

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

**HAYNES GENERATING STATION
OCTOBER 2016 THROUGH SEPTEMBER 2017**

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 (Once-Through Cooling [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 Haynes Generating Station's 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 Determination¹ for the October 1, 2015, to September 30, 2016, interim mitigation period (2015-2016 Final Determination). The 2015-2016 Final Determination also included the interim mitigation payment for the period of October 2015 through September 2016, comprised of an entrainment fee, an impingement fee and a management and monitoring fee, consistent with Resolution No. 2015-0057² and the recommendations in the Expert Review Panel's Final Report³.

The State Water Board calculated Haynes Generating Station's interim mitigation payment for October 1, 2016, through September 30, 2017, consistent with the methods and calculations applied in the 2015-2016 Final Determination.

Interim Mitigation Payment Calculation for Haynes Generation Station

Entrainment Payment Calculation

To calculate the interim mitigation payment to offset entrainment impacts, the State Water Board used the default average cost of entrainment. 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 2015-2016 Final Determination to 2017 dollars to account for inflation. The resulting average default entrainment cost for October 2016 through September 2017 increased from \$4.73 per million gallons (MG) to \$4.87/MG:

¹ State Water Board 2015-2016 Final Determination for Haynes Generating Station.

<https://www.waterboards.ca.gov/water_issues/programs/ocean/cwa316/docs/haynes_1516mitigation_letter.pdf>

² State Water Board Resolution No. 2015-0057.

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

³ Final Report from the Expert Review Panel.

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

$$(\$4.73/MG \times 0.03) + \$4.73/MG = \$4.87/MG$$

In their February 12, 2018 letter⁴, Los Angeles Department of Water and Power (LADWP) provided the intake volume for Haynes Generating Station from October 2016 through September 2017, totaling 162,283 MG. The State Water Board verified intake volume with the data submitted in the National Pollution Discharge Elimination System permit monitoring reports for Haynes Generating Station.

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

$$\$4.87/MG \times 162,283 MG = \$790,318.21$$

Impingement Payment Calculation

In their February 12, 2018 letter, LADWP provided the total fish impingement biomass for Haynes Generating Station from October 2016 to September 2017, totaling 3.624 pounds. 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:

$$\$0.80/pound \times 3.624 pounds = \$2.90$$

Management and Monitoring Payment Calculation

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

$$0.20 \times (\$790,318.21 + \$2.90) = \$158,064.22$$

State Water Board's Draft Determination for Haynes Generating Station

Based on the sum of the entrainment, impingement, and management and monitoring payment calculations, the total payment is \$948,385.33 to fulfill the interim mitigation obligation for LADWP's Haynes Generating Station for the operating period of October 1, 2016, to September 30, 2017.

$$\$790,318.21 + \$2.90 + \$158,064.22 = \$948,385.33$$

⁴ Letter from Mark Sedlacek, LADWP, to Eileen Sobeck, State Water Board on February 12, 2018.
<https://www.waterboards.ca.gov/water_issues/programs/ocean/cwa316/powerplants/harbor/docs/ladwp_1617inforequest_resp.pdf>