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STATE OF CALIFORNIA

CALIFORNIA ENERGY COMMISSION

IN THE MATTER OF:	DOCKET NO. 15-AFC-01
APPLICATION FOR CERTIFICATION OF THE PUENTE POWER PROJECT	REPLY BRIEF OF THE CALIFORNIA ENVIRONMENTAL JUSTICE ALLIANCE; OPENING BRIEF RE CAISO STUDY

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The California Environmental Justice Alliance ("CEJA") respectfully submits this combined opening brief regarding the California Independent System Operator ("CAISO") local reliability study reply brief. CEJA intends to submit additional reply briefing related to the CAISO study as ordered by the Committee.

I. INTRODUCTION

The environmental justice communities in Oxnard have carried the burden of the local area's electricity generation needs for generations. Now, the planet demands, and the state requires, that our electricity system cease reliance on fossil fuels, and transition to a resilient, reliable resource mix that does not include combustion and its concomitant greenhouse-gas emissions. These clean energy sources are already benefitting California's more affluent, whiter communities in the form of net metering and opportunities to participate in clean energy programs. The state's low-income communities of color have been left behind the transition. Oxnard is a stark example – it hosts two Once Through Cooling ("OTC") units at Ormond Beach, two additional OTC units at Mandalay Beach, and additional gas-fired units at Mandalay Beach and MacGrath State Beach. No other community in the predominantly white, predominantly affluent Moorpark sub-area hosts this many gas-fired units.

The procurement effort by Southern California Edison ("SCE") that resulted in a contract for the proposed Puente Power Plant, another gas-fired generating unit that would on Oxnard's beach ("P3") could have been filled with noncombustion resources. Indeed, the California Public Utilities Commission ("PUC") specified that the entire local capacity need for the Moorpark Sub-area could be met with renewable resources. SCE's RFO was doomed from the outset, however. As detailed at length in comments on the Preliminary Staff Assessment, the RFO sought resources for both the larger Los Angeles area and the Moorpark sub-area simultaneously; it hampered bids from demand response providers; and it failed specifically to seek preferred resources in Oxnard, or to take into account disproportionate impacts that already exist in Oxnard.

In opening briefs, both NRG and CEC Staff seek to defend the environmental justice analysis staff conducted in the Final Staff Assessment. While the FSA correctly concludes that there are environmental justice communities in proximity to the proposed P3 plant, there is no analysis of disproportionate impacts P3 may have on those communities. The FSA essential reiterates the analysis it would otherwise conduct under the California Environmental Quality Act ("CEQA"), concluding that there are no significant or cumulative impacts from P3, then adding the statement that there are also no disproportionate impacts. This is not an environmental justice analysis, it is a CEQA analysis. Yet adding P3 to the cumulative effects of existing pollution sources would impose additional burdens on an already heavily disadvantaged and vulnerable population. This analysis is not the same as the CEQA cumulative impacts analysis; it must consider whether, in light of existing conditions, the effects of P3 would be disproportionate as compared to impacts suffered by other communities in the Moorpark sub-area.

CAISO's recent local reliability study highlights the fact that this case is purely an environmental justice matter. The study concluded that noncombustion alternatives to P3 are feasible. California is moving away from gas-fired generation, this could, in fact, be the last new gas-fired power plant to be built. Approving the last plant in an environmental justice community, when noncombustion alternatives are feasible.

II. PROJECT DESCRIPTION¹

As CEJA has repeatedly explained, the project description for Puente is not stable throughout the FSA, and indeed it is misleading and prejudicial. Both CBD and Sierra Club point out significant flaws in the project description as well.² Under CEQA, an "accurate, stable and finite" project description is the sine qua non of an environmental impact report ("EIR"). *San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal. App. 4th 645, 655. Despite CEJA's reiterations of the need for a stable project description, staff has not

¹ These flaws were thoroughly explained in CEJA's Comments on Preliminary Staff Assessment (Exhibit 6004), yet they have not been remedied.

² CBD Opening Brief at 29, Sierra Club Opening Brief at 4-7.

acknowledged the flaws in the Preliminary Staff Assessment, corrected the flaws in the Final Staff Assessment, or explained, in its opening brief, why the project – to build and operate P3 – would include decommissioning and demolition of Mandalay Units 1 and 2. Given that NRG initially proposed P3 as a project that did not include demolition, the FSA's inclusion of demolition as a project component is particularly deceptive. While demolition may be a necessary mitigation measure, it cannot be considered an element of the project.

Further, the project objectives are so narrowly drawn that they can only be met by P3. NRG's stated goal of "Fulfill[ing] NRG's obligations under its 20-year Resource Adequacy Purchase Agreement (RAPA) with SCE requiring development of a 262-MW nominal net output of newer, more flexible and efficient natural-gas generation"³ Under CEQA, the applicant's desires for its project do not set the agenda the agency considers.⁴

III. PROJECT IMPACTS

A. The Environmental Justice Analysis Fails to Assess whether P3 would have a Disproportionate Impact on Oxnard's Environmental Justice Communities.

As explained in CEJA's Opening Brief, the PUC and the community are relying on the CEC to conduct a thorough environmental justice analysis, one that compares Oxnard communities to other communities in the Moorpark Sub-area. Staff's Opening Brief correctly summarizes the metrics staff considered to arrive at the FSA conclusion that environmental justice populations exist within six miles of the P3 site.⁵ Yet Staff makes no effort to explain the fact that the FSA failed to evaluate whether there were disproportionate impacts compared to the rest of the Moorpark sub-area; indeed its Opening Brief does not address the evaluation of P3 with respect to the environmental justice communities the FSA identified.⁶

³ Exhibit 2000 (FSA at 1.3.)

⁴ See Kings County Farm Bureau v. City of Hanford (1990) 221 Cal. App. 3d 692, 736-37.

⁵ Staff Opening Brief at 24-27.

⁶ See id.

The FSA failed to determine how Puente's impacts, regardless of their significance level, would disproportionately affect the environmental justice community in Oxnard. In its opening brief, NRG restates the FSA's erroneous conclusion that because P3 will not result in a significant environmental impact, there can be no disproportionate impact and it is therefore not necessary to consider whether an environmental justice community suffers a disproportionate amount of harm from the proposed Project than other non-environmental justice communities would.⁷

All other parties contest the FSA's analysis of environmental justice impacts. The City points out that the "FSA contains no meaningful comparison between Oxnard and non-environmental justice communities to determine whether locating another power plant in Oxnard would disproportionately impact the City's most vulnerable residents."⁸

Directly contesting NRG's contention that P3 has no significant impact, the City examines only P3's significant and unmitigated impacts to confirm significant and disproportionate impacts on the overly-burdened community. Puente's land use implications directly harm Oxnard residents, who would otherwise be protected by Oxnard's local rules regarding coastal development which are intended to defend sensitive species and recreational uses along Oxnard's coast. Additionally, Puente undermines recreational use of Oxnard's beaches, a valued natural resource, "exacerbat[ing] the history of inequitable power plant siting on the City's coast."⁹ The City's witnesses have testified that largescale industrial uses prevent residents' use of the area.¹⁰ CEQA mandates an evaluation of project's impact on recreational opportunities.¹¹ Finally, inconsistencies in the FSA suggest the Project will produce significant air quality impacts that not been mitigated.¹²

NRG offers the contention that "the Project will not pose a significant public health risk during construction or operation, [by] citing the example of an individual on MGS

⁷ NRG Opening Brief at 88.

⁸ City Opening Brief at 60.

⁹ *Id.* at 61-62.

¹⁰ Id. (citing Mayor Pro Tem Carmen Ramirez and the City's Development Services Director.)

¹¹ *Id.* at 61.

¹² *Id.* at 62.

property's eastern boundary for 70 years not being exposed to a single health risk." NRG states that Intervenors lack evidentiary support that children and agricultural workers located in close proximity to the Project will be exposed to air pollutants that result in damage to their health.¹³ To the contrary, the record shows that agricultural workers will be working in extremely close proximity to P3, and children will attend school, potentially work in the fields adjacent to P3, and potentially recreate near P3. The record shows that they are already suffering among the highest pesticide exposure rates in the state. The record shows that the staff's assessment of health risk did not include information on pesticide exposures, because staff assumed occupational safety and Department of Pesticide Regulation requirements would address pesticide exposure.¹⁴

Intervenors CBD and Sierra Club argue that the FSA fails to adequately analyze the Project's impact on environmental justice communities; a proper analysis would require Staff to assess disparate impacts regardless of whether impacts were separately found significant and immitigable.¹⁵ Staff "did not properly assess the disproportionate impact to communities in this area that will be affected by the proposed project in comparison to impacts to other communities where a project could be proposed to meet the same identified 'need."¹⁶

B. Air Quality Impacts Are Not Defined or Mitigated

1. Sierra Club, CBD and the City demonstrate that the Project will create significant air quality impacts that the FSA fails to address or mitigate.

NRG defends the FSA's air quality conclusions, contending that after mitigation, there would be no significant air quality impacts from P3.¹⁷ This conclusion is factually incorrect.

¹³ NRG Opening Brief at 89.

¹⁴ Evidentiary Hearing Transcript 2/7/17 at 106 (explaining that CalEnviroScreen ranks based on quantities of pesticide used per census tract) and 117 (explaining that staff believed the Department of Pesticide Regulation regulated pesticide use to control background pesticide levels, but had not reviewed any exposure data, only CalEnviroScreen.)

¹⁵ Sierra Club Opening Brief at 33.

¹⁶ CBD Opening Brief at 48.

¹⁷ NRG Opening Brief at 12.

As Sierra Club, the City, and CBD all point out, the FSA assumes a capacity factor of 11% for mitigation purposes. By contrast, P3 has a permitted capacity factor of 24.5%.¹⁸ Sierra Club translates the discrepancy into hours. Puente will be permitted to operate 2,150 hours per year, as stated in the Project Description. Additionally, the Sierra Club notes that the Project is categorized as a non-baseload plant under 40 C.F.R. 60 Subpart TTTT due to the maximum operation of 2,150 hours per year. Outside of the air quality sections of the FSA, Project's water use impacts are based on a 30 percent capacity factor, or 2,150 hours per year. However, the FSA calculates air quality mitigation as if Puente will only be permitted to operate 964 hours per year.¹⁹

NRG suggests that mitigating the impacts of the project's permitted capacity would be misleading and would "substantially overestimate the Project emissions that will actually occur."²⁰ The record, indeed the FSA itself, contradict the premise that P3 would only operate at an 11% capacity factor. While the FSA maintains that the 11% capacity rate would allow the "same amount of energy from Puente as MSG Units 1 and 2 historically produced," (FSA at 4.1-83.), as correctly explained by CBD, other statements in the FSA indicate that Puente will run substantially more than Mandalay 1 and 2.²¹

NRG cites no legal support for the proposition that mitigation would only be required for a portion of a project's permitted impacts. In fact, the law requires mitigation for the entire permitted impact.²² The difference is significant. Sierra Club explains that to mitigate adequately the reasonably foreseeable emissions, 11 tons of particulate matter should be addressed instead of 5, 5.9 tons of sulfuric oxide emissions instead of 1, and 33 tons of oxides of nitrogen emissions instead of 19.²³

In conclusion, the FSA only requires half the mitigation necessary for the Project, even though Staff expert concedes additional mitigation is **not** infeasible.²⁴ CEJA adopts the City

¹⁸ Oxnard Opening Brief at 63, CBD Opening Brief at 39, Sierra Club Opening Brief at 28.

¹⁹ Sierra Club Opening Brief at 28.

²⁰ NRG Opening Brief at 13.

²¹ CBD Opening Brief at 42.

²² San Joaquin Raptor v. County of Merced (2007) 149 Cal.App.4th 645, 660.

²³ Sierra Club Opening Brief at 28.

²⁴ Evidentiary Hearing Transcript 2/7/17 at 119.

of Oxnard's position that the Commission should impose a condition of certification limiting operations to 11% capacity factor if that is in fact the Applicant's intention.²⁵

2. Emission reduction credits offered to address NOx emission impacts do not mitigate those impacts.

In response to objections over the P3's use of ERCs "for CEQA mitigation", NRG states offsets are specifically allowed by VCAPCD rules, and that all ERCs will be generated locally within the VCAPCD as required by the FSA.²⁶ As CEJA explained at length in its comments PSA comments, the NOx credits offered by SCE do not mitigate impacts on Oxnard's environmental justice communities. Indeed use of those ERCs would highly and exacerbate environmental injustice.

First, by their nature ERCs are reductions that occurred in the past. The entire region has breathed cleaner air due to their reductions since the early 1990s. NRG touts that "'the emission offset program was designed to encourage such early reductions' because 'early reductions in emissions are always preferable."²⁷ The federal and state clean air protection laws do seek to provide incentives to ensure that polluters cease or reduce emissions in advance of being required. This is a different question from whether CEQA's mitigation mandate for new impacts should be met with 25 year old emission reductions. Generally, CEQA mitigation is projects that occur after the project is constructed, and are designed to address the specific impacts caused by the project.

Second, these particular ERCs originate from electrification of natural-gas powered equipment throughout the region. The community in Oxnard will be responsible for generating the electricity to power the electrified equipment, which is located throughout the region, not in Oxnard, let alone the specific communities affected by P3.²⁸ The question is not whether the Ventura County Air Pollution Control District could allow NRG to mitigate

²⁵ City Opening Brief at 64.

²⁶ NRG Opening Brief at 13.

²⁷ NRG 13 (Applicant's Rebuttal Test. – Rubenstein Powers Rebuttal Decl. at 10.

²⁸ As explained in Exhibit 6004 at 13.

its air impacts using these ERCs, it is whether the CEC, as the lead agency under CEQA, will require NRG to take affirmative steps prospectively to reduce emissions in the communities where P3 would emit NOx. These measures could include new protections for farm workers, students and residents within a six mile radius to address NOx-emitting equipment (including but not limited to farm equipment, off-road vehicles, and oil-extraction equipment) and pesticide application.²⁹ They could also include free health services specifically sought by the affected community to provide access to care and medicine to Oxnard's environmental justice communities. ERCs representing historic reductions that occurred "throughout the VCAPCD" do not actually mitigate any of the impacts of P3's NOx emissions.

3. The FSA's analysis of GHG emissions fails to assess climate change impacts of the project and is unsupported by substantial evidence.

CEJA agrees with and incorporates CBD's comments regarding the FSA's greenhouse gas emissions analysis. CBD correctly observes that the FSA "concludes that Puente's GHG emissions will not be significant because—according to a chain of assumptions unsupported by any specific evidence or analysis—the facility is expected to reduce overall "system" emissions."³⁰ In fact, staff's expert explained that the FSA assumed the GHG difference would be the system with P3, compared to the system without P3, he conceded that "it would be fair to state that we never calculated the difference in system-wide emissions from the system that did not include the project, and a system that did include the project."³¹

CEJA is a party to the PUC proceeding developing Integrated Resource Plans, and has been actively engaged in the PUC's system modeling efforts, called the Modeling Advisor Group, which has met regularly over the last year.³² The PUC's modeling seeks, *inter alia*, to

²⁹ Pesticide application can release VOCs, which react with NOx to contribute to ground-level ozone formation, or smog.

³⁰ CBD Opening Brief at 24. See FSA at 4.1-165.

³¹ Evidentiary Hearing Transcript 2/7/17 at 121.

³² R.16-02-007 Order Instituting Rulemaking to Develop an Electricity Integrated Resource Planning Framework and to Coordinate and Refine Long-Term Procurement Planning Requirements.

assess the GHG impacts of long-term procurement decisions in the electricity sector. The analysis is extremely complex, involving at least three different models and numerous sensitivities seeking to answer exactly the question the FSA blithely assumes: what would be the system effect of adding a particular type of resource. The only clear answer is that, on a systemwide basis, it is not adequate to assume that replacing two (or even four) inefficient units that run at 3-5% capacity factor with a simple cycle gas-fired unit that is permitted to run at 24.5% (or 30%, depending on which permit) capacity factor would reduce systemwide GHG emissions. In fact, as the CAISO retirement study recently concluded, gas-fired generation within transmission constrained load pockets like the Moorpark Sub-area are likely to lead to retirement of gas-fired generation outside these load pockets. This is likely even when the non-LCR resources are more efficient, with lower GHG emissions. NRG's witness acknowledges that displacement will occur, and that P3 is likely to serve not only LCR need but Resource Adequacy need.³³ While displacement of existing gas-fired resources by non-combustion resources should result in the simplistic benefit the FSA posits, the same is not true for the simple-cycle P3 facility, whose high Pmin and operational design are just as likely to displace combined cycle and more efficient units.

In sum, the record does not support a conclusion the P3 would reduce systemwide GHG emissions. Indeed the facts in this record suggest P3 is more likely to increase system GHG emissions than to reduce them, hamstringing California's efforts to meet its vital climate change targets at the critical moment in global history when system-wide behavior change can still make a difference.

C. P3 Presents Significant Impacts to Local Land Uses

As explained in CEJA's Opening Brief, the Oxnard communities need their beaches – they are park poor and lack recreational facilities for youth and for the public at large. NRG argues that P3 would augment recreational uses of the beach at Mandalay.³⁴ The only way to arrive at such a conclusion is to mis-define the project baseline and the project description,

³³ Evidentiary Hearing Transcript 9/14/17 at 228.

³⁴ NRG Opening Brief at 77.

as the FSA does. The project would add a new gas-fired generating unit to a beach when the City of Oxnard has specifically amended its land use rules to keep new power plants off the beaches. The project would convert a beach that would have only one unit that operates very rarely and is likely to retire (Mandalay unit 3) into a beach that has two units, one of which may be operating at 24.5% capacity factor for the next decades, even after Mandalay unit 3 retires. A decade from now, will Oxnard's environmental justice communities have a beach with no gas-fired power plants operating, or will they have emissions coming out of the stack of the P3 simple-cycle gas-fired power plant?

IV. ALTERNATIVES

A. The FSA Conclusory Statements regarding Feasibility of a Preferred Resources Alternative Must be Rejected.

NRG seeks to defend the FSA alternatives analysis contending that staff made an evaluation that would support a conclusion that preferred resources are not available and therefore could not constitute a feasible alternative.³⁵ Under CEQA, there can be "no approval or adoption of a proposed activity 'if there are feasible alternatives or feasible mitigation measures available that would substantially lessen a significant adverse [environmental] effect' (§ 21080.5, subd. (d)(2)(A))...."³⁶ It is the responsibility of the CEC, as lead agency, to conduct a thorough alternatives analysis.

NRG's position is incorrect, and indeed CEC staff did not offer their expert witness to defend the analysis of preferred resources in light of the more CAISO recent analysis.³⁷ The FSA discusses whether a Preferred Resources Alternative should be considered. After reviewing the operational attributes of energy efficiency, demand response, energy storage, utility scale and distributed renewable generation, it concludes that because the PUC approved the NRG/SCE contract for P3, preferred resources were not an option. The FSA concludes that the PUC "effectively found that preferred resources beyond those procured

³⁵ NRG Opening Brief at 103.

³⁶ Strother v. California Coastal Com'n (2009) 173 Cal.App.4th 873, 878.

³⁷ Committee Conference Hearing Transcript 9/12/17 at 53-54.

by SCE in response to its RFO could not feasibly and reliably be counted on to costeffectively meet local reliability needs."³⁸ This is factually inaccurate. The PUC concluded that the RFO complied with its procurement authorization and with the procurement plan approved by the PUC's Energy Division. It made no finding concerning whether preferred resources could be feasible or reliable.³⁹ As a matter of law, the CEC may not simply rely on a PUC decision approving a contract for one project to conclude alternatives to the project are not feasible. Regardless of whether the PUC reached a conclusion based on its record that preferred resources could not constitute an alternative, the CEC has an independent duty to review the facts and evaluate a Preferred Resources Alternative. The CEC must consider all feasible alternatives to P3.

As an initial matter, the FSA section discussing Preferred Resources Alternatives (FSA 4.2-9 to 4.2-15) has been superseded by facts established in the record and, in particular, the CAISO study. The CEC cannot rely on the FSA alternatives analysis, which essentially concluded that the PUC had made the decision that preferred resources in the Moorpark Sub-area could not meet the local need. While this conclusion was already ill-founded, given that, unlike the detailed instructions the PUC provided regarding categories of resource procurement for SCE's LA Basin procurement, the PUC simply instructed that SCE procure "between 215 and 290 Megawatts of electric capacity to meet local capacity requirements in the Moorpark sub-area of the Big Creek/Ventura local reliability area by 2021."⁴⁰ After extensive briefing and evidentiary hearings regarding whether to require specific levels and sequencing of procurement efforts, the PUC ordered SCE to conduct an RFO that was open to all sources. Indeed, SCE's procurement effort was prohibited from including any "… provisions specifically or implicitly excluding any resource from the bidding process should have no provisions specifically or implicitly excluding any

³⁸ FSA at 4.2-14-15.

³⁹ See generally D.13-02-015.

⁴⁰ D. 13-02-015, Ordering paragraph 2, p.131

⁴¹ D. 13-02-015, p.91.

resource from the bidding process due to technology, except for specific requirements in this decision for the LA basin local area."⁴²

1. The CAISO Study Establishes that a Noncombustion Alternative is Technically Feasible.

At the CEC's request, In August 2017 CAISO conducted a local capacity alternative study for the Moorpark Sub-area.⁴³ CAISO began with conservative assumptions regarding the resources that would be available, consulting with SCE to build the base case it carried through each of its three scenarios.⁴⁴ The CAISO study "quantifies the amount of preferred resources, energy storage, and/or reactive power devices that would be necessary to meet LCR in the Moorpark sub-area."⁴⁵

The three scenarios were:

• Scenario 1 – 125 MW of energy storage resources with a nine hour continuous discharge duration would be necessary to satisfy local capacity requirements consistent with the local capacity technical study criteria.

• Scenario 2 – No addition of generation-type resources beyond the conservative base assumptions, but adding a 240 Mvar reactive power device to satisfy local capacity requirements consistent with local capacity technical study criteria.

• Scenario 3 – Assumes the 54 MW Ellwood Generating Facility is retired, so 240 MW of energy storage resources would be necessary to satisfy local capacity requirements consistent with the local capacity technical study criteria. 115 MW of this energy storage capacity would need a five hour continuous discharge duration, 65 MW would need a nine hour continuous discharge duration, and 60 MW would need a ten hour continuous discharge duration.⁴⁶

All three scenarios involved existing technologies, and all three scenarios would meet

CAISO's stringent standards for local reliability. None of the scenarios involved addition of

⁴² D. 13-02-015, Conclusion of Law 4, p.119.

⁴³ Exhibit 9000.

⁴⁴ *Id.* at 2; Evidentiary Hearing Transcript 9/14/17 at e.g. 36 (regarding Energy Efficiency assumptions.)

⁴⁵ Exhibit 9000 at 1.

⁴⁶ *Id.* at 2.

combustion resources. As CAISO summarized, "The analysis conducted was based on reasonable and admittedly conservative overall assumptions, and demonstrated the viability of the preferred resource alternatives."⁴⁷

2. While Actual Costs and Bid Response Cannot be Determined without a Procurement Effort, the Record Supports a Conclusion that a Noncombustion Alternative is Financially and Logistically Feasible to Meet the Moorpark Subarea Need.

CAISO was not asked to include a cost estimate in its study, yet without any discussion or input from parties, it assigned costs to the generic resources in the study. Its motivation in including cost information was to satisfy an internal concern that the alternatives be within the range of feasible pricing. CAISO concluded that all three scenarios were economically feasible as well as being technologically feasible, and so did not seek additional price information. As CAISO expert testified "The important part for us here was to get our foot against some level of cost understanding to see if the costs were such that we honestly couldn't accept the alternatives as being feasible. When we saw that the costs did not, in our view, render the alternatives infeasible, we stopped."⁴⁸

While CAISO concluded that the costs of the three scenarios were feasible, the record is replete with information showing CAISO's rough estimates were wildly inflated. For example, CAISO relied on cost information from 2014, when prices have plummeted in the years since 2014.⁴⁹ Further, CAISO included the entire cost of the resources in its assumptions. Yet CAISO admitted that the relevant costs would be costs to ratepayers, not the entire capital cost of the resource.⁵⁰ CAISO stated that the way to establish actual costs would be for SCE to conduct an RFO.

⁴⁷ Evidentiary Hearing Transcript 9/14/17 at 17.

⁴⁸ Evidentiary Hearing Transcript 9/14/17 at 76.

⁴⁹ *Id.* at at 182-183.

⁵⁰ *Id.* at 46.

The record supports a conclusion that a noncombustion alternative would not rise to the magnitude of costs assumed in the CAISO study. For example, both Tesla and Stem, two providers of noncombustion resources, provided testimony that the costs assumed were significantly different from what an RFO would result in. Especially for battery storage, providers can offer different value streams. The bid they would provide in an RFO would not reflect the entire cost of the resource, unless SCE were seeking all of the attributes Tesla or Stem could provide. For example, a provider could address customer demand charges in addition to providing SCE with LCR services; SCE would contract for the LCR services, not for the demand charges benefit.⁵¹

A noncombustion alternative is also feasible with respect to timing of the need. The need P3 proposes to meet will arise when the four OTC units in Oxnard retire. Retirement is scheduled for 2020. SCE has conducted effective RFOs for preferred resources in less than three years. To respond to unanticipated retirement of San Onofre Nuclear Generating Station, it conducted a targeted Preferred Resources Pilot; to address gas shortage due to catastrophic leakage at Aliso Canyon, it procured preferred resources in very short order through its ACES procurement. Further, the record shows that providers such as Tesla and Stem are interested and would intend to participate in an RFO for the Moorpark sub-area.

Finally, if it became clear that SCE's RFO were not going to result in adequate resources to address the LCR need, not all four OTC units would retire. CAISO has authority and responsibility to keep resources online when retirement may impact reliability.⁵² A committee o agencies also reviews and periodically extends OTC retirement deadlines. This is not an extreme event; indeed the Encina retirement was extended by a year to address a delay in online date for its replacement capacity.⁵³

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⁵¹ *Id.* at 184.

⁵² *Id.* at 72.

⁵³ *Id.* at 35.

B. A Noncombustion Alternative is Feasible, Would Meet the Project Objectives, and Would Address Significant Impacts.

A Preferred Resources Alternative, relying on noncombustion technologies, is not only feasible, it meets the project objectives as well as satisfying many of the City's, State's and agency goals regarding environmental justice, land use, greenhouse gases.

Regarding potential for local distributed renewable generation, CEJA agrees with the information provided by CBD and the City establishing availability of various resource mixes. The fact that SCE conducted its RFO simultaneously with its significantly larger LA Basin RFO, which had a minimum mandate for preferred resources, resulted in poor responses to the Moorpark RFO. Further, SCE failed to conduct a targeted solicitation to secure renewable resources in the Moorpark Subarea's disadvantaged communities. It is undisputed in the PUC's record that SCE did not, in either its solicitation or procurement efforts, express any preference for renewables in Oxnard, or at any location other than Goleta—an area that has not been recognized as having environmental justice communities. Specifically, SCE witness Bryson testified that Edison emphasized the procurement of preferred resources at its bidder conference, but never emphasized the need for preferred resources in Oxnard. He testified that SCE "emphasized [the] ... desire for preferred resources in the Moorpark area and then more specifically a preference for resources in Goleta."54 He unequivocally testified that "Edison never communicated a need or preference for preferred resources to benefit Oxnard particularly."55 SCE witness Singh acknowledged that SCE gave "qualitative preference" to renewables in general, but never considered a qualitative advantage to renewable projects in disadvantaged communities like Oxnard.⁵⁶

In addition, numerous behind the meter projects that were conceived and funded after conclusion of the PUC's local area need finding are likely to be installed prior to 2021. For example, the Multifamily Affordable Housing Solar Rooftops bill, AB 693,⁵⁷ provides

⁵⁴ PUC Evidentiary Hearing Transcript, vol. 1 (redacted) p. 151.

⁵⁵ Id.

⁵⁶ *Id.* at 40.

⁵⁷ Cal. Pub. Util. Code 2870 et seq.

significant funding to install rooftop solar on multifamily affordable housing. Many qualifying buildings exist in and around Oxnard. While the PUC is currently establishing implementation parameters, the program is due to launch in 2017. Parties to the AB 693 proceeding contend that, in order to maximize benefits of the program, solar installations should be paired with storage, to shift load, assisting with the flexibility function identified as a need in the local area.

The record establishes that far more robust procurement of demand response, a preferred resource correctly identified in the FSA as having many of the attributes necessary for the local need, would likely be available were the CEC to consider a noncombustion alternative. As presented by EnerNOC to the PUC, demand response providers who bid into the SCE RFO were unable to participate because CAISO set rules excluding every single project. Were a new RFO issued, which set out the actually requirements in advance, DR providers would be more likely participate.⁵⁸ Further, the CAISO study presumes that significant slow response demand response resources could be enabled by pairing them with shorter-duration battery storage.

Energy storage, for which the PUC has set specific IOU procurement targets, provides significantly more benefits than previously documented. As with renewable energy resources, SCE's application for approval does not reflect the likely results of a renewed procurement effort, and is certainly not reflective either of the capabilities storage offers to meet the local area need or of the actual availability of feasible resources. The sole contract for storage that SCE presented for the Moorpark Subarea was tied to a non-incremental gas-fired generation project.⁵⁹

The CAISO study specifically considered, and found feasible, noncombustion technology to provide the type of "ancillary" services in the quantities needed in the subarea. Indeed the variety of technologies to provide reactive support includes batteries as well

⁵⁸ See Comments of the Center for Biological Diversity, filed in docket 15-AFC-01 September 12, 2016 at TN # 213621, Attachment PE-25 EnerNOC Response to Application, pdf p. 194.

⁵⁹ D. 16-05-050, p. 39 ("All contracts presented by Southern California Edison Company are accepted and approved, with the exception of 447021 (Ellwood) and 447030 (Energy Storage). These contracts will be considered in a subsequent decision in this docket.")

as synchronous condensers of various types. One study documented storage use for grid services such as black start capability, spinning / non-spinning reserves, energy arbitrage and frequency regulations.⁶⁰ In addition to documented current uses of storage, storage offers numerous under-utilized opportunities to address existing flaws in the electricity system. For example, behind-the-meter storage can provide benefits to the grid, address the duck curve and allow customers to control utility bills as Time of Use rates come into effect.⁶¹ The Multifamily Affordable Housing Solar Roofs program may provide specific, funded opportunities in the Moorpark subarea to deploy customer-sited storage in tandem with rooftop solar, to provide precisely these services.

Another, more recent, study connects California peaker plants, air pollution and the ability of storage to provide significant air quality benefits by reducing use of peakers.⁶² The California peaker study observed that "84% of the 64 peaker plants mapped are in locations that have higher than average EJ scores (i.e., are located in more disadvantaged communities). Over half of the plants are located in communities with the top 30% of EJ scores."⁶³ As described above, the P3 plant would add another peaker to the environmental justice community in Oxnard, which already hosts, and will continue to host, Mandalay Unit 3 and MacGrath Peaker. While air districts regulate on a basinwide basis, the air quality impacts of peakers operation are more concentrated in the community in near proximity to them. As described above, CEJA objects to use of ERCs as a mitigation measure. Krieger et al. concur that offsetting local emissions from peakers is not the best approach:

Siting of large powerplants in California requires an assessment of EJ measures, including minority concentration within a six-mile radius, but if sufficient pollutant offsets are purchased then the environmental impact is considered negligible. Instead

⁶⁰ THE ECONOMICS OF BATTERY ENERGY STORAGE, Fitzgerald et al., Rocky Mountain Institute (Oct. 2015) (available at http://www.rmi.org/Content/Files/RMI-TheEconomicsOfBatteryEnergyStorage-FullReport-FINAL.pdf) pp. 5, 15.

⁶¹ *Id.* at p. 16

⁶² A FRAMEWORK FOR SITING AND DISPATCH OF EMERGING ENERGY RESOURCES TO REALIZE ENVIRONMENTAL AND HEALTH BENEFITS: CASE STUDY ON PEAKER POWER PLANT DISPLACEMENT, Krieger et al., Energy Policy 96 (2016) 302– 313.

⁶³ *Id.* at 308.

of simply limiting emissions in a specific air basin, we suggest siting cleaner energy resources to actively displace emissions in areas with poor air quality, and especially near high populations densities and populations that are disproportionately exposed to poor air quality and other environmental and socio- economic stressors.⁶⁴

Storage, paired with other preferred resources in a comprehensive Preferred Resource Alternative, would avoid many of the project impacts.

V. LORS/Override -

A. Puente conflicts with applicable state and federal law.

CEJA agrees with and incorporates herein arguments of the City, Sierra Club and CBD with regard to conflicts between P3 and LORS. As the City explains, CEQA compels agencies to evaluate a project's consistency with all applicable local land use laws, including general plans and ordinances.⁶⁵ On the question of whether a project is consistent, CEC staff must give due deference to the evaluation of the agency that administers the particular LORS.⁶⁶

Because the proposed project would be located within the City's coastal zone, Puente must comply with both the City's General Plan and its certified Local Coastal Program.⁶⁷ This is black-letter law, as well as the evaluation of the City, which administers the General Plan and the Local Coastal Program.

In the FSA, CEC staff fails to give any deference at all to the City's evaluation of its own land use regulations. Although owing deference to the City of Oxnard's findings on whether a project is inconsistent with local land use laws, regulations, and standards, CEC staff erroneously concludes that Puente is consistent with all applicable LORS.⁶⁸

CEJA agrees with the City that P3 conflicts with the City's General Plan Amendments. Both CEC staff and NRG concede that P3 conflicts with General Policy SH-3.5, which was

⁶⁴ *Id.* at 306.

⁶⁵ City Opening Brief at 4.

⁶⁶ Cal. Code Regs., tit. 20 § 1714.5(b).

⁶⁷ City Opening Brief at 4.

⁶⁸ City Opening Brief at 4, see Staff Opening Brief at 1-6, NRG Opening Brief at 108.

added to the General Plan to address the City's priority that large power plans not be located in places vulnerable to environmental hazards. General Policy SH-3.5 restricts development of "new electricity generating facilities of 50 megawatts or more" in "areas where the City has documented that the location of such facilities is threatened by seismic hazards, wildfire, flooding, or coastal hazards."⁶⁹

CEJA adopts the arguments that the FSA failed to acknowledge and resolve serious conflicts with applicable LORs, including:

- o Conflict with General Plan Policy SH-3.5
- o Conflict with General Plan Policy ICS-17.1
- o Conflict with Coastal Land Use Policy Plan 52
- o Failure to conform with the CZO Coastal Energy Facilities Sub-Zone
- Failure to protect wetlands as required by CLUP 6

Staff failure to give due deference to City evaluation that P3 conflicts with the LORS renders the FSA inadequate under both CEQA and the Warren Alquist Act. The CEC must not approve the P3 project unless it can overcome the significant hurdle of make findings of public necessity and convenience as well as that no prudent and feasible means of meeting the need exist.

In addition to the local land use LORS, the project conflicts with state federal laws, including:

- o California Coastal Act
- o Coastal Act Policies Protecting Wetlands and ESHA
- The Fish and Game Code
- The Endangered Species Act
- o the Migratory Bird Treaty Act

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⁶⁹ City Opening Brief at 6-7.

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B. The CEC fails to make the findings required to override inconsistencies with the City's land use policies.

1. CEJA joins the City of Oxnard, CBD, and the Sierra Club in finding that public convenience and necessity do not require the project.

To override LORS, the CEC must find both "that the facility is required for public convenience and necessity," and that "there are not more prudent and feasible means of achieving public convenience and necessity." Puente fails to meet either of these standards. The reliability benefits offered by the project are minimal compared to the destruction of sensitive habitat and imposes air quality and recreational impacts on Oxnard's EJ community. It moves away from meeting California's RPS and will be one of state's least efficient plant the moment it begins operating.⁷⁰

2. There are more prudent and feasible means of achieving the identified need.

In light of the CAISO study showing feasibility of noncombustion alternatives, there can be no dispute that more prudent and feasible alternatives exist to meet the need that P3. P3 would be a single large turbine with potentially three times the needed capacity in an environmental hazard area, susceptible to a contingency event. There a flood risks and significant vulnerabilities presented by P3 that a noncombustion alternative would not have.⁷¹

V. CONCLUSION

The CEC has obligations under state law and its own rules to consider environmental and environmental justice impacts P3 may have in comparison to impacts incurred by other communities in the Moorpark Sub-area. The CAISO study brings into stark relief the environmental justice implications of the P3 decision. Alternatives exist that would meet the

⁷⁰ City Opening Brief at 33-36.

⁷¹ Id.

need and not impose yet another gas-fired power plant on an environmental justice community.

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Respectfully Submitted,

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