



October 18, 2017

Gavin Newsom, Lieutenant Governor  
Betty T. Yee, State Controller  
Michael Cohen, Finance Director  
California State Lands Commission  
100 Howe Ave., Suite 100-South  
Sacramento, California 95825  
*Via Email:* [CSLC.Commissionmeetings@slc.ca.gov](mailto:CSLC.Commissionmeetings@slc.ca.gov)

**Re: Poseidon Application for Lease Amendment (PRC 1980.1) for Proposed Seawater Desalination Project in Huntington Beach**

Dear Honorable Commissioners,

The Surfrider Foundation urges the State Lands Commission not to certify the Final Supplemental Environmental Impact Report (“FSEIR”) and not approve a lease amendment for the Proposed Seawater Desalination Project in Huntington Beach until a full and adequate analysis is performed under the California Environmental Quality Act (“CEQA”) and pursuant to the Commission’s public trust obligations. The FSEIR continues to be fundamentally flawed. It continues to inappropriately analyze a new, narrowly defined Lease Amendment Project, instead of all changes to the Desalination Project, changed circumstances, and new information, which will result in new significant impacts from the entire Project.

While the lease amendments are some of the changes triggering the need for subsequent California Environmental Quality Act (“CEQA”) review for the project, they are not a new, narrower project. This narrow scope results in inadequate CEQA analysis, including with respect to impacts from the changed distribution component; the undocumented need for the project; lack of appropriate alternatives, including alternative sites; sea level rise; and impacts to marine resources and on Marine Protected Areas.

This is a massive proposed desalination plant. It will be withdrawing more than 100 million gallons of seawater from the coast a day; discharging 56.7 million gallons per day (“MGD”) of effluent composed of brine, filter backwash, rinse wastewater, and occasional stormwater; and utilizing a tremendous amount of energy – 265,888 MWh/y. This not only means impacts to our public trust resources, which the State Lands Commission is entrusted to protect, but a significant contribution to climate change. And these impacts are of course greater, the larger the plant. This project would tie for first place in terms of the United States’ largest desalination plant, along with Poseidon’s

existing plant in Carlsbad, California,<sup>1</sup> and the next largest plant is *half* the size, at 25 MGD, in Tampa, Florida, and it rarely runs at full capacity.<sup>2</sup> Without a demonstrated need for the 50 MGD project, these adverse impacts to our public trust resources are avoidable and unwarranted.

As the desalination plant will be so energy intensive, it is necessary to focus on its energy and greenhouse gas impacts specifically. The fact is desalination is far more energy intensive than other California water sources. Energy requirements for seawater desalination average about 15,000 kWh per million gallons of water produced. This compares with only 0 to 3,400 kWh per million gallons for the least energy intensive options of local sources of groundwater and surface water, while wastewater reuse, depending on treatment levels, may require from 1,000 to 8,300 kWh per million gallons, and energy requirements for importing water through the State Water Project to Southern California range from 7,900 to 14,000 kWh per million gallons.<sup>3</sup>

Here, the FSEIR acknowledges that the overall annual power use by the project, with the lease modification, would be approximately 165,888 MWh/yr, which means a total of 68,745 MTCO<sub>2</sub> per year. This does not even account for the additional construction and screen rotation-related emissions. This plainly exceeds the 10,000 metric ton significance standard, and emissions *are significant*.

Therefore, next, under CEQA, there should be a full analysis of mitigation measures. And mitigation measures are not “voluntary” as Poseidon suggests in their 2017 Energy Minimization Plan, but are required.

There is a critical problem in that neither this FSEIR nor the 2010 EIR separately analyzes the energy and greenhouse gas impacts of the entire project, and instead combine the significance determination with the mitigation analysis (which, appropriate analysis, is lacking). Under CEQA, an agency must first determine whether a project’s greenhouse gas emissions - and not those confined to the intake and discharge modifications - are significant, and *then* consider all reasonable measures to mitigate those impacts. Because the project’s emissions are significant, an agency cannot merely rely on Poseidon’s non-binding, unenforceable, self-described “voluntary” greenhouse gas reduction measures, in lieu of a complete range of potential mitigation measures.

Critically, there are problems with Poseidon’s Energy Minimization Plan. While Poseidon says it will offset the project’s greenhouse gas emissions, many of its proposed measures are non-binding. For instance, it will install rooftop solar panels only if it is

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<sup>1</sup> See <https://voiceofoc.org/2011/12/poseidon-facing-another-hurdle-for-hb-desalination-plant/>

<sup>2</sup> See <https://www.cbsnews.com/news/getting-clean-water-from-the-sea-at-a-high-price/> and <http://www.tampabay.com/news/environment/water/more-problems-for-tampa-bay-water-desalination-plant/984409>

<sup>3</sup> See *Key Issues for Seawater Desalination in California: Energy and Greenhouse Gas Emissions* (Cooley and Heberger (2013)), available at <http://pacinst.org/wp-content/uploads/2013/05/desal-energy-ghg-full-report.pdf> and <http://pacinst.org/publication/energy-and-greenhouse-gas-emissions-of-seawater-desalination-in-california/>.

reasonably expected to provide a return on the capital investment over the life of the project;<sup>4</sup> building design will follow LEED design principles, only “to the extent reasonably practicable;” and energy efficiency measures will be “given the highest priority.” However, these are not concrete, enforceable commitments. There are also contingencies with respect to offsets and renewable energy credits.<sup>5</sup> The Plan also includes unreasonable provisions, such as allowing Poseidon to seek a determination from the City of Huntington Beach’s Planning Director regarding the availability or price of offsets and credits, and in case of such a determination, deposit funds into an escrow account to fund offset programs. Given the Plan’s contingencies, however, it is clear that there is no guarantee of a greenhouse gas neutral project. There are additional concerns identified in the “Assessment of Energy Intensity and Greenhouse Emissions of Proposed Poseidon Huntington Beach Desalination Plant and Water Supply Alternatives” Report prepared by Orange County Coastkeeper, attached (September 26, 2016). For example, “the cost of carbon credits is likely to be substantially higher than the \$10 metric ton assumed as an economically reasonable offset cost ceiling by Poseidon.” (p. 1). Additionally, preferred alternative measures are identified. (See, e.g., “The most effective mechanism available to Poseidon to assure the GHG emissions generated by the operation of the desalination plant are directly offset in the LA Basin is to expand the scope of its small solar proposal to completely offset the GHG emissions from the operation of the desalination plan. This would require approximately 150 MW of installed solar capacity, battery storage and/or some combination of energy efficient investments in Huntington Beach area combined with solar power to fully offset the GHG emissions from the plant.” (p. 18).)

The 2017 Energy Minimization Plan is a newly revised plan which requires additional CEQA analysis in a subsequent EIR. The State Lands Commission cannot merely rely on it, and ignore the massive energy and greenhouse gas impacts this project will create. (14 Cal. Code Regs. § 15162.)

Additionally, there is no discussion of greenhouse gas emissions related to construction or operation of the distribution system component; nor is there a cumulative impacts analysis of this desalination Project, including with respect to other projects in the region or other energy-intensive potential desalination projects in the State (e.g., as of 2013, then-proposed desalination plants in California were expected to contribute to 1 million MTCO<sub>2e</sub> per year<sup>6</sup>).

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<sup>4</sup> Poseidon Resources, Energy Minimization and Greenhouse Gas Reduction Plan (2017), p. 10-11.

<sup>5</sup> Additionally, renewables could be used to reduce *existing* emissions, rather than offset new emissions and maintain current greenhouse gas levels. Communities should consider whether there are less energy-intensive options available to meet water demand, such as through conservation and efficiency, and water reuse. (See <http://pacinst.org/wp-content/uploads/2013/05/desal-energy-ghg-full-report.pdf>, at 30.)

<sup>6</sup> See <http://pacinst.org/wp-content/uploads/2013/05/desal-energy-ghg-full-report.pdf> p/ 18.

Therefore, we respectfully urge the Commission not to certify the FSEIR and not approve the lease until these significant energy and greenhouse gas impacts and all reasonable enforceable mitigation measures are considered.

Finally, the Commission's FSEIR repeatedly and incorrectly claims that Poseidon has acquired a "vested right" based on the Commission's 2010 lease. *See, e.g.,* "For reasons described in master responses MR-1 ... Poseidon's rights under the initial lease have vested, precluding a re-evaluation of the earlier, final CEQA review of the HB Desalination Plant Project (the Commission's 2010 lease amendment would continue to authorize desalination operations on the lease premises under the terms of the existing lease whether or not the Lease Modification Project is approved at this time)" (p. II-37); "Poseidon has a vested right to use the pipelines for seawater desalination until August 7, 2026" (p. II-10); and repeated claims to the effect that "The Commission's action in 2010 granted Poseidon a vested right to use the offshore pipelines for seawater desalination as a co-located and stand-alone facility." (e.g., p. II-33; *see also* references to vested rights in Master Responses 1, 2, 2D, 3D, 3A, 6).

These repeated claims are inaccurate for several reasons, and do not justify the lack of necessary environmental review in the FSEIR. First, as the California Supreme Court has held, the State's ongoing public trust power precludes anyone from acquiring a vested right to harm the public trust. (*National Audubon Society v. Superior Court* (1983) 33 Cal.3d 419, 436, 452.) Therefore, the doctrine of vested rights is completely misplaced in this context.

Second, the 2010 lease was conditioned on the project being constructed by October 2018. Therefore, even assuming the vested rights doctrine could apply in this circumstance, which it does not, it cannot arise where conditions on a government approval are not met. *See, e.g., Billings v. California Coastal Commission* (1980) 103 Cal App 3d 729 (a right had not vested in part because four conditions of a permit had not been met). This condition has not and will not be met, in large part because Poseidon has not yet even obtained other necessary government approvals for the project.

Furthermore, vested rights do not arise until *all* necessary government approvals have been obtained. As the court in *Patterson v. Central Coast Regional Com.* has recognized: "Where an owner of property, in good faith reliance upon a governmental representation that construction is *fully approved*, has suffered substantial detriment by proceeding with development, the government is estopped from prohibiting the project by a subsequent change in law...", and "(U)nless the owner possesses *all the necessary permits*, the mere expenditure of funds or commencement of construction does not vest any rights in the development." *Patterson v. Central Coast Regional Com.* (1976) 58 Cal.App.3d 833, 844, 130 Cal.Rptr. 169 (emphasis added).

As both Poseidon and the Commission are well aware, in addition to a lease from the State Lands Commission, approvals for Poseidon's proposed project are still needed from the California Coastal Commission (a Coastal Development Permit) and the Regional Water Quality Control Board (an NPDES permit and a §13142.5 determination).

Therefore, while Poseidon may have a contract right to have pipes occupy space in the public trust property under the current, conditioned term of the existing lease, no right has vested for Poseidon to "use the pipelines for seawater desalination" as this FSEIR repeatedly says. Poseidon may only proceed with the old project once it first obtains all necessary government approvals and completes construction by October 29, 2018. That is the extent of the contract right; there is no right or entitlement to an amendment of the lease even if Poseidon can demonstrate reliance on the prior regulatory regime.

Additionally, even if there were a "vested rights" argument (which we strongly refute), an applicant's vested right is no justification for not performing an environmental analysis and does not excuse failure to perform a realistic CEQA analysis. (*Communities for a Better Environment v. South Coast Air Quality Management District* (2010), 106 Cal. Rptr.3d 502.) The statements regarding vested rights and that the alleged vested right precludes further CEQA review are completely misplaced.

In conclusion, we respectfully urge you not to certify the FSEIR and not approve a lease amendment until a full and adequate analysis is performed under CEQA and pursuant to the Commission's public trust obligations.

Sincerely,

A handwritten signature in cursive script that reads "Staley Prom".

Staley Prom, Esq.  
Legal Associate  
The Surfrider Foundation