

690 North Studebaker Road Long Beach, CA 90803 tel 562 493 7891 fax562 493 7320

December 26, 2018

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

RE: Once-Through Cooling Interim Mitigation Requirements for the Alamitos 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 AES Alamitos Generating Station (AES-AL). 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-AL are listed in the table below:

| Month | Intake Volume ¹ Units 1 &2 (MGD) | Intake Volume ² Units 3&4 (MGD) | Intake Volume ³ Units 5&6 (MGD) | Intake Volume Total AES-AL (MGD) |
|-------------|--|---|---|---|
| October-17 | 2602.36 | 6322.58 | 2987.39 | 11912.33 |
| November-17 | 1981.33 | 3677.49 | 169.24 | 5828.06 |
| December-17 | 2287.13 | 1331.17 | 6.2 | 3624.5 |
| January-18 | 2438.08 | 1522.75 | 60.91 | 4021.74 |
| February-18 | 3779.51 | 5626.47 | 59.63 | 9465.61 |

¹ Discharges to EFF-001

² Discharges to EFF-002

³ Discharges to EFF-003

| Total | 37897.26 | 59833.33 | 32734.21 | 130464.8 |
|------------|----------|----------|----------|----------|
| 18 | 3043.64 | 498.9 | 1255.94 | 4798.48 |
| September- | | | | |
| August-18 | 5500.42 | 10429.69 | 8236.52 | 24166.63 |
| July-18 | 6070.01 | 10753.22 | 15193.47 | 32016.7 |
| June-18 | 2529.54 | 6183.11 | 450.8 | 9163.45 |
| May-18 | 975.9 | 3593.48 | 1981.34 | 6550.72 |
| April-18 | 2955.41 | 5788.52 | 456.96 | 9200.89 |
| March-18 | 3733.93 | 4105.95 | 1875.81 | 9715.69 |

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. At least one circulating OTC pump was required for either power generation or critical system maintenance at all times at AES-AL.

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

Impingement data collected in October 2017, April 2018 and June 2018 were used to calculate the total pounds impinged at Units 1 & 2, Units 3 & 4, and Units 5 & 6 for the period from October 1, 2017 through September 30, 2018. Flow data is included for the operating units for the period from October 1, 2017 through September 30, 2018.

The total fish impingement biomass from October 1, 2017 to September 30, 2018 is:

Units 1 & 2 Intake (to discharge EFF-001) = 0.130 lbs

Units 3 & 4 Intake (to discharge EFF-002) = 3.015 lbs

Units 5 & 6 Intake (to discharge EFF-003) = 0.079 lbs

AES-AL Station Total Estimate = 3.224 lbs

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

Weikko Wirta

AES West Complex Operations Manager