

**DRAFT 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, 2017 THROUGH SEPTEMBER 30, 2018**

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<sup>1</sup> for the October 1, 2016 to September 30, 2017 interim mitigation period (2016-2017 Final Determination). Consistent with Resolution No. 2015-0057<sup>2</sup> and the recommendations in the Expert Review Panel's Final Report<sup>3</sup>, 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 has calculated Redondo Beach Generating Station's interim mitigation payment for October 1, 2017, through September 30, 2018 (also known as the 2017-2018 determination period). This calculation is consistent with the methods and calculations applied in the 2016-2017 Final Determination.

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 2016-2017 Final Determination to 2018 dollars to account

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<sup>1</sup> State Water Board 2016-2017 Final Determination for Redondo Beach Generating Station.

<[https://www.waterboards.ca.gov/water\\_issues/programs/ocean/cwa316/docs/interim\\_mitigation/fdi1617\\_redondo.pdf](https://www.waterboards.ca.gov/water_issues/programs/ocean/cwa316/docs/interim_mitigation/fdi1617_redondo.pdf)>

<sup>2</sup> State Water Board Resolution No. 2015-0057.

<[https://www.waterboards.ca.gov/board\\_decisions/adopted\\_orders/resolutions/2015/rs2015\\_0057.pdf](https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2015/rs2015_0057.pdf)>

<sup>3</sup> Final Report from the Expert Review Panel.

<[https://www.waterboards.ca.gov/water\\_issues/programs/ocean/desalination/docs/erp\\_intake052512.pdf](https://www.waterboards.ca.gov/water_issues/programs/ocean/desalination/docs/erp_intake052512.pdf)>

for inflation. The resulting average default entrainment cost for October 1, 2017, through September 30, 2018 increased from \$4.87 per million gallons (MG) to \$5.02/MG:

$$(\$4.87/MG \times 0.03) + \$4.87/MG = \$5.02/MG$$

In its December 26, 2018 letter<sup>4</sup>, AES Southland provided the intake volume for Units 5 through 8 for the 2017-2018 determination period of 49,791.26 MG. The State Water Board verified intake volume with the data submitted in the National Pollution 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:

$$\$5.02/MG \times 49,791.26 MG = \$249,952.13$$

#### *Impingement Payment Calculation*

In its December 26, 2018 letter, AES Southland provided the total fish impingement biomass for Units 5 through 8 for the 2017-2018 determination period of 18.019 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:

$$\$0.80/pound \times 18.019 pounds = \$14.42$$

#### *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:

$$0.20 \times (\$249,952.13 + \$14.42) = \$49,993.31$$

#### 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, 2017, to September 30, 2018, is \$299,959.86.

$$\$249,952.13 + \$14.42 + \$49,993.31 = \$299,959.86$$

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<sup>4</sup> Letter from Weikko Wirta, AES Southland, to Karen Larsen, State Water Board on December 26, 2018.  
<[https://www.waterboards.ca.gov/water\\_issues/programs/ocean/cwa316/docs/cwa\\_april/rb\\_im1718.pdf](https://www.waterboards.ca.gov/water_issues/programs/ocean/cwa316/docs/cwa_april/rb_im1718.pdf)>