
State Water Resources Control Board

SEP 09 2019

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

Dear Ms. Didlo:

**RE: INVOICE FOR THE 2017-2018 INTERIM MITIGATION PERIOD FOR
HUNTINGTON BEACH GENERATING STATION - ONCE-THROUGH COOLING
POLICY**

This letter serves as an invoice for Huntington Beach Generating Station's interim mitigation payment for the operating period of October 1, 2017, through September 30, 2018 (2017-2018 interim mitigation period). The final determination calculating the interim mitigation payment is included as Attachment A.

The State Water Resources Control Board's (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 Huntington Beach Generating Station¹, AES Southland elected to comply with interim mitigation requirements in Sections 2.C(3)(a) and 2.C(3)(b) of the OTC Policy. These options demonstrate compliance with interim mitigation by compensating for impingement and entrainment impacts through existing mitigation efforts and providing funding to the Ocean Protection Council or State Coastal Conservancy to fund appropriate mitigation projects, respectively.

E. JOAQUIN ESQUIVEL, CHAIR | EILEEN SOBECK, EXECUTIVE DIRECTOR

Ms. Jennifer Didlo

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The State Water Board calculated the interim mitigation payment for the 2017-2018 interim mitigation period using information provided by AES Southland in its February 11, 2019 information response letter². The annual interim mitigation payment is the sum of three components: an entrainment payment, an impingement payment, and a management and monitoring payment. The interim mitigation payment for Huntington Beach Generating Station for the operating period of October 1, 2017, through September 30, 2018, is \$499.20.

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 Huntington Beach 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 9th 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), or Katherine Walsh at (916) 445-2317 (Katherine.Walsh@waterboards.ca.gov).

Sincerely,



Eileen Sobeck
Executive Director

Enclosure:
Attachment A – Final Determination for Huntington Beach Generating Station

cc:

Mr. Mark Gold
Executive Director
Ocean Protection Council
1416 9th Street, Suite 1311
Sacramento, CA 95814

Ms. Jennifer Didlo

SEP 09 2019

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

cc via email:

Mr. Weikko Wirta, Weikko.Wirta@aes.com
Mr. Jonathan Bishop, Johnathan.Bishop@waterboards.ca.gov
Ms. Karen Mogus, Karen.Mogus@waterboards.ca.gov
Mr. Michael Lauffer, Michael.Lauffer@waterboards.ca.gov
Ms. Marleigh Wood, Marleigh.Wood@waterboards.ca.gov
Mr. Phillip Crader, Phillip.Crader@waterboards.ca.gov
Ms. Rebecca Fitzgerald, Rebecca.Fitzgerald@waterboards.ca.gov
Ms. Hope Smythe, Hope.Smythe@waterboards.ca.gov

¹ 2015-2016 Final Determination for Huntington Beach Generating Station:
https://www.waterboards.ca.gov/water_issues/programs/ocean/cwa316/docs/huntington_1516mitigiaton_letter.pdf

² AES Southland's February 11, 2019 Information Response Letter:
https://www.waterboards.ca.gov/water_issues/programs/ocean/cwa316/docs/cwa_april/hb_im1718.pdf

Attachment A – Final Determination for Huntington Beach 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:**

**HUNTINGTON 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 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 Determination¹ for the October 1, 2016 to September 30, 2017 interim mitigation period (2016-2017 Final Determination). Consistent with Resolution No. 2015-0057² and the recommendations in the Expert Review Panel's Final Report³, 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 Huntington 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 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 2016-2017 Final Determination to 2018 dollars to account 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:

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

In its February 11, 2019 letter⁴, AES Southland provided the intake volume for Units 1 and 2 for the 2017-2018 determination period of 43,136.0212 MG. The State Water Board verified 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, which was required 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 Station⁵.

Consistent with the 2015-2016 and 2016-2017 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:

$$\$5.02/\text{MG} \times (43,136.0212 \text{ MG} - 46,272.875 \text{ MG}) = \$0.00$$

Impingement Payment Calculation

In its February 11, 2019 letter, AES Southland provided an estimate of fish impingement biomass for Units 1 and 2 for the 2017-2018 determination period of 520 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:

$$\$0.80/\text{pound} \times 520 \text{ pounds} = \$416.00$$

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:

$$0.20 \times (\$0 + \$416) = \$83.20$$

State Water Board's Final 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, 2017, to September 30, 2018, is \$499.20.

$$\$0.00 + \$416.00 + \$83.20 = \$499.20$$

¹ State Water Board 2016-2017 Final Determination for Huntington Beach Generating Station.

<https://www.waterboards.ca.gov/water_issues/programs/ocean/cwa316/docs/interim_mitigation/fdi1617_huntington.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 Letter from Weikko Wirta, AES Southland, to Karen Larsen, State Water Board on February 11, 2019.

<https://www.waterboards.ca.gov/water_issues/programs/ocean/cwa316/docs/cwa_april/hb_im1718.pdf>

⁵ State Water Board 2015-2016 Final Determination for Huntington Beach Generating Station.

<https://www.waterboards.ca.gov/water_issues/programs/ocean/cwa316/docs/huntington_1516mitigation_letter.pdf>