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Via Email and Docket No. 23-AFC-01

California Energy Commission
715 P Street
Sacramento, CA 95814

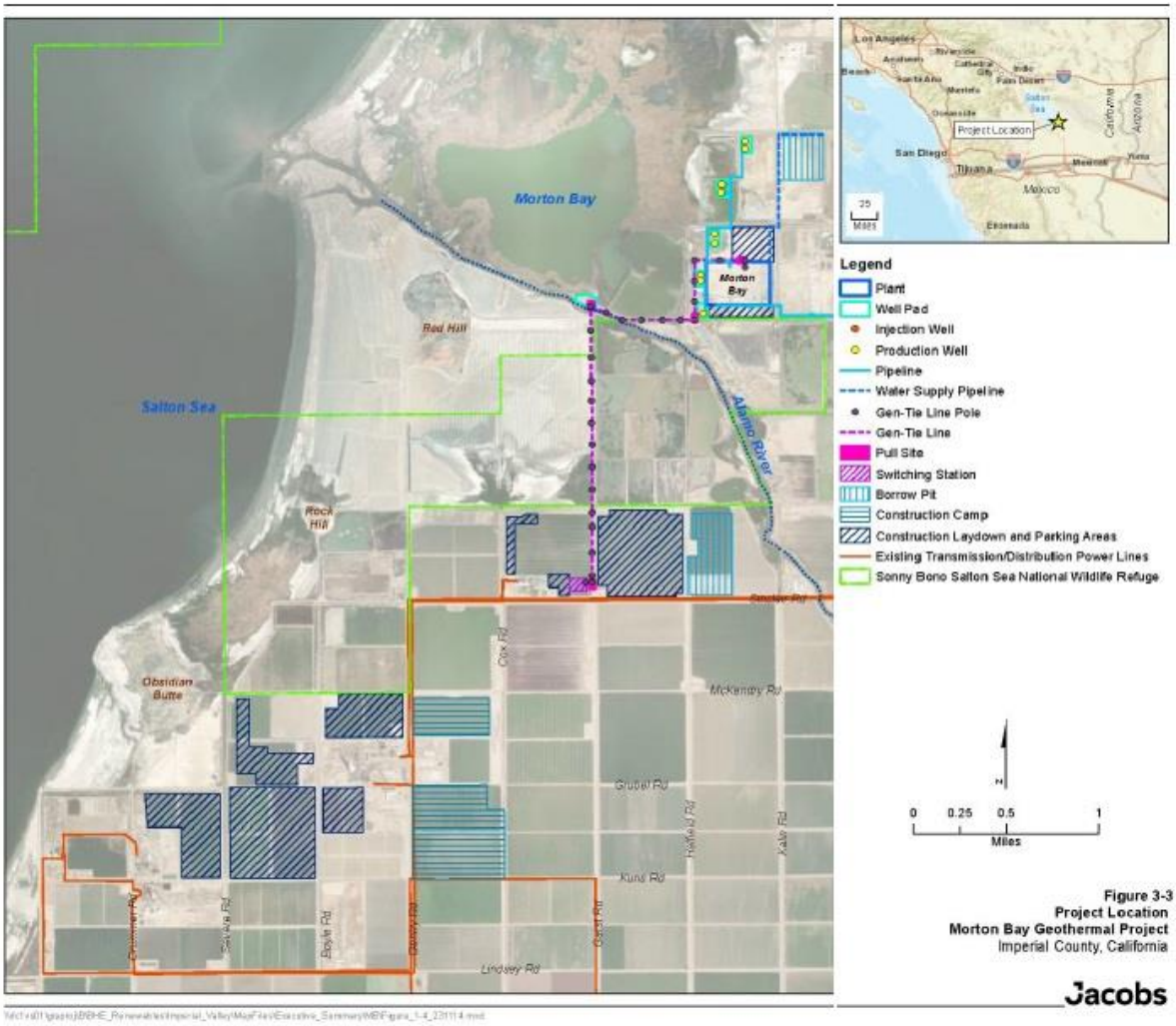
RE: United Automobile, Aerospace, and Agricultural Implement Workers of America's Comments on Preliminary Staff Assessment for the Morton Bay Geothermal Project

To the California Energy Commission:

We write on behalf of United Automobile, Aerospace, and Agricultural Implement Workers of America ("UAW") regarding the recently issued Preliminary Staff Assessment ("PSA") for the Morton Bay Geothermal Project ("MBGP" or "Project") being proposed by Morton Bay Geothermal, LLC ("Applicant"), an indirect, wholly owned subsidiary of BHE Renewables, LLC. For the reasons discussed below, the PSA fails to conform to the California Environmental Quality Act's ("CEQA") mandates, which are applicable to this process. The PSA issued for the Project is incomplete and inadequate and must be amended and supplemented prior to certification to be in compliance with CEQA, the Warren-Alquist Act, and implementing regulations. Unless and until the California Energy Commission ("CEC") remedies the below issues, it cannot lawfully issue an Application for Certification ("AFC") authorizing the Applicant to construct and operate the Project.

I. INTRODUCTION AND LEGAL BACKGROUND

The Project would be a geothermal energy production facility with a maximum continuous rating of approximately 157 megawatts ("MW") gross and with an expected net output of roughly 140 MW. The Project would be on sixty-three (63) acres of a 160-acre parcel in unincorporated Imperial County, bounded by McDonald Road to the north, Davis Road to the east, Schrimpf Road to the south, and the Salton Sea to the immediate west. A map of the Project site is provided below.



The AFC process administered by the CEC is the functional equivalent of CEQA review. (14 C.C.R. § 15251(j); 20 C.C.R. § 2300.) Compliance with the CEC's AFC process therefore constitutes compliance with CEQA, and CEQA-based standards and caselaw are relevant and persuasive in CEC AFC review processes. (*See Californians for Alternatives to Toxics v. Department of Pesticide Regulation* (2016) 136 Cal.App.4th 1049, 1067; *City of Sacramento v. State Water Resources Control Bd.* (1992) 2 Cal.App.4th 960, 975.) When a certificate is issued, it supersedes any conflicting local, regional, or state statute, ordinance, or regulation. (*Voices of the Wetlands v. California State Water Resources Control Bd*. (2007) 157 Cal.App.4th 1268, 1302.) However, neither the Warren-Alquist Act, which sets forth the AFC process, nor the AFC process itself, exempts projects subject thereto from the requirements of other federal laws. (*Id.* at 1303.) Where applicable, applicants for certification must therefore also obtain relevant Clean Air Act, Clean Water Act, or other pertinent permits. (*Id*.)

The CEC is the "lead agency" for all "projects that require certification." (Pub. Resources Code § 25519(c).) And, importantly, the AFC process must be conducted in such a way as:

> (1) To ensure that the applicant incorporates into the project all measures that can be shown to be feasible, reasonably necessary, and available to substantially

lessen or avoid the project's significant adverse environmental effects, and to ensure that any facility which may cause a significant adverse environmental effect is certified only if the benefits of such facility outweigh its unavoidable adverse effects[;]

(2) To ensure that the applicant takes all measures that can be shown to be feasible, reasonably necessary, and available to comply with applicable governmental laws and standards; to ensure that any facility certified complies with applicable federal law; and to ensure that any facility which fails to comply with an applicable local or state law or standard is certified only if such facility is required for public convenience and necessity and there are not more prudent and feasible means of achieving such convenience and necessity[; and]

(3) To ensure safe and reliable operation of the facility.

(20 C.C.R. § 1741(b)(1)-(3).) CEC staff must prepare a preliminary environmental assessment of the proposed site and related facilities that describes and analyzes the significant environmental effects of the project, the completeness of the applicant's proposed mitigation measures (referred to in this context as Conditions of Certification), and the need for, and feasibility of, additional or alternative mitigation measures. (*Id.* § 1742(b).) The report must also "provide a description of all applicable federal, state, regional, and local laws, ordinances, regulations and standards and the project's compliance with them. In the case of noncompliance, the staff assessment [must also] provide a description of all staff efforts with the agencies responsible for enforcing the laws, ordinances, regulations and standards, for which there is noncompliance, in an attempt to correct or eliminate the noncompliance." (*Id.* § 1742(d).) And it must "indicate the staff's positions on the environmental issues affecting a decision on the applicant's proposal." (*Id.* § 1742(e).)

The staff's "preliminary environmental assessment [must also] be subject to at least a 30 day public comment period," and it is not until after that comment period that the staff may publish the final assessment, which must provide "responses to comments on significant environmental issues received during the comment period." (*Id.* § 1742(c).) The CEC then relies on the final staff assessment and subsequent hearings to issue a proposed decision on the AFC. (*Id.* § 1745.5(a).) The public then has another commenting period to submit comments on the CEC's proposed decision on the project. (*Id.* § 1745.5(c).) Then the CEC may issue a final decision on the project. (*Id.* § 1748.)

Here, the Applicant submitted its application for certification on April 18, 2023, and, on July 27, 2023, the CEC determined that the Applicant's application for certification was complete. On June 27, 2024, CEC staff issued the PSA for the Project. And, on July 26, 2024, CEC staff issued an order extending the commenting deadline for the PSA for this Project to September 4, 2024. (Joint Order Clarifying the Deadline for Public Comment Periods on Preliminary Staff Assessment is September 4, 2024 (TN-258708) at 2.) UAW's comments are thus timely.

II. STATEMENT OF INTEREST

UAW is a party via intervention to the Project's AFC proceeding before the CEC. UAW is one of the largest and most diverse unions in North America, with members in virtually every

sector of the economy. UAW-represented workplaces range from multinational corporations, small manufacturers, and state and local governments to colleges and universities, hospitals, and private non-profit organizations. UAW has more than 400,000 active members and more than 580,000 retired members in the United States, Canada, and Puerto Rico. As relevant here, UAW Region 6 is comprised of local union affiliates with over 100,000 active and retired members in Alaska, Arizona, California, Hawai'i, Idaho, Nevada, Oregon, Utah, and Washington whose members' environmental and economic interests are affected by the Project. UAW members live in communities surrounding the Project and will accordingly experience detrimental impacts if the Project is approved, constructed, and operated without appropriate environmental analysis and mitigation. UAW thus has an interest in minimizing the impacts of projects that would negatively impact the environment and in enforcing environmental laws to protect its members.

Environmental degradation also impacts UAW members' quality of life. UAW members increasingly live in geographic areas, including the Imperial Valley, most impacted by water restrictions, poor air quality, increased temperatures, hazardous waste storage, and their associated health outcomes. The Project also affects UAW's members' longer term economic and environmental interests. UAW is committed to ensuring that the transition to a green economy is environmentally and socially sustainable.

III. COMMENTS ON THE PRELIMINARY STAFF ASSESSMENT FOR THE MORTON BAY GEOTHERMAL PROJECT

The PSA for the Project covers a wide range of potential impacts, so this comment is divided into subsections, each of which addresses a particular issue area.

A. The PSA's Analysis Fails to Meaningfully Evaluate the Risks Posed by the Project on Onsite Workers.

By the PSA's own admission, the Project will pose serious risks for onsite workers. Indeed, according to the PSA, "[a]ccidents, fires, and two worker deaths have occurred at CEC-certified power plants in the past due to failure to recognize and control safety hazards and adequately supervise compliance with occupational safety and health regulations." (PSA at 4.4-9.) In light of this and based on the PSA itself, as explained below, the PSA's analysis of worker safety issues remains inadequate, and the PSA fails to mandate sufficient Conditions of Certification to offset the Project's worker safety risks. For one, the PSA unlawfully defers the actual formulation, review, and finalization of the performance standards specific to several of the Conditions of Certification intended to minimize the Project's worker safety impacts. (*See Preserve Wild Santee v. City of Santee* (2012) 210 Cal.App.4th 260, 272 [holding EIR improperly deferred formulating mitigation measures because it did not describe specific actions or specify performance standards]. CEQA prohibits deferral of mitigation measures except in narrow circumstances:

> Formulation of mitigation measures shall not be deferred until some future time. The specific details of a mitigation measure, however, may be developed after project approval when it is impractical or infeasible to include those details during the project's environmental review provided that the agency (1) commits itself to the mitigation, (2) adopts specific performance standards the mitigation will achieve, and (3) identifies the type(s) of potential action(s) that can feasibly achieve

> that performance standard and that will considered, analyzed, and potentially incorporated in the mitigation measure.

(14 C.C.R. § 15126.4(a)(1)(B).)

The PSA's worker safety mitigation measures fail to meet this standard. For example, the PSA mandates a Condition of Certification referred to as COC Worker Safety-1 that requires the Applicant prepare a "Project Construction Health and Safety Program" and submit that to the CEC prior to commencing construction. (PSA at 4.4-14.) This program is intended to protect workers from significant hazards, including exposure to hot steam and high concentrations of hydrogen sulfide, benzene, and other toxic air contaminants. (*Id*. at 4.4-7 – 4.4-8.) Similarly, the PSA mandates another Condition of Certification referred to as COC Worker Safety-2 that requires the Applicant to submit to the CEC a "Project Operations and Maintenance Safety and Health Program" to offset the Project's significant hazards to worker health that will occur during Project operations. (*Id*. at 4.4-15.)

Yet, the PSA only requires that the Applicant submit these programs thirty (30) days prior to the start of construction despite the fact that there is nothing in the PSA (or the docket for this Project) suggesting that the circumstances of this AFC review process make it "impractical or infeasible" to flesh out the details of these Conditions of Certification sooner, before the Project is approved. (*Id*. at 4.4-14, 4.4-1.5.) This plainly violates CEQA's (and therefore the Warren-Alquist Act's) mandates. (*See Preserve Wild Santee*, 210 Cal.App.4th at 272; 14 C.C.R. § 15126.4(a)(1)(B).)

Unlawfully delaying the actual formulation of these plans is particularly concerning given that, according to the PSA, these programs must include "Heat Illness Prevention Program[s]" to address potentially significant worker safety issues given that the Project often gets very, very hot, and will only get hotter in the coming decades. (PSA at 4.4-14 [Heat Illness Prevention Program]; *id*. at 5.15-27 [noting that the average temperature at the Project site in July is 107 degrees Fahrenheit].) It is entirely likely that onsite workers will be exposed to instances of extreme atmospheric temperatures. Indeed, this past July the temperature in the area around the Project site exceeded 116 degrees Fahrenheit. Yet, no mitigation measures have actually been developed to address these known impacts on workers. Rather, the PSA simply requires that the Applicant flesh out such programs down the line, after the AFC environmental review process is over, all of which will occur without public comment. More is needed to protect onsite workers from the excessive temperatures. (20 C.C.R. § 1741(b).)

Further, the PSA states that the Project will use a computerized maintenance management system to monitor equipment onsite and ensure all systems are adequately maintained, but it does not evaluate whether reliance on that system without a human backup may expose onsite workers to unnecessary hazards. (PSA at 4.2-2.) Moreover, there is no information regarding the frequency of maintenance or how such systems will be maintained, audited, and adjusted based on said monitoring and maintenance. Given the dangers this Project may pose for onsite workers, relying solely on this non-redundant system for worker safety is insufficient to ensure significant impacts are lessened to a less-than-significant level, in violation of CEQA and the Warren-Alquist Act. (*Id.* at 4.4-9; 20 C.C.R. § 1740(b)(1).) If, in fact, this system is the only barrier between onsite workers and significant hazards, the CEC must address this issue, as it is entirely possible that an automated maintenance system could malfunction and thereby expose workers to significant hazards. (20

C.C.R. § 1741(b) [requiring the AFC review process to "ensure that the applicant incorporates into the project all measures that can be shown to be feasible, reasonably necessary, and available to substantially lessen or avoid the project's significant adverse environmental effects"].) Likewise, it is critical that the CEC amend the proposed Project Operations and Maintenance Safety and Health Program to provide for engineering controls, such as built-in controls like barriers, lockout devices, ventilation and exhaust devices, and controls for valves, piping, and drilling devices. If and when controls fail, *there must be a backup plan*. (*Id*.) This will help to prevent the burns and other accidents inherent in operating geothermal power generation facilities. (*See* Occupational Safety and Health Administration, Geo-Thermal Energy, available at https://www.osha.gov/green-jobs/geo-thermal [discussing severe injuries sustained by workers at geothermal power plants].)

B. The PSA's Analysis of the Water Supply Available for the Project is Arbitrary and Unlawful.

The PSA's discussion regarding the water supply available for the Project ignores a known, impending, and inevitable crisis in the Colorado River watershed. CEC staff wrongly state that the Imperial County Irrigation District ("IID") *has* set aside 25,000 acre-feet-per-year ("AFY") of water for non-agricultural uses and, that the IID has, as of January 2024, already allocated 6,380 AFY of that supply, leaving 18,620 AFY for all other non-agricultural uses. (PSA at 5.15-7.) The IID, in comments on the PSA for the Elmore North Geothermal Project, reiterated that the Water Supply Assessment for this Project did not state that the IID has already set aside the 25,000 AFY of water for non-agricultural uses that CEC staff claim it did, but rather asserted that it *may* conserve and set aside 25,000 AFY for non-agricultural uses. (Imperial Irrigation District Comment Letter CEC NOA of the PSA (TN-257957) at 3.) The PSA asserts further (rightly this time) that the three Berkshire Hathaway projects now under CEC review (including this Project) would require seventy-one (71) percent of the remaining, non-allocated supply. (*Id*.) This is particularly concerning not only because the exact amount of water the Project would require remains unknown, but also because the County's water supply (and therefore the Project's water supply) is likely to decrease in the coming years and decades. (*Id*. at 3-12 – 3-13 ["Average annual supply requirements will vary, depending on the capacity factor of the overall facility … During high ambient conditions, more supplemental water will be used from the service pond."].) In fact, the Water Supply Assessment prepared by the Applicant in collaboration with the IID warns that "[t]he dependability of IID's water rights, Colorado River flows, and Colorado River storage facilities for Colorado River water alone are not sufficient to assure water availability for the Project" given that "prolonged drought conditions on the Colorado River Basin have made it increasingly likely that the water supply of IID may be disrupted[.]" (Water Supply Assessment at 9-1.)

Yet, without any evidence, let alone credible and substantial evidence, the PSA concludes there will be enough water for the Project (and the other Berkshire Hathaway projects). (PSA at 5.15-14.) Despite the CEC itself having expressed concerns to both the Applicant and the IID about the available supply for the Project, the Water Supply Assessment concludes the "projected water supply is sufficient to satisfy the demands of this proposed Project in addition to existing and planned future uses, including agricultural and non-agricultural uses for a 20-year Water Supply Assessment period and *for up to 30 years of the anticipated 40-year proposed Project life*." (*Id*. at 9-2 [emphasis added].) Relying on this (but without citing to it), CEC staff conclude that they need not independently analyze the Project's likely impacts on water supply in the region or mandate Conditions of Certification to meaningfully protect against water shortages elicited or worsened

by the Project or its cumulative impacts. (PSA at 5.15-14; *Historic Architecture Alliance v. City of Laguna Beach* (2022) 2022 Cal. Super. LEXIS 29316, at *9 [a "conclusory statement, untethered to the operative standard, is not substantial evidence"]; *City of Long Beach v. Los Angeles Unified School Dist.* (2009) 176 Cal. App. 4th 889, 903 [conclusory statements unsupported by factual information are not substantial evidence]; *Pfeiffer v. City of Sunnyvale City Council* (2011) 200 Cal. App. 4th 1552, 1567 [same].)

Unquestionably, the water supply in Imperial County will diminish in the coming decades. Climate change is dramatically reducing the quantity of water flowing through the Colorado River basin, and the Biden administration recently negotiated a deal with three Colorado River basin states, including California, that compels such states to reduce their water demand on the river by thirteen percent (13%) in response to climate-exacerbated drought, over-allocation, and historically low water levels in Lake Mead and Lake Powell. (U.S. Bureau of Reclamation, *Lower Basin Plan Letter*, May 22, 2023, available at https://www.doi.gov/media/document/lower-basin-plan-letter-5-22-2023-pdf [attached as **Exhibit A**]; *see also* U.S. Bureau of Reclamation, Draft Environmental Assessment for IID 2024-2026 Temporary Colorado River System Water Conservation Project (June 2024) at 3-4, available at https://www.usbr.gov/lc/region/g2000/envdocs/IID/00_FinalDraftEAIID_508ADAFinal.pdf [discussing decreases in water allocation available to IID from the mainstem Colorado River] [attached as **Exhibit B**].) The climate crisis will continue to get worse, so it is likely that further, more drastic cuts will be mandated in the future. (Water Supply Assessment at 5-5 ["Despite the Department's extraordinary actions, the hydrological forecasts and reservoir elevations have continued to decline. Basin states have been asked to develop a plan in 2022 to reduce demands by 2-4 million acre-feet per year through 2026 or the Secretary of the Interior would take regulatory action to force these reductions in order to protect the Colorado River system from the prolonged drought conditions and climate change impacts."].)

The CEC must meaningfully account for and analyze climate-exacerbated reductions in water supply that may impact the water supply available to the Project. (*See Voices for Rural Living v. El Dorado Irrigation Dist*. (2012) 209 Cal.App.4th 1096, 1110-1112; *see also Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 421-432.) In *Voices for Rural Living*, the court held that an irrigation district needed to analyze the available water supply for a proposed casino based on the conclusion that, with climate change, a future drought plausibly could cause the deliveries for the project to have a significant effect on water availability. *Voices for Rural Living*, 209 Cal.App.4th at 1110-1112. Similarly, in *Vineyard Area Citizens for Responsible Growth,* the court held that future water supplies projections that relied on speculative sources and unrealistic allocations, or "paper water," were insufficient bases for decision-making. *Vineyard Area Citizens for Responsible Growth,* 40 Cal.4th at 421-432. CEQA requires the agency to provide a "consistent and coherent description" of how the long-term demand would be met. (*Id.*) Here, the Project cannot rely on unrealistic, unsubstantiated projections of available water, especially in light of credible factual information to the contrary and must instead assess the water supply considering likely climate-related reductions.

Further, CEC staff cannot rely solely on the Water Supply Assessment to account for the requisite analysis, as that document fails to guarantee that an adequate water supply will be available for the Project. For one, the Water Supply Assessment rests its analysis on speculative hopes regarding the efficacy of two *non-mandatory, speculative* programs. (Water Supply Assessment at 8-3.) Specifically, the Water Supply Assessment provides that:

> In the event that IID has issued water supply agreements that exhaust the 25 KAFY[1] [Interim Water Supply Policy] set aside for conservation, and it becomes apparent that IID delivery demands due to non-agriculture use are going to cause the district to exceed its quantified 3.1 MAFY[2] entitlement less [Quantification Settlement Agreement and Related Agreements] obligations, IID has identified options to meet these new non-agricultural demands. These options include (1) tracking water yield from temporary land conversion from agricultural to non-agricultural land uses (renewable solar energy); and (2) only if necessary, developing conservation projects to expand the size of the district's water supply portfolio.

(*Id*.) To make up for supply shortages, the IID hopes to reduce water demand countywide by converting five percent of the County's agricultural land to solar (thereby reducing its attendant water demand). (*Id*.) And the IID expects that another, larger percentage of land will be converted to non-agricultural commercial and/or residential uses. (*Id*.) Together, the IID expects that the reductions in demand resulting from these land-use changes will account for any decreases in supply that may result from the Colorado River drying up and any increases in demand associated with this and other projects new projects coming online. (*Id*.) However, these programs, though commendable, are speculative, aspirational, and discretionary, not mandatory, and the IID admits as much. (*Id*. ["However, due to the nature of the conditional use permits under which solar farms are developed, IID cannot rely on this supply being permanently available. In fact, should a solar project decommission early that land may go immediately back to agricultural use (it remains zoned an agricultural land)."]; *see also* U.S. Bureau of Reclamation, Draft Environmental Assessment for IID 2024-2026 Temporary Colorado River System Water Conservation Project (June 2024) at 18, available at https://www.usbr.gov/ [discussing non-mandatory, in-county water conservation programs managed by IID within Imperial County].)

At best, the IID's reasoning here is wishful thinking; the IID *hopes* that it will have enough water for this and other projects and that, if it does not, it may fund projects to obtain the requisite water. (Water Supply Assessment at 8-4; *Sierra Club v. County of San Diego* (2014) 231 Cal. App. 4th 1152, 1169 [holding that EIR cannot rely on discretionary programs to conclude that a project's impacts would be less than significant].) There is no guarantee that these proposed fixes will satisfy existing and anticipated water supply demands. This is a promise the IID may not be able to keep, and one that is dependent on funding and authorizations outside of the IID's, Applicant's, CEC's, and County's control. Indeed, in comments on the PSA for the Elmore North Geothermal Project, the IID itself directs the CEC (and its staff) to amend that PSA to state that the "IID has given assurance to CEC staff that IID *has the necessary confidence and management history that they, in coordination with the project proponent, can reliably conserve the water supply needed for these projects*." (Imperial Irrigation District Comment Letter CEC NOA of the PSA (TN-257957) at 3 [emphasis added].) The IID's confidence that with the Applicant's help it can penny pinch its way to sufficient water supply is neither supported by substantial evidence nor sufficient to guarantee an adequate supply will be available in the coming decades as climate change exacerbates drought conditions. (Pub. Resources Code, § 21080, subd. (e)(2) [speculation, argument, unsubstantiated opinion or narrative and evidence of economic impacts are not substantial evidence]; *Rio Vista Farm Bureau Center v. County of Solano* (1992) 5 Cal. App. 4th 351, 375 ["Speculative possibilities are not substantial evidence[.]"].)

[1] "KAFY" indicates thousand-acre-feet-per-year.
[2] "MAFY" indicates million-acre-feet-per-year.

Additionally, and importantly, the programs the IID relies on to conserve enough water to supply the Project its sister projects (the Elmore North Geothermal Project and Black Rock Geothermal Project) are meant to compensate (at least in part) for reductions in the IID's water allocation from the Colorado River. (U.S. Bureau of Reclamation, Draft Environmental Assessment for IID 2024-2026 Temporary Colorado River System Water Conservation Project (June 2024) at 18, available at https://www.usbr.gov/.) Indeed, the IID's allocation is down from approximately 3 million AFY to 2.5 million AFY (the current allocation), and further reductions are necessary. (*Id*.) These conservation programs are intended to make up for IID getting less water from the Colorado River and should not also be used to account for additional water demand attendant to the Project and the coming geothermal and lithium extraction boom within the Salton Sea Known Geothermal Resource Area (discussed below). (*Id*.) Relying on these same programs to supply projects that will increase water demand is therefore shortsighted and disingenuous. The CEC must account for the Project's likely impacts on water supply and mandate Conditions of Certification to offset the Project's water consumption. (20 C.C.R. § 1741(b).)

Moreover, the Water Supply Assessment is not supported by substantial evidence, as it relies on data from IID documents that are well over a decade old. (Water Supply Assessment at 11-1 [citing the references relied on, more than half of which were published in 2012 or earlier].) For example, the Imperial Integrated Regional Water Management Plan (which includes the land-fallowing program) was approved in 2012, well before some of the worst droughts in California history. (*Id*. at 1-10.) That document (and plan) could not have and did not account for the best climate science or the current conditions of the Colorado River, which, as noted, are dire. Although the Water Supply Assessment seems to acknowledge this issue and claims to have modified the figures lifted from the Imperial Integrated Regional Water Management Plan, it provides no substantial evidence supporting its modified statistics, which appear to be based wholly on guesswork. (*Id*. at 6-2; Pub. Resources Code, § 21080, subd. (e)(2) [speculation, argument, unsubstantiated opinion or narrative and evidence of economic impacts are not substantial evidence].) Likewise, the Water Supply Assessment utilizes the IID's Imperial Irrigation District Interim Water Supply Policy for Non-Agricultural Projects, which provides a mechanism to address water supply requests from new non-agricultural projects like this Project. (Water Supply Assessment at 1-13.) This program was initially approved in 2009, well before some of the worst, long-lasting droughts in California history and well before the Colorado River dropped to such low levels (threatening dead pool status) that the President of the United States had to intervene in interstate negotiations to mandate reductions across the Colorado River watershed. (*Id*.) These droughts, the climate crisis, and the substantial decreases in Colorado River water supply downstream are all significant new information that warrant subsequent study and demonstrate that reliance on these resources by the Water Supply Assessment was misplaced and inappropriate. (Pub. Resources Code § 21092.1.)

Despite this, the only Conditions of Certification required by the PSA to reduce the Project's water supply impacts are for the Applicant to track and report its water consumption and to install a floating cover over its water supply pond to reduce evapotranspiration. (PSA at 5.15-17 – 5.15-22.) More is needed. (20 C.C.R. § 1741(b).) The County will be faced with a situation where it will have to make hard choices between agricultural uses, domestic, commercial, and industrial supply, and the geothermal energy projects now under CEC review, especially given that Imperial County is currently undertaking a CEQA review process for a Specific Plan that would open much of the County (particularly the area surrounding the proposed Project site) to

lithium extraction and battery production that will demand even more water from the IID. (*See* Imperial County, *Notice of Preparation for Lithium Valley Specific Plan and Programmatic Environmental Impact Report Project* (Dec. 21, 2023) [attached hereto as **Exhibit C**.) In a December 14, 2023, PowerPoint presentation for a public scoping meeting for the Lithium Valley Specific Plan Program, Imperial County stated that the projects associated with the Specific Plan would eventually call for approximately 93,000 AFY of water supply, far more than the 18,620 AFY the IID says it may have available for projects like these in the future. (A copy of this PowerPoint is included as an attachment to this comment as **Exhibit D**.) It is therefore *absolutely critical* that the CEC and its staff meaningfully account for the Project's likely implications on water supply in Imperial County and not blindly rely on the IID to fix any subsequent shortages that may occur through ad-hoc projects and discretionary programs outside of the IID's control. (20 C.C.R. § 1741(b); *see also Voices for Rural Living*, 209 Cal.App.4th at 1110-1112; *Vineyard Area Citizens for Responsible Growth,* 40 Cal.4th at 421-432.)

In addition, the CEC must prepare a cumulative impacts analysis of the Project's impacts on water resources that accounts for the likely water supply requirements attendant to the development to be facilitated by the aforementioned specific plan and the other projects proposed by the Applicant. (14 C.C.R. § 15130(b)(1)(B).) The PSA states that because "specific projects are speculative at this time, a cumulative impacts analysis regarding water supply cannot be provided." (PSA at 5.16-15.) Not so. A cumulative impacts analysis must be conducted that accounts for recently permitted and existing projects identified in the PSA's "Master Cumulative Project List," including the other two Berkshire Hathaway projects now under CEC review, the Hell's Kitchen, EnergySource Minerals (Atlis), and Hudson Ranch Geothermal projects, and the Lithium Valley Specific Plan now under Imperial County review. (14 C.C.R. § 15130(b)(1)(B).) The PSA fails to do so and must be amended.

C. The PSA Does Not Accurately Describe the Project.

The PSA also violates CEQA and the Warren-Alquist Act by not accurately describing the Project. According to the PSA, the Project "would be a geothermal electric power generating facility … fitted with one steam turbine generator … consisting of a condensing turbine generator set with three steam entry pressures." (PSA at 3-1.) Yet, the Applicant has openly announced that it plans to extract lithium from the Salton Sea Known Geothermal Resource Area. (*See, e.g.*, *Ernest* Scheyder, *Insight: U.S. steps away from flagship lithium project with Buffett's Berkshire* (October 5, 2022), Reuters, available at https://www.reuters.com/markets/us/us-steps-away-flagship-lithium-project-with-berkshire-2022-10-05/ [discussing the Applicant's receipt of a grant to fund lithium extraction in the Salton Sea area that was later rescinded] [attached hereto as **Exhibit E**]; Kit Norton, *Warren Buffett Gathers His Energy Gang To Extract Lithium* (June 5, 2024), Investors Business Daily, available at https://www.investors.com/news/] [attached hereto as **Exhibit F**].) In fact, in a recent application to the California Alternative Energy and Advanced Transportation Financing Authority ("CAEATFA"), the Applicant stated that the Project will include lithium extraction. (A copy of this application is attached hereto as **Exhibit G**.) And, as noted, Imperial County is currently planning on rapidly developing the Project area into a lithium extraction hub. (*See generally* **Exhibit C**.) Given this reality, the PSA's failure to account for the Applicant's plan to add lithium extraction facilities to the proposed Project in the not-so-distant future is a clear and unequivocal violation of CEQA and therefore the Warren-Alquist Act. (*Concerned Citizens of Costa Mesa, Inc. v. 32nd Dist. Agricultural Assn.* (1986) 42 Cal.3d 929, 938 ["An accurate, stable and finite project description is the sine qua non of an informative and legally sufficient EIR."].)

The CEC must therefore amend the Project description and consider the implications of adding lithium extraction facilities to the proposed Project.

By not considering and evaluating the strong likelihood that the Applicant will add lithium extraction to the Project, the CEC is unlawfully segmenting its review of the Project's likely environmental impacts. "A public agency may not divide a single project into smaller individual projects in order to avoid its responsibility to consider the environmental impacts of the project as a whole." (*Sierra Club v. West Side Irrigation Dist*. (2005) 128 Cal.App.4th 690, 698; *see also Orinda Assn. v. Board of Supervisors* (1986) 182 Cal.App.3d 1145, 1171.) Regardless of whether the Applicant raised the potential to add lithium extraction capacities in the future in its AFC, where, as here, an activity is a reasonably foreseeable consequence of the first activity being considered or where the second activity is a future expansion of the first activity that will change the scope of the first activity's impacts, courts have considered both projects as a single, consolidated project and required contemporaneous CEQA review. (*See, e.g., Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 392; *Bozung v. Local Agency Formation Com*. (1975) 13 Cal.3d 263, 270; *No Oil, Inc. v. City of Los Angeles* (1987) 196 Cal.App.3d 223, 230.) Subsequently adding lithium extraction facilities to the Project is not only foreseeable, but is being planned, given both the Applicant's and County's public statements and actions, and is indisputably connected to the proposed Project as currently described. Indeed, lithium extraction facilities cannot be added to the Project if it is not first approved by the CEC through this process. Accordingly, segmenting review and failing to account for the likelihood that the Applicant will later seek to add lithium extraction facilities to the Project violates CEQA and therefore the Warren-Alquist Act. *(Laurel Heights Improvement Assn.,* 47 Cal.3d at 392; *Bozung,* 13 Cal.3d at 270; *No Oil, Inc.,* 196 Cal.App.3d at 230.)

The PSA also fails to account for the full temporal duration of the Project's likely impacts and thereby fails to accurately account for the whole of the Project, as required. (*Concerned Citizens of Costa Mesa, Inc.,* 42 Cal.3d at 938.) Despite the fact that, according to the PSA, "there is every expectation that" the Project will continue to operate beyond the forty (40) years being authorized by the CEC through this process, the PSA does not evaluate the Project's impacts beyond the forty-year period being authorized here. (PSA at 3-29.) By the PSA's (and the Applicant's) own admission, the Project continuing to operate beyond the forty-year period considered is entirely foreseeable, and therefore must be considered through this process. (14 C.C.R. § 15026.2 (a) [EIRs must consider the whole action, including long-term, foreseeable impacts].)

D. The PSA's Review of Potential Alternatives to the Project Violates CEQA and the Warren-Alquist Act.

The PSA's analysis of potential alternatives to the proposed Project violates CEQA in several ways. First, the PSA improperly rejects potential alternatives solely on the basis that they may pose construction-related difficulties or complications. CEQA requires that "governmental agencies … consider alternatives to proposed actions affecting the environment." (Pub. Resources Code § 21001(g).) And it mandates that "agencies [] not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects[.]" (*Id.* § 21002.) The Act defines "feasible" as "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors." (*Id.* § 21061.1.) Yet,

here, in clear contravention of these mandates, the PSA rejects alternative sites that would reduce impacts on affected Tribes and potentially on endangered species on the basis that, according to the Applicant, using those sites would pose construction-related complications requiring the Applicant to purchase underlying mineral rights from third-party owners. (PSA at 8-21; *Citizens of Goleta Valley v. Board of Supervisors* (1988) 197 Cal.App.3d 1167, 1181 [holding that an environmentally superior alternative cannot be deemed infeasible absent evidence the additional costs or lost profits are so severe the project would become impractical].) There is no proof or discussion of how these alternatives are so economically infeasible as to make the Project impracticable. The CEC must meaningfully analyze whether potentially feasible alternative sites are available that could lessen the Project's impacts even if such sites may require the Applicant to spend a bit more money than it would otherwise prefer. (*Citizens of Goleta Valley,* 197 Cal.App.3d at 1181; *Banning Ranch Conservancy v. City of Newport Beach* (2017) 2 Cal.5th 918, 936-937 [requiring consideration of alternative sites that may lessen impacts on endangered species, wherever possible].)

Likewise, the PSA improperly dismisses potential alternative sites that are not in the Salton Sea Known Geothermal Resource Area on the basis that the geothermal energy resources required for the Project may not be available there. (PSA at 8-21.) This violates CEQA in at least two ways. First, CEQA requires the CEC and Applicant to at least investigate whether such sites may have the resources required for the Project and to provide substantial evidence to support such a conclusion one way or another. (14 C.C.R. § 15384(a).) Second, nothing in the stated primary objective for the Project requires the Project to rely on geothermal energy (instead of other renewable generation sources like solar-plus-battery-storage) or to rely on geothermal energy within the Salton Sea Known Geothermal Resource Area in particular. (PSA at 3-25.) Rejecting alternative, potentially less-harmful sites outside of the Salton Sea Known Geothermal Resource Area was thus unsupported and violates CEQA. (*Citizens of Goleta Valley,* 197 Cal.App.3d at 1181; *Banning Ranch Conservancy,* 2 Cal.5th at 936-937.)[3]

Moreover, and critically, the PSA relies on an unlawfully narrow description of the Project's objectives. (14 C.C.R. § 15126.6(a); *North Coast Rivers Alliance v. Kawamura* (2015) 243 Cal.App.4th 647, 668.) The PSA states that the "primary objective" of the Project is "to develop, construct[,] and operate a baseload renewable electrical generating facility that supports grid reliability and the state's goal for a transition to a 100 percent renewable energy and zero-carbon resource supply to induce customers by 2045." (PSA at 3-25; *id*. at 8-3.) The PSA further defines the Project's "related objectives" as the following:

[3] It is worth noting that the Applicant would likely not have prioritized the Project site and rejected other potential alternative sites further from the Salton Sea if it were not also planning to incorporate lithium extraction facilities into the Project. As noted already, Imperial County is planning to transform the area around the Project site into a hub for lithium extraction and battery manufacturing. (*See* **Exhibit C**.) In order to capitalize on this Specific Plan, the Applicant needs this Project to be located within or adjacent to the area subject to the Specific Plan. Rejecting alternative sites outside of the Specific Plan area evinces the Applicant's intent to hide the ball regarding its plan to add lithium extraction facilities to the Project after it is authorized by the CEC. The Applicant is now trying to get in on the ground floor of a development boom without undertaking the requisite environmental review attendant to that, in violation of CEQA and the Warren-Alquist Act.

(1) To construct and operate an approximately 140 MW (net) baseload renewable electrical generating facility that utilizes geothermal resources.

(2) Develop a renewable electrical generating facility that minimizes significant environmental impacts through the utilization of existing infrastructure, existing real property interests and rights-of-way, project design measures, and feasible mitigation measures.

(3) Develop new incremental capacity from a facility eligible under the California Renewables Portfolio Standard (RPS) program with a capacity factor of at least 80 percent capable of satisfying the procurement requirements of California's utilities under the California Public Utilities Commission's (CPUC's) Mid-Term Reliability Decision 21-06-035 and subsequent decisions.

(4) Develop an eligible renewable energy resource facility that can assist community choice aggregators, investor-owned utilities, and publicly owned utilities in meeting their RPS requirements.

(5) Encourage the responsible development and revitalization of the Salton Sea."

(*Id*.) These so-called Related Objectives render the Project objectives unlawfully narrow. (*In re Bay-Delta etc*. (2008) 43 Cal.4th 1143, 1163; *Save San Francisco Bay Assn. v. San Francisco Bay Conservation etc. Com*. (1992) 10 Cal.App.4th 908, 924–925; *Citizens of Goleta Valley*, 197 Cal.App.3d at 1181.) By including "related objectives" that limit potential alternatives to ones that "utilize[] geothermal resources" and that have "a capacity factor of at least 80 percent capable of satisfying the procurement requirements of California's utilities under the California Public Utilities Commission's (CPUC's) Mid-Term Reliability Decision 21-06-035[,]" the stated objectives unlawfully and artificially rule out potential alternatives that could meet the Project's "primary purpose," like solar-plus-battery or biomass. In *Citizens of Goleta Valley*, the court held that where the proposed project was an oceanfront resort hotel, agencies need not consider inland locations. (*Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 561.) Here, the Applicant has proposed to construct "a baseload renewable electrical generating facility that supports grid reliability and the state's goal for a transition to a 100 percent renewable energy," a goal that may be achieved by constructing a renewable energy facility other than a geothermal energy plant in the Salton Sea Known Geothermal Resource Area. (PSA at 3-25.) There are other locations in the state where geothermal energy is produced, including the Geysers in Sonoma, Lake, and Mendocino Counties. Yet, the PSA's stated "related objectives" limit review to only those options that would provide for geothermal energy production within the Salton Sea Known Geothermal Resource Area. (*Id*.) This discrepancy violates CEQA and the Warren-Alquist Act. (*In re Bay-Delta etc*. 2008 43 Cal.4th at 1163; *Citizens of Goleta Valley*, 197 Cal.App.3d at 1181.) CEC staff must amend the Project's objectives and consider and analyze Project alternatives other than geothermal plants in the Salton Sea Known Geothermal Resource Area.

E. The PSA Violates CEQA Because it Fails to Meaningfully Account for the Lithium Valley Specific Plan Now Under Review in Imperial County.

The PSA evaluated the Project's likely cumulative impacts with regards to the Project's potential air quality impacts and impacts on sensitive and endangered species, among others. (*See* PSA at 5.2-137 – 5.2-138; *id.* at 5.1-35.) In doing so, the PSA lists several nearby projects that could, along with this proposed Project, result in cumulatively significant impacts. (*See, e.g., id.* at 5.1-35 [discussing cumulative air emissions associated with this Project and the Elmore North and Black Rock proposed geothermal power plants]; 5.2-138 [discussing cumulative impacts on nearby species from this Project and "six solar farms[], one energy source mineral project [], one geothermal exploration project [], and three geothermal projects"].) At no point, however, does the PSA consider the impacts of the Project in conjunction with the likely impacts associated with Imperial County's recently proposed Lithium Valley Specific Plan that, as noted, will transform the area around the Project site into a hub for lithium extraction and battery manufacturing. (*See* **Exhibit C**.) This violates CEQA, which requires an agency, when evaluating a proposed project's cumulative impacts, to consider "past, present, and probable future projects … including, if necessary, those projects outside the control of the agency." (14 C.C.R. § 15130(b)(1)(B); *see also* 14 C.C.R. § 15151 ["[T]he sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. . . . The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure."].) Given that the proposed specific plan is likely to exacerbate all of the Project's likely impacts by facilitating a drastic expansion of development in the Project area, this omission calls into question the PSA's evaluation of each of the Project's likely significant cumulative impacts. Accordingly, the CEC must evaluate the Project's likely cumulative impacts in light of the proposed Lithium Valley Specific Plan now under Imperial County review. (14 C.C.R. § 15130 [cumulative impacts analyses must consider "past, present, and probable future projects producing related or cumulative impacts"]; *Citizens Assn. for Sensible Development of Bishop Area v. County of Inyo* (1985) 172 Cal. App. 3d 151, 168 [agencies must interpret this requirement in such a way as to "afford the fullest possible protection of the environment"]; *Friends of the Eel River v. Sonoma County Water Agency*, 108 Cal. App. 4th 859, 870-872 [holding that EIRs must be inclusive in conducting cumulative impacts analyses and requiring the instant EIR to consider other, proposed water curtailments being considered by other agencies when evaluating the project's cumulative water supply impacts].)

F. Much of What the Applicant Requested During the July 31 Workshop Would Violate CEQA if Incorporated.

During the July 31, 2024, workshop hosted by CEC staff regarding the PSAs for this Project and the Applicant's other proposed projects (*i.e.,* the Elmore North Geothermal Project and Black Rock Geothermal Project), the Applicant made several requests to CEC staff to amend the PSA for this Project and those other projects that would, if implemented, violate CEQA. For example, the Applicant requested across-the-board changes to the PSA to remove any analysis of and conditions of certification for any actions related to Project decommissioning, reasoning that the Applicant has not yet proposed to decommission the Project. If the CEC adopts this proposed amendment, it would clearly and unequivocally violate CEQA's mandate that the PSA analyze the whole of the Project, including decommissioning. (14 C.C.R. § 15026.2 (a).)

Likewise, during the July 31 workshop, the Applicant requested amending the PSA to add qualifying language throughout, rendering many of the proposed Conditions of Certification in

violation of CEQA and the Warren-Alquist Act. For example, the Applicant requested that CEC staff add qualifying language to the SWPPP provision of Condition of Certification BIO-4 such that it would mandate that best management practices "shall not pose a barrier to wildlife movement and shall be installed to allow for the safe passage of wildlife movement out of the project are [*to the best of the Applicant's ability*]." (PSA at 5.2-154.) The Applicant also proposed analogous amendments to myriad Conditions of Certification throughout the PSA. (Citation to Transcript.) Doing so would needlessly and unlawfully give the Applicant a way out of implementing many of the most significant and important Conditions of Certification imposed by the PSA. (20 C.C.R. § 1741(b); 14 C.C.R. § 15126.4 ["Mitigation measures must be fully enforceable[.]"]; *Woodward Park Homeowners Assn., Inc. v. City of Fresno* (2007) 2007 Cal. App. LEXIS 714, at *12 ["The Guidelines state that mitigation measures must be enforceable."].)

Moreover, the CEC will violate CEQA and the Warren-Alquist Act to the extent that it plans to host a subsequent workshop to discuss PSA-related concerns after the close of this public comment period. At the July 31, 2024, workshop, CEC staff noted that they planned to host a second workshop after the close of this comment period. Hosting such a meeting would violate CEQA and commenters' due process rights since it would prohibit commenters from being able to incorporate any new information provided during that workshop into their comments on the PSA. (*Concerned Residents of Carson Comm., Inc. v. Board of Trustees of the California State Univ.* (2003) 2003 Cal.App.Unpub. LEXIS 2488, at *35.)

G. The PSA's Air Quality Analysis Is Woefully Inadequate and Threatens to Expose Workers to Dangerous Concentrations of Air Pollutants.

The PSA's air quality analysis violates CEQA and the Warren-Alquist Act in several distinct ways. Given the breadth of the issues with the PSA's air quality analysis, this section is divided into subsections, each of which address a particular flaw in the PSA's evaluation of the Project's likely significant air emissions. For the following reasons, CEC staff must amend their assessment to conform to CEQA's requirements.[4]

i. The PSA's description of the Project's setting is inadequate.

The PSA's description of the Project's setting for the purposes of evaluating the extent and severity of its air emissions unlawfully ignores emissions from the Salton Sea. There is overwhelming evidence that the Salton Sea is shrinking (as a result of drying up) and is thereby exposing the Project's region to increasingly significant fugitive dust emissions. (*See, e.g.*, Henry Fountain, *The Salton Sea, an Accident of History, Faces a New Water Crisis*, (February 25, 2023), NEW YORK TIMES, available at https://www.nytimes.com/2023/02/25/; Imperial County, Final Baseline Report (February 2024) at 56-57 [attached hereto as **Exhibit H**].) Dust blown into the ambient air from exposed Salton Sea playas will drastically increase ambient particulate matter concentrations. (**Exhibit H** at 56-57.) The PSA must consider the emissions from the Salton Sea as part of the baseline conditions. (14 C.C.R. § 15125(a) ["An EIR must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published … from both a local and regional perspective. This environmental setting will normally constitute the baseline physical conditions by which a lead

[4] UAW also incorporates, as though fully set forth herein, the comments made by Dr. Ranajit Sahu, attached hereto as **Exhibit J**.

agency determines whether an impact is significant."].) This would, of course, impact the calculus as to whether the Project's particulate matter emissions will result in exceedances of both state and federal ambient air quality standards. Given that nearly twenty (20) percent of residents near the Salton Sea have asthma and will therefore be severely impacted by increases in ambient particulate matter concentrations, this is particularly concerning. (*Id*. at 56; *see also* Biddle, T. et al., *Aerosolized aqueous dust extracts collected near a drying lake trigger acute neutrophilic pulmonary inflammation reminiscent of microbial innate immune ligands*, SCIENCE OF THE TOTAL ENVIRONMENT 858 (2023) [attached hereto as **Exhibit I**].) Yet, the PSA never mentions this likelihood. CEC staff must consider this issue and address it in their final staff assessment (and the CEC itself must address this issue in subsequent phases of this AFC review process). (20 C.C.R. § 1741(b); 14 C.C.R. § 15026.2(a).)

ii. The PSA also fails to guarantee the Project will not cause or contribute to exceedances of applicable ambient air quality standards.

For several distinct reasons, the PSA fails to guarantee the Project will not cause or contribute to any exceedances of applicable ambient air quality standards, as required. (20 C.C.R. § 1741(b).) For one, the PSA allows the Applicant to emit significant amounts of particulate matter despite the fact that doing so would cause and/or contribute to exceedances of applicable air quality standards. Specifically, the PSA states that ambient air concentrations of particulate matter sized ten microns or smaller ("PM_{10}") already exceed applicable National Ambient Air Quality Standards ("NAAQS"). (PSA at 5.1-5.) And the PSA's data likely understate the actual concentration of PM_{10} at the Project site both because the drying of the Salton Sea will disburse more significant quantities of fugitive dust, as discussed *supra*, and because the ambient concentrations described in the PSA are based on data recorded at the Niland monitoring station about 5.5 miles from the Project site. (*Id*.) In fact, ambient concentrations at the Niland site likely underestimate the actual concentrations at the Project site because the Project site is located closer to the Salton Sea (an ongoing, significant source of fugitive dust) and closer to other existing and proposed industrial facilities that emit PM_{10} pollution. Yet, the PSA allows for the Applicant to emit PM_{10} at a rate that exceeds the U.S. Environmental Protection Agency's ("EPA") "significant impact levels" ("SILs"). (*Id.* at 5.1-18.) Doing so would, without question, contribute to exceedances of applicable ambient air quality standards, in clear violation of the Clean Air Act, state-specific standards, and therefore both CEQA and the Warren-Alquist Act. (20 C.C.R. § 1741(b).)

The PSA attempts to write this issue away in several ways, each of which is unavailing and in contravention of the governing law. For example, it states that Project-related emissions "would decrease rapidly with distance from the fence line … [so] PM_{10} impacts at the nearest sensitive receptors would be lower than" significance levels. (*Id*. at 5.1-25.) This argument, however, ignores the fact that, as discussed already, the background concentrations in the Project area are likely to be higher than currently estimated in the PSA right now and in the future, so concentrations at the fence line are likely to remain dangerous even if the Project's PM_{10} emissions decrease with distance. Further, this argument belies the aforementioned issues with the PSA's monitoring data, as it admits that particulate matter concentrations can vary greatly with distances of even one hundred feet, let alone 5.5 miles. Second, the PSA likewise asserts that because the Project's PM_{10} emissions would result primarily from construction and construction for the Project is a "short term" issue, the Project's PM_{10} emissions are somehow less than significant. (*Id*.) Not so. Construction is expected to last for longer than one year, which is not "short term" within the

common parlance of that term, especially where public health is at stake. Moreover, there is no exception in either CEQA or the Clean Air Act for so-called "short term" exceedances of applicable, controlling ambient air quality standards.

The PSA also attempts to decrease the seeming severity of the Project's particulate matter emissions by assuming, for the purposes of emissions modeling, that all dust-causing activities (like grading) will be conducted at all times with a ten-meter buffer from the nearest property boundary even though the PSA admits that "grading activities would not continuously occur within 10 m of the proposed facility fence line." (PSA at 5.1-24.) This assumption is arbitrary, capricious, and totally unsupported and appears to be intended to reduce the Project's projected particulate matter emissions. (14 C.C.R. § 15384(a).) Plus, and critically, the PSA imposes no means of monitoring to ensure that the Applicant actually abides by the buffer. Yet, even with this clearly unenforceable assumption, the Project's particulate matter emissions are likely to cause or contribute to NAAQS violations. CEC staff must therefore address this issue in their final staff assessment (and the CEC itself must address this issue in subsequent phases of this AFC review process). (20 C.C.R. § 1741(b).)

Second, the PSA's estimates regarding the Project's air emissions are not supported by substantial evidence, as required. (14 C.C.R. § 15384(a).) For example, the PSA states that "operational emissions were estimated based on analytical data from other geothermal power plants in the area and vendor-provided data[.]" (PSA at 5.1-13.) However, it is not clear what "vendor-provided" data were used in the analysis. The manufacturer of key equipment such as the steam turbine is not known as yet. The CEC must clearly specify what vendor-provided data were relied upon in the analysis and why these vendor-provided data reflect the actual and/or potential emissions of the equipment in question here. (14 C.C.R. § 15384(a).) Likewise, the PSA states that the Project's emissions "were based upon analytical data from other geothermal power plants in the area" without providing which geothermal plants' emissions were used or why those plants make effective analogues for the Project. (PSA at 5.1-13.) The CEC must also clearly specify which plants' emissions were used and why those plants reflect the emissions to be expected from this Project. (14 C.C.R. § 15384(a).) And the PSA also "assumes" that seventy (70) percent of the particulate matter emitted by the cooling tower (one of the main sources particulate matter onsite) will be PM_{10} and thirty (30) percent will be $PM_{2.5}$. (PSA at 5.1-19.) In assuming as much, the PSA relies on a single document from the California Air Resources Board to support this 70-30 split, but never explains why this assumption makes sense in this context, especially when the specific vendor and model of the cooling tower remains unknown. The CEC must therefore also clearly explain why utilizing this assumption makes sense in this context. (14 C.C.R. § 15384(a).)

Third, the PSA fails to accurately evaluate the Project's likely impacts on the secondary formation of particulate matter sized two-point-five microns or smaller ("$PM_{2.5}$"). The PSA's analysis of the Project's impacts on the atmospheric formation of secondary $PM_{2.5}$ discusses the Project's emissions of certain $PM_{2.5}$ precursors like nitrogen oxides and sulfur dioxide, but it does not mention the Project's emissions of other $PM_{2.5}$ precursors like ammonia and volatile organic compounds even though the EPA has made clear that these pollutants are $PM_{2.5}$ precursors. (PSA at 5.1-31; *see also* Environmental Protection Agency, *Fine Particulate Matter ($PM_{2.5}$) Precursor Guidance* (May 30, 2019), available at https://www.epa.gov/pm-pollution/pm25-precursor-demonstration-guidance.) Given that the Project is anticipated to emit large quantities of ammonia

in particular, this omission is particularly concerning and must be addressed in the final staff assessment and subsequent CEC review documents. (PSA at 5.1-22; 20 C.C.R. § 1741(b).)

Fourth, the PSA also unlawfully relies on inaccurate data to inform its emissions models. Rule 207 of the Imperial County Air Pollution Control District's ("Air District") regulations requires that any air quality models used to estimate the effects of a new emissions unit, including this Project, be consistent with the requirements contained in the most recent edition of the EPA's "Guidelines on Air Quality Models," which direct regulators to use meteorological data that is both spatially and climatologically representative of the background conditions at the proposed project. (40 C.F.R. Pt. 51; *see also* 82 Fed. Reg. 5182-235 (Jan. 17, 2017).) Yet, here, the emissions modelling utilized to estimate that the Project's impacts on pollutant concentrations in the ambient air utilized five (5) years of data collected at the Imperial County Airport, which is approximately twenty-five (25) miles from the proposed Project site. (PSA at 5.1-23.) Given the distance, this data is not representative of the conditions at the Project site. The PSA attempts to defend this choice by stating, without citation, that "because there are no significant geographical features between [the airport and the Project site] and both are south/southeast of the Salton Sea[,]" data from the airport is representative of the air near the Project. (*Id*.) This conclusion is arbitrary and capricious. The Project site is located nearer to the Salton Sea and other existing and proposed geothermal projects than the airport and is therefore much closer to the major sources of air emissions in the County than is the airport. Instead, the CEC should use the data from the Sonny Bono monitoring station since it is only approximately five (5) miles from the Project site. (40 C.F.R. Pt. 51; 14 C.C.R. § 15384(a).)

iii. The 2024 $PM_{2.5}$ NAAQS applies to this Project.

The PSA fails to account for the fact that the EPA recently issued an updated and more stringent NAAQS for $PM_{2.5}$. As relevant here, on March 6, 2024, the EPA published a rule to strengthen the NAAQS for $PM_{2.5}$. (89 Fed. Reg. 16202-406 (Mar. 6, 2024), available at https://www.govinfo.gov/content/pkg/FR-2024-03-06/pdf/2024-02637.pdf.) The EPA revised the level of primary annual $PM_{2.5}$ from 12.0 $\mu g/m^3$ to 9.0 $\mu g/m^3$. (*Id.* at 16204-05.) Imperial County does not meet the revised annual primary $PM_{2.5}$ standard. (U.S. Environmental Protection Agency, *Fine Particle Concentrations for Counties with Monitors Based on Air Quality Data from 2020-2022* (Feb. 2022), available at https://www.epa.gov/system/files/.) And the Applicant's air emissions modelling demonstrates the Project will cause or contribute to violations of the new $PM_{2.5}$ NAAQS. (PSA at 5.1-24.)

Rather than mandating that the Applicant modify its Project to ensure it will not cause or contribute to this NAAQS exceedance, however, the PSA writes off this issue by arguing that the new, updated NAAQS for $PM_{2.5}$ does not apply. (*Id*. at 5.1-3.) This argument misses the mark. Rule 207 of the Air District's regulations expressly states that "Applications received by the [Air] District shall be subject to the requirements of this Rule in effect at the time such application is deemed complete, ***except when a more stringent new federal requirement not yet incorporated into this Rule shall apply to the new or modified Stationary Source***." (Rule 207 A.2.b. [emphasis added].) Here, the new, updated NAAQS for $PM_{2.5}$ applies to the Project because the rule took effect on May 6, 2024. The fact that the AFC for this Project was already deemed complete by that time is irrelevant. Congress made an "express policy choice not to allow construction which will cause or contribute to nonattainment of '*any*' effective NAAQS, regardless of when they are adopted or when a permit was completed.'' (*Murray Energy Corp. v. EPA*, 936 F.3d 597, 627

(D.C. Cir. 2019) [emphasis added] [citations omitted].) In fact, in previous instances where the EPA issued new, updated NAAQS, it exempted certain proposed sources of pollution from having to demonstrate they would not cause or contribute to violations of the new standards where they had reached certain stages of their permitting processes before the new NAAQS was promulgated. (*Id*.) Some commenters on the new NAAQS for $PM_{2.5}$ requested this kind of exemption. (89 Fed. Reg. 16202-406 (Mar. 6, 2024), available at https://www.govinfo.gov/content/pkg/FR-2024-03-06/pdf/2024-02637.pdf.) However, the EPA refused to include such an exemption in this rule. (*Id*.) Accordingly, the Applicant and the CEC must use the new, updated $PM_{2.5}$ NAAQS in its analysis and mandate mitigation measures to reduce the Project's emissions such that the Project will not cause or contribute violations thereof. (20 C.C.R. § 1741(b).) Indeed, given the amount of $PM_{2.5}$ pollution expected to be emitted by the Project, it will without question cause or contribute to violations of the new, updated $PM_{2.5}$ NAAQS. (PSA at 5.1-21.)

iv. The PSA's evaluation of the Project's hydrogen sulfide emissions is deeply flawed.

The PSA fails to fulfill its obligation to determine whether the Project will cause or contribute to violations of the California Ambient Air Quality Standard ("CAAQS") for hydrogen sulfide. The current CAAQS for hydrogen sulfide is 0.03 parts per million (42 $\mu g/m^3$). Here, per the PSA, even with the implementation of control technologies, the Project will emit hydrogen sulfide at concentrations that exceed this limit and, at the very least, may contribute to violations of that limit. (PSA at 5.1-31.) Indeed, the Project site is already subject to episodic events that cause the ambient air in the region to exceed the hydrogen sulfide CAAQS. (*Id.* at 5.1-29.)

Nevertheless, the PSA presents several reasons why this impact is not significant, each of which ignores the law. First, it argues that comparing the Project's hydrogen sulfide emissions directly with the 42 $\mu g/m^3$ standard (without accounting for the background concentration of hydrogen sulfide in the ambient air) is appropriate because the region is subject to episodic spikes in hydrogen sulfide concentrations and because Imperial Valley is listed as "unclassified" for the hydrogen sulfide CAAQS and therefore does not have current background monitoring information for hydrogen sulfide. (*Id*.) Not so. Lack of available background monitoring data, while unfortunate, does not excuse CEC staff (or the CEC itself) from their obligation to determine whether the proposed Project will cause or contribute to an exceedance of the hydrogen sulfide CAAQS. (*Sundstrom v. County of Mendocino* (1988) 202 Cal. App. 3d 296, 311 [holding that CEQA places the burden of environmental investigation on government rather than the public, so a public agency cannot rely on its own lack of investigation].) Second, the PSA argues that because "there is a low probability that a single person would be within the area" when Project-related hydrogen sulfide emissions coincide with a spike in background concentrations, permitting the Project to cause and contribute to CAAQS violations is acceptable here. (PSA at 5.1-30.) This reasoning ignores onsite workers, who are likely to be onsite during such times, and it ignores the potential for residential development within the vicinity of the Project area, a situation that is more likely to occur now than it was when the Applicant first proposed the Project because of the Specific Plan discussed *supra*. The CEC must redo their analysis of the Project's hydrogen sulfide emissions and evaluate means of further reducing the Project's emissions so that it will not cause or contribute to violations of the hydrogen sulfide CAAQS or otherwise endanger onsite workers and potential nearby residents. (20 C.C.R. § 1741(b).)

v. The PSA fails to protect onsite workers from unlawful concentrations of toxic air contaminants.

The PSA admits the Project will emit sufficient emissions of toxic air contaminants to exceed relevant regulatory thresholds for the maximally exposed individual worker ("MEIW") and "point of maximum impact" ("PMI") for both the chronic and acute hazard index ("HI"). (PSA at 5.10-29 – 5.10-30.) Per applicable regulations from the Air District (which uses regulations from the South Coast Air Quality Management District on this point), the CEC can only approve an AFC that meets all of the following conditions:

- The maximum individual cancer risk is less than one in one million at any receptor location if the permit unit is constructed without the application of "best available control technology for toxics" (or "T-BACT") *or* if the maximum individual cancer risk is less than 10 in one million if the permit unit is constructed with T-BACT;
- The total chronic hazard index is less than 1.0;
- The total acute hazard index is less than 1.0; and
- The cancer burden is less than 0.5.

(South Coast Air Quality Management District, Rule 1401. New Source Review of Toxic Air Contaminants (Sept. 1, 2017), *available at* https://www.aqmd.gov/docs/default-source/rule-book/reg-xiv/rule-1401.pdf.; 20 C.C.R. § 1741(b).) The Project does not meet these conditions. As noted, modeling shows the Project's non-cancer chronic and acute health risks exceed the 1.0 thresholds for both the MEIW and PMI. (PSA at 5.10-29 – 5.10-30.) This is significant because the modeling here likely underestimates the risks posed by the Project by relying on the same meteorological data from the Imperial County Airport discussed above that are not representative of the ambient air conditions at the Project site, which is much closer to existing and proposed sources of toxic air contaminants (like other geothermal plants). And this is even more significant in light of the Lithium Valley Specific Plan, which makes it much more likely that a substantial workforce will be working regularly at and near the MEIW and PMI location and that more and more industrial pollution will be emitted into the ambient air in this area. More is required to reduce the Project's air toxics emissions. (20 C.C.R. § 1741(b).) The CEC must amend its analysis to ensure that the Applicant reduces its emissions of toxic air contaminants below critical levels or otherwise offsets these emissions in such a way as to adequately protect onsite workers and the public at large from harms therefrom. (20 C.C.R. § 1741(b).)

vi. The PSA's cumulative air quality impacts assessment violates CEQA.

The PSA's cumulative air impacts assessment violates CEQA in several ways and, as a result, only considers the Project's impacts in conjunction with those of the Applicant's other proposed projects (the Elmore North Geothermal Project and Black Rock Geothermal Project). Specifically, it arbitrarily presumes that the zone of influence (the radius where a project's air impacts are felt) would be no greater than six (6) miles based on nothing more than "staff's modeling experience." (PSA at 5.1-33.) And it excludes stationary sources "with emissions of less than five tons per year (tpy) as de minimis" based on only "previous power plant proceedings." (*Id*. at 5.1-34.) It also excludes localized impacts during construction based only on a "qualitative demonstration" that it is "unlikely" that these emissions would overlap with those of nearby

sources. (*Id*.) Each of these assumptions are completely unsupported, in clear violation of CEQA. (14 C.C.R. § 15384(a).) The CEC must therefore amend its cumulative air impacts analysis to address these and other deficiencies therein. (20 C.C.R. § 1741(b).)

H. The PSA's Evaluation of the Project's Likely Impacts on Sensitive and Endangered Species is Flawed.

Despite the PSA's assertions to the contrary, the Project is likely to significantly impact sensitive and endangered species and much of the PSA's analyses regarding the Project's impacts on sensitive and endangered species violate the clear mandates imposed by CEQA in various ways. For the following reasons, CEC staff must amend their assessment to conform to CEQA's requirements.

i. The Applicant and CEC must prepare a Biological Assessment pursuant to the federal Endangered Species Act to assess the Project's potential impacts on federally endangered species.

Where federally endangered species may be present within the site of a project that requires authorization under other federal laws, such as this Project, the agency authorizing the project (here the CEC) must prepare a "Biological Assessment" to determine whether the species or its critical habitat may be adversely affected. (16 U.S.C. § 1536(c)(1).) If the Biological Assessment concludes that the project will not adversely affect the species at issue or its critical habitat, the agency authorizing the project (here the CEC) must obtain a concurrence letter attesting to that from the relevant federal expert agency (either the National Marine Fisheries Service ("NMFS") or the U.S. Fish and Wildlife Service ("FWS")). (50 CFR 402.12(j).) Where the Biological Assessment concludes that the relevant project will adversely affect the species at issue or its critical habitat, the agency managing the project's authorization must "formally consult" with the relevant federal expert agency to determine whether the project will jeopardize the continued existence of the affected species. (16 U.S.C. § 1536.)

Here, the PSA states that the Project may impact Desert Pupfish, Yuma Ridgeway's Rail, and Southwestern Willow Flycatchers, each of which is federally endangered under the federal Endangered Species Act. (PSA at 5.2-88 – 5.2-108.) And the PSA mandates some Conditions of Certification to offset potential impacts on these species. (*Id.* at 5.2-147 – 5.2-184.) The PSA even states that, prior to any handling or relocation of Desert Pupfish, the Applicant must obtain a Biological Opinion from the FWS, further evincing the Applicant's and staff's opinion that the Project may adversely impact this species. (*Id*. at 5.2-165.) This is critical because, according to the IID, the Elmore North Geothermal Project, in conjunction with this other proposed projects in the area, will require construction to improve existing water conveyance systems that likely host Desert Pupfish. (Imperial Irrigation District Comment Letter CEC NOA of the PSA (TN-257957) at 3-4.) Given the similarities and locations of this Project and the Elmore North Geothermal project, it is entirely likely (if not inevitable) that this Project will also necessitate the same impacts. However, this mitigation measure, though generally positive, fails to meet the legal requirements of the federal Endangered Species Act. (16 U.S.C. § 1536.) The final staff assessment must mandate that, prior to implementing the Project, the CEC and Applicant prepare a Biological Assessment to evaluate the Project's potential impacts on the above-referenced federally endangered species and obtain a concurrence letter from NMFS or the FWS, as required. Failure to do so would be a significant legal violation. (20 C.C.R. § 1741(b).)

Likewise, the CEC must prepare a Biological Assessment to evaluate the Project's impacts on Yuma Ridgway's Rail before commencing construction on the Project. (16 U.S.C. § 1536(c)(1); 20 C.C.R. § 1741(b).) The Applicant found Yuma Ridgway's Rail onsite, and the PSA states that "*the loss of habitat would be considered a significant impact*." (PSA at 5.2-99 [emphasis added].) The PSA states that "activities that result[] in changes to water levels in marshes would affect habitat suitability and occupancy of marshland species," including Yuma Ridgway's Rail. (*Id.* at 5.2-100.) And it goes on to say that "[d]raining, ditching, or filling marshes that currently support marshland species ha[s] the potential to adversely affect their occupancy," that "[a]ny action that restricts waterflow into or out of occupied marshes has the potential to adversely affect occupancy of marshland species," and that "[g]round-disturbance activities in adjacent areas that cause water level subsidence within rail habitat could adversely impact populations." (*Id*.) All in all, it states that the Project may cause "25.56/22.85 acres of riparian habitat[] and approximately 20.02/17.91 acres of native habitat," so it is entirely possible, if not likely, that the Project may result in significant impacts to Yuma Ridgway's Rail by affecting their habitat onsite. (*Id*. at 5.2-124.) Yet, the PSA does not mandate the preparation of a Biological Assessment to evaluate the Project's potential impacts on Yuma Ridgway's Rail prior to commencing construction, as required. (16 U.S.C. § 1536(c)(1).) This too is a significant legal violation that must be addressed immediately. (20 C.C.R. § 1741(b).)

ii. Several of the Conditions of Certification described in the PSA violate CEQA.

Recognizing that the Project is likely to have myriad and significant impacts on species in the vicinity of the Project, the PSA mandates several species-specific Conditions of Certification. (PSA at 5.2-145 – 5.2-182.) However, several of these Conditions of Certification constitute unlawfully deferred mitigation. (*See Preserve Wild Santee,* 210 Cal.App.4th at 272; *see also* 14 C.C.R. § 15126.4(a)(1)(B). For example:

- MM BIO-17 ("Habitat Conservation or Restoration Plan") requires the Applicant to purchase compensatory habitat for any impacts to vegetation at a 1:1 ratio at sites to be approved by the CEC at a later point and with "success criteria and monitoring specifications" and "legal protection assurances" that have yet to be specified. (*Id*. at 5.2-176.)
- COC BIO-16 ("Burrowing Owl Habitat Preservation and Enhancement") requires the Applicant to replace impacted Burrowing Owl habitat (i.e., burrows and foraging sites) at a 1:1 ratio but does not set performance standards for selecting and managing replacement habitat. (*Id*. at 5.2-175.)
- MM BIO-13 ("Yuma Ridgway's Rail Survey, Management, and Monitoring") requires the Applicant and its "designated biologist," who has yet to be selected, hired, or identified, to prepare a plan for surveying both before and during construction to identify Yuma Ridgway's Rails or their habitat and to provide for a system whereby work would stop if they are spotted and not resume until after "the birds have left the work area." (*Id*. at 5.2-171.)
- COC BIO-10 requires the Applicant to prepare an invasive species plan "to prevent invasive and exotic species from establishing themselves in the temporary disturbance areas." (*Id*. at 5.2-167.)

- MM BIO-9 ("Desert Pupfish Protection and Relocation Plan") likewise requires the Project's "designated biologist" to "prepare and implement a desert pupfish protection and relocation plan" and to submit the plan to the California Department of Fish and Wildlife and the FWS for "review and comment" prior to any ground-disturbing activities associated with the plan." (*Id.* at 5.2-165.) The plan must provide "[p]rotocols for pre-activity surveys to assess species presence and spawning within or immediately adjacent to work areas" and "provide for the capture, relocation, and subsequent monitoring of Desert Pupfish." (*Id*.)

Like the mitigation measure at issue in *Preserve Wild Santee*, these Conditions of Certification defer the actual planning and evaluation to a later point without specifying sufficient performance standards to manage the compensatory habitat in advance. (*Preserve Wild Santee,* 210 Cal.App.4th at 272.) Given the circumstances of this AFC review process, it is not "impractical or infeasible" for the Applicant (or CEC) to flesh out the details of these Conditions of Certification, so deferring finalization of such details of this Condition of Certification for a later date is unlawful in this context. (14 C.C.R. § 15126.4(a)(1)(B).)

Moreover, with regards to MM BIO-9, the Condition of Certification does not specify the management protocols necessary to avoid violating the federal Endangered Species Act or explain why deferring the finalization of the details of this mitigation measure makes sense in this context. (14 C.C.R. § 15126.4(a)(1)(B).) This is no substitute for lawful conformance with the federal Endangered Species Act procedures discussed *supra* prior to approving the Project. The Condition of Certification referred to as MM BIO-9 must therefore be amended to conform both to CEQA and the federal Endangered Species Act. (20 C.C.R. § 1741(b).)

The circumstances of this AFC review process allow the Applicant and the CEC to adequately and fully flesh out all of the mitigation measures mandated to reduce or avoid the Project's likely environmental impacts. Yet, despite the lack of any immediate or legitimate need to rush to complete this process, the Applicant (and now the CEC staff) have proposed Conditions of Certification without having first finalized the details thereof, in clear violation of CEQA and therefore the Warren-Alquist Act. (14 C.C.R. § 15126.4(a)(1)(B).) CEC staff in the final preliminary staff assessment (and the CEC itself in subsequent phases of this AFC review process) must amend these above-referenced mitigation measures to provide detailed requirements outlining how these measures will be implemented and monitored. (20 C.C.R. § 1741(b).)

Furthermore, the PSA's Condition of Certification regarding the Project's brine pond (referred to as COC BIO-19) is insufficient to ensure that impacts to wildlife are less than significant. (PSA at 5.2-178.) The mitigation measure requires the Applicant to incorporate design features to allow wildlife to escape from the pond. (*Id*.) This is insufficient. The Applicant must install measures to prevent animals from ever entering the brine pond, given that animals are likely to be harmed (or even killed) simply by entering the pond. (20 C.C.R. § 1741(b) [requiring the CEC to impose Conditions of Certification to reduce impacts to the maximum extent feasible].) The Applicant must install a webbed net over the pond (or something to that effect) to prevent birds and other animals from unwittingly encountering the brine therein. (*Id*.)

Condition of Certification BIO-4 also violates CEQA for various reasons. For example, BIO-4 mandates that the injured wildlife be taken to a nearby veterinarian but fails to require the Applicant fund any treatments provided as part of that process. (PSA at 5.2-157.) The CEC must

mandate that the Applicant actually fund any treatments prescribed by responding veterinarians when injured wildlife are taken thereto. (20 C.C.R. § 1741(b).) Likewise, BIO-4 mandates that construction-related noise be minimized when in close proximity to sensitive habitat (like potential Yuma Ridgway's Rail habitat) but never delineates where this habitat is located. (PSA at 5.2-158.) Without this information, this aspect of the Condition of Certification is effectively useless. The CEC must flesh out where exactly these noise mitigation measures will kick in and make that information available for subsequent public comment. (20 C.C.R. § 1741(b).)

iii. The PSA's analysis regarding the Project's likely significant noise-related impacts on sensitive and endangered species is flawed and unsupported by substantial evidence.

The PSA concludes that Project-related noise will have less-than-significant impacts on affected species with mandated mitigation. (PSA at 5.2-100 – 5.2-101.) And it imposes a Condition of Certification referred to as MM BIO-14 requiring the Applicant to prepare a plan prior to beginning construction activities within five hundred (500) feet of suitable rail habitat to address noise impacts associated with Project construction and operation. (*Id*.) The plan requires the Applicant to implement certain noise-reduction measures, including a requirement that any activities occurring during Yuma Ridgway's Rail breeding season that will result in noise exceeding sixty (60) a-weighted decibels ("dBA") utilize noise-reduction methods to reduce noise below that level and a requirement that activities occurring outside of the breeding season have a biological monitor onsite whenever Project-related noise may exceed eighty (80) dBA. (*Id*.) This Condition of Certification is insufficient to ensure impacts to Yuma Ridgeway's Rail are less than significant, and it is unsupported by substantial evidence. (14 C.C.R. § 15384(a).)

The commonly used, FWS-backed standard for bird-related noise impacts limits project-related noise to sixty (60) dBA and holds that any noise above that level will significantly and adversely impact nearby bird species. (Application for Certification [TN-249723] at 5.2-23.) Yet, the PSA allows Project-related noise to exceed that limit at all times except when Project-related operations or construction occur in close proximity to Yuma Ridgway's Rail habitat during their breeding season. (PSA at 5.2-100 – 5.2-101.) In fact, the eighty (80) dBA threshold relied upon by the PSA is only supported by a single bird hearing specialist – Robert Dooling, Ph.D. – who testified on this issue in relation to an AFC application regarding the Huntington Beach Energy Project. (Application for Certification [TN-249723] at 5.2-23.) Mr. Dooling's past testimony, when considered against the long-standing, agency-backed scientific consensus, does not constitute substantial evidence. (14 C.C.R. § 15384.) Plus, and importantly, the PSA does not even identify where the sensitive habitat where these noise-reduction measures kick in is located, effectively rendering this program useless. More is required to prevent noise-related impacts to Yuma Ridgway's Rail and other birds. (20 C.C.R. § 1741(b).)

iv. The PSA's analysis of Project-related light pollution is inadequate.

At no point does the PSA discuss the potential impacts of night lighting at Project-related construction sites, camps, and parking areas despite the fact that these locations are likely to be nearby to critical habitat for sensitive species like Yuma Ridgway's Rail. This plainly violates CEQA. (14 C.C.R. § 15026.2 (a) [EIRs must consider the whole action]; 20 C.C.R. § 1741(b).) Light pollution has significant impacts on bird species, including by affecting their migration and foraging habits. (*See, e.g.,* Benjamin Van Doren et al., High-intensity urban light installation

dramatically alters nocturnal bird migration, PNAS (Aug. 2017), https://www.pnas.org/doi/epdf/10.1073/pnas.1708574114.) The CEC must meaningfully evaluate the Project's likely light-pollution impacts on sensitive species, particularly with regards to Project-related construction activities, and mandate Conditions of Certification to minimize or avoid any such impacts identified and evaluated.

v. The PSA's Analysis of the Project's Cumulative Species Impacts is Flawed.

The PSA writes off the Project's cumulative impacts on local species as insignificant by stating that the three projects now being proposed by the Applicant will not cause significant cumulative impacts because together they would only cause permanent loss of less than one percent of the County's agricultural foraging habitat. (PSA 5.2-139.) This reasoning misses the mark for several reasons. For one, it ignores the likely possibility that the habitat to be destroyed by the projects being proposed by the Applicant is more valuable for affected species than is agricultural foraging habitat elsewhere in Imperial County. Given the proximity of these projects to the Salton Sea and the Sonny Bono National Wildlife Refuge, it is entirely possible (if not likely) that habitat therein is more valuable to impacted species than like habitat further from those areas. Second, the PSA's reasoning here avoids any meaningful analysis and thereby deviates from CEQA's mandates; California courts have already rejected the PSA's drop-in-the-bucket method of cumulative impacts review. (*See, e.g*., *Communities for a Better Environment v. California Resources Agency* (2002) 103 Cal.App.4th 98, 118 [holding that agency erred by labeling a project's impact as insignificant merely because that impact was a drop in the bucket to an already existing environmental problem].) Especially considering the Lithium Valley Specific Plan, and the habitat-related impacts thereof, it is entirely possible, if not likely, that a non-*de-minimis* amount of agricultural foraging habitat in the County, especially near the Salton Sea, will be converted to industrial uses in the coming years. The CEC must therefore redo its cumulative impacts review regarding species-related impacts to meaningfully account for the cumulative destruction of important habitat in the vicinity around the Salton Sea and Sonny Bono National Wildlife Refuge.

I. The PSA's Review of Impacts on Tribal Cultural Resources Remains Insufficient and Incomplete.

Despite its conclusion that the Project will have significant and unavoidable impacts on Tribal cultural resources, the PSA's discussion of the Project's impacts on Tribal cultural resources remains legally deficient for several reasons. (PSA at 5.4-81.) For one, despite concluding that the Project will have significant and unavoidable impacts on Tribal cultural resources, the PSA does not include a statement of overriding considerations justifying the authorization of the Project. (20 C.C.R. § 1741(b)(1); Pub. Res. Code § 21081(b).) When a public agency has found that a project's significant environmental effects cannot feasibly be mitigated, the agency may nevertheless proceed with the project only if it also finds "that specific overriding economic, legal, social, technological, or other benefits of the project outweigh the significant effects on the environment." (Pub. Res. Code § 21081(b); 20 C.C.R. § 1741(b)(1).) Despite concluding that the Project will have significant and unavoidable impacts on Tribal cultural resources, the PSA does not provide a reasoned statement of overriding considerations justifying that the benefits of the Project nevertheless outweigh its attendant costs. (PSA at 5.4-74.) It therefore violates CEQA and the Warren-Alquist Act. (Pub. Res. Code § 21081(b); 20 C.C.R. § 1741(b)(1).)

Further, one of the Conditions of Certification imposed by the PSA (referred to as TRI-9), though significant, is unlawfully weak. TRI-9 requires the Applicant to work with affected Tribes "to devise a monitoring plan for the three sets of mud pots and volcanoes documented in [the PSA]" and "establish standards for measuring both the pre-project and post-construction behavior of the mud pots and volcanoes." (PSA at 5.4-102.) According to the Condition of Certification, if "negative changes to the functioning of the mud pots and volcanoes" are identified, the Applicant must "*recommend* ways that the operation of the geothermal wells could be altered to benefit the functioning of the mud pots and volcanoes, if feasible." (*Id* [emphasis added].) The AFC process must be conducted "to ensure that the applicant incorporates into the project all measures that can be shown to be feasible, reasonably necessary, and available to substantially lessen or avoid the project's significant adverse environmental effects, and to ensure that any facility which may cause a significant adverse environmental effect is certified only if the benefits of such facility outweigh its unavoidable adverse effects." (20 C.C.R. § 1741(b).) Accordingly, TRI-9 must *mandate* that the Applicant implement any methods that it and the coordinating Tribes deem feasible to lessen the Project's impacts on the mud pots and volcanoes, not just *recommend* them. (*Id*.)

In addition, the CEC will violate CEQA and the Warren-Alquist Act to the extent that it plans to host a public workshop regarding Tribal impacts, mitigation, and participation after the close of this public comment period. It recently announced a plan to host a workshop on September 6, 2024, to this effect. To the extent any new information is disclosed at that workshop, the CEC will be in violation of CEQA and therefore the Warren-Alquist Act. (*Concerned Residents of Carson Comm., Inc.*, 2003 Cal.App.Unpub. LEXIS 2488, at *35.)

J. The PSA's Description of the Project's Benefits to the Surrounding Community Is Inconsistent.

The PSA is inconsistent with regards to the Project's economic benefits on the surrounding community. At one point the PSA states that the Project "will be designed with a high degree of automation to reduce the required actions performed by operating personnel" and that only "[a] small core team of personnel (3-5) can be expected to be on site on a regular basis." (PSA at 3-16.) Yet, without explanation, the PSA elsewhere states that the Project will create sixty-one (61) operations-related jobs. (*Id.* at 7-2.) Without further explanation in the record, it is hard to reconcile these two assertions. Given the implications this Project may have for onsite employees (as discussed *supra*), subsequent analyses must account for this discrepancy and explain the disconnect. (*Concerned Citizens of Costa Mesa, Inc.*, 42 Cal.3d at 938 ["An accurate, stable and finite project description is the sine qua non of an informative and legally sufficient EIR."].)

IV. CONCLUSION

For the aforementioned reasons, CEC staff must amend their analysis of the Project and the mitigation measures required. Until then, the CEC and Applicant will remain in violation of

CEQA and therefore the Warren-Alquist Act. We look forward to discussing these issues with CEC staff and/or the Applicant further.

Respectfully,

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