

## State Water Resources Control Board

JUL 25 2018

Ms. Jennifer Didlo  
President, AES Southland  
690 North Studebaker Road  
Long Beach, CA 90803

Dear Ms. Didlo:

RE: INVOICE FOR THE 2016-2017 INTERIM MITIGATION PERIOD FOR ALAMITOS  
GENERATING STATION - ONCE-THROUGH COOLING POLICY

This letter serves as an invoice for Alamitos Generating Station's interim mitigation payment during the operating period of October 1, 2016 through September 30, 2017 (2016-2017 interim mitigation period). The Final Determination calculating the interim mitigation payment is included as Attachment A.

The State Water Resources Control Board (State Water Board) Statewide Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling (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. Section 2.C(3) of the OTC Policy provides options for demonstrating compliance with the interim mitigation requirements.

As stated in the 2015-2016 Final Determination for Alamitos Generating Station<sup>1</sup>, AES Southland elected to comply with interim mitigation requirements in Section 2.C(3)(b) of the OTC Policy. This option demonstrates compliance with the interim mitigation requirement by providing funding to the Ocean Protection Council or California Coastal Conservancy to fund an appropriate mitigation project.

The State Water Board calculated the interim mitigation payment for the 2016-2017 interim mitigation period using information provided by AES Southland in their February 8, 2018 information response letter<sup>2</sup>. The annual interim mitigation payment is the sum of three components: an entrainment payment, an impingement payment, and a management and

<sup>1</sup> 2015-2016 Final Determination for Alamitos Generating Station:

[https://www.waterboards.ca.gov/water\\_issues/programs/ocean/cwa316/docs/alamitos\\_1516mitigation\\_letter.pdf](https://www.waterboards.ca.gov/water_issues/programs/ocean/cwa316/docs/alamitos_1516mitigation_letter.pdf)

<sup>2</sup> AES Southland's February 8, 2018 Information Response Letter:

[https://www.waterboards.ca.gov/water\\_issues/programs/ocean/cwa316/powerplants/alamitos/docs/alamitos\\_1617info\\_request\\_resp.pdf](https://www.waterboards.ca.gov/water_issues/programs/ocean/cwa316/powerplants/alamitos/docs/alamitos_1617info_request_resp.pdf)

JUL 25 2018

monitoring payment. The interim mitigation payment for Alamos Generating Station for the operating period of October 1, 2016 through September 30, 2017 is \$695,767.26.

AES Southland has 60 days from receipt of this letter to make this payment to the Natural Resources Agency's Ocean Protection Council. When submitting this payment, include a cover letter that identifies the National Pollution Discharge Elimination System number for Alamos Generating Station and copy Karen Mogus, Director of the Division of Water Quality at the State Water Board. Please make the check payable to the Natural Resources Agency and send to:

California Natural Resources Agency  
Attn: Jenn Eckerle  
1416 9<sup>th</sup> Street, Suite 1311  
Sacramento, CA 95814  
Reference Account: Ocean Protection Trust Fund

If you have questions regarding this invoice letter, please contact Julie Johnson at (916) 341-5687 ([Julie.Johnson@waterboards.ca.gov](mailto:Julie.Johnson@waterboards.ca.gov)) or Katherine Faick at (916) 445-2317 ([Katherine.Faick@waterboards.ca.gov](mailto:Katherine.Faick@waterboards.ca.gov)).

Sincerely,



Eileen Sobeck  
Executive Director

Enclosure:

Attachment A - Final Determination for Alamos Generating Station

cc: Ms. Deborah Halberstadt  
Executive Director  
Ocean Protection Council  
1416 9<sup>th</sup> Street, Suite 1311  
Sacramento, CA 95814

Ms. Jenn Eckerle  
Deputy Director  
Ocean Protection Council  
1416 9<sup>th</sup> Street, Suite 1311  
Sacramento, CA 95814

cc via email:

Mr. Weikko Wirta, [Weikko.Wirta@aes.com](mailto:Weikko.Wirta@aes.com)  
Mr. Jonathan Bishop, [Jonathan.Bishop@waterboards.ca.gov](mailto:Jonathan.Bishop@waterboards.ca.gov)  
Ms. Karen Mogus, [Karen.Mogus@waterboards.ca.gov](mailto:Karen.Mogus@waterboards.ca.gov)  
Mr. Michael Lauffer, [Michael.Lauffer@waterboards.ca.gov](mailto:Michael.Lauffer@waterboards.ca.gov)  
Ms. Marleigh Wood, [Marleigh.Wood@waterboards.ca.gov](mailto:Marleigh.Wood@waterboards.ca.gov)  
Mr. Paul Hann, [Paul.Hann@waterboards.ca.gov](mailto:Paul.Hann@waterboards.ca.gov)  
Ms. Rebecca Fitzgerald, [Rebecca.Fitzgerald@waterboards.ca.gov](mailto:Rebecca.Fitzgerald@waterboards.ca.gov)  
Ms. Hope A. Smythe, [Hope.Smythe@waterboards.ca.gov](mailto:Hope.Smythe@waterboards.ca.gov)

**Attachment A – Final Determination for Alamitos Generating Station**

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

**ALAMITOS 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 Alamitos 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 Determination<sup>1</sup> 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. 2015-0057<sup>2</sup> and the recommendations in the Expert Review Panel's Final Report<sup>3</sup>.

The State Water Board calculated Alamitos 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 Alamitos 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

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<sup>1</sup> State Water Board 2015-2016 Final Determination for Alamitos Generating Station.

<[https://www.waterboards.ca.gov/water\\_issues/programs/ocean/cwa316/docs/alamitos\\_1516mitigation\\_letter.pdf](https://www.waterboards.ca.gov/water_issues/programs/ocean/cwa316/docs/alamitos_1516mitigation_letter.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)>

through September 2017 increased from \$4.73 per million gallons (MG) to \$4.87/MG:

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

In their February 8, 2018 letter<sup>4</sup>, AES Southland provided the intake volume for units one through six from October 2016 through September 2017, totaling 118,983.73 MG. The State Water Board verified intake volume with the data submitted in the National Pollution Discharge Elimination System permit monitoring reports for Alamitos Generating Station.

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

$$\$4.87/MG \times 118,983.73MG = \$579,450.77$$

#### Impingement Payment Calculation

In their February 8, 2018 letter, AES Southland provided an estimate of fish impingement biomass for units one through six from October 2016 to September 2017, totaling 444.1 pounds. AES Southland calculated its estimate of fish impingement by using the flow for the 2016-2017 mitigation period and a quarterly average impingement rate that was derived from impingement data collected from October 2016 through September 2017. 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:

$$\$0.80/pound \times 444.1pounds = \$355.28$$

#### 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:

$$0.20 \times (\$579,450.77 + \$355.28) = \$115,961.21$$

#### State Water Board's Final Determination for Alamitos Generating Station

Based on the sum of the entrainment, impingement, and management and monitoring payment calculations, the total payment is \$695,767.25 to fulfill the interim mitigation obligation for AES Southland's Alamitos Generating Station for the operating period of October 1, 2016, to September 30, 2017.

$$\$579,450.77 + \$355.28 + \$115,961.21 = \$695,767.26$$

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<sup>4</sup> Letter from Weikko Wi, AES Southland, to Karen Larsen, State Water Board (February 8, 2018) at [https://www.waterboards.ca.gov/water\\_issues/programs/ocean/cwa316/powerplants/alamitos/docs/alamitos\\_1617inforequest\\_resp.pdf](https://www.waterboards.ca.gov/water_issues/programs/ocean/cwa316/powerplants/alamitos/docs/alamitos_1617inforequest_resp.pdf)