF) and Pacific Gas & Electric (PG&E) agreements support the fuel management services for the Modesto Irrigation District (MID), Turlock Irrigation District (TID), and City of Lodi (Lodi) facilities developed under the agreement with Enchanted Rock, LLC (ERock). The EDF agreement provides purchasing and scheduling needs and the PG&E agreement finances the transportation of natural gas to each of the three facilities. The EUCI agreement provides training services for staff for topics such as power purchase agreements, regulatory compliance, and energy markets. The Kiewit Power

Constructors, Co. agreement provides design, construction, and commissioning expertise, and other related technical services. The MID agreement is for the purchase of a spare transformer to replace the one used to interconnect the ERock generator at the MID site. The Qualus[1] agreement supports compliance with mandatory North American Electric Reliability Corporation reliability standards via permitting, reliability, technical engineering support, and auditing services. The Stantec Consulting Services, Inc. and Ulteig Operations, LLC[2] agreements support engineering, professional and technical programs, and project management services for all ESSRRP activities.

IV. 2023 – 2027 – Emergency and Temporary Power Generators > 5 MW

Under the authority provided in Water Code Section 80710, subdivision (b)(1)(B), DWR executed a contract with ERock and three related site use agreements with MID, TID, and Lodi, respectively, to secure new emergency and temporary power generators to support electric grid reliability during extreme events as shown in Table 2 below. Site studies, engineering design, equipment procurement activities, site certification, permitting, and project management activities began in Q4 2022. These new emergency resources are contracted to operate until 2027 to support electric grid reliability during extreme events.

As noted in the *Contracted Program Support, Professional and Technical Services, and Equipment* section, DWR voluntarily undertook environmental studies, surveying, environmental analysis, tribal consultation, and engagement with the local air pollution control districts to support the three new ERock facilities.[3] Moreover, ERock's proprietary technology, similar to those contracted by DWR, has met CARB's Distributed Generation (DG) Certification Program requirements.[4] The DG Certification Program certifies electrical generation technologies that are exempt from the permit requirements of air pollution control or air quality management districts.

[1] Previously doing business as Linda Rogers & Associates, Inc.
[2] Previously doing business as Ulteig Engineers, Inc.
[3] "Environmental Documents" for the City of Lodi, Modesto Irrigation District, and Turlock Irrigation District are available at: https://water.ca.gov/Programs/Statewide-Energy-Office.
[4] California Air Resources Board. Executive Order DG-052. *Distributed Generation Certification of Enchanted Rock LLC NGE21.9L-CA Generator*. August 2021. https://ww2.arb.ca.gov/sites/default/files/2022-05/DG-052.pdf.

Table 2: Emergency and Temporary Power Generators > 5 MW

Counterparty	Site Name	MW	Committed Funds	Disbursed prior to 6/1/25	Disbursed 6/1/25 – 9/30/25	Total Disbursed
ERock	City of Lodi	48	$113,832,881	$91,428,323	$1,187572	$92,615,895
	Modesto Irrigation District	48	$104,418,556	$84,531,155	-$482,960	$84,048,195
	Turlock Irrigation District	47	$115,706,405	$87,911,060	$670,176	$88,581,236
	Total	**143**	**$333,957,842**	**$263,870,538**	**$1,374,787**	**$265,245,325**

V. Extended Operations of Retiring Facilities

Pursuant to Water Code Section 80710, subdivision (b)(1)(A), DWR sought to fund, reimburse, or compensate the owners of electric generating facilities pending retirement for costs, expenses, or financial commitments incurred to retain future availability. Table 3 below summarizes five such agreements executed to retain existing resources while load-serving entities are actively pursuing clean energy resources, which may be negatively affected by tariffs and other challenges, to meet traditional planning requirements.[5]

Table 3: Extended Operations of Retiring Facilities

Counterparty	MW	Committed Funds	Disbursed prior to 6/1/25	Disbursed 6/1/25 – 9/30/25	Total Disbursed
CSUCI	27.5	$23,000,000	$6,568,683	$1,347,671	$7,916,354
AES - Alamitos	1,141.2	$528,616,081	$223,809,223	$60,366,980	$284,176,203
AES - Huntington Beach	226.8	$105,799,596	$52,617,384	$11,365,513	$63,982,897
GenOn – Ormond Beach	1,491.3	$558,011,387	$215,588,390	$54,922,271	$270,510,661
PG&E*	-	$75,000,000	$52,488,868	$0	$52,488,868
Total	**2,886.8**	**$1,290,427,064**	**$551,072,548**	**$128,002,435**	**$679,074,983**

*Capacity for PG&E's contract is not considered part of the ESSRRP portfolio.

[5] Kootstra, Mark, and Nathan Barcic (CPUC). 2023. Joint Agency Reliability Planning Assessment. California Energy Commission. Publication Number: CEC-200-2023-002

California State University Channel Islands

In 2020, California State University Channel Islands (CSUCI) submitted a retirement notice to the CAISO but was ultimately retained by the CAISO to address local reliability needs.[6] Later in August 2022, the CAISO noted that the unit was no longer needed for local electric reliability.[7] Under the authority provided by Water Code Section 80710, subdivision (b)(1)(A), DWR entered into an agreement with CSUCI to ensure the facility remained online from January 1, 2023, through 2027 to retain 27.5 MW under the ESSRRP portfolio.

AES Alamitos, AES Huntington Beach, and GenOn Ormond Beach

On September 30, 2022, the Statewide Advisory Committee on Cooling Water Intake Structures (SACCWIS) recommended to the State Water Resources Control Board (SWRCB) to extend the compliance date of a number of once-through cooling (OTC) natural gas fueled electric generation facilities from December 31, 2023, to December 31, 2026, in order to include these facilities in the ESSRRP portfolio.[8] Without SWRCB action, these resources with a combined capacity of 2,859.3 MW[9] would have retired by December 31, 2023, in order to comply with OTC policy.[10] The SACCWIS, which includes the CAISO, CEC, and CPUC, recommended compliance extension for the following units: Alamitos Units 3, 4, and 5 (1,141.2 MW), Huntington Beach Unit 2 (226.8 MW), and Ormond

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[6] Millar, Neil. California Independent System Operator. (2020, March 18). *Decision on reliability must-run designations for Greenleaf II Cogen, Channel Islands Power and E.F. Oxnard Incorporated.* https://www.caiso.com/Documents/Decision-ReliabilityMust-RunDesignations-Memo-Mar2020.pdf.

[7] Millar, Neil. California Independent System Operator. (2022, August 24). *Decision on conditional approval to extend existing reliability must-run contracts for 2023.* http://www.caiso.com/Documents/DecisiononConditionalApprovaltoExtendReliabilityMust-RunContracts-Memo-Aug2022.pdf.

[8] Statewide Advisory Committee on Cooling Water Intake Structures. (2022, September 30). 2022 Special Report of the Statewide Advisory Committee on Cooling Water Intake Structures. https://www.waterboards.ca.gov/water_issues/programs/ocean/cwa316/saccwis/docs/20221108-final-report.pdf and 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.

[9] Based on net qualifying capacity as determined by the CAISO.

[10] California State Water Resources Control Board. (2021, October 10). Amendment to the Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling. https://www.waterboards.ca.gov/water_issues/programs/ocean/cwa316/docs/otc_policy_2021/otc_policy.pdf.

Beach Units 1 and 2 (1,491.3 MW). The SACCWIS explained that "[e]nabling DWR to contract with existing resources will allow the state to address [electric grid] reliability concerns and populate the Strategic [Reliability] Reserve more expeditiously and with more certainty while it works to secure additional resources."[11] 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."[12] Instead, the OTC "resources will only be called upon to support grid operations during extreme events (including any maintenance or test events recommended by and coordinated with the CAISO)."[13] Otherwise, these resources will remain offline. The SWRCB unanimously voted to extend the OTC compliance period to December 31, 2026, at its August 15, 2023, Board meeting.[14] DWR executed separate agreements with AES Alamitos LLC, AES Huntington Beach LLC, and GenOn Ormond Beach Power, LLC. The term of all three contracts is from January 1, 2024, through December 31, 2026. SWEO staff collaborated with the CPUC, CEC, and CAISO staff to negotiate the agreements which added the OTC facilities to the ESSRRP portfolio to support electric grid reliability during extreme events. These assets provide 2,859.3 MW to support California's electric grid reliability as California is taking action to accelerate the deployment of clean energy resources. Costs incurred for AES Alamitos, AES Huntington Beach, and GenOn Ormond Beach during the reporting period largely reflect capacity payments for each unit's availability, which began January 1, 2024.

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[11] Statewide Advisory Committee on Cooling Water Intake Structures. (2022, September 30). 2022 Special Report of the Statewide Advisory Committee on Cooling Water Intake Structures, pg. 15. https://www.waterboards.ca.gov/water_issues/programs/ocean/cwa316/saccwis/docs/20221108-final-report.pdf

[12] *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.*

[13] *Ibid*.

[14] State Water Resources Control Board Resolution No. 2023-0025, Amendment to the Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling to Revise Compliance Schedules for Alamitos, Huntington Beach, Ormond Beach, and Scattergood Generating Stations, and Diablo Canyon Nuclear Power Plant, August 13, 2023. https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2023/rs2023-0025.pdf.

Pacific Gas & Electric

The last agreement listed in Table 3 is with PG&E, the owner and operator of the Diablo Canyon Power Plant (DCPP), which had been scheduled for decommissioning on November 2, 2024 (Unit 1) and August 26, 2025 (Unit 2). DWR's agreement with PG&E allows for the procurement of fuel purchases, spent fuel management, and other costs necessary to maintain the option of extending operations for DCPP. This agreement was executed pursuant to AB 205 (Committee on Budget, Chapter 61, Statutes of 2022). Subsequently, in September 2022, Senate Bill (SB) 846 (Dodd, Chapter 239, Statutes of 2022) was signed into law to preserve the option of continued operations at DCPP to improve statewide electric reliability and reduce greenhouse gas (GHG) emissions while additional renewable and zero-carbon resources are built. DCPP supplies approximately 17 percent of California's zero-carbon electricity supply and 8.6 percent of California's total electricity supply. SB 846 found that actions to extend DCPP's operations for a renewed license term are prudent, cost effective, and in the best interests of all California electricity customers. SB 846 established the Diablo Canyon Extension Fund overseen by DWR, as well as milestones and criteria for PG&E and various state agencies to extend the operating life of DCPP for another five years to no later than October 31, 2030. DWR's agreement with PG&E under AB 205 is funded by the General Fund and is separate from SB 846's loan agreement funded by the Diablo Canyon Extension Fund.

At its August 15, 2023, Board meeting, the SWRCB unanimously voted to revise the OTC compliance date for DCPP to October 31, 2030.[15] On November 7, 2023, PG&E filed a License Renewal Application (LRA) with the United States Nuclear Regulatory Commission (NRC), which the NRC deemed sufficient on December 19, 2023.[16] Accordingly, DCPP may continue to operate, even beyond its current licensed end dates, while the NRC reviews PG&E's LRA. In parallel, the CPUC voted to conditionally extend DCPP operations until October

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[15] State Water Resources Control Board Resolution No. 2023-0025, Amendment to the Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling to Revise Compliance Schedules for Alamitos, Huntington Beach, Ormond Beach, and Scattergood Generating Stations, and Diablo Canyon Nuclear Power Plant, August 13, 2023. https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2023/rs2023-0025.pdf.

[16] Federal Register / Vol. 88, No. 242 / Tuesday, December 19, 2023 / Notices page 87817 to 87819. https://www.govinfo.gov/content/pkg/FR-2023-12-19/pdf/2023-27856.pdf (accessed on December 19, 2023).

31, 2029 (Unit 1) and October 31, 2030 (Unit 2).[17] As part of the LRA process, the NRC issued its safety evaluation report in June 2025, concluding that DCPP had met its safety requirements.[18] Also in June 2025, the NRC issued a completed Supplemental Environmental Impact Statement for DCPP.[19] On December 11, 2025, the California Coastal Commission voted to issue a Coastal Zone Management Act Federal Consistency determination, a requirement for NRC's approval of the LRA.[20] On April 2, 2026, the United States Nuclear Regulatory Commission issued a renewed license for DCPP.[21]

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[17] California Public Utilities Commission, Decision Conditionally Approving Extended Operations at Diablo Canyon Nuclear Power Plant Pursuant to Senate Bill 846, Rulemaking 23-01-007, Decision 23-12-036, December 14, 2023, https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M521/K496/521496276.PDF (accessed on January 17, 2024).

[18] Office of Nuclear Reactor Regulation, Nuclear Regulatory Commission, *Safety Evaluation Related to the License Renewal of Diablo Canyon Nuclear Power Plant, Units 1 and 2*, Docket Nos. 50-275 and 50-323, June 2025, https://www.nrc.gov/docs/ML2515/ML25153A508.pdf (accessed on August 1, 2025).

[19] Office of Nuclear Material Safety and Safeguards, Nuclear Regulatory Commission, *Generic Environmental Impact Statement for License Renewal of Nuclear Plants, Supplement 62, Regarding License Renewal of Diablo Canyon Nuclear Power Plant, Units 1 and 2, Final Report*, June 2025, https://www.nrc.gov/docs/ML2515/ML25156A357.pdf (accessed on August 1, 2025).

[20] California Coastal Commission, Consistency Certification No. CC-0003-23 (Pacific Gas and Electric, San Luis Obispo Co.), Item 9a at December 11, 2025 meeting, available at: https://cal-span.org/meeting/ccc_20251211/ (accessed on December 11, 2025).

[21] Federal Register / Vol. 91, No. 65 / Monday, April 6, 2026 / Notices pages 17310 to 17312. https://www.govinfo.gov/content/pkg/FR-2026-04-06/pdf/2026-06641.pdf (accessed April 6, 2026).