

RESPONSE TO PUBLIC COMMENTS ON THE PROPOSED AMENDMENT TO THE WATER QUALITY CONTROL POLICY ON THE USE OF COASTAL AND ESTUARINE WATERS FOR POWER PLANT COOLING

Comment letter	Commenter	Submitted by
Comment letters submitted by March 24, 2015 comment deadline		
1	Dynegy Moss Landing, LLC	Martin Daley
2	California Coastkeeper Alliance	Sean Bothwell

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1.1	<p>While significant environmental benefits will be achieved earlier than the current December 31, 2017 compliance deadline, the extension still is necessary to provide Dynegy with sufficient time to perform required studies, including testing the efficacy of various technology control alternatives. Dynegy will need to conduct baseline studies prior to submitting study design proposals to the State Water Board, subsequent pilot-studies for each technology, and verification studies. During this process, Dynegy will be reporting to State Water Board staff to ensure that progress is being made to achieve full Policy compliance by December 31, 2020.</p>	The State Water Board agrees.
1.2	<p>Dynegy understands the Respondent-Intervenors in the lawsuit underlying the settlement agreement between the State Water Board and Dynegy oppose the proposed Policy amendment unless the Board (1) removes the finding that it is infeasible for Moss Landing to implement Track 1, and (2) provides an explicit enforcement clause stating Moss Landing must cease once-through cooling operations if it is not in compliance with Track 2 by December 31, 2020. We oppose both conditions as unnecessary and inappropriate. As stated in the Draft Staff Report (p. 4), "[t]he proposed extension of the final compliance date for Moss Landing is the only settlement provision requiring Policy amendment." Neither of Respondent-Intervenors' issues are before the SWRCB in the proposed Policy amendment. Moreover, Dynegy supported its position on the infeasibility of Track 1 at Moss Landing in its implementation plan submittal, which the State Water Board agreed to in the settlement agreement. As noted above, under the settlement agreement, Dynegy commits to early implementation and full compliance with the Policy by December 31, 2020, and submitted an updated Implementation Plan following settlement. Respondent-Intervenors' descriptions of Dynegy's proposed implementation and statements that Dynegy made false claims in its original submittal are unfounded. In addition, an explicit enforcement clause is not needed because, after the amendment is adopted, the SWRCB retains its full enforcement authority to secure Dynegy's compliance with the Policy in the same manner as every</p>	The State Water Board agrees.

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	other owner/operator's compliance.	
2.1	The State Water Board should not find that Moss Landing has proven Track I is infeasible.	The proposed amendment to the Policy is a 3-year extension for Moss Landing Power Plant's compliance deadline. The determination of Track 1 infeasibility is outside the scope of the proposed amendment that requires State Water Board approval. The Track 1 infeasibility determination was a State Water Board staff decision as part of the settlement agreement. Regardless, it is not expedient to require an in-depth feasibility study for Track 1 compliance at Moss Landing at this time. The settlement agreement reflects that substantial near-term environmental benefits will result from Track 2 compliance measures undertaken before the proposed extended compliance deadline.
2.2	Dynergy has not made a proper showing that it is infeasible to do Track 1 at Moss Landing. The OTC Policy, Section 3.A. requires "no later than April 1, 2011, the owner or operator of an existing power plant shall submit an implementation plan to the State Water Board." The implementation plan must identify the selected compliance alternative, describe the general design, construction, or operational measures that will be undertaken to implement the alternative, and propose a realistic schedule (including any requested changes to the default final compliance dates identified in the Policy) for implementing these measures that is as short as possible. As the Amendment's Staff Report states "Dynergy submitted an Implementation Plan for Moss Landing Power Plant on April 2011, determining that Track 1 of the Policy is not feasible due to space constraints, inability to obtain necessary permits, and based upon previous decisions made by the California Energy Commission and the Central Coast Regional Water Board that installation of cooling towers were not feasible at the Moss	See response to Comment 2.1. Additionally, the State Water Board's concurrence with Dynergy's infeasibility determination is appropriate. The Staff Report accurately describes Dynergy's April 2011 Implementation Plan, which explains that Track 1 was not feasible due to space constraints, inability to obtain necessary permits, and the previous determination by the California Energy Commission (CEC).

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	<p>Landing Power Plant.” The Amendment’s Staff Report accurately describes Moss Landing’s claims, but falsely implies that Dynegy’s claims are fact. The California Energy Commission (CEC) and the Central Coast Regional Water Board did not conclude that closed-cycle cooling towers were infeasible for the Moss Landing Power Plant. Beyond those false claims, Dynegy makes no additional justifiable claims that Track 1 is infeasible under the Policy. For those reasons, Dynegy has failed to make the proper showing that Track 1 is infeasible, and the State Water Board should not adopt a finding that says otherwise.</p>	
2.3	<p>Allowing a project proponent to self-select their own best technology available (BTA) is not the same as determining cooling towers are infeasible. In 2000, the CEC considered and approved Moss Landing’s re-licensing decision. To approve re-licensing, the CEC relied on Duke Energy’s 1 316(b) Study dismissing closed-cycle cooling as BTA. The Commission Decision states that closed-cycle cooling options were eliminated based on "cost", and that the "[a]pplicant’s 316(b) study concluded that the currently proposed design [open-ocean intakes] is the best technology available to reduce entrainment and impingement of aquatic organisms." Given today’s legal requirements, the State Water Board would not, and could not, approve a project that proposed to continue OTC operations without additional BTA. Therefore, this 15-year old decision should hold no authority for the consideration of the currently proposed Amendment. Furthermore, allowing the applicant to self-decide to take no additional actions to reduce impingement and entrainment is not the same as deciding that "installation of cooling towers were not feasible at the Moss Landing Power Plant" – as Dynegy asserts in its Implementation Plan.</p>	<p>See response to Comment 2.1. Furthermore, to the extent that a response is required, the commenter portrays the 2011 Implementation Plan as Dynegy “self-select[ing] their own best technology available” in place of an appropriate demonstration of infeasibility. However, in the Policy, the State Water Board already determined that Track 2 is the best technology available where an owner or operator has demonstrated that Track 1 is infeasible. Rather than require an extensive record or formal determination about Track 1 infeasibility, the Policy lists factors to be considered in making this conclusion. Dynegy’s April 2011 Implementation Plan addresses these factors, and State Water Board staff has interpreted the Policy as neither requiring a Board decision nor formal findings regarding infeasibility. The commenter asserts that the CEC’s re-licensing decision eliminated closed-cycle cooling technology due to cost, but factors, such as limitations on freshwater supply and</p>

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		harmful environmental impacts from discharge were considerations as well.
2.4	<p>Allowing in-lieu mitigation instead of requiring BTA is not legal and does not constitute an affirmation that cooling towers are infeasible at Moss Landing. Instead of requiring Duke Energy to implement BTA to minimize marine life mortality, the CEC allowed an in-lieu mitigation fee. Analyzing OTC impacts of re-licensing Moss Landing, the CEC created a Technical Working Group that determined the "loss due to entrainment would be significant." The Group determined that a \$7 million mitigation fee would be reasonable, and the CEC decided that the applicant "will pay this amount to fund the mitigation package described in Condition of Certification." It is important to note that this decision was made in 2000, well before the adoption of the OTC Policy; and perhaps more importantly, before the Supreme Court's 2007 Riverkeeper decision that in-lieu mitigation fees are an illegal way to comply with the Clean Water Act's Section 316(b). Today, the CEC's 2000 decision is illegal. It should not hold any weight regarding the decision of whether cooling towers at Moss Landing are infeasible.</p>	<p>As noted in the response to Comment 2.1, a determination about whether Track 1 compliance is feasible at Moss Landing is outside the scope of the proposed policy amendment. In addition, the 2000 CEC re-licensing decision does not constitute the basis for the compliance deadline extension in the proposed amendment. Rather, Dynegy used some facts and considerations set forth in that decision to support their case for Track 1 infeasibility at Moss Landing. As noted in the response to Comment 2.3, the CEC decision cites factors other than cost that were considered when assessing the option of closed-cycle cooling technology.</p>
2.5	<p>Cost concerns are not to be a factor in determining infeasibility. The CEC allowed the Moss Landing facility to dismiss closed-cycle cooling as BTA due to cost concerns. Duke Energy's 316(b) Study found that a cooling tower alternative would add \$12 million to capital costs and diminish power output by approximately 25 MW, resulting in annual revenue losses of \$2 million, or \$60 million over the Project life. The CEC then concluded that "the evidence establishes that significant impacts from entrainment can be mitigated [through the use of an in-lieu mitigation fee], the cooling tower alternative is not preferred." The CEC also concluded that the "use of air-cooled condensers would totally eliminate the use of water for cooling altogether" but because of capital costs "air cooled condensers have been eliminated as an alternative technology." The OTC Policy states that "[c]ost is not a factor to be considered when determining feasibility under Track 1." Therefore, the CEC's 2000 decision that cooling towers "is not preferred" due to cost considerations cannot be used by Dynegy as</p>	<p>The determination of Track 1 infeasibility is outside the scope of the proposed amendment that requires State Water Board approval. See responses to Comments 2.1 and 2.4. Additionally, the 2000 CEC re-licensing decision is not the sole basis for concluding that Dynegy satisfactorily has demonstrated Track 1 infeasibility - a determination that is not presented here for State Water Board approval. Dynegy's April 2011 Implementation Plan describes multiple factors that were considered, including insufficient local freshwater supplies for freshwater wet cooling, lack of space for dry cooling towers, and inability to obtain air credits. The implementation plan</p>

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	<p>authority to claim Track 1 is infeasible for Moss Landing. Dynegy has inaccurately asserted that the CEC found Track 1 to be infeasible, and the Amendment’s Staff Report re-asserts those claims as fact – which they are not – and should not be considered when determining whether Track 1 is feasible for the Moss Landing facility.</p>	<p>also discusses conflicts with visual standards and local land use regulations. Rather than requiring additional investigations to demonstrate the thoroughness of the feasibility analysis, the settlement terms are intended to secure Policy compliance and, by resolving the litigation, to eliminate a continuing source of uncertainty for the Policy.</p>
2.6	<p>In 2003, based on a court order, the Central Coast Regional Water Board conducted a BTA analysis for the Moss Landing Power Plant. The Regional Water Board concluded that, “the cost of these alternatives [closed-cycle cooling] is estimated to be approximately \$47 million to \$124 million,” and went on to determine cooling towers were not BTA based on cost. Again, the OTC Policy does not allow cost to be a factor to be considered when determining feasibility under Track 1. Therefore, the Regional Water Board’s 2003 decision holds no weight for a present day determination that Track 1 is infeasible for Moss Landing. If cost was not a consideration in the Regional Board’s 2003 decision, then cooling towers would have been deemed feasible for Moss Landing. The Regional Water Board never found cooling towers were infeasible because of “space constraints or the inability to obtain necessary permits due to public safety considerations, unacceptable environmental impacts, local ordinances, regulations, etc.” - as the OTC Policy requires. In fact, the Regional Water Board made the exact opposite conclusion: “[c]losed cooling systems, such as mechanical draft cooling towers or dry cooling would provide a significant reduction in entrainment, up to 100 percent. Staff considers these alternatives to be demonstrated available technologies, and has little evidence that they could not be installed at MLPP [Moss Landing].” Again, Dynegy falsely asserts that the Central Coast Regional Water Board decided that closed-cycle cooling towers were infeasible at Moss Landing.</p>	<p>The infeasibility determination is not proposed for State Water Board approval, nor do the prior determinations form the sole basis for concluding that Dynegy’s showing of infeasibility is reasonable. In addition, see response to Comment 2.5.</p>
2.7	<p>Following Dynegy’s false claims that the CEC and the Central Coast</p>	<p>See response to Comment 2.5. Also, while</p>

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	<p>Regional Water Board both concluded cooling towers were infeasible, Dynegy attempts to argue that Track 1 is infeasible for commercial or equitable reasons. Dynegy's Implementation Plan states: "[W]ith respect to Moss Landing Units 1 and 2, Track 1 compliance is not feasible commercially or equitably given the large capital investments that were recently made in those Units in reliance on the site-specific Regional Water Board's NPDES permit determination and CEC certification, both of which expressly approved the use of the Units' upgraded once-through cooling system under existing law." As stated above, the OTC Policy's "Not Feasible" determination can only be based on "space constraints or the inability to obtain necessary permits", commercial or equitable considerations are not factors to be considered. Therefore, the State Water Board cannot conclude that this argument holds any weight in determining whether Track 1 is infeasible at Moss Landing. Dynegy goes on to rebuke the State Water Board's authority by stating it will ignore the OTC Policy's BTA requirements and compliance schedule, and instead will "comply with the Policy using the existing once-through cooling system through the end of 2032." This statement shows Dynegy's true motive – they were unwilling to do anything beyond what was required by the CEC and the Regional Water Board in 2000 and 2003. They never truly assessed whether Track 1 was feasible. They simply decided to ignore the State Water Board's authority to minimize marine life mortality as required under the Clean Water Act. Dynegy falsely claimed that the CEC and the Regional Water Board determined Track 1 to be infeasible. Knowing their assertions were false, they relied on the inappropriate considerations of commercial and equitable factors, and concluded by suggesting they will ignore the State Water Board's authority to enforce the OTC Policy. Dynegy never made a proper showing that Track 1 was infeasible at Moss Landing.</p>	<p>the content of Dynegy's April 2011 Implementation Plan provided some support for the determination to allow Dynegy to proceed via Track 2, neither it nor the infeasibility determination is presented specifically before the State Water Board in the proposed amendment. Furthermore, Dynegy's original request for an extension of compliance until 2032 has been abandoned and provides no support for the argument that the deadline extension in the proposed amendment should not be approved.</p>
2.8	<p>The State Water Board's Amendment determination that Track 1 is infeasible at Moss Landing is unwarranted. Rather than make such a determination, the State Water Board should only allow Moss Landing to use Track 2 as part of the settlement agreement. By making a</p>	<p>The determination of Track 1 infeasibility is outside the scope of the proposed amendment that requires State Water Board approval. Please see response to Comment</p>

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	<p>finding that Moss Landing did a proper feasibility analysis creates an undesirable precedent. The Amendment's infeasibility determination not only shows other permittees they can avoid their requirements by threatening litigation, but also prevents the State Board from requiring close-cycle cooling towers if Dynegy cannot come into compliance with Track 2. If Dynegy cannot show it has complied with Track 2 by December 31, 2020, the State Water Board will have no recourse to require cooling towers because they have been determined, by this Amendment, to be infeasible. The only option would be to shut down the units. To prevent closing-off future compliance options, we recommend the State Water Board delete its finding that Track 1 is infeasible at Moss Landing. Instead, the State Water Board should only allow Moss Landing to comply with the OTC Policy using Track 2 based on the lawsuit's settlement agreement.</p>	<p>2.1. In addition, the commenter's concern about precedent is unfounded. The settlement resolves all outstanding litigation remaining from adoption of the Policy, and any new threatened litigation by an owner or operator seeking to avoid compliance with Track 2 clearly would be untimely under the statute of limitations.</p>
2.9	<p>The State Water Board should make explicit that Moss Landing shall cease all once-through cooling operations by December 31, 2020 if Track 2 compliance is not achieved.</p>	<p>As with other power plants subject to the Policy, the new compliance deadline for Moss Landing in the proposed amendment will be implemented through an applicable National Pollutant Discharge Elimination System (NPDES) permit. Any requirement set forth in an NPDES permit becomes enforceable, such that failure to comply is a violation subject to all applicable enforcement authorities.</p>
2.10	<p>The Amendment's proposed change to the compliance schedule is without merit – but we understand it is necessary to finalize the lawsuit. However, if the State Water Board is willing to provide Dynegy with an additional three years to come into compliance, then there should be assurances that if compliance is not met then Dynegy must cease all once-through cooling operations as long as no local capacity shortage exists and cannot be mitigated through any other preferred resources, storage, or transmission solutions in a timely manner.</p>	<p>See response to Comment 2.9.</p>
2.11	<p>The OTC Policy sets strict terms for when a final compliance date can be changed. The Policy states that the Statewide Advisory Committee</p>	<p>While the Policy establishes the Statewide Advisory Committee on Cooling Water</p>

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	<p>on Cooling Water Intake Structures (SACCWIS) will report to the State Water Board with recommendations on modifications to the implementation schedule every year starting in 2012. The State Water Board shall consider the SACCWIS' recommendations and direct staff to make modifications, if appropriate, for the State Water Board's consideration. The Regional Water Board shall incorporate a final compliance schedule that requires compliance no later than the due dates contained in Table 1 in Section 3.E of the policy. If the State Water Board determines that a longer compliance schedule is necessary to maintain reliability of the electric system per SACCWIS recommendations while other once-through cooling power plants are retrofitted, repowered, or retired or transmission upgrades take place, this delay shall be incorporated into the compliance schedule and stated in the permit findings." However, there has been no showing that Moss Landing needs additional compliance time to maintain grid reliability. The compliance schedules were carefully developed to ensure the OTC Policy did not cause disruption to electrical power supply. During the development of the OTC Policy, State Water Board staff met regularly with representatives from the California Energy Commission (CEC), California Public Utilities Commission (CPUC), California Coastal Commission (CCC), California State Lands Commission (SLC), California Air Resources Board (ARB), and California Independent System Operator (CAISO) to "develop realistic implementation plans and schedules for this Policy" that will not cause disruption in the State's electrical power supply. However, the proposed Amendment disregards the carefully planned and "realistic implementation plans" to simply allow Moss Landing an additional three years to comply without any grid reliability concerns.</p>	<p>Intake Structures (SACCWIS) to advise the State Water Board on grid reliability issues, the Policy provisions governing SACCWIS' advisory role on grid reliability do not restrict future Policy amendments that otherwise reflect new information. Furthermore, nothing in the Policy constrains the State Water Board's authority to amend compliance dates in the Policy. Water Code section 13140 governs State Water Board's authority to formulate and to adopt state policy for water quality control, which includes authority to amend previously adopted policies as new circumstances or information requires. The commenter has not shown that anything in the Policy was intended to restrict future compliance schedule amendments to those specifically identified or recommended by the SACCWIS; nor does the commenter provide authority for why the State Water Board is restricted from amending the Policy deadlines for reasons other than SACCWIS recommendations or local area and grid reliability concerns. Regarding the implementation schedule established as part of the Policy development process and included in the adopted Policy, the schedule was based upon available information at that time and was intended to be revised in the future as circumstances warrant.</p>
2.12	<p>The existing deadlines provide Dynegy with adequate time to implement necessary measures under Track 2. As facilities developed their implementation plans, the State Water Board required the plan to</p>	<p>The proposed compliance deadline extension allows time for Moss Landing Power Plant to complete necessary studies</p>

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	<p>“identify the compliance alternative selected by the owner or operator, describe the general design, construction, or operational measures that will be undertaken to implement the alternative, and propose a realistic schedule for implementing these measures that is as short as possible.” On March 31, 2011, Dynegy submitted the Moss Landing Implementation Plan outlining on a unit-by-unit basis how they intend to “achieve compliance with the Policy by their compliance deadline of December 31, 2017.” However, the proposed Amendment states that requiring compliance by the existing deadline of 2017 “should not be selected because it would not reflect the agreement made between Dynegy and the State Water Board in the settlement. Moreover, the existing deadline does not allow adequate time for Dynegy to implement the necessary measures to come into compliance with Track 2 of the Policy.” This statement directly conflicts with the State Water Board’s previous statement that Dynegy has already determined how it will comply with the OTC Policy by 2017. Therefore, the only reason for amending the compliance schedule to allow Moss Landing to comply by 2020 is the settlement agreement.</p>	<p>as well as to design and test supplemental control technologies. The settlement agreement’s terms reflect that Dynegy will undertake actions to achieve substantial reductions in impingement and entrainment well ahead of the proposed 2020 deadline. The compliance extension is justified by both the proposed near-term reductions and by the added certainty in resolving the litigation.</p>
2.13	<p>The State Water Board has no justification for amending the OTC Policy’s compliance schedule for Moss Landing - but for the settlement agreement. We do not oppose this position. However, giving Dynegy an additional three years to comply should come with assurances that compliance will be achieved. We request the State Water Board make clear the repercussions of not complying by the newly proposed 2020 deadline; and request that, as part of the Amendment, the State Water Board include an enforcement provision that if Moss Landing is not in compliance by December 31st, 2020, then Dynegy will cease all OTC operations at Moss Landing.</p>	<p>As noted in response to Comment 2.9, the compliance deadline will become an enforceable requirement set forth in Moss Landing Power Plant’s NPDES permit for the facility. Dynegy is required to achieve compliance by the proposed deadline and, if compliance is not achieved, becomes subject to all enforcement authority under the Water Code. A further requirement to cease operating in the event that compliance is not achieved is unnecessary.</p>