December 18, 2012

VIA FEDEX

Roger E. Johnson, Deputy Director
Siting, Transmission and Environmental Protection Division
California Energy Commission
1516 Ninth Street
Sacramento, CA 95814

Re: Comments on “Data Adequacy” of Application for Certification
Redondo Beach Energy Project (12-AFC-03)

Dear Deputy Director Johnson:

We are writing on behalf of the City of Redondo Beach (“City”) as the local host jurisdiction for the above-referenced Project. Thank you for inviting the City to comment on the Application for Certification (“AFC” or “Application”) for the Redondo Beach Energy Project (“RBEP” or “Project”).

The purpose of this letter is to provide comments on the “data adequacy” of the Application, i.e., whether the Application satisfies the information requirements set forth in the California Code of Regulations, Title 20, Chapter 5, Appendix B.

As set forth below, the City believes the Application does not meet the requirements of Appendix B, and is therefore data inadequate. Moreover, by neglecting to provide all of the required information, the Applicant fails to address—or even raise—certain critical elements and issues related to the Project.

DISCUSSION OF SIGNIFICANT DATA GAPS

The City has identified significant data gaps in the AFC. We identify and describe these gaps below, in the order in which they appear in Appendix B. Any reference below to “no comment at this time” should not be construed as an acceptance by the City of the AFC as “data adequate,” or a waiver of the City’s right to provide additional comments to the CEC (or data requests) in the future as to those particular matters, and the City expressly reserves its rights in that regard.
Appendix B, Section (f): Alternatives

Appendix B, Section (f), requires the applicant to provide, in part:

A discussion of the range of reasonable alternatives to the project, or to the location of the project, including the no project alternative, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and an evaluation of the comparative merits of the alternatives. In accordance with Public Resources Code section 25540.6(b), a discussion of the applicant's site selection criteria, any alternative sites considered for the project, and the reasons why the applicant chose the proposed site.

- **Need to discuss alternative locations.** Appendix B requires a discussion of alternative locations. Without explanation, the AFC simply says, "a discussion of site alternatives is not included in this AFC." This is an enormous data gap.

This gap is especially relevant because the current location of the facility on the coastline, adjacent to the Santa Monica Bay ocean environment may no longer make sense for the following reasons: (1) the facility will no longer need ocean water for cooling; (2) the neighborhood immediately adjacent to the facility has developed into a thriving mixed-use community (see Socioeconomics below); and (3) the facility is located in a liquefaction zone and would be vulnerable in a tsunami (see Geologic Hazards and Resources below). It is therefore critical in this case that the Application consider alternative locations. The California Environmental Quality Act ("CEQA"), Public Resources Code Section 21000 et seq., mandates a discussion of "a reasonable range of alternatives." No alternative locations are provided or evaluated in the AFC.

- **Inadequate discussion of the “no project alternative”**: Appendix B requires a discussion of the “no project alternative.” In Section 6.4 of the Application, the Applicant purports to discuss the no project alternative:

The no project alternative is a scenario where no new project is undertaken. Existing conditions and infrastructure would remain in place and continue to operate or cease operations. Under the no project alternative, the existing Redondo Beach Generating Station would still need to comply with the [State Water Resource Control Board’s Once-Through Cooling (OTC)] policy, by either replacing the present ocean water OTC system with a closed-loop cooling system; employing other engineered solutions to reduce impingement and
entrainment of marine life through the OTC system; or ceasing operations.

Despite the above language, the Application does not, in fact, contain a meaningful discussion of the option of "ceasing operations." In fact, it offers only one sentence on this alternative.¹

The proposed Project will have a profound impact on the local community. It is therefore critical that the Application contain a serious and thorough discussion of the no project alternative, including the option of ceasing operations.

Appendix B, Section (g): Environmental Information

(1) General Information (no comment at this time)

(2) Cultural Resources (no comment at this time)

(3) Land Use

- **Inadequate discussion of the potential impact of the March 5 initiative.**

Appendix B requires:

"A discussion of any recent or proposed zone changes and/or general plan amendments; noticed by an elected or appointed board, commission, or similar entity at the state or local level.

... A discussion of the compatibility of the proposed project with present and expected land uses, and conformity with any long-range land use plans adopted by any federal, state, regional, or local planning agencies. The discussion shall identify the need, if any, for land use decisions by another public agency or as part of the commission's decision that would be necessary to make the project conform to adopted federal, state, regional, or local coastal plans, land use plans, or zoning ordinances. Examples of land use decisions include: general plan amendments, zoning changes, lot line adjustments, parcel mergers, subdivision maps, Agricultural Land Conservation Act contracts cancellation, and Airport Land Use Plan consistency determinations.

¹ "Based on [the California Independent System Operator's] 2021 projection of the need for [Once-Through Cooling (OTC)] replacement generation, decommissioning existing OTC facilities such as the Redondo Beach Generating Station units without adequate replacement generation would create reliability concerns."
A local initiative has recently qualified for the March 5, 2013 ballot in the City of Redondo Beach that would prohibit operation of the power plant at the Project site after 2020, and requires the power plant to be removed by the end of 2022. The initiative includes an amendment to the Coastal Land Use Plan, which would re-zone most of the Project site into a “Coastal Preserve.”

The AFC briefly mentions this initiative, but does not discuss or evaluate it in any detail. (AFC Section 5.2.6.2.1.)

The City, as the local host jurisdiction, believes that passage of the initiative would so fundamentally change the land use circumstances related to the Project, that the Commission would be ill-advised to proceed with considering and processing the AFC at this time. Instead, the Commission should defer certifying the AFC as “data adequate” until after March 5, 2013. The AFC cannot adequately or completely address land use issues until after the result of the March 5, 2013 ballot is known to the Commission.

(4) Noise

- **Inadequate analysis of noise issues.** Noise is a significant issue. There have been significant historic and continuing complaints to City of Redondo Beach from residential areas near the facility. The Applicant must demonstrate how it will comply with the City's local noise ordinance.

The AFC noise analysis is inadequate. It is based on two noise monitoring locations: one on the south side of the facility (M) and one on the west side (M2). No monitoring locations were located on the east and north sides of the plant, where dense commercial and residential areas are located. A more comprehensive noise study—which includes monitoring locations on all sides of the facility—must be included in the AFC.

(5) Traffic and Transportation

- **Inadequate analysis of potential impact on nearby airports.** The Application briefly describes nearby airports and FAA regulations, but does not analyze whether the thermal plume from the facility could impact air traffic. (AFC 5.12.1.9, 5.12.2.6, 5.12.5.1.) The nearest airports are the Torrance Airport, or Zamperini Field, located

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less than four miles from the RBEP site, and the Los Angeles International Airport (LAX), located less than six miles from the RBEP site. In particular, the runway alignment at Zamperini Field points directly at the proposed project.

In other CEC proceedings, the potential impact of thermal plumes, including both physical and visual distractions to pilots, has been a significant issue. For the Carlsbad Energy Project, the FAA completed a feasibility report, and had an agency safety expert comment on thermal plume impacts on aircraft in the area surrounding the Carlsbad Airport. (See Intervenor documents, Nov. 8, 2008 and Jan. 8, 2009.) The CEC denied licensing of the Eastshore Energy project, due to significant impacts and safety hazards from thermal plumes on the Hayward Airport that could not be mitigated. (Commission Decision, 10/17/08, pp. 1-2.) The Eastshore Energy project was also found by CEC to be inconsistent with the City of Hayward and Hayward Airport zoning ordinances, the City of Hayward General Plan, and the Alameda County Airport Land Use Policy Plan. In that case, the impacts and inconsistencies were not considered until late in the application process, after considerable time and money had been spent by CEC staff, the developer, City staff and the public.

The AFC should therefore include an analysis of the potential impact of thermal plumes, including an analysis of aircraft flight routes, airport influence and safety zones, vertical plume rise modeling, and applicable LORS. Moreover, the AFC should be considered data adequate only after initial consultation and review of these issues with responsible municipalities and airport authorities.

(6) Visual Resources

- **Inadequate analysis of the visual impact of lower, denser, and more frequent plumes.** The AFC dismisses the possible visual impact of plumes without serious consideration: “Based on previous experience with these kinds of systems, formation of visible plumes from the project will be an unlikely occurrence....” (AFC Section 5.13.2.4.7.)

The RBEP will use new gas turbines with air cooled condenser technology. The AFC states that visible plumes will not come from the cooling tower and air-cooled condensers, but it does not adequately address the visible steam plume impacts from exhaust stacks. These plume impacts could significantly degrade the existing visual quality of the Redondo Beach Marina. With the technology proposed, the potential exists for considerable tons of water to be transported each day through exhaust stacks and shot hundreds of feet high into the atmosphere, to form large, visible steam plumes. In coastal environments, the impacts can particularly be of concern due to the continual presence of humid, or saturated, marine air. The AFC should not be considered data adequate until the completion of visible plume modeling and analysis of visual impacts at similar coastal region power plants using similar technology.
(7) Socioeconomics

- **Need to consider the impact on the thriving tourism industry of Redondo Beach.**
  
  As noted by the Redondo Beach Chamber of Commerce & Visitors Bureau:
  "Tourism plays a major role in Redondo Beach economy. Our tourism industry creates thousands of jobs and helps diversify and stabilize the local economy.” The Chamber estimates that visitors to Redondo Beach generate over $130 million in business revenue annually, which contributes millions of dollars to the City’s general fund in the form of tax revenue. (http://redondoadvocacy.biz/tourism.htm)

  Despite the huge economic importance of tourism to the local community, the AFC does not discuss the impact of the Project on the thriving tourism industry of the City. This is a major data gap.

  The gap is especially significant because—if the Energy Commission does not approve the AFC—the existing Redondo Beach power plant will likely be forced to close in 2020, as a result of the State Water Resources Control Board’s (“SWRCB”) Once-Through Cooling (“OTC”) rule. (See discussion above regarding “Alternatives.”)

  The impact of the Project on tourism is thus greatly magnified. If the AFC is approved, a major power plant will continue operating (and actually increase its operations) in the heart of the Redondo Beach tourism district. If the AFC is denied, the power plant will be shut down and removed, which could have an enormous, positive impact on tourism and tourism dollars.

(8) Air Quality

Air quality issues are among the most complex and important issues relating to the proposed facility. The following is a list of significant data gaps in the AFC’s analysis of air quality issues.

- **Need to properly categorize the RBEP as a new facility.** The Applicant freely acknowledges that the RBEP is a new facility. In the first sentence of the AFC, it states: “AES Southland Development, LLC (AES-SLD), the Project Owner, proposes to construct, own, and operate a new electrical generating plant in the City of Redondo Beach, Los Angeles County, California.” If the AFC is approved, the pre-existing facility will be entirely demolished and removed. A new power plant with entirely new and different equipment, and very different (i.e., increased) operational expectations will then be built. If the AFC is not approved, the existing facility will be forced to close in 2020. (See discussion above regarding “Alternatives” and “Land Use.”)
Regulatory requirements are often very different for new facilities versus pre-existing facilities. (One example is the applicability of the “Rule 1304 exemption” from emissions offsets, discussed below.) Given the circumstances in this case, the RBEP should be considered a new facility with respect to all CEQA and regulatory analysis.

- **Need to show applicability of the Rule 1304 exemption from emission offsets.**
  The Applicant asserts that the proposed facility will be exempt from emission offset requirements pursuant to SCAQMD Rule 1304(a)(2). However, this exemption requires a showing that “the new equipment must have a maximum electrical power rating (in megawatts) that does not allow basin-wide electricity generation capacity on a per-utility basis to increase.” If there is an increase in basin-wide capacity, the increased capacity must be offset. The AFC does not contain this analysis.

An example of how such an analysis would be completed is provided by the Walnut Creek Energy Center Park. (See Petition for Amendment, Air Quality Conditions for Certification, March 2011.) For that proceeding, the project plans to claim credit for and utilize emission reductions from older plants, including boilers at the existing Huntington Beach Power plant. After extensive review, technical and regulatory evaluation, the Walnut Creek Energy Center developer concluded that about 10% of emission increases would not be exempted by Rule 1304(a)(2). The AFC should not be considered data adequate until AES has provided similar detailed justification, as well as appropriate evidence of the approved use of offsets from the SCAQMD offset bank.

- **Need to provide a cumulative analysis of air quality impacts with the RBEP project and other facilities within 6 miles.**
  The South Bay area is highly industrial, with two major refineries within six miles, the Chevron El Segundo Refinery and the Exxon Mobil Torrance refinery. The AFC does not address whether projects at these major facilities or other facilities will have a cumulative impact on the Redondo Beach community.

- **Need to provide a plan for mitigating local health impacts from increased fine particulate emissions from facility construction and operations.**
  Localized particulate impacts could be significant and must be mitigated by reducing other local emissions. Example mitigation plans for other projects have included use of nearby emission offsets, diesel emissions reduction, and wood-burning stove trade-in programs.

The Project calls for five years of construction and demolition in the heart of downtown Redondo Beach. It is critical that local particulate emissions be analyzed and addressed for the safety and comfort of the community.
- **Need to provide analysis of whether lower particulate emission rates are achievable.** An increase in fine particulate emissions, with increased impact on the health of the citizens of Redondo Beach, is a significant concern. The AFC claims best available control technology for particulate is pipeline quality gas, but does not provide adequate information on whether a lower emission rate is achievable, on a lb/MW-hour basis as determined for other similar projects. The Applicant must be required to minimize fine particulate emissions. To be deemed data adequate, the Applicant should prepare a more detailed technical analysis of lowest achievable particulate emission rates from any power plants burning natural gas, and candidate technical methods to minimize the impacts, such as installing different technology than the Mitsubishi turbines, and installing add-on filters, scrubbers and/or electrostatic precipitator emissions controls.

- **Need to justify the greenhouse gas emission standard in lb/MW-hour basis to other projects to describe whether a lower rate is achievable.** The proposed GHG emission performance standard of 1,082 lb/MW-hour is high for a new power plant, nearly at the SB1368 performance standard limit of 1,100 lb/MW-hour. Other projects have achieved or will achieve a lower GHG emissions efficiency; the proposed limit as BACT needs to be justified relative to other licensing projects. For example, the City of Palmdale Hybrid Energy Project was permitted at 774 lb/MW-hr. If the Applicant’s proposed turbine technology cannot achieve the lower GHG emission limits accomplished by recent projects, then different, cleaner and more efficient technology than the Mitsubishi turbines should be considered and installed.

- **Need to provide mitigation for increased greenhouse gas emissions from facility construction and operation, in the form of AB32 allowances or certified carbon offsets.** GHG emissions will increase above recent plant operations. AES has not provided a plan for providing mitigation for these emission increases in the form of carbon credits or AB32 carbon allowances.

- **Need to provide adequate justification for background monitoring and meteorological information.** Background data are from monitoring sites some distance away. Following EPA requirements, adequate justification has not been provided for why pre-construction ambient monitoring for criteria pollutants and air toxics near the site is not needed. The Palos Verdes peninsula may cause localized impacts and variability in the wind flow that is not represented at LAX. Further justification, including localized monitoring of meteorological variables, is needed to justify use of the LAX data. Following EPA guidance, a detailed analysis of data completeness should also be provided.
(9) Public Health

- **Need to provide a plan for mitigating local health impacts from increased emissions of carcinogens and other toxins from construction and new plant operation.** While the AFC indicates that health risk impacts from the RBEP facility will not be significant, the City is concerned that these health impacts will increase over recent plant operations. The AFC should provide more detailed information on technical methods to minimize the increased impacts from emissions of carcinogens and toxics on public health.

(10) Hazardous Materials Handling

- **Inadequate discussion of environmental conditions at the site.** Appendix B requires applicant to identify and assess risks to the public or the environment from hazardous materials. The potential impacts to the public and the environment from the historical on-site underground and above ground storage tanks are not adequately documented. The extent of potential on-site and off-site soil and groundwater contamination needs to be clearly delineated. Additional documentation is needed on the investigation, characterization, and remediation of on-site soil and groundwater contamination from unlined surface impoundments as required in Superior Court of Los Angeles County Order No. 121219, dated February 1, 1995.

- **Inadequate discussion of Risk Management Plan for aqueous ammonia.** There are two aqueous ammonia storage tanks on-site which are supplied by frequent tank truck deliveries of aqueous ammonia. The AFC should better address the potential releases of aqueous ammonia during on-site loading and transfer, including details for on-site and off-site detection monitoring and emergency actions. Additional consideration is needed to address an aqueous ammonia release/spill during transportation on route to the facility and possible impacts and mitigation measures to be implemented.

(11) Worker Safety  (no comment at this time)

(12) Waste Management

- **Need to demonstrate compliance with local waste ordinance.** The AFC does not discuss whether the Project complies with the City’ ordinance on “Construction and Demolition Debris Waste Reduction and Recycling Requirements.” (City of Redondo Beach Municipal Code §§ 5-2.701 to 5.2710. ) The AFC must include an analysis of this issue.
(13) Biological Resources

- **Need to consider the impact on the El Segundo blue butterfly.** The El Segundo blue butterfly—a federally-designated endangered species found only on the southeastern shores of Santa Monica Bay—has been the target of major restoration efforts by numerous government agencies, including the City of Redondo Beach. The AFC should contain a discussion of the potential impact of the Project on the recovery of the butterfly.

(14) Water Resources

- **Inadequate analysis of the potential use of recycled water.** The RBEP will use 52.5 acre-feet of water per year. The Applicant states that the facility will use potable water—not recycled or reclaimed water—for process water. “Water Supply Alternatives, including the potential use of reclaimed water, to support RBEP were analyzed and determined to be infeasible.” (AFC Sections 5.15.1.4.1 & 6.6.3.)

Section 13551 of the California Water Code prohibits the use of potable water for industrial projects, if there is a source of recycled water that meets the criteria set forth in the statute. The AFC should specifically discuss whether the potential sources of recycled water meet the criteria set forth in the statute.

(15) Soils

- **Inadequate discussion of soil contamination at the site.** See discussion above under Hazardous Materials Handling.

(16) Paleontological Resources (no comment at this time)

(17) Geologic Hazards and Resources

- **Inadequate discussion of liquefaction issue.** The Application briefly mentions that the facility is located in a zone that is potentially subject to liquefaction. (Section 5.4.2.1.) This is a serious issue that should be examined in detail in the AFC. During the Northridge earthquake in 1994, the City experienced severe damage due to liquefaction in locations very close to the RBEP site. The California Department of Conservation has concluded that liquefaction "was a major cause of damage in the Kings Harbor area of Redondo Beach during the Northridge earthquake of 1994."3

- **Inadequate discussion of tsunami hazard.** The Application states that "the western side of the site is located along the border of a tsunami run-up hazard zone, and it may be appropriate to evaluate the potential effects of tsunami run-up hazard for this"}

part of the site during the detailed design phase of the project.” (Section 5.4.1.4.8.) This is a critical issue which should be examined in detail in the AFC.

(18) Transmission System Safety and Nuisance

- **Inadequate analysis of impact of increased EMF on residents adjacent to transmission lines.** The Application briefly mentions the potential impact of electromagnetic fields ("EMF") on the neighboring community. (Section 3.3.2.1.) The amount of EMF generated by transmission lines will significantly increase as a result of the anticipated increased operations of the facility. Moreover, since the existing facility would be shut down in 2020 if the AFC is not approved, the RBEP will result in continued exposure to EMF that otherwise would be terminated in 2020.

EMF is an area of significant public concern, and merits a more thorough discussion and analysis in the AFC.

CONCLUSION

For the reasons set forth above, the City of Redondo Beach, as the local host jurisdiction, respectfully requests that the Commission to find the AFC to be “data inadequate.” Please feel free to contact me with any questions.

Sincerely,

DAVID P. WAITE of
Jeffer Mangels Butler & Mitchell LLP

cc: William Workman, City Manager, City of Redondo Beach
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