











March 24, 2015

Chair Felicia Marcus and Board Members c/o Jeanine Townsend, Clerk to the Board State Water Resources Control Board 1001 I Street, 24<sup>th</sup> Floor Sacramento, CA 95814

Sent via electronic mail to: commentletters@waterboards.ca.gov

## **RE:** Comment Letter – Once-Through Cooling Policy Amendment

Dear Chair Marcus and Board Members:

On behalf of California Coastkeeper Alliance, which represents 12 California Waterkeeper groups spanning the coast from the Oregon border to San Diego, the Natural Resources Defense Council, Heal the Bay, Surfrider Foundation, we appreciate the opportunity to provide comments on the February 6<sup>th</sup>, 2015, proposed Amendment of the Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling (OTC Policy). Our organizations have been actively involved in the OTC Policy over the last decade, and have participated in the development, adoption, and implementation of the Policy to ensure timely phase-out of once-through cooling (OTC) in California. Regarding this specific Amendment, the undersigned organizations were the Respondent-Intervenors to the lawsuit brought in 2010 by the owners and operators of the facilities affected by the OTC Policy. While we did not formally oppose the settlement agreement in court, we believe the State Water Board should adopt addition assurances, as described below, to ensure the OTC Policy is not undermined and that Moss Landing comes into compliance.

Congress wrote Clean Water Act, Section 316(b) almost 40 years ago to compel the development and use of technology to replace and minimize the adverse impacts of OTC. We commend the State Water Board for taking action and adopting the OTC Policy after decades of inaction by the U.S. Environmental Protection Agency. However, it is imperative that the State Water Board now ensure the Policy is implemented efficiently and appropriately. The proposed Amendment provides Dynegy – the owner and operator of Moss Landing - an unjustified three year extension without any explicit recourse if compliance is not met after the additional three years. More troubling is the State Water Board's determination that it is infeasible for Moss Landing to comply with the Policy using Track 1.

The court has already accepted the lawsuit's settlement agreement. We understand that the State Water Board needs to adopt this Amendment to finalize settlement and close the lawsuit. However, the undersigned organizations – Respondent-Intervenors on the lawsuit – OPPOSE the proposed Amendment unless the State Water 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 they are not in compliance with Track 2 by December 31<sup>st</sup>, 2020 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.

While the focus of these comments is the substance of the proposed settlement terms, we also must to register concerns about the settlement negotiation process that led to the development of these terms.

Settlement negotiations continued for years, as Petitioners requested and received numerous hearing delays. Our organizations were concerned about the delays as the timeline is of course essential to OTC Policy implementation. However, we agreed to the repeated delays to allow negotiations to proceed. Throughout the three-year settlement process, our organizations, as Respondent-Intervenors, repeatedly requested that we be included in settlement negotiation discussions. We expressed a willingness and desire to work cooperatively with the Parties involved and yet were wholly excluded from settlement discussions. The few instances where we were included did not allow for our meaningful engagement as we were not provided with the terms of the proposed settlement in adequate time to offer feedback. Most recently, we proposed, and State Water Board staff agreed, to consider two settlement terms. To this day, we remain unsure whether those terms where ever considered by the Plaintiffs. We ask you to seriously consider these suggestions in our following comments, recognizing the lack of opportunity for input and engagement in the settlement negotiations process.

## A. THE STATE WATER BOARD SHOULD NOT FIND MOSS LANDING HAS PROVEN TRACK 1 IS INFEASIBLE.

Dynegy 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 "Dynegy 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 CCRWQCB that installation of cooling towers were not feasible at the Moss 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 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.

1. The California Energy Commission did not decide that cooling towers were infeasible at the Moss Landing Power Plant.

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 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

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<sup>&</sup>lt;sup>1</sup> Duke Energy was the owner and operator of Moss Landing at the time of the CEC relicensing. Moss Landing was later sold to Dynegy

<sup>&</sup>lt;sup>2</sup> State of California Energy Resources Conservation and Development Commission, In the Matter of: Application for Certification for the Moss Landing Power Plant Project, ORDER NO. 00-1025-24, pg. 159 (2000).

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.

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.

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 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.

2. The Central Coast Regional Water Board used cost as a factor when deciding to not require closed-cycle cooling as the Best Technology Available for Moss Landing's permit renewal.

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 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

<sup>&</sup>lt;sup>3</sup> *Id* at 158.

<sup>&</sup>lt;sup>4</sup> Id at 176.

<sup>&</sup>lt;sup>5</sup> Entergy Corp. v. Riverkeeper, Inc., <sup>5</sup> 129 S.Ct. 1498 (2009) ("Riverkeeper II")..

<sup>&</sup>lt;sup>6</sup> Supra note 2, at 160.

<sup>7</sup> Id.

<sup>&</sup>lt;sup>8</sup> California State Water Resources Control Board, Statewide Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling, pg. 18 (May 4, 2010).

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%. Staff considers these alternatives to be <u>demonstrated available technologies</u>, and has <u>little evidence that they could not be installed</u> 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.

Both the Regional Board's determination and the CEC's re-issuance did not conclude closed-cycle cooling towers were infeasible at Moss Landing. The State Water Board should find neither decision holds any weight. Dynegy has failed to make the proper showing that Track 1 is infeasible in its implementation plan.

3. The State Water Board cannot conclude Track 1 is infeasible for commercial or equitable reasons.

Following Dynegy's false claims that the CEC and the Central Coast 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."<sup>11</sup>

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. To allow Dynegy to succeed at making an infeasibility determination, when there was never any true attempt to determine feasibility, is reckless.

Dynegy falsely claimed that the CEC and the Regional 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.

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<sup>&</sup>lt;sup>9</sup> *Id*.

<sup>&</sup>lt;sup>10</sup> California Regional Water Quality Control Board Central Coast Region, Duke Energy Moss Landing Power Plant, Units 1 and 2, Review of Finding No. 48, NPDES Permit Order No. 00-041, Pursuant to Order of the Monterey County Superior Court: Staff Report FOR REGULAR MEETING OF MAY 15, 2003, pg. 1 (April 10, 2003).

<sup>&</sup>lt;sup>11</sup> Dynegy Moss Landing LLC, State Water Resources Control Board Once-Through Cooling Water Policy IMPLEMENTATION PLAN for the Moss Landing Power Plant, pg. 1 (April 1, 2011).

4. The State Water Board should remove the determination that Track 1 is infeasible at Moss Landing.

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 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 31st, 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.

## B. THE STATE WATER BOARD SHOULD MAKE EXPLICIT THAT MOSS LANDING SHALL CEASE ALL ONCE-THROUGH COOLING OPERATIONS BY DECEMBER 31<sup>ST</sup>, 2020 IF TRACK 2 COMPLIANCE IS NOT ACHIEVED.

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 OTC 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.

The OTC Policy sets strict terms for when a final compliance date can be changed. The Policy states that the Statewide Advisory Committee 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, contained in Section 3.E, below. "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 OTC 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.

<sup>&</sup>lt;sup>12</sup> Supra note 8, at 10.

<sup>13</sup> Id.

<sup>&</sup>lt;sup>14</sup> *Id*.

<sup>15</sup> *Id* at 2.

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 "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.

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 31<sup>st</sup>, 2020, then Dynegy will cease all OTC operations at Moss Landing.

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Our organizations believe the Amendment undermines the integrity of the State Water Board to properly implement the OTC Policy. We look forward to working with you to ensure the OTC Policy is upheld and continues to phase-out the destructive practice of OTC in California.

Sincerely,

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<sup>16</sup> Id at 8

<sup>&</sup>lt;sup>17</sup> California State Water Resources Control Board, PROPOSED AMENDMENT TO THE WATER QUALITY CONTROL POLICY ON THE USE OF COASTAL AND ESTUARINE WATERS FOR POWER PLANT COOLING, Draft Staff Report for Dynegy Moss Landing LLC, pg. 2 (February 5, 2015).