

Los Cerritos Wetlands Authority

Date: November 4, 2021

To: Governing Board Members

From: Sally Gee, Project Analyst

Through: Mark Stanley, Executive Officer

Subject: Item 8: Consideration of a resolution authorizing the Executive Officer to commit staff resources to negotiate an agreement and workplan with AES Corporation for their Voluntary Environmental Benefits Grants Program

RECOMMENDATION: That the Los Cerritos Wetlands Authority (LCWA) authorize the Executive Officer to commit staff resources to negotiate an agreement and workplan with AES Corporation for their Voluntary Environmental Benefits Grants Program.

PROJECT DESCRIPTION: AES Corporation (AES) committed to investing in additional voluntary environmental benefits for watershed improvements and community benefits for receiving an extension for Once Through Cooling (OTC) operations at the Redondo Beach Generating Station (RBGS). This program is in addition to, and separate from, existing OTC Policy mitigation mandates. AES proposes to grant \$1,000,000 to the LCWA to support planning, engineering, restoration, and rehabilitation of the Los Cerritos Wetlands (LCW) (Exhibit A). Goals of the funding will also support coastal access and science education opportunities at LCW for underserved communities in the region. Staff time is needed to develop an agreement between AES and LCWA to commit the grant funds and to establish a workplan. Elements of the workplan may support existing and new stewardship programs to restore LCW, planning and monitoring for the Southern LCW Restoration Project, and continued care of LCWA owned properties with the goal of watershed improvement and marine life enhancement. The proposed agreement, workplan and financial analysis will be presented to the Board for approval at a later date.

BACKGROUND: AES Corporation is a global power generating company and has been providing energy to California for more than 30 years. AES operates several coastal OTC facilities in California, including the Alamitos, Huntington Beach, and Redondo Beach Generation Stations. California's OTC Policy establishes uniform, technology-based standards to reduce harmful effects associated with OTC operations on marine and estuarine life, and AES has been working to upgrade their facilities to phase out OTC. Extreme heat waves in August 2020 that led to rolling blackouts in California prompted the California Public Utilities, California Independent System Operator, and California Energy Commission to conduct a system-wide analysis (stack analysis) of the existing capacity of energy supply to meet forecasted demands. It was determined that the energy supply was insufficient to meet projected demands. On October 19, 2021, the State Water Resource Control Board extended the compliance date to end OTC operations at the RBGS from December 31, 2021, to December 31, 2023, to partially mitigation the shortfall in supply (Exhibit B).

FISCAL INFORMATION: Costs will include legal review for the agreement, and consultant time from Tidal Influence staff to establish a workplan. Costs may be funded through lease fees and other revenue.

July 16, 2021

Jeanine Townsend
Clerk to the Board
State Water Resources Control Board
1001 I Street
Sacramento, CA 95814

Dear Ms. Townsend,

AES appreciates the opportunity to provide comments to the State Water Resources Control Board (“Water Board”) on the proposed amendment to the Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling (the “OTC Policy”).

The June 14, 2021 Draft Staff Report on the *Amendment to the Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling to Extend the Compliance Schedule for the Redondo Beach Generating Station* (“Draft Staff Report”) and the 2021 Report of the Statewide Advisory Committee on Cooling Water Intake Structures (“2021 SACCWIS Report”) both recommend a two-year extension of the once through cooling (“OTC”) compliance date for Redondo Beach Units 5, 6 and 8 (collectively herein referred to as “Redondo Beach Generating Station or RBGS”) through December 31, 2023. As the SACCWIS and Draft Staff Report states:

Even with an extension of the Redondo Beach’s compliance date, California may still experience black-outs or brown-outs during times when electrical demand is high and imports are unreliable due to similar high demands in other states or BAAs, such as during extreme and prolonged heat waves. However, this risk would be reduced with the availability of capacity provided by Redondo Beach.¹

If the RBGS is needed to operate through December 31, 2023, to support California’s grid reliability, we at AES are committed to ensuring the facility is available. This firm commitment to keep RBGS available on our part assumes the Water Board action is taken by the current schedule of October 19 or sooner to provide adequate time for all parties.

For these reasons and those discussed in our comments below, AES supports the recommendations of the Draft Staff Report and 2021 SACCWIS Report. Specifically, AES requests that the Water Board approve Alternative 1 of the Draft Staff Report, which recommends a two-year extension of the OTC compliance date for the RBGS through December 31, 2023.

¹ Draft Staff Report, p. 17.

Should the RBGS be granted an OTC extension through December 31, 2023, AES will continue to comply with the provisions of Section 2.C(3)(b) of the OTC Policy and will provide funding for mitigation projects calculated in accordance with Resolution No. 2015-0057. For years 2015-2019, AES has paid more than \$1.1 million in interim mitigation funds for RBGS alone.¹¹ The draft determination for 2019-2020 will bring the total interim mitigation payments to more than \$1.4 million.¹²

VIII. AES Has Committed to an Additional, Voluntary Environmental Benefits Program Through Grants for Watershed Improvement and Under-Served Community Benefits.

AES is committed to investing in additional, voluntary environmental benefits program for watershed improvements and community benefits if the operations of RBGS are extended through December 31, 2023. We are evaluating investments in three specific established projects that have direct marine life enhancement in marine protected areas near our OTC facilities and that build on existing proven science education and outreach programs in the region's disadvantaged communities. We propose the following investments, in addition to the existing OTC Policy mitigation mandates detailed above, if the RBGS OTC compliance deadline is extended through December 31, 2023.

A. Los Cerritos Wetlands.

AES proposes to grant a total of one million dollars (\$1,000,000) to support the continued development of the Los Cerritos Wetlands, a restoration project managed by the Los Cerritos Wetlands Authority. This project improves the marine areas in our region. The funds will be used to advance the planning, engineering, restoration, and rehabilitation of nearby wetlands. We also will establish programmatic goals to work with the Wetlands Authority to facilitate coastal access and science education opportunities with Tree People and other stakeholders who manage outreach and education programs in the underserved areas of Los Angeles and Orange Counties.

B. Tree People Outreach and Education to Support Benefits for Disadvantaged Communities.

AES proposes to grant a total of two hundred and fifty thousand dollars (\$250,000) to the Tree People to fund outreach and education programs. Tree People has established programs which benefit Los Angeles County's historically disadvantaged and underserved communities. We will establish specific program engagement protocols, with a focus on coastal access and science education and will coordinate with the Los Cerritos Wetlands Authority and other similar projects.

¹¹ https://www.waterboards.ca.gov/water_issues/programs/ocean/cwa316/interim_mitigation.html

¹² *Id.*

C. Bolsa Chica Wetlands is An Important Partnership for AES with a Proven Track Record for Land Stewardship and Community Benefits.

AES proposes to grant a total of two hundred and fifty thousand dollars (\$250,000) to fund continued wetland facilities upgrades, and new outreach and education programs at Bolsa Chica Conservancy. The outreach and education programs will be targeted to support underserved communities within Orange County, with a focus on coastal access and science education.

IX. A Low “Capacity Factor” Does Not Mean an OTC Unit Is Not Needed to Ensure System Reliability.

Some stakeholders have suggested that “low-capacity factor” OTC facilities are not needed. This is incorrect. There is an important distinction between the role of capacity and energy generation in supporting grid reliability. Having low-capacity factor OTC facilities available to support the reliable energy transition may be the difference between meeting electric reliability needs and rolling brownouts or blackouts.

The “capacity factor” of a power plant is the ratio between (1) what a generation unit is theoretically *capable* of generating at maximum output over a set time, versus (2) the unit’s actual generation output over a period of time. There are many important variables. Generators typically do not operate at their full 100% capacity all the time. It is more typical that a generator will ramp up and down to follow electric customer needs, i.e., “load.” A generator’s output will also be less than 100% due to many other factors, such as scheduled maintenance, weather conditions such as wind and sun availability, and ramping up and down as instructed by the electric power grid operator, in this case, the CAISO. For reference, California defines a “baseload” powerplant as one that operates at a 60% capacity factor.¹³

The table below shows the capacity factors of the AES OTC facilities over the last four years. On average, they operated at less than 5% of their potential maximum annual output or capacity factor and last year ran at a 4.9% capacity factor.

Power Plant	2017	2018	2019	2020	4-Yr Average
Alamitos	5.0%	5.6%	3.4%	5.3%	4.8%
Huntington Beach	10.9%	8.5%	5.9%	5.4%	7.7%
Redondo Beach	4.5%	2.4%	1.7%	4.1%	3.2%
Total (Weighted)	5.5%	4.8%	3.1%	4.9%	5.6%

¹³ Cal. Pub. Util. Code § 8340(a): “Baseload generation” means electricity generation from a powerplant that is designed and intended to provide electricity at an annualized plant capacity factor of at least 60 percent.”

**STATE WATER RESOURCES CONTROL BOARD
BOARD HEARING/MEETING SESSION – DIVISION OF WATER QUALITY
OCTOBER 19, 2021**

ITEM 8

SUBJECT

CONSIDERATION OF ADOPTION OF AN AMENDMENT TO THE WATER QUALITY CONTROL POLICY ON THE USE OF COASTAL AND ESTUARINE WATERS FOR POWER PLANT COOLING TO REVISE THE COMPLIANCE SCHEDULE FOR REDONDO BEACH GENERATING STATION

DISCUSSION

This is a combined hearing and consideration of adoption meeting for an amendment to the statewide Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling (Once-Through Cooling or OTC Policy). The OTC Policy establishes uniform, technology-based standards to implement Clean Water Act section 316(b) with the goal of reducing harmful effects associated with cooling water intake structures on marine and estuarine life.

If approved, the proposed amendment would extend the compliance date of Redondo Beach Generating Station Units 5, 6, and 8 for two years, from December 31, 2021, to December 31, 2023, to address statewide grid reliability concerns.

The compliance date extension is needed to help fill a projected energy supply shortfall in 2022 and compensate for uncertainty of the grid's reliability in 2023. The compliance date extension is the preferred recommendation of the Statewide Advisory Committee on Cooling Water Intake Structures (SACCWIS), as described in the committee's Final 2021 Report of the SACCWIS. The OTC Policy requires the SACCWIS to periodically convene to evaluate the compliance schedule to ensure that implementation of the OTC Policy will not cause disruption to the State of California's electrical grid.

Staff will give a short presentation on the amendment, comments received during the public comment period, and responses to those comments.

POLICY ISSUE

In August 2020, large portions of the western United States encountered extreme heat conditions that led to a series of rotating blackouts throughout California. The California Public Utilities Commission, California Independent System Operator, and California Energy Commission subsequently conducted a system-wide analysis, or stack analysis, to compare forecasted demand to the capacity of all existing resources and resources expected to be online in 2022. This stack analysis demonstrated that energy supply is insufficient to meet projected demand. By extending the compliance date of Redondo Beach Generating Station Units 5, 6, and 8, energy provided by the units will partially mitigate the shortfall.

Additionally, the stack analysis pointed to several uncertainties that necessitate an extension of Redondo Beach Generating Station's compliance date through December 31, 2023. These uncertainties are associated with proposed procurement and demand, availability of energy imports from other states, power plant performance, planning and market process changes, droughts, wildfires, and other weather and climate change-associated conditions.

FISCAL IMPACT

If the compliance date for Redondo Beach Generating Station Units 5, 6, and 8 is extended, operation of the facility would likely provide revenue to the owner and operator. The owner and operator are also anticipated to incur expenses for maintaining trained staff and resources to continue operations and interim mitigation payments for up to two years beyond December 31, 2021. The costs described above are considered as cost of compliance with the OTC Policy and are consistent with those discussed in the May 4, 2010 *Final Substitute Environmental Document* for the OTC Policy.

The amendment would cause the Los Angeles Regional Water Board to incur expenses to update Redondo Beach's Time Schedule Order; however, this impact is expected to be absorbed by current program funding.

REGIONAL BOARD IMPACT

The National Pollution Discharge Elimination System (NPDES) issued to Redondo Beach Generating Station by the Los Angeles Regional Water Quality Control Board (Los Angeles Regional Water Board) was scheduled to expire on September 30, 2021. Upon submission of a complete Report of Waste Discharge on April 1, 2021, the NPDES permit is administratively extended as confirmed by the Los Angeles Regional Water Board on April 29, 2021. The associated Time Schedule Order will expire on December 31, 2021. The Los Angeles Regional Water Board is considering whether to adopt a new or revised Time Schedule Order for Redondo Beach concurrently with this amendment.

STAFF RECOMMENDATION

Staff recommend that the State Water Board adopt the proposed amendment to the OTC Policy and staff report consistent with alternative 1 in Section 6 of the staff report.

November 4, 2021 – Item 8

RESOLUTION 2021 – 14

RESOLUTION OF THE LOS CERRITOS WETLANDS AUTHORITY
AUTHORIZING THE EXECUTIVE OFFICER TO COMMIT STAFF RESOURCES
TO NEGOTIATE AN AGREEMENT AND WORKPLAN WITH AES CORPORATION FOR
THEIR VOLUNTARY ENVIRONMENTAL BENEFITS GRANT PROGRAM

WHEREAS, the Los Cerritos Wetlands Authority has been established between the Coastal Conservancy, the San Gabriel and Lower Los Angeles Rivers and Mountains Conservancy, the City of Seal Beach and the City of Long Beach to facilitate the acquisition, protection, conservation, restoration, maintenance and operation an environmental enhancement of the Los Cerritos Wetlands; and

WHEREAS, the LCWA has further been established to focus on projects which will provide open space, habitat restoration, and watershed improvement projects within the Los Cerritos Wetlands; and

WHEREAS, AES Corporation (AES) committed to investing in additional voluntary environmental benefits for watershed improvements and community benefits for receiving an extension for Once Through Cooling (OTC) operations at the Redondo Beach Generating Station (RBGS); and

WHEREAS, AES proposes to grant \$1,000,000 to the LCWA to support planning, engineering, restoration, and rehabilitation of the Los Cerritos Wetlands; and

WHEREAS, this LCWA desires to enter in to an agreement with AES to commit the grant funds and establish a workplan to support rehabilitation of the Los Cerritos Wetlands; and

WHEREAS, this action is exempt from the environmental impact report requirements of the California Environmental Quality Act (CEQA); NOW

Therefore be it resolved that the LCWA hereby:

1. FINDS that this action is consistent with the purposes and objectives of the LCWA.
2. FINDS that the actions contemplated by this resolution are exempt from the environmental impact report requirements of the California Environmental Quality Act.
3. ADOPTS staff report dated November 4, 2021.
4. AUTHORIZES the Executive Officer to commit staff resources to negotiate an agreement and workplan with AES Corporation for their Voluntary Environmental Benefits Grant Program.

~ End of Resolution ~

Passed and Adopted by the Board of the LOS CERRITOS WETLANDS AUTHORITY
On November 4, 2021

Suzie Price
LCWA Board Chair

ATTEST:

Elizabeth St. John.
Deputy Attorney General