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STATE OF CALIFORNIA

Energy Resources Conservation
And Development Commission

In the Matter of:	Docket No. 08-AFC-1
Application for Certification For the Avenal Energy Project	August 24, 2009

Energy Commission Staff's Reply Brief

On August 12, 2009, the parties to this proceeding filed opening briefs addressing issues raised at the evidentiary hearing, held July 7, 2009. Many of the issues raised in the opening briefs of Center on Race, Poverty and the Environment (CRPE) and Rob Simpson are already addressed in Energy Commission staff's opening brief. In this brief we respond to any new arguments not previously addressed or more fully address arguments just briefly touched upon in staff's opening brief.

I. Standard of Review

Before getting into the substance of intervenors' arguments, it is important to consider what CEQA requires of an environmental analysis and the basis on which the Energy Commission may reach a decision in this proceeding. Analysis of a proposed project need not be exhaustive. "Technical perfection is not required; the courts have looked not for an exhaustive analysis but for adequacy, completeness and a good-faith effort at full disclosure … The absence of information from the EIR does not per se constitute a prejudicial abuse of discretion. A prejudicial abuse of discretion occurs 'if the failure to include relevant information precludes informed decisionmaking and informed public participation, thereby thwarting the statutory goals of the EIR process." (*Berkeley Keep Jets Over the Bay Comm. v. Board of Port Commissioners* (2001) 91 Cal.App.4th 1344, 1355-1356.)

Thus, the analysis of Avenal Energy's impacts need not describe in detail every minute aspect of the project; it need only contain "sufficient information about [the] proposed project, the site and

surrounding area and the projected environmental impacts arising as a result of the proposed project or activity to allow for an informed decision." (*Berkeley Keep Jets Over the Bay Comm. v. Board of Port Commissioners* (2001) 91 Cal.App.4th 1344, 1355-1356.)

The Energy Commission's determination regarding the environmental impacts of Avenal Energy must be based on substantial evidence. (*Berkeley Keep Jets Over the Bay Comm. v. Board of Port Commissioners* (2001) 91 Cal.App.4th 1344, 1355-1356.)

Substantial evidence is "enough relevant information and reasonable inferences from this information that a fair argument can be made to support a conclusion, even though other conclusions might also be reached." (Cal. Code Regs., tit. 14, § 15384(a); *Gray v. County of Madera*, 167 Cal.App.4th 1099, 1109.) "Argument, speculation, unsubstantiated opinion or narrative … shall not constitute substantial evidence." (Cal. Code Regs., tit. 14, §15064(f)(5).) Therefore, intervenors cannot simply argue that staff's analysis was flawed and leave it at that; they must support their claims with citation to the evidentiary record. As discussed below, intervenors' arguments are not supported by substantial evidence.

II. There is Substantial Evidence in the Record to Support the Conclusion that, with the Proposed Conditions of Certification, Avenal Energy's Air Quality Impacts have been Reduced to Less than Significant.

Intervenor CRPE makes several assertions that staff failed to adequately analyze Avenal Energy's air quality impacts. (CRPE Opening Brief, pp. 6-13.) In discussing staff's analysis of air quality impacts it is helpful to understand the coordination that occurs between staff and the air district for such analysis, as well as the direction provided by CEQA guidelines as to how the analysis should occur. As directed by statute and regulation, staff works closely with the responsible air district to analyze a project's compliance with air quality laws, ordinances, regulations and standards (LORS) and its potential significant adverse impacts to air quality. (See Pub. Resources Code §25519(h), §25523(d); Cal. Code Regs., tit. 20, §§1744, §1744.5, §1752.3.) The guidelines are clear that "the significance criteria established by the applicable air quality management or air pollution control district may be relied upon" to make the necessary determinations regarding a project's potential for a significant adverse air quality impact." (CEQA Guidelines, Cal. Code Regs., tit. 14, Appendix G.) Staff's conclusion that Avenal Energy

will comply with all applicable air quality laws, ordinances, regulations, and standards (LORS) is supported by the air district's Final Determination of Compliance (FDOC). Staff's analysis describes the significance criteria used in conjunction with the LORS analysis to support the conclusion that the project would not result in any unmitigated significant adverse impacts to air quality. (Exh. 200, pp. 4.1-20 to 4.1-21.)

A. Staff has Described in Detail the Potential Health Effects of Criteria Pollutant Emissions, and there is Substantial Evidence in the Record to Support Staff's Conclusion that Such Impacts have been Mitigated

CRPE claims that staff failed to identify the impact the project's emissions would have on nearby communities. (CRPE Opening Brief, p. 6-7.) This claim is unsupported by the record. Staff explicitly discusses the potential health impacts resulting from exposure to each of the criteria pollutants analyzed. (Exh. 200, pp. 4.7-15 to 4.7-20.) Staff clearly identified their threshold of significance: "all emissions of nonattainment criteria pollutants and their precursors (NOx, VOC, CO, PM10, PM2.5, and SOX) are considered significant and must be mitigated." (Exh. 200, p. 4.1-20.) Staff also explained the basis for this threshold: the ambient air quality standards from which a district's attainment/non-attainment status is determined are health-based standards established by the Air Resources Board (ARB) and U.S. Environmental Protection Agency (U.S. EPA) and "are set at levels that contain a margin of safety to adequately protect the health of all people, including those most sensitive to adverse air quality impacts such as the elderly, persons with existing illnesses, children, and infants." (Exh. 200, p. 4.1-21.) Staff then explained the modeling that was performed to determine what the project's impacts will be and explained the types of emission reductions that will offset and mitigate the impacts. (Ex. 200, pp. 4.1-21 to 4.1-23, 4.1-28 to 4.1-31.)

CRPE relies on two cases as support for its argument that staff must describe what health effects are possible if project emissions are allowed to violate the ambient air quality standards (AAQS). (CRPE Opening Brief, p. 7.) The first case, *Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1184, however, involved several environmental impact reports that found air quality impacts significant and unavoidable. (*Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1184, 1219-1220.) The case does not

address the situation where all impacts have been mitigated and does not hold that, where impacts have been mitigated, environmental documents must describe the impacts that could have resulted if no mitigation were required. The second case, *Berkeley Keep Jets Over the Bay v. Board of Port Commissioners* (2001) 91 Cal.App.4th 1344, involved a situation where the reviewing agency simply threw up its hands and concluded that the health impacts are unknowable, even though there was evidence in the record that a health risk assessment was feasible. And again, this case involved a finding of a significant unmitigable impact. (*Id*. at 1371.) Unlike the agencies in these two cases, staff has fully discussed the potential public health impacts that could result from the emission of criteria pollutants if those pollutants are not offset. (Exh. 200, pp. 4.7-15 to 4.7-20.)

CRPE also argues that staff cannot rely on the regulatory framework currently in place to address air quality. (CRPE Opening Brief, p. 7.) Despite CRPE's contentions CEQA allows a reviewing agency to rely on a health-based standard established by state and federal agencies in determining whether a project will result in a significant adverse environmental impact. (Cal. Code Regs., tit. 14, §15064(h)(3) ["A lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project will comply with the requirements in a previously approved plan or mitigation program which provides specific requirements that will avoid or substantially lessen the cumulative problem (e.g. water quality control plan, **air quality plan**, integrated waste management plan) within the geographic area in which the project is located."][emphasis added]; *Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal.App.4th 1099, 1107 ["a lead agency's use of existing environmental standards in determining the significance of a project's environmental impacts is an effective means of promoting consistency in significance determinations and integrating CEQA environmental review activities with other environmental program planning and resolution."].)

Staff, however, does not simply defer to the project's compliance with air district requirements. The Final Staff Assessment goes into great detail about what criteria pollutants are, the quantity Avenal Energy is projected to emit, and how it will mitigate for these emissions, and describes

the framework of planning and regulations developed by the California Air Resource Board and the U.S. Environmental Protection Agency to control air pollution.

B. There is Substantial Evidence in the Record to Support Staff's Conclusion that Avenal Energy's Air Quality Impacts are Mitigated to Less Than Significant by the Use of Emission Reduction Credits as well as Other Mitigation Measures Proposed by Staff

CRPE also claims that staff failed to demonstrate that the provision of emission reduction credits (ERCs), especially those from sources outside the immediate vicinity of the project, would mitigate for the project's impacts to air quality. (CRPE Opening Brief, pp.6, 9-10.) Staff has explained why implementation of Best Available Control Technology (BACT) and reliance on ERCs would mitigate Avenal Energy's air quality impacts to less than significant. (Exh. 200, pp. 4.1-37 to 4.1-38.) CRPE argues that staff's failure to identify the exact location of all ERC sources proposed by the applicant is a fatal flaw in the analysis resulting in a lack of substantial analysis to support staff's conclusion that all project air quality impacts have been mitigated. In support of this argument, it claims that "ERCs must be spatially, temporally, and qualitatively equivalent to the project's actual emissions." (CRPE Opening Brief, p. 9.) CRPE fails to provide any legal support for this assertion. It also claims that many of the project's air quality impacts will occur locally, yet there is no evidence in the record to support this assertion. (CRPE Opening Brief, p. 9.) As discussed in our opening brief, staff's analysis, including dispersion modeling, shows that Avenal Energy will not result in any significant adverse localized impacts. (Staff's Opening Brief, p. 2; RT 7/7/09 p. 256.)

C. There is Substantial Evidence in the Record to Support an Interpollutant Trading Ratio of 1:1 for SOx ERCs to Offset PM10 Emissions

CRPE also argues that staff has failed to justify the use of a 1:1 ratio for SOx ERCs to offset the project's PM10 emissions. (CRPE Opening Brief, p. 10.) The Final Determination of Compliance (FDOC) contains the air district's analysis of the proper interpollutant ratio for Avenal Energy. (Exh. 58, Attachment H.) Additionally, the San Joaquin Air Pollution Control District (SJVAPCD) detailed its analysis in response to questions staff raised at the Preliminary Staff Assessment (PSA) workshop and described the steps the SJVAPCD took to arrive at the 1:1 ratio, including extensive modeling. (Exh. 61.) Based on this information, staff concluded

that it was reasonable for SJVAPCD to determine that a 1:1 SOx to PM10 ratio would satisfy air district requirements. (Exh. 200, p. 4.1-35.) With implementation of the distance ratio, the applicant will end up submitting SOx for PM10 at a 1.5:1 ratio. (RT 7/7/09 pp. 260-262.) Staff concluded that, based on its long-held position that offsets must be of sufficient quantity to achieve a 1:1 offset, this was sufficient to mitigate the project's potential adverse air quality impacts to less than significant. (Exh. 200, p. 4.1-38.) As we explained in our opening brief, the U.S. EPA's final rule does not mandate a larger ratio. (Staff's Opening Brief, p. 3) Intervenors have not submitted any evidence into the record to substantiate their claims that a higher ratio is necessary to mitigate significant impacts.

D. There is Substantial Evidence to Support Staff's Conclusion that the Proposed Mitigation Measures Reduce Avenal Energy's Construction-Related Air Quality Impacts to Less than Significant

CRPE also argues that the project must be required to surrender ERCs to mitigate for construction air quality impacts. (Opening Brief, p. 12.) After arguing at length that ERCs do not mitigate for local impacts, CRPE nevertheless urges the surrender of ERCs by the applicant. The issue should be considered moot in that staff concludes that measures taken during construction to reduce fugitive dust and diesel emissions from construction equipment are sufficient to reduce the project's potential for adverse air quality impacts to less than significant. These measures are encapsulated in Conditions of Certification AQ-SC1 through AQ-SC-5. (Exh. 200, pp. 4.1-39 to 4.1-43.) If determined that a project's impacts will be reduced to less than significant, no further mitigation is required. (Cal. Code Regs., tit. 14, §15126.4(a)(3.)) CRPE argues that, without quantitative thresholds, it is impossible to determine a mitigation measure's effectiveness. (Opening Brief, pp. 12-13.) CEQA does not require quantitative thresholds. While it is true that a mitigation measure may contain numeric performance standards, there is no requirement that every measure do so. (See Staff's Opening Brief, pp. 9-10.)

III. There is Substantial Evidence in the Record to Support Staff's Conclusion that Avenal Energy will not Result in Significant Adverse Cumulative Impacts

CRPE argues that staff's analysis of cumulative impacts is deficient because it does not include the Kettleman Hills Chem Waste facility or a "sludge farm." (CRPE Opening Brief, p. 13.) Under CEQA, a cumulative impacts analysis must take into consideration closely related past,

present and reasonably foreseeable future projects. (Cal. Code Regs., tit. 14, §15355(b).) As discussed in our opening brief, staff is aware of the existence of the Chem Waste facility and its potential expansion and included this facility, where appropriate, in the analysis of Avenal Energy. (Staff's Opening Brief, pp. 8-9.) As for the nondescript "sludge farm" referenced by intervenors, no evidence was provided describing what this "sludge farm" consists of or even confirming that it currently exists or is reasonably foreseeable as that term is used in CEQA (generally meaning that the permitting process has begun). Nor is there any evidence indicating that Avenal Energy's impacts would be cumulatively considerable when combined with any potential impacts resulting from the referenced sludge farm. If the sludge farm currently exists, its impacts would have been accounted for in the background pollutant levels. (Exh. 200, p. 4.7-13.) In identifying what projects are reasonably foreseeable, staff consulted with SJVAPCD to determine if there are any projects currently in their permitting process. There are none. (Exh. 200, p. 4.7-12.) Therefore, this nondescript sludge farm could not be considered reasonably foreseeable at this time. Nevertheless, the existence of such a project would not have changed staff's analysis. The chemicals that would be released by Avenal Energy drastically decrease in impact with distance. (Exh. 200, p. 4.7-9.) As discussed in our opening brief, Avenal Energy does not produce the types of chemicals that could result in a considerable contribution to a public health impact when combined with a hazardous waste facility. The same conclusion would equally apply with regard to a sludge farm. (See Staff's Opening Brief, p. 9.)

CRPE also claims that staff failed to determine the impacts of existing projects located in the area, and, because of this, there is insufficient information in the record to reach a conclusion on whether Avenal Energy considerably contributes to a cumulative public health impact. (CRPE Opening Brief, p. 14.) Staff's public health analysis begins with a quantification of ambient levels of toxic pollutants, to which the project's anticipated pollutant emissions are added. (Exh. 200, p. 4.7-7 to 4.7-8.) Staff examined average toxic concentrations from the air monitoring station closest to the proposed site to provide a background risk level for inhalation of ambient air. (Exh. 200, p. 4.7-7.) Staff concludes that a background cancer risk of 225 in one million was present in the project area. (Exh. 200, p. 4.7-8.) Thus, contrary to CRPE's assertions, staff did determine the current level of exposure before reaching any conclusions regarding Avenal Energy's potential to significantly add to that exposure. Based on this background cancer risk,

staff concludes that Avenal Energy's potential incremental cancer risk of .46 in one million would not considerably contribute to a cumulative public health impact. (Exh. 200, p. 4.7-13.)

Rob Simpson argues that staff's public health analysis is flawed because it did not disclose toxic air contaminants, did not identify sensitive receptors, and did not consider potential environmental justice impacts. (Rob Simpson Opening Brief, p. 7.) As referenced in the FSA, the Application for Certification contains a description of the pollutants that would be emitted by Avenal Energy, as well as detailed emission summaries and calculations. (Exh. 200, p. 4.7-10; Exh. 1, pp. 6.16-12 to 6.16-13 and Appendix 6.16.) The FSA also contains a table listing some of the more common emissions and exposure routes. (Exh. 200, p. 4.7-11, Public Health Table 1.) Altogether, this provides the public and the Commissioners sufficient information regarding potential project emissions on which to reach a decision.

With regard to Mr. Simpson's argument that staff did not identify sensitive receptors, staff reviewed the environmental setting and information concerning the project site and vicinity and concluded that no sensitive receptors were located within six miles of the project site. (Exh. 200, p. 4.7-6.) Lastly, with regard to Mr. Simpson's argument that staff did not analyze potential environmental justice impacts, staff did, in fact, conduct such an analysis and concluded that, because the project would not result in any significant adverse impacts to public health, it would not result in any disproportionately high and adverse impacts to a minority or low-income population. (Exh. 200, p. 4.7-12.) Staff's public health analysis is conducted in such a manner as to overstate the potential risk, thus ensuring that the project will not result in a significant impact to even the most sensitive. (Exh. 200, p. 4.7-6.) Staff's analysis took into consideration the few residences in the area as well as the farmworkers tending the nearby fields and concluded that the project would not have a significant public health impact to these or any other persons. (Exh. 200, p. 4.7-12)

IV. There is Substantial Evidence in the Record to Support Staff's Conclusion that Avenal Energy will not Result in any Growth Inducing Impacts

CRPE argues that staff's growth inducing impacts analysis is deficient because it only analyzes growth on a local scale, and does not address how increasing energy capacity in the state may

have a growth inducing effect. (CRPE Opening Brief, p. 15.) CEQA requires a discussion of "the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, **in the surrounding environment**." (Cal. Code Regs., tit. 14, §15126.2(d)[emphasis added].) While some courts have interpreted this to require a look at regional impacts, staff is unaware of any finding interpreting this provision to require an analysis of growth for the entire state. Indeed, CRPE cites no legal authority to support its claim that staff must attempt to predict whether adding another power plant to the grid will encourage population growth in the entire state. Even if there was a requirement to analyze potential statewide growth-inducing impacts, substantial evidence in the record shows that power plants do not create demand for electricity. (RT 7/7/09 p. 83.) In general, because of stringent renewable portfolio standards, any increase in electricity demand will be met with renewable facilities, and natural gas facilities like Avenal Energy would not be used to accommodate population growth, or increased electricity use, but instead would have the effect of displacing existing less-efficient generation and supporting the renewable power. (RT 7/7/09 pp. 180, 197-200.)

V. There is Substantial Evidence in the Record to Support Staff's Conclusion that Avenal Energy's Greenhouse Gas Emissions Will Not result in Any Significant Adverse Impacts

CRPE argues that staff's greenhouse gas emissions analysis is deficient because it fails to provide support for its conclusion that Avenal Energy will displace less-efficient power plants, fails to use the correct baseline, fails to include enforceable mitigation measures, fails to account for growth-inducing impacts, and fails to mitigate for construction-related greenhouse gas emissions. (CRPE Opening Brief, p. 16.) As discussed in our opening brief, and below, there is substantial evidence in the record to support staff's conclusion that Avenal Energy's greenhouse gas emissions would not result in a significant adverse environmental impact. (Staff's Opening Brief, pp. 5-7.)

A. There is Substantial Evidence in the Record to Support Staff's Conclusion that Avenal Energy will Displace Electricity from Less-Efficient Natural Gas Power Plants, thus Resulting in Fewer Greenhouse Gas Emissions

CRPE argues that staff never identifies any of the less-efficient sources Avenal Energy would displace and, without such identification, the analysis is speculative. (CRPE Opening Brief, p. 17.) In fact, staff has identified dozens of plants that are less efficient than Avenal Energy would be, as well as those that will soon be phased out and will need to be replaced. Greenhouse Gas Table 3 lists by name nearby generating sources, most of which have higher heat rates than Avenal Energy; Greenhouse Gas Table 5 lists coal plants with expiring contracts, and Greenhouse Gas Table 6 lists aging power plants and those that use soon-to-be-phased-out once-through cooling. (Exh. 200, pp. 4.1-80, 4.1-83, 4.1-85.) Because of its relatively low heat rate, Avenal Energy would likely displace electricity from any of these types of facilities. While it is true that staff cannot point to plant X and state that its electricity will be displaced, this in no way weakens staff's analysis. There is substantial evidence in the record explaining the mechanism by which displacement would occur, including a specially-commissioned report of over 100 pages, a 19-page staff analysis, and four staff-sponsored witnesses, in addition to the evidence provided by applicant. CRPE failed to provide any evidence that disputes this substantial evidence.

CRPE also claims that Avenal Energy would increase the aggregate combustion of fuel to produce electricity. (CRPE Opening Brief, p. 17.) There is no support for this statement in the evidentiary record; in fact, the reduction in greenhouse gas emissions posited by staff follows directly from a reduction in the aggregate combustion o natural gas. Moreover, the claim is factually incorrect in that Avenal Energy's likely displacement of less efficient plants would maintain, if not lower, the aggregate combustion of fuel by the electricity system. Avenal Energy may indeed increase the total energy capacity of the system, at least until the aging or once-through cooling plants start shutting down. However, as staff testified, capacity is wholly different from energy. (Exh. 200, p. 4.1-75.) Increased capacity does not result in any increased emissions. The project need not operate at all to provide increased capacity, it is simply available in the event that its electricity is needed and it would not operate unless needed electricity was no

available from a lower-emission source. The electricity system must always be in balance – a power plant cannot physically put more electricity into the grid than is needed to meet load. Staff testified that, given stringent renewable portfolio standards, Avenal Energy's electricity would only be needed to replace electricity from current, less-efficient power plants. (Exh. 200, pp. 4.1-79 to 4.1-80.) There is no evidence that the existence of Avenal Energy would, itself, cause electricity use in California to increase. In fact, there is the possibility that, with the increased focus on energy efficiency and demand response, energy use in California could decrease. (RT 7/7/09 pp. 180-181.)

B. Staff Used the Proper Baseline for Analyzing Greenhouse Gas Emissions

CRPE claims that staff failed to identify the baseline it used to analyze the project's greenhouse gas emissions and inappropriately used a future baseline. (CRPE Opening Brief, p. 18.) As discussed in our opening brief, staff used the existing environment as the baseline for determining Avenal Energy's impacts from greenhouse gas emissions, and there is substantial evidence of this in the record. (Staff's Opening Brief, pp. 5-6; RT 7/7/09 p. 144.) What CRPE objects to is not the baseline determination, but the conclusion that, because Avenal Energy will have the effect of contemporaneously reducing more GHG polluting generation, the net impact of Avenal Energy's greenhouse gas emissions is less than significant. CRPE, however, has failed to provide any evidence to counter this conclusion.

C. Staff Concluded that No Mitigation Was Necessary to Reduce Avenal Energy's Greenhouse Gas Emissions to Less than Significant

CRPE claims that the replacement of older power plants is speculative and unenforceable; therefore, staff cannot rely on the displacement to offset Avenal Energy's greenhouse gas emissions. (CRPE Opening Brief, p. 19.) As discussed in our opening brief, reliance on Avenal Energy displacing less-efficient generation is not speculative nor is it a mitigation measure. It is a direct result of how the electricity system operates. (Staff's Opening Brief, pp. 6-7.)

D. There is Substantial Evidence in the Record to Support Staff's Conclusion that Avenal Energy's Construction-Related Greenhouse Gas Emissions will be Less than Significant

CRPE argues that there should, in effect, be a "one molecule" rule for any construction-related release of greenhouse gases. (CRPE Opening Brief, pp. 19-20.) Staff does not take such a stringent approach, nor does CRPE cite to any authority requiring such an approach. Staff concluded that the project's GHG emissions from construction would be less than significant because they would be temporary and intermittent, and mitigation measures are proposed to ensure that they are minimized to the fullest extent possible. (Exh. 200, p. 4.1-79; RT 7/7/09 pp. 145-146.) As a result of this, staff concluded that the limited amount of construction-related GHG emissions from the project would be less than significant.

VI. There is Substantial Evidence in the Record to Support Staff's Conclusion that Avenal Energy will not Result in any Significant Adverse Public Health Impacts.

CRPE argues that staff failed to adequately analyze Avenal Energy's public health impacts because staff relied on established thresholds. (CRPE Opening Brief, p. 20.) To support this argument, CRPE claims that staff failed to properly model off-site exposure to construction-related diesel particulate matter (DPM), staff failed to adequately take into consideration existing health problems, and the project would exacerbate existing air quality problems. (CRPE Opening Brief, pp. 20-21.) As addressed above in the discussions concerning staff's analysis of cumulative impacts and air quality, staff showed that existing health impacts were considered in staff's analysis of Avenal Energy's impacts to public health and, with the mitigation proposed, Avenal Energy would not result in any significant adverse impacts to air quality. The claim regarding modeling of DPM has not been previously raised by intervenors in this proceeding, nor have they provided any evidence to support this contention. Staff has analyzed the potential health impacts from diesel use during construction, concluded that it is significantly below staff's significance criterion of 10 in a million (it was calculated at 3.6 in a million), and has recommended several conditions of certification to ensure that it is minimized to the maximum extent feasible. (Exh. 200, p. 4.7-9 and pp. 4.1-40 to 4.1-42.) CRPE has provided no evidence calling into question staff's methodology.

CRPE's main argument appears to take issue with staff's reliance on established thresholds of significance even though, elsewhere CRPE argues that staff must use a numerical significance threshold to determine significance. In support of its argument, CRPE cites to *Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal. App. 4th 1099. That case holds, however, that a project's compliance with a pertinent threshold of significance should not "foreclose the consideration of other substantial evidence tending to show the environmental effect to which the threshold relates might be significant." (*Id*. at 1109.) Staff does not disagree with this tenet, but does disagree with CRPE's unsubstantiated claims. Intervenors have failed to provide any substantial evidence showing that, irrespective of Avenal Energy's compliance with the established thresholds, the project would still result in a significant adverse impact to public health. As discussed above, substantial evidence is not argument, speculation, or unsubstantiated opinion, which is all CRPE provides to support its contention.

VII. Avenal Energy Does not Trigger the Analysis Required by Water Code Section 10910

As thoroughly discussed in staff's opening brief, due to limited water use and the rather small project footprint, Avenal Energy does not trigger application of Water Code Section 10910. (Staff's Opening Brief, pp. 13-14.) Water code section 10910 requires a water supply and demand assessment for a "project", defined, inter alia, as an industrial plant "planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area." Avenal Energy does not meet any of these thresholds. (Exh. 200, p. 4.8-2, 3-2; Exh. 1, Figure 2.3-3 and Appendix 2-2, Figure B-13.) A facility would also be deemed to be a "project" under this section if it would use an amount of water equivalent to a 500 dwelling unit project. (Water Code §10912(a)(7).) Using the metric provided by the Department of Water Resources, that one dwelling unit typically consumes at a minimum .3 acre-feet of water per year, Avenal Energy would have to use 150 acre-feet of water per year to trigger application the requirement to conduct a water supply and demand assessment. (Guidebook for Implementation of Senate Bill 610 and Senate Bill 221 of 2001 to Assist Water Suppliers, Cities, and Counties in Integrating Water and Land Use Planning, Department of Water Resources, October 8, 2003, p. 3.) Since Avenal Energy will only use a maximum of 104 acre-feet of water per year, no such assessment is required.

VIII. Staff Appropriately Analyzed a Reasonable Range of Project Alternatives

CRPE claims that staff inappropriately dismissed detailed consideration of wind or solar from the alternatives analysis because neither of these options could provide exactly 600 megawatts (MW) of capacity. (CRPE Opening Brief, pp. 22-23.) This is a simplified, and ultimately incorrect, reading of staff's analysis. Staff concluded that these two technologies did not present viable alternatives to the proposed project because they were infeasible and could result in additional unavoidable significant adverse impacts at the proposed project site. Staff found wind generation at the proposed site to be infeasible given the absence of sufficient wind resources at that location. (Exh. 200, p. 6-20.) Solar technology was determined to be nonviable at the project site because it would result in potentially significant impacts to biological resources, land use, and visual resources. (Exh. 200, p. 6-20.) Additionally, while staff did not constrain analysis to only those alternatives that could provide exactly 600MWof electricity, the anticipated capacity of a solar facility on the proposed site, approximately 20 to 37MW maximum, was so much lower than the proposed project that it did not represent a true alternative on par with the proposed project. (Exh. 200, p. 6-20.) While the applicant did not identify an output of 600MW as a project objective, it is not reasonable to conclude that a project that could provide as little as approximately 1/30th of the electricity as the proposed project is truly an acceptable alternative. (Exh. 200, p.6-20.) Additionally, given that most solar projects being proposed today are much larger that what could be constructed at the project site, this alternative also raises the question whether such a small facility would meet the applicant's objective of being cost-effective.

CRPE also argues that staff failed to identify any alternatives that would "offer substantial environmental alternatives over the proposed project." (CRPE Opening Brief, pp. 23-24.) CEQA establishes no categorical legal imperative as to the scope of alternatives to be analyzed in an environmental document; instead, a rule of reason is applied. (*Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 566.) CEQA directs that agencies "should 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." (Public Resources Code §21002.) While agencies are instructed to look for alternatives that would reduce or avoid the project's significant impacts, CRPE cites to no cases holding that, where reasonable efforts have been made, failure to find the perfect alternative that would do so

is cause for overturning a particular project's approval. (Pub Resources Code, §21002.) In fact, the courts acknowledge that finding the perfect alternative is practically impossible for complex projects. (*Sierra Club v. City of* Orange (2008) 163 Cal. App. 4th 523, 546.) Instead, all that is required is that alternatives be identified that would avoid or substantially lessen the significant impacts of the project, even if the alternative would present other significant effects. (*Id.* at pp. 546-547.) It cannot be disputed that power plants are very complex projects and that trying to find alternatives that meet the project objectives of providing electricity to the state without any conceivable impacts would be difficult. Here, staff has concluded that, while impacts had been identified in several areas including air quality and biological resources, mitigation measures will reduce these impacts to less than significant; therefore, the feasibility of alternatives need not even be discussed. (*Laurel Hills Homeowners Assoc. v. City Council* (1978) 83 Cal.App.3d 515 [holding that, in adopting findings, an agency need not even consider the feasibility of project alternatives if it adopts mitigation measures that substantially lessen or avoid a project's significant adverse impacts].) Nevertheless, staff discussed several alternative technologies that could avoid the air quality impacts, but noted they would have greater biological impacts. (Exh. 200, pp. 6-19 to 6-21.) Similarly, staff identified a few site alternatives that could avoid the biological impacts, but these were not free of impacts. (Exh. 200, pp. 6-11 to 6-16.) In all, staff looked at a wide range of both technological and site alternatives and, while CRPE disagrees with staff's conclusions, they have not provided any evidence of a superior alternative to the proposed project or evidence in support of their contention that the alternatives dismissed are viable. As the record shows, they are not.

CRPE also argues that staff cannot recommend approval of Avenal Energy because the smaller power plant alternative is preferable. (CRPE Opening Brief, p. 24.) Again CRPE contradicts itself – first arguing that staff has failed to comply with CEQA by not identifying any alternatives that avoid the proposed project's significant impacts and then arguing that staff cannot recommend approval of the proposed project because it indeed did identify an alternative with fewer impacts. But staff concluded that Avenal Energy's impacts to air quality are mitigated to less than significant. Therefore, though it would provide less electricity due to its reduced capacity, the smaller power plant alternative would not necessarily result in fewer impacts. (Exh. 200, pp. 6-17 to 6-18.) CRPE cites to no authority that prevents an agency from

approving a project that was determined to have no unmitigated significant impacts solely because an alternative was identified that likewise had no unmitigated significant impacts.

Rob Simpson argues that staff's alternatives analysis is deficient because it failed to analyze the alternative of placing photovoltaics over the state water project aqueduct. (Rob Simpson Opening Brief, p. 6.) Staff's analysis discusses photovoltaics in general, but dismisses this technology as ultimately not a viable option because of the land use requirements. (Exh. 200, p. 6-20.) The conclusion would be the same regardless of whether the photovoltaics were located over the aqueduct or farmland. As discussed above, staff's analysis need not identify every permutation of every alternative under the sun. It need only describe a reasonable range of alternatives, which it has done.

IX. The Energy Commission has Fully Complied with all Public Participation Requirements

CRPE claims that public participation was precluded because the Final Staff Assessment was not translated into Spanish. (CRPE Opening Brief, p. 24.) As discussed in our opening brief, several notices and informational sheets were provided in Spanish, and several of the staff workshops, as well as the evidentiary hearing, had a Spanish interpreter available for those who needed one. (Staff's Opening Brief, pp. 14-15.) CRPE does not cite to any authority requiring more extensive translation/interpretation than what the Energy Commission has already provided. CRPE cites to *Emmington v. Solano County Redevelopment Agency*, but this case does not even involve the issue of translation. It simply holds that an agency may not refer to several previously prepared environmental impact reports (EIRs) dealing with different projects in lieu of preparing an EIR for a redevelopment plan. (*Emmington v. Solano County Redevelopment Agency*, 195 Cal.App.3d 491, 501-502.) CRPE's citation to *San Franciscans for Reasonable Growth v. City and County of San Francisco* is similarly off-point. Neither of these cases involves the question of whether an environmental document must be translated into a language other than English. The cases only stand for the tenet that an agency's environmental document must be written in "plain language" so as to be comprehensible to the decisionmakers and the public. (*San Franciscans for Reasonable Growth v. City and County of San Francisco* 193 Cal.App.3d 1544, 1549.) CRPE's contention that this means that, in addition to being presented in English, environmental

documents must be translated into whatever other language is spoken in the community, is not supported by caselaw. Staff's analysis, contained in one document, is written for the layperson to understand and thereby fosters public participation. And though staff has taken steps to enable monolingual Spanish speakers to participate as well, CEQA does not require the wholesale translation of environmental documents into languages other than English.

X. Staff's Analysis is Consistent with Executive Order 12898

Executive Order 12898 requires federal agencies to identify and address disproportionately high and adverse human health or environmental effects on low-income and minority populations. It has also been interpreted by some agencies to apply to state agencies that receive federal funding. It is not clear, however, whether the directive applies only to those state programs that utilize federal funding, or whether it applies to all agency programs if that agency receives any federal funding. The Energy Commission receives a small amount of federal funding, most of which the Energy Commission does not use itself but simply passes through. The Energy Commission's siting division does not receive or pass through any federal funding. Therefore, there is still some ambiguity as to whether Executive Order 12898 could be enforced against the Energy Commission's power plant permitting process. Nevertheless, as discussed in our opening brief, staff errs on the side of caution and follows Executive Order 12898. After applying the directives, staff concluded that because Avenal Energy would not result in any unmitigated significant adverse impacts, it would not result in any disproportionately high and adverse human health or environmental effects on low-income or minority populations. (Staff's Opening Brief, p. 12.)

XI. The San Joaquin Air Pollution Control District Properly Noticed the Preliminary and Final Determinations of Compliance

Intervenor Rob Simpson claims that the SJVAPCD failed to comply with regulatory noticing requirements. (Rob Simpson Opening Brief, p. 2.) The SJVACPD rule applicable to review of this project is Rule 2201. Section 5.0 of this rule provides that, for projects for which an Application for Certification has been filed with the Energy Commission, the administrative requirements of section 5.8 apply. Section 5.8 states that noticing requirements of section 5.5 apply. Section 5.5 requires that "within ten (10) calendar days following the preliminary decision

the APCO shall publish in at least one newspaper of general circulation in the District a notice stating the preliminary decision, noting how pertinent information can be obtained, and inviting written public comment for a 30 day period following the date of publication." The air district published the required notice in the Fresno Bee for both the PDOC and FDOC, fully complying with the applicable requirement. (Exh. 58; RT 7/7/09 pp. 284-286.)

XII. Avenal Energy Complies with State Water Policy

Rob Simpson argues that Avenal Energy would not be in compliance with the state's water policy. (Rob Simpson Opening Brief, p. 5.) This assertion has no basis in the record. Avenal Energy will be using both dry cooling and zero liquid discharge. (Exh. 200, p. 4.9-1.) The 2003 Integrated Energy Policy Report (IEPR) encapsulates state water policy for energy facilities as follows:

> the Energy Commission will approve the use of fresh water **for cooling purposes** by power plants which it licenses only where alternative water supply sources and alternative cooling technologies are shown to be "environmentally undesirable" or "economically unsound." Additionally, as a way to reduce the use of fresh water and to avoid discharges in keeping with the Board's policy, the Energy Commission will require zero-liquid discharge technologies unless such technologies are shown to be "environmentally undesirable" or "economically unsound."

(Exh. 200, p. 4.9-24 [emphasis added]; 2003 Integrated Energy Policy Report, p. 41.) The project is using dry cooling for all of the project's cooling needs. The Energy Commission would, therefore, not be approving the use of fresh water for cooling purposes. (Exh. 200, p. 4.9-7.) The small amount of water the project is proposing to use is solely for process use, domestic use, and landscape irrigation. (*Id.*) Therefore, this project is in full compliance with state water policy.

XIII. Conclusion

The record contains sufficient information about the proposed project, the environmental setting, and the potential impacts of the proposed project to inform the public and allow the Commissioners to reach an informed decision. Intervenors have failed to point to any substantial evidence in the record that supports their contention that staff's analysis is flawed or contradicts

staff's conclusion that, with the proposed conditions of certification, Avenal Energy will comply with all applicable LORS and will not result in any unmitigated significant adverse impacts.

DATED: August 24, 2009

Respectfully submitted,

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APPLICATION FOR CERTIFICATION
For the AVENAL ENERGY PROJECT

Docket No. 08-AFC-1
PROOF OF SERVICE
(Revised 6/24/2009)

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DECLARATION OF SERVICE

I, Janet Preis, declare that on August 24, 2009, I served and filed copies of the attached, Energy Commission Staff's Reply Brief re: Docket No. 08-AFC-1 dated August 24, 2009. The original document, filed with the Docket Unit, is accompanied by a copy of the most recent Proof of Service list, located on the web page for this project at: [http://www.energy.ca.gov/sitingcases/avenal/index.html].

The documents have been sent to both the other parties in this proceeding (as shown on the Proof of Service list) and to the Commission's Docket Unit, in the following manner:

(*Check all that Apply*)

FOR SERVICE TO ALL OTHER PARTIES:

__x__ sent electronically to all email addresses on the Proof of Service list;

__x__ by personal delivery or by depositing in the United States mail at Sacramento, California with first-class postage thereon fully prepaid and addressed as provided on the Proof of Service list above to those addresses NOT marked "email preferred."

AND

FOR FILING WITH THE ENERGY COMMISSION:

__x__ sending an original paper copy and one electronic copy, mailed and emailed respectively, to the address below (***preferred method***);

OR

_____ depositing in the mail an original and 12 paper copies, as follows:

CALIFORNIA ENERGY COMMISSION
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I declare under penalty of perjury that the foregoing is true and correct.

/s/