## **RESPONSE TO PUBLIC COMMENTS**

## for the Determinations to Approve Mitigation Measures for the Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling (Once-Through Cooling Policy) for Alamitos, Harbor, Haynes, Huntington Beach, Mandalay, and Redondo Beach Generating Stations<sup>1</sup>

| Comment<br>Letter | Commenter  | Submitted by     |
|-------------------|--|------------------|
| 1                 | Hollywood by the Sea   | Keith Moore      |
| 2                 | Los Cerritos Wetlands Land Trust for Long Beach and Seal Beach | Elizabeth Lambe  |
| 3                 | Friends of Channel Islands Harbor Lessees Association          | Steven L. Kinney |
| 4                 | California Coastkeeper Alliance                                | Sean Bothwell    |

| Comment | Determination                     | Comment   | Response  | Revision <sup>2</sup> |
|---------|-----------------------------------|---|---|-----------------------|
| 1.1     | Mandalay<br>Generating<br>Station | We notice that the Mandalay Station cooling<br>water pumps and canal connecting the CI Harbor<br>to the Mandalay Power Station are to be<br>abandoned!<br>Since the 1970's, the Mandalay Station cooling<br>water pumps provide an essential function to<br>purge and prevent stagnation of Ventura<br>County's Channel Island Harbor. The average<br>flow is 10 million / gal / day (from 2010 to 2014)<br>(design capacity is ~ 250 million gallons/day).<br>To abandon this system will quite possibly create<br>a stagnant pond at the north-end of our Harbor!<br>What are your plans to address this issue? | This comment is outside of the scope of the<br>determination of interim mitigation payments,<br>which only pertains to measures undertaken to<br>comply with requirements for interim mitigation in<br>the statewide Water Quality Control Plan on the<br>Use of Coastal and Estuarine Water for Power<br>Plant Cooling (Once-Through Cooling [OTC]<br>Policy). | Νο                    |

<sup>&</sup>lt;sup>1</sup> No comments were received for Ormond and Scattergood Generating Stations

<sup>&</sup>lt;sup>2</sup> This column refers to revisions to the Draft Determinations released on August 8, 2017, or a change that has affected the Final Determinations.

| 2.1 | Alamitos    | For the reasons below, we strongly urge you to       | The OTC Policy states that it is the preference of         | No |
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|     | Generating  | recommend the Ocean Protection Council               | the State Water Resources Control Board (State             |    |
|     | Station and | and/or Coastal Conservancy use the mitigation        | Water Board) that interim mitigation funding               |    |
|     | Haynes      | funding for restoration of habitat and aquatic life  | provided to the Coastal Conservancy (CC) or the            |    |
|     | Generating  | populations in the Los Cerritos Wetlands – the       | Ocean Protection Council (OPC) would be for                |    |
|     | Station     | source water body most directly impacted by the      | mitigation projects directed towards increases in          |    |
|     |             | interim OTC operations. We suggest the               | marine life associated with the state's Marine             |    |
|     |             | mitigation funds be appropriated to the Los          | Protected Areas in the geographic region of the            |    |
|     |             | Cerritos Wetlands Authority with the expressed       | facility. The OPC and the CC are each                      |    |
|     |             | stipulation that the expenditure of the funds must   | developing a framework to identify and prioritize          |    |
|     |             | prove to result in the intended purpose of           | projects that fulfill the requirements of the OTC          |    |
|     |             | replacing aquatic life lost to the operation of the  | Policy. <sup>3</sup> The commenter is encouraged to submit |    |
|     |             | two OTC systems. As implied in the draft             | these comments to the OPC and CC. Visit link:              |    |
|     |             | decision for Alamitos and Haynes, the mitigation     | http://www.opc.ca.gov/2017/10/ocean-protection-            |    |
|     |             | fees should be spent on improvements to habitat      | council-meeting-wednesday-november-1-2017/                 |    |
|     |             | values in the Los Cerritos Wetlands, or              |  |    |
|     |             | acquisition of adjacent property that will result in |  |    |
|     |             | expanded habitat, resulting in the replacement of    |  |    |
|     |             | the aquatic life lost in the cooling water intake.   |  |    |
|     |             | Further, the calculated 20% additional fees          |  |    |
|     |             | should be set aside to monitor the progress of       |  |    |
|     |             | the restoration                                      |  |    |
|     |             | projects to ensure they meet predetermined           |  |    |
|     |             | performance standards to replace the species         |  |    |
|     |             | lost to entrainment and impingement from the         |  |    |
|     |             | two power stations' interim OTC operations.          |  |    |
| 2.2 | Alamitos    | We understand the OTC Policy states a                | See response to comment 2.1. Additionally, the             | No |
|     | Generating  | preference for mitigation funds to be directed       | use of interim mitigation funds to be applied              |    |
|     | Station and | towards Marine Protected Areas. Further, it is       | towards increases in marine life associated with           |    |
|     | Haynes      | our understanding the State Water Board,             | the state's Marine Protected Areas in the                  |    |
|     | Generating  | Coastal Conservancy and Ocean Protection             | geographic regions of the facilities does not              |    |
|     | Station     | Council have agreed to a set allocation of the       | preclude those funds from being provided                   |    |
|     |             | statewide mitigation fees between the Coastal        | towards wetland restoration projects.                      |    |
|     |             | Conservancy and Ocean Protection Council.            |  |    |
|     |             | Nonetheless, that "preference", and fee              |  |    |
|     |             | allocation agreement, does not, and should not,      |  |    |
|     |             | prohibit use of the mitigation funds for wetlands    |  |    |

<sup>&</sup>lt;sup>3</sup> Cyndi Dawson, Sara Worden, and Liz Whiteman. 2016. Once-Through Cooling Mitigation Program Policy and Science Framework Linking California's Marine Protected Area Network to OTC Impacts.

<sup>&</sup>lt;http://www.opc.ca.gov/webmaster/ media library/2016/10/FINALScience PolicyFramework LinkingMPAstoOTCmitigation 8.30.16.pdf>

|     |  | restoration projects that would result in "in-kind"<br>habitat improvements and the restoration of<br>species' populations directly impacted by historic<br>and ongoing entrainment and impingement.<br>Clearly the Haynes and AES-Alamitos cooling<br>water intakes are distinct from most other<br>operating power plants in California in that the<br>cooling<br>water intakes are located in a bay and wetlands -<br>- estuarine habitat.   |   |    |
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| 2.3 | Alamitos<br>Generating<br>Station and<br>Haynes<br>Generating<br>Station | The ETM/APF formula is intended to estimate<br>the "area of production foregone" – what was<br>once merely an attempt to illustrate the severity<br>of impacts to marine life. More recently that<br>formula has been adapted to estimate the<br>amount of habitat restoration needed for<br>replacement of the species suffering mortality in<br>the cooling water intake. However, scientists<br>admit that any mitigation calculation, including<br>ETM/APF, are inherently difficult to ensure<br>accuracy given the data-poor science on marine<br>life populations and life histories, and the poorly<br>understood complexity of marine ecosystems.<br>And the numerous benefits of healthy coastal<br>wetlands to a healthy marine ecosystem creates<br>even greater complexity to calculating<br>ecosystem "replacement" values.<br>However, it is clear that restoring in-kind habitat,<br>in the same water body that is the source of the<br>cooling water intake, provides greater<br>assurances that the impact will be directly<br>mitigated. Further, beyond ensuring direct<br>replacement value of the impacted estuarine<br>species' populations from wetlands restoration,<br>nearshore Marine Protected Areas will indirectly<br>benefit from restoring the ecosystem benefits of<br>what is a small remnant of historical coastal<br>wetlands in Southern California. Among a long<br>list of ecosystem services, coastal wetlands<br>provide: a natural filtration system for pollutants<br>that degrade marine environments; forace | See response to comment 2.1. Additionally, the interim mitigation fund calculation method was developed by the Expert Review Panel and approved by the State Water Board through adoption of Resolution No. 2015-0057. It is a reasonable method to comply with the interim mitigation option outlined in Section 2.c.(3)(b) of the Policy. | No |

|     |  | species that are transported offshore and<br>provide critical nutrition for marine species, and a<br>"habitat link" for anadromous species that once<br>inhabited regional watersheds in abundance but<br>now are barely protected from extinction.  |  |    |
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| 2.4 | Alamitos<br>Generating<br>Station and<br>Haynes<br>Generating<br>Station | The Los Cerritos Wetlands Land Trust is well<br>aware of the tenuous status of marine life<br>populations, and we support the State's efforts to<br>protect and restore marine ecosystems through<br>adoption and maintenance of Marine Protected<br>Areas. And we are more intimately familiar with<br>the historical loss of estuarine habitat in the<br>region and the immediate need to protect and<br>restore what is left if we hope to restore the<br>natural beauty and bounty of our coast and<br>ocean past generations of Californians once<br>enjoyed. As it is often said, you cannot put<br>together a complex jig-saw puzzle unless you<br>keep all the pieces. | Comment noted.                         | No |
| 2.5 | Alamitos<br>Generating<br>Station and<br>Haynes<br>Generating<br>Station | Once again, we strongly urge the State Water<br>Resources Control Board to include language in<br>your decision to approve the interim mitigation<br>proposed for Haynes and AES-Alamitos that<br>directs the funding to restoration of habitat in the<br>Los Cerritos Wetlands that will fulfill the intended<br>purpose of the OTC Policy to replace aquatic life<br>killed in the OTC systems.  | See responses to comments 2.1 and 2.2. | No |
| 3.1 | Mandalay<br>Generating<br>Station  | I represent the Lessees of Channel Islands<br>Harbor. This is the group which collectively is<br>responsible for all of the private investment in<br>and around the harbor through the years, i.e., all<br>of the marinas, the hotels, the restaurants, the<br>shops, and the apartments and condos. To say<br>that we have a vested interest in the water<br>quality in the harbor is to state the obvious. Mr.<br>Keith Moore, in his August 9 letter to you below,<br>described very succinctly the major concern that<br>we have with the planned closure of the<br>Mandalay Generating Station and its circulating  | See response to comment 1.1.           | No |

|     |  | pumps. This system has kept the harbor waters<br>clean since the inception of the harbor. We seek<br>a regulatory ally equally concerned about the<br>potential future deterioration of our water<br>quality. Please indicate how we can enlist your<br>support in securing clean water in the years<br>ahead in the face of the planned changes to this<br>proven flushing system. |   |    |
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| 4.1 | Huntington<br>Beach<br>Generating<br>Station | HBGS's draft Determination is flawed and needs<br>to be denied or re-circulated. HBGS's mitigation<br>for OTC operations between 2001 through 2011<br>should not be double-counted for continuing and<br>ongoing operations that have occurred since<br>October 1st, 2015.  | It is appropriate to provide credit for 66.8 acres of tidal wetlands that currently provide fish and invertebrate species productivity as mitigation for the impingement and entrainment impacts of approximately 46,272 million gallons per year of once-through cooling water at Huntington Beach Generating Station.<br>According to the OTC Policy section 2.C(3)(a), an owner or operator may comply with the interim mitigation requirements by demonstrating to the State Water Board's satisfaction that the owner or operator is compensating for the interim impingement and entrainment impacts through existing mitigation efforts, including any projects that are required by state or federal permits as of October 1, 2010.<br>The 66.8 acre wetland mitigation project was required by the California Energy Commission (Commission) as a condition of its certification to retool and repower Units 3 and 4. The Commission concluded there would be an estimated loss of productivity of 66.8 acres of coastal habitat due to impingement and entrainment for the state was required by the California Energy Commission (Commission) as a condition of its certification to retool and repower Units 3 and 4. The | No |

| from 2012 to 2018 to maintain proper functioning<br>of the 66.8 acres of wetlands.<br>Although Units 3 and 4 were retired in November<br>2012, the 66.8 acres of mitigation wetlands in<br>Huntington Beach Wetlands were in existence<br>and providing species productivity from October | 30, 2011.4.5This mitigation translates to an<br>intake flow volume of 126.775 million gallons per<br>day (46,272.875 million gallons per year).At the September 27, 2005 Commission Hearing,<br>AES-Southland, the owner and operator of<br>Huntington Beach Generating Station, was<br>ordered to restore 66.8 acres of the Huntington<br>Beach Wetlands and fund maintenance for 10<br>years. AES-Southland provided \$4,987,288 to<br>the Huntington Beach Wetlands Conservancy<br>(Conservancy) for the restoration of 66.8 acres of<br>the Huntington Beach Wetlands, and \$523,712<br>for the maintenance of those restored wetlands<br>for a period of 10 years, totaling \$5,511,000. In<br>2010, when the Commission approved an<br>extension to operate Units 3 and 4 for an<br>additional five years, a condition was added to<br> |  |
|---|---|--|
| Although Units 3 and 4 were retired in November<br>2012, the 66.8 acres of mitigation wetlands in<br>Huntington Beach Wetlands were in existence<br>and providing species productivity from October   | contribute an additional \$20,000 to fund the<br>annual maintenance and monitoring activities<br>from 2012 to 2018 to maintain proper functioning<br>of the 66.8 acres of wetlands.   |  |
| 1, 2015, to September 20, 2016, and continue to<br>do so today. The species productivity is an<br>existing benefit and is appropriate compensation  | Although Units 3 and 4 were retired in November<br>2012, the 66.8 acres of mitigation wetlands in<br>Huntington Beach Wetlands were in existence<br>and providing species productivity from October<br>1, 2015, to September 20, 2016, and continue to<br>do so today. The species productivity is an<br>existing benefit and is appropriate compensation   |  |

 <sup>&</sup>lt;sup>4</sup> Christina Snow. 2010. Huntington Beach Generating Station Retool Project (00-AFC-13C) Staff Analysis of Proposed License Extension.
 <<u>http://www.energy.ca.gov/business\_meetings/2010\_packets/2010-10-20/2010-10-20\_ltem\_01\_HBGSR\_Amendment/FINAL\_STAFF\_ANALYSIS2.pdf</u>>
 <sup>5</sup> Dr. Noel Davis, Dr. Pete Raimondi, Rick York, Joanna Reinhardt. 2006. Huntington Beach Entrainment and Impingement Study Results, Mitigation Options, Staff and Working Group Recommendations, and AES's Response and Objections to the Recommendation.
 <<u>http://www.energy.ca.gov/sitingcases/huntingtonbeach/compliance/2006-07-14\_STAFF\_ANALYSIS.PDF></u>

| 4.2 | Huntington<br>Beach<br>Generating<br>Station | The OTC Policy's interim mitigation requirement<br>was intended to encourage facilities to come into<br>compliance as quickly as possible. The HBGS<br>draft Determination lacks any incentive to phase-<br>out OTC operations.  | The OTC Policy's interim mitigation requirement<br>was intended to encourage facilities to come into<br>compliance as quickly as possible while<br>maintaining the reliability of the state's electric<br>system. Satisfactory progress is being made<br>toward full compliance with the OTC Policy at<br>Huntington Beach Generating Station, as Units 3<br>and 4 are retired and Unit 1 may be retired one<br>year earlier than required by the OTC Policy, as<br>indicated in the Statewide Advisory Committee<br>on Cooling Water Intake Structures (SACCWIS)<br>2017 Report. In addition, \$51,582.90 shall be<br>due to mitigate interim impingement and<br>entrainment impacts for the period of October 1,<br>2015, to September 30, 2016. | No |
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| 4.3 | Huntington<br>Beach<br>Generating<br>Station | This Determination is inequitable for other OTC facilities, is not consistent with the mitigation fee calculation approved in the 2015 Resolution, and it does not comply with the OTC Policy or the Clean Water Act.  | The mitigation payment complies with Resolution<br>No. 2015-0057 and OTC Policy as it calculates a<br>mitigation payment that consists of an<br>entrainment component, an impingement<br>component, and a management and monitoring<br>component. The Huntington Beach Generation<br>Station calculation is unique in that the amount of<br>intake flow volume used in the calculation of the<br>entrainment component is reduced by the<br>amount of flow volume used to determine the<br>size of the 66.8 acre wetland mitigation project.<br>The commenter does not explain how the<br>calculation fails to comply with the Clean Water<br>Act.   | No |
| 4.4 | Huntington<br>Beach<br>Generating<br>Station | We respectfully request that the State Water<br>Board Executive Director revise the draft HBGS<br>Determination to deny the adjusted interim<br>mitigation. In the alternative, we ask the Director<br>to bring this issue to the attention of the State<br>Water Board Members, and to schedule the item<br>for a public hearing. Such a material deviation of<br>the OTC Policy's requirements – and the State<br>Water Board's own statements from its August<br>18, 2015 Board Hearing – should be presented<br>to the full Board for consideration. | Comment noted. The final determination shall be<br>approved by the Executive Director in<br>accordance with Resolution No. 2015-0057.  | No |

| 4.5 | Huntington<br>Beach<br>Generating<br>Station | A. THE STATE WATER BOARD SHOULD NOT<br>ALLOW PREVIOUS MITIGATION BY THE<br>ENERGY COMMISSION TO REDUCE<br>HUNTINGTON BEACH GENERATING<br>STATION'S CURRENT RESPONSIBILITIES<br>UNDER THE OTC POLICY.<br>The State Water Board is impermissibly allowing<br>HBGS to avoid its requirements – under the OTC<br>Policy – to mitigate for ongoing marine life<br>impacts after October 1st, 2015. The HBGS draft<br>Determination states that the intake flow volume<br>used to calculate the mitigation fee was "further<br>refined to account for existing mitigation." AES-<br>Southland was previously required to mitigate for<br>the improvement and preservation of 66.8 acres<br>of area of habitat production foregone (HPF),<br>which was required based on a previous<br>operation of intake flow of 126,775 MGD or a<br>total annual volume of 46,272.875 MG. This<br>mitigation has been stipulated in Huntington<br>Beach Station California Energy Commission<br>license and order to operate since 2006. The<br>draft Determination states that "AES-Southland<br><i>proposes</i> that any volume of once-through-<br>cooling flow in excess of 46,272.875 MG per<br>year after October 1, 2015, should be used to<br>calculate the mitigation costs." This proposal<br>should be outright denied and the State Water<br>Board should calculate HBGS's mitigation fee<br>using an intake flow volume of 54,959.79 MG. | See Response to Comment 4.1.   | Νο |
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| 4.6 | Huntington<br>Beach<br>Generating<br>Station | HBGS's past mitigation was not identified as<br>eligible for interim mitigation. At the State Water<br>Board's August 18th, 2015 hearing, we raised<br>substantive concerns regarding the lack of<br>guidance or criteria for determining whether an<br>OTC facility would be eligible for applying past<br>mitigation to its interim mitigation requirements.<br>Additionally in our written comments, we<br>specifically noted that HBGS would attempt to<br>argue its past mitigation should be applied to   | State Water Board staff comments at the August 2015 Board meeting were based on information available to them at the time. Upon consideration of the factors associated with the 66.8 acre mitigation wetland, it is appropriate to credit for the existing mitigation effort. | No |

|     |  | <ul> <li>mitigate its current OTC impacts. However, our concerns went unaddressed because the State Water Board believed at the time that only two OTC facilities were eligible for applying past mitigation – those two facilities did not include HBGS.</li> <li>When we raised our concerns regarding past mitigation at the August 2015 hearing, Chair Marcus asked staff how many projects would be eligible for applying past mitigation to the interim mitigation requirements. The response from staff was they knew of only two facilities that would be</li> </ul> |   |    |
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|     |  | eligible for applying past mitigation to the interim<br>mitigation requirements: San Onofre Nuclear<br>Generating Station (SONGS) and Moss Landing<br>Power Plant. The Board members relied upon<br>staff's assertion – as did we – and concluded<br>that additional guidance was moot and<br>unnecessary since all past mitigation had been<br>decided.   |   |    |
|     |  | its position regarding which facilities are eligible<br>for applying past mitigation to its interim<br>mitigation. Our organization, the Board<br>Members, and other stakeholders relied on<br>staff's assertion that they would only allow two<br>facilities to use past mitigation. The State Water<br>Board's HBGS Determination directly conflicts<br>with the assertions made at the August 18, 2015<br>hearing; we therefore request this draft<br>Determination be either revised to deny past<br>mitigation, or schedule this issue for a Board<br>hearing.          |   |    |
| 4.7 | Huntington<br>Beach<br>Generating<br>Station | HBGS's past mitigation did not increase marine<br>life to mitigate ongoing OTC operations. The<br>OTC Policy provides a preference for mitigation<br>directed towards increasing marine life lost as a<br>result of ongoing OTC operations. We<br>acknowledge that interim mitigation Option A   | See the response to comment 4.1. Since the<br>Huntington Beach Wetlands are still in existence,<br>and were in existence during the October 2015 to<br>September 2016 time period, any species<br>productivity would be an existing benefits and is<br>appropriate compensation for interim | No |

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|     |  | projects that are required by state or federal<br>permits as of October 1, 2010" superfluous. The<br>clause in Option A referring to mitigation projects<br>since 2010 has meaning – and the State Water<br>Board must follow the requirements set forth in<br>the OTC Policy. Therefore, we request that<br>HBGS's mitigation prior to 2010 not be allowed<br>as an existing mitigation project.  |  |    |
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| 4.8 | Huntington<br>Beach<br>Generating<br>Station | The HBGS draft Determination approving past<br>mitigation to count towards current interim OTC<br>impacts should not be approved. HBGS should<br>not be eligible for past mitigation given the State<br>Water Board's August 18th statements that only<br>two OTC facilities – neither of which is ESP – are<br>eligible under Option A. Furthermore, past<br>mitigation does not mitigate the impacts of OTC<br>operations occurring since October 1st, 2015.<br>And lastly, ESP's mitigation payment was for<br>impacts caused from OTC activities from 2001<br>through 2010 – not for current OTC impacts as a<br>result of not coming into compliance by October<br>1, 2015. Therefore, we request the State Water<br>Board deny HBGS draft Determination; and<br>require HBGS comply with its interim mitigation<br>requirements through either Option B or C. If<br>staff is unwilling to deny the determination, we<br>request a formal hearing to bring this issue<br>before the full Board's consideration. | See responses to comments 4.1 and 4.7. | No |
| 4.9 | Huntington<br>Beach<br>Generating<br>Station | <ul> <li>B. IF PAST MITIGATION IS ALLOWED TO<br/>REDUCE HBGS'S CURRENT MITIGATION<br/>OBLIGATIONS, IT SHOULD ONLY BE<br/>REDUCED BY THEIR CURRENT MITIGATION<br/>PAYMENTS OF \$20,000 ANNUALLY.</li> <li>The State Water Board should not dismiss the<br/>vast majority of HBGS's current intake flow due<br/>to past mitigation for impacts from 2001 through<br/>2010. The State Water Board should require<br/>HBGS to mitigate its full, current impacts.<br/>However, alternatively, if the State Water Board</li> </ul>  | See response to comment 4.1.           | No |

|      |  | decides to proceed with HBGS's proposed<br>"adjustment", then the Board should only reduce<br>the mitigation fee by the current amount HBGS is<br>paying - \$20,000 in management costs.  |  |    |
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| 4.10 | Huntington<br>Beach<br>Generating<br>Station | HBGS's past mitigation is not consistent with current science or the State Water Board's mitigation calculation approved in the 2015 Resolution. As part of HBGS's 2001 License Amendment, the California Energy Commission (CEC) required AES to fund a study to determine environmental impacts on aquatic life from the OTC system. The study was completed in 2005 and a determination was made with regard to the environmental effect, and appropriate mitigation to lessen impacts to a less than significant level. It is important to note that this mitigation was required to comply with CEQA – not the OTC Policy and not in conformance with the 2015 Mitigation Fee Calculation Resolution. CEC staff concluded that the proposed license extension could have the potential for significant impacts and required the 66.8 acres of wetlands to be restored as mitigation. However, the science and expertise on mitigating OTC marine life impacts has changed dramatically since 2005. For example, the ability to translate APF into a cost value was largely indeterminate in 2005. The final number of 66.8 acres and the associated cost to restore those acres was chosen arbitrarily and was not based on current science. The State Water Board cannot rely on past mitigation determined on incomplete scientific values when new information is currently being relied upon. Realizing that California needed a better way to calculate mitigation fees for seawater intakes, the State Water Board created several Expert Panels to develop a scientifically-based mitigation fee. The State Water Board created several Expert Panels to develop a scientifically-based mitigation fee. The State Water Board contracted Moss Landing Marine Laboratory to establish an Expert Review Panel on minimizing | Guidance on determining appropriate existing<br>mitigation efforts was provided in the response to<br>comment 2.16 for Resolution No. 2015-0057 on<br>August 18, 2015. In determining whether existing<br>mitigation efforts adequately meet the OTC<br>Policy's interim mitigation requirements, an<br>owner or operator would need to demonstrate 1)<br>that the habitat production foregone method was<br>employed in those efforts or, if not, that an<br>alternative method was comparable; and 2)<br>preferably, whether those efforts are directed<br>toward increases in marine life associated with<br>the state's MPAs in the geographic region of the<br>facility. Furthermore, the owner or operator<br>would need to include a comparison of the<br>existing mitigation efforts to what the owner or<br>operator would have provided if the fee-based<br>interim mitigation option had been selected<br>instead. If it is determined that existing efforts fall<br>short, the owner or operator would be required to<br>make up the difference through mitigation<br>payment up to and until the power plant achieves<br>final compliance with the OTC Policy.<br>In determining the appropriateness of the 66.8<br>acres of wetland mitigation, the Commission<br>required a detailed study on the entrainment and<br>impingement impacts on aquatic resources due<br>to OTC. The study assessed the habitat<br>production forgone using the empirical transport<br>model. The Commission concluded that the tidal<br>wetland restoration and maintenance was<br>appropriate because tidal wetlands compensate<br>for lost productivity and provide other benefits to<br>coastal waters. The Huntington Beach Wetlands<br>area is located immediately down the coast and | No |

|      |  | and mitigating intake impacts from power plants<br>and desalination facilities (ERP II). ERP II<br>developed a "scientifically defensible mitigation<br>fee for power plant interim mitigation that would<br>compensate for continued intake impacts due to<br>impingement and entrainment." If previous<br>mitigation calculations – like the Energy<br>Commission's 66.8 acres – were scientifically<br>defensible, then ERP II would not have been<br>necessary. Therefore, the only logical conclusion<br>is that the science used in 2005 to come to 66.8<br>acres is not scientifically defensible. The State<br>Water Board should rely only upon its mitigation<br>calculation, recommended to it by ERP II, and<br>approved in August, 2015.   | to the northwest of the Huntington Beach<br>Generating Station. <sup>6</sup> (Snow 2010.)<br>While the existing 66.8 acre wetland mitigates for<br>approximately 46,272 million gallons per year of<br>once-through cooling water, this does not offset<br>the full amount of water used and the remaining<br>flow volume is used to calculate the 2015-2016<br>interim mitigation payment.<br>The calculation of the mitigation payment is<br>consistent with the approach specified by the<br>ERP II and the 2015 Resolution by multiplying<br>the appropriate intake volume by the default<br>entrainment cost as specified in the 2015<br>Resolution. |    |
|------|--|---|---|----|
| 4.11 | Huntington<br>Beach<br>Generating<br>Station | If any mitigation reduction is allowed, it should<br>only be the current HBGS payments of \$20,000<br>for ongoing wetland management. On March 2,<br>2010, AES Huntington Beach, LLC filed a<br>petition with the California Energy Commission<br>(Energy Commission) to extend the license for<br>the Huntington Beach Generating Station Retool<br>Project (HBGS) Units 3 and 4, for an additional<br>10-year period (September 30, 2011 to<br>December 31, 2020). During the approval of the<br>license extension, Energy Commission staff<br>concluded that the continued viability of the<br>restored wetlands will mitigate the continued<br>OTC impacts from the extension of the license.<br>To comply with CEQA, staff decided that AES<br>shall contribute an additional \$20,000 to fund the<br>annual maintenance and monitoring activities<br>from 2012 to 2018 to maintain proper functioning<br>of the 66.8 acres of wetlands restored under the<br>original licensing of the Huntington Beach Power<br>Plant. | See response to comment 4.1.  | No |

<sup>&</sup>lt;sup>6</sup> Snow, Christina. Huntington Beach Generating Station Retool Project (00-AFC-13C) License Extension Staff Analysis. October 20, 2010. < http://www.energy.ca.gov/business\_meetings/2010\_packets/2010-10-20/2010-10-20\_Item\_01\_HBGSR\_Amendment/FINAL\_STAFF\_ANALYSIS2.pdf>

|      |   | If HBGS's mitigation is to be adjusted, it should<br>only be for current mitigation payments. It is<br>clear from HBGS's 2011 – 2020 license<br>extension that the mitigation required by the<br>Energy Commission was only a \$20,000<br>management fee. If the State Water Board wants<br>to adjust HBGS's mitigation fee due to ongoing<br>CEC mitigation – then it should only do so by<br>subtracting its current mitigation payment of<br>\$20,000 annually. HBGS should be required to<br>mitigate all of its impacts according to the OTC<br>Policy and the 2015 Resolution; however,<br>alternatively HBGS's entrainment calculation<br>should be determined by multiplying the full<br>intake volume by \$4.73, and then subtracting<br>\$20,000. The calculation should look like this:<br>(54,959.79 MG X \$4.73/MG) - \$20,000 =<br>\$239,959.80 |  |  |
|------|---|---|--|--|
| 4.12 | Alamitos<br>Generating<br>Station   | First, we found one instance of faulty math, for<br>Alamitos, where the intake volume multiplied by<br>the entrainment flow fee (\$4.73/MG) was<br>\$283.00 short, working out to a total shortage of<br>\$340.56. This is a minor error, but worth<br>correcting.  | The calculation in the draft determination is correct. No error was found and no change was made.  | No   |
| 4.13 | Alamitos<br>Generating<br>Station and<br>Redondo<br>Generating<br>Station | For Alamitos and Redondo, the State Water<br>Board proposed a correction to intake volumes<br>that should be investigated. The draft<br>Determinations state that the flow rate was mis-<br>matched with the months, which would only<br>explain the difference if the reported volumes<br>that were included in the sum for the time range<br>were for months outside the time range. If the<br>volumes are just mismatched, the total sum<br>should be the same. The two plants' corrections<br>results in a combined reduction in payment of<br>\$69,416.63. This is an important issue that could<br>be repeated and compounded in future years,<br>resulting in very significant losses in mitigation<br>payments over time.   | All OTC power plants are required to submit<br>monitoring reports in accordance with their<br>national pollutant discharge elimination system<br>(NPDES) permit, under penalty of perjury.<br>Letters were sent to OTC power plant owners or<br>operators to confirm their calculations for intake<br>volumes against the data submitted in the<br>NPDES monitoring reports. State Water Board<br>staff reviewed the data and noticed that the<br>intake volumes were mismatched, but the<br>mismatching covered a period outside the<br>mitigation time frame, specifically providing<br>September 2015 values under the October 2015<br>month. The determination was revised to clarify<br>this statement; however, there was no change in<br>total intake volume for the October 2015 through | Yes, a<br>clarificatio<br>n was<br>made to<br>the<br>determinat<br>ions. No<br>change<br>was made<br>to the<br>interim<br>mitigation<br>payment. |

|      |                                 |   | September 2016 time period used to calculate the interim mitigation payment.  |    |
|------|---------------------------------|---|---|----|
| 4.14 | Harbor<br>Generating<br>Station | Lastly, the impingement numbers seem vastly<br>under reported. In the case of Harbor, they<br>report 4.9 lbs. of total impinged biomass<br>resulting in a fee of \$3.92 for the entire year—<br>this seems implausible. The State Water Board<br>needs a better methodology for ensuring<br>accuracy for the amount of impingement<br>reported. | Impingement varies greatly among power plants.<br>For this reason, the Expert Review Panel<br>determined that it would be inappropriate to set<br>an impingement cost to apply to all plants.<br>Instead, the Expert Review Panel advised<br>determining the impingement fee on a case-by-<br>case basis, using each plant's annual estimate of<br>fish impingement together with the value for<br>fishes estimated from catch totals and the<br>average indirect economic value of the fisheries<br>as determined in the ERP II final report (\$0.80<br>per pound). The State Water Board's<br>methodology for calculating the impingement<br>portion of the interim mitigation payment is<br>consistent with the recommendation of the Expert<br>Review Panel.<br>To calculate the impingement portion of the<br>interim mitigation payment, the State Water<br>Board requested estimates for annual<br>impingement. In their December 8, 2016<br>response letter <sup>7</sup> , Los Angeles Department of<br>Water and Power (LADWP) explained the<br>impingement monitoring program implemented at<br>Harbor Generating Station, Haynes Generating<br>Station and Scattergood Generating Station. The<br>impingement monitoring program is more<br>extensive than the semi-annual monitoring<br>requirements in the NPDES Permit for Harbor<br>Generating Station as it includes sampling every<br>other week at the OTC units' screens, from<br>January 2015 through April 2015 and from April | No |

<sup>&</sup>lt;sup>7</sup> Letter from Katherine Rubin, Manager of Wastewater Quality and Compliance for LADWP, to Karen Larsen, Deputy Director of the Division of Water Quality at the State Water Board. <<u>https://www.waterboards.ca.gov/water\_issues/programs/ocean/cwa316/powerplants/harbor/docs/harbor\_imf16.pdf></u>

|  | 2016 through September 2016. LADWP                  |  |
|--|---|--|
|  | explained that, due to transitioning to a new       |  |
|  | contract, there is a gap in the 2015-2016           |  |
|  | monitoring data. To account for this data gap,      |  |
|  | LADWP also included statistics from 2014 to         |  |
|  | provide an estimate of impingement from October     |  |
|  | 1, 2015 to September 30, 2016. In addition, it will |  |
|  | be expected that each year an estimate of annual    |  |
|  | impingement be provided to capture the time         |  |
|  | specific variability and give a more current        |  |
|  | impinged biomass.                                   |  |