

**DRAFT 2021 – 2022 DETERMINATION TO APPROVE MITIGATION MEASURES
FOR THE WATER QUALITY CONTROL POLICY ON THE USE OF
COASTAL AND ESTUARINE WATERS FOR POWER PLANT COOLING:**

**REDONDO BEACH GENERATING STATION
OCTOBER 1, 2021, THROUGH SEPTEMBER 30, 2022**

Interim Mitigation Requirements and Determinations

The State Water Resources Control Board's (State Water Board) Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling (also known as the Once-Through Cooling or OTC Policy) requires owners or operators of existing power plants to implement measures to mitigate interim impingement and entrainment impacts resulting from their cooling water intake structures. The interim mitigation period commenced on October 1, 2015, and continues up to and until owners or operators achieve final compliance with the OTC Policy.

The State Water Board approved Redondo Beach Generating Station's continued request to comply with the interim mitigation measures described in Section 2.C(3)(b) and Section 2.C(3)(e) of the OTC Policy in the Final Determination for the October 1, 2020, to September 30, 2021 interim mitigation period (2020-2021 Final Determination).

In the sections below, the State Water Board calculated Redondo Beach Generating Station's interim mitigation payment for October 1, 2021, through September 30, 2022 (also known as the 2021-2022 determination period). This calculation is consistent with the methods and calculations applied in the 2020-2021 Final Determination. Consistent with Resolution No. 2015-0057ⁱ and the recommendations in the Expert Review Panel's Final Reportⁱⁱ, the interim mitigation payment is comprised of an entrainment payment, an impingement payment, and a management and monitoring payment.

Interim Mitigation Payment Calculation for Redondo Beach Generation Station

Entrainment Payment Calculation

To calculate the portion of the interim mitigation payment to offset entrainment impacts, the State Water Board used the default average cost of entrainment determined in the Expert Review Panel's Final Report. Consistent with Resolution No. 2015-0057 and the Expert Review Panel's Final Report, the State Water Board used a three percent escalator to update the average cost of entrainment from the 2020-2021 Final Determination to 2022 dollars to account for inflation. The resulting average default entrainment cost for October 1, 2021, through September 30, 2022, increased from \$5.49 per million gallons (MG) to \$5.65/MG:

$$(\$5.49/\text{MG} \times 0.03) + \$5.49/\text{MG} = \$5.65/\text{MG}$$

In its May 22, 2023 letter, AES-Southland provided the intake volume for Units 5, 6 and

8 for the 2021-2022 determination period of 40,745.74 MG. The State Water Board verified the intake volume with the data submitted in the National Pollutant Discharge Elimination System permit monitoring reports for Redondo Beach Generating Station.

To calculate the entrainment payment, the State Water Board multiplied the intake volume by the updated average default cost of entrainment:

$$\$5.65/\text{MG} \times 40,745.74 \text{ MG} = \$230,213.43$$

Impingement Payment Calculation

In its May 22, 2023 letter, AES-Southland provided the total fish impingement biomass for Units 5, 6 and 8 for the 2021-2022 determination period of 0.002 pounds. The State Water Board calculated the impingement payment using the total pounds of fish impinged multiplied by the average indirect economic value of the fisheries as determined in the Expert Review Panel's Final Report of \$0.80 per pound:

$$\$0.80/\text{pound} \times 0.002 \text{ pounds} = \$0.00$$

Management and Monitoring Payment Calculation

The State Water Board calculated the management and monitoring payment by taking twenty percent of the sum of the entrainment and impingement payments:

$$0.20 \times (\$230,213.43 + \$0.00) = \$46,042.69$$

State Water Board's Draft Determination for Redondo Beach Generating Station

Based on the sum of the entrainment, impingement, and management and monitoring payment calculations, the total payment to fulfill the interim mitigation obligation for AES-Southland's Redondo Beach Generating Station for the interim mitigation period of October 1, 2021, to September 30, 2022, is \$276,256.12.

$$\$230,213.43 + \$0.00 + \$46,042.69 = \$276,256.12$$

ⁱ State Water Board Resolution No. 2015-0057.

<https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2015/rs2015_0057.pdf>

ⁱⁱ Final Report from the Expert Review Panel.

<https://www.waterboards.ca.gov/water_issues/programs/ocean/desalination/docs/erp_intake052512.pdf>