

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

**HUNTINGTON BEACH GENERATING STATION
OCTOBER 1, 2018 THROUGH SEPTEMBER 30, 2019**

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 Huntington Beach Generating Station's continued request to comply with a combination of the interim mitigation measures described in Section 2.C(3)(a), Section 2.C(3)(b), and Section 2.C(3)(e) of the OTC Policy in the Final Determination for the October 1, 2017 to September 30, 2018 interim mitigation period (2017-2018 Final Determination). Consistent with [Resolution No. 2015-0057](#)ⁱ and the recommendations in the [Expert Review Panel's Final Report](#)ⁱⁱ, the interim mitigation payment is comprised of an entrainment payment, an impingement payment, and a management and monitoring payment.

In the sections below, the State Water Board calculated Huntington Beach Generating Station's interim mitigation payment for October 1, 2018, through September 30, 2019 (also known as the 2018-2019 determination period). This calculation is consistent with the methods and calculations applied in the 2017-2018 Final Determination.

Interim Mitigation Payment Calculation for Huntington 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 2017-2018 Final Determination to 2019 dollars to account for inflation. The resulting average default entrainment cost for October 1, 2018, through September 30, 2019, increased from \$5.02 per million gallons (MG) to \$5.17/MG:

$$(\$5.02/MG \times 0.03) + \$5.02/MG = \$5.17/MG$$

June 17, 2020

In its December 20, 2019 letter, AES Southland provided the intake volume for Units 1 and 2 for the 2018-2019 determination period of 41,632.99 MG. The State Water Board verified the intake volume with the data submitted in the National Pollution Discharge Elimination System permit monitoring reports for Huntington Beach Generating Station.

AES Southland was previously required to mitigate for the improvement and preservation of 66.8 acres of area, determined through the habitat production foregone method for replacement of annual entrainment and based on a previous operation intake flow of 126,775 MGD or a total annual volume of 46,272.875 MG. This mitigation has been stipulated in the Huntington Beach Station California Energy Commission license and order to operate since 2006. AES Southland proposed that any volume of once-through cooling flow in excess of 46,272.875 MG per year after October 1, 2015, should be used to calculate the entrainment portion of the interim mitigation payment for that year. The State Water Board approved the use of this calculation in the 2015-2016 Final Determination for Huntington Beach Generating Station.

Consistent with the 2015-2016, 2016-2017, and 2017-2018 Final Determinations, total intake volume was refined to account for existing mitigation efforts pursuant to Section 2.C(3)(a) of the OTC Policy, resulting in a reduction of the total intake volume by 46,272.875 MG.

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

$$\$5.17/MG \times (41,632.99 MG - 46,272.875 MG) = \$0.00$$

Impingement Payment Calculation

In its December 20, 2019 letter, AES Southland provided an estimate of fish impingement biomass for Units 1 and 2 for the 2018-2019 determination period of 92.4 pounds. AES Southland calculated its estimate of fish impingement by using the flow for this interim mitigation period and an estimated impingement rate based on the final three years of impingement data collection. The State Water Board calculated the impingement payment using the estimated 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:

$$\$0.80/pound \times 92.4 pounds = \$73.92$$

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:

$$0.20 \times (\$0 + \$73.92) = \$14.78$$

June 17, 2020

State Water Board's Draft Determination for Huntington 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 Huntington Beach Generating Station for the interim mitigation period of October 1, 2018, to September 30, 2019, is \$88.70.

$$\$0.00 + \$73.92 + \$14.78 = \$88.70$$

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>