

690 North Studebaker Road Long Beach, CA 90803 tel 562 493 7863 fax 562 493 7320

February 11, 2019

Karen L. Larsen Director State Water Resources Control Board 1001 | Street Sacramento, CA 95814

RE: Once-Through Cooling Interim Mitigation Requirements for the Huntington Beach Generating Station

Dear Ms. Larsen,

This letter is in response to your October 29, 2018 correspondence requesting information for determining interim mitigation fees for Once-Through Cooling (OTC) impingement and entrainment impacts at the Huntington Beach Generating Station (AES-HB). As stated in your letter, you requested the following information:

- 1. Monthly and total intake volume for October 1, 2017, through September 30, 2018; and
- 2. Actual annual impingement data in total pounds from October 1, 2017 through September 30, 2018, or newly available impingement data since October 1, 2017.

Our responses to your data request are detailed below:

1. Monthly and total intake volume for October 1, 2017 through September 30, 2018

Intake volumes for AES-HB are listed in Table 1 below:

Table 1. Total monthly seawater intake volumes by month for AES Huntington Beach Generating Station in million gallons per day (MGPD), and total intake volume for the mitigation period covered, October 1, 2017 – September 30, 2018, in million gallons.

Month	Total Intake Volume Units 1 &2 (MGD)	
October-17	4136.55	
November-17	2861.02	

Month	Total Intake Volume Units 1 &2 (MGD)	
December-17	2217.02	
January-18	2306.20	
February-18	2339.89	
March-18	5129.99	
April-18	2483.18	
May-18	2546.15	
June-18	3590.19	
July-18	5770.20	
August-18	6470.09	
September-18	3285.55	
Total	43136.0212	

There were no days during the period October 2017 through September 2018 when intake volume data was not available. Intake pumps were operational during the entire period.

2. Actual annual impingement data in total pounds of fishes impinged

Actual annual fish impingement data is not available for AES-HB for the mitigation period referenced. Fish impingement monitoring was discontinued with the renewal and adoption of National Pollutant Discharge Elimination System permit number CA0001163, Order Number R8-2014-0076. In accordance with the renewed permit, beginning January of 2015, fish impingement has no longer been monitored at AES-HB.

In previous years we have estimated annual fish impingement weight based upon prior years' data. The normal operation impingement calculation and heat treatment impingement estimation examined three NPDES years' (October 1, through September 30) flow and fish biomass data for 2012, 2013 and 2014. However, since 2015 when fish impingement monitoring was discontinued, the operational characteristics of the plant have changed enough to draw continued utilization of historical data into question.

In keeping with recent years' calculation, an average monthly impingement rate for 2012 through 2014 was calculated for normal operation conditions and that rate was applied to recorded 2018 monthly intake volumes. AES-HB performed two heat treatments in the 2018 NPDES year: one on October 17, 2017 and one on May 25, 2018. The estimation of heat treatment impingement was evaluated independent of flow and was derived from average quarterly data in the historical data set. The estimated impinged biomass described by the methods herein is presented in Table 2.

Table 2. Summary of Estimated Fish Impingement Biomass in Pounds for October 1, 2017 through September 30, 2018

Est. Normal Operation	1.27
Est. Heat Treatment	519
Total Est. Fish Biomass	520

If you have questions regarding this submittal, please contact Coury McKinlay, AES Southland Environmental Manager at (562) 493-7863 or coury.mckinlay@aes.com.

Sincerely

Weikko Wirta

AES West Complex Operations Manager