

Terramar Witness List For 07-AFC-6 Hearings

Jan. 6, 2010

Expert Witness
1) Lane Sharman

Other Witnesses
1) Bailey Noble
2) Dianne Wist

DOCKET	
07-AFC-6	
DATE	JAN 6 2009
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**Testimony for Intervener Terramar
by FSA Section
Exhibits 300-399**

Executive Summary

Exhibit 300

p. 1-6, 7“... the impacts of CECP can be mitigated such that its impacts are less than significant.”

This statement is an opinion based on theoretical information regarding a power plant that has not been constructed anywhere in the United States. I have a different opinion based on fifteen years in Terramar living next to a power plant - the Encina Power Plant. My opinion and that of most of the residents in Terramar are that the added impacts created by the proposed CECP will be significant to us, surrounding neighborhoods and the community as a whole. When the I-5 is widened many impacts will be intensified.

During signature gathering to oppose this project, thousands of people from this area and outside of this area voiced a similar opinion. They said that the impacts of a second power plant would be significant for the surrounding neighborhoods, the City of Carlsbad and the region.

Exhibit 301

a) p. 1-7 “ eliminating the daily need for millions of gallons of once-through ocean water cooling, and its associated fish impingement and biological impacts (entrainment);”

Since units 1, 2, & 3 have been minimally used in the last few years, how can millions of gallons of water be saved from “once through cooling” on a daily basis?

b) p. 1-7”Staff has identified additional noteworthy socioeconomics public benefits that would include both short term construction-related and long term operational-related increases in local expenditures and payrolls, as well as sales tax revenues.”

Per the FSA, page 4.8-7, the construction of the proposed CECP will require a maximum of 357 workers in the nineteenth month with the fewest being 76 in the ninth month. The contractor’s administrative staff would not be local workers.

Nowhere does it state that these employees would only be hired from the local employment pool. They could be hired from the local pool and also from surrounding counties. With the high rate of unemployment at this time, there is also the possibility that workers could apply from all over the country making the local socioeconomic benefits exaggerated.

The FSA also states that post-construction and after the retirement of Encina units 1, 2, and 3, Encina employees will be transferred from Encina to the proposed CECP, adding no permanent employment to the local base.

Carlsbad is a tourist town and staff has not evaluated how the proposed CECP could negatively affect and devalue the future of our tourism industry. Negative impacts on tourism should be included in staff's assessment to properly show the net economic effects of both types of impacts on the local economy.

Exhibit 302

p. 1-8 "Implementation of the Energy Commission staff's proposed conditions of certification is necessary to avoid or minimize potential indirect impacts to biological resources. The project would not result in take of listed species and no wetlands or other waters of the United States will be directly impacted by the project."

NRG is proposing to construct an ocean water purification system for the CECP. This system will create issues of impingement and entrainment causing direct impacts to "waters of the United States". The FSA statement should be corrected.

Exhibit 303

p.1-9 "As found in the summary above and in more detail in the sections of the FSA below, all potentially significant impacts are mitigated and no environmental override is necessary."

Regarding the 1990 Coastal Commission report (docketed with the CEC by the City of Carlsbad) it states:

Page 8 of the Executive Summary further states:

The Coastal Commission's assessment is that the construction of a new power plant at either Encina or South Bay is inconsistent with the policies of the Coastal Act.

This report is not mentioned in the FSA.

Since Coastal Commission staff is not available for budgetary reasons, then staff should adhere to the Coastal Commission's prior assessment.

Project Description

Exhibit 304

p. 3-3 "Providing short and long-term employment for skilled labor in a region with over 10% unemployment, given CECP's capital construction budget of over \$500 Million".

Please identify the long term employment. The FSA states Encina staff would be transferred to the proposed CECP after Encina units 1, 2, and 3 are shut down.

Air Quality

Exhibit 305

p. 4.1-5,4.1-6” This area is designated as nonattainment for both the federal and state ozone standards and the state PM10 and PM2.5 standards. AIR QUALITY Table 3 summarizes federal and state attainment status of criteria pollutants for the SDAB.”

Aside from living in an area designated as nonattainment for health risk pollutants, the neighborhoods to the north, south and east of the Encina property are influenced by other high level pollution sources – the I-5 Interstate (slated for widening), the railway and the Encina Power Station. Our neighborhood to the south, Terramar, is frequently exposed to diesel emissions from the railway, as trains often sit behind the neighborhood while waiting for an approaching train to pass. Many of us are concerned with the exposure to additional emissions from a second power plant, the proposed CECP.

Exhibit 306

a) p. 4.1-20”During the construction periods, most of heavier construction activities would occur between 7 am and 7 pm, 9 hours per day, 5 days per week. However, there would be times when additional hours of construction may be necessary to make up for construction delays due to weather or other unforeseen events. Some activities would be continuous 24 hours per day, 7 days per week, during some construction periods and during startup and commission of the units.”

These construction guidelines allow the applicant to make the decision to run construction crews any time and any day they want to work. This is unacceptable.

b) p. 4.1-20”An existing railroad line, which would be available for delivery of materials and heavy equipment, is located immediately on the west side of the project site. Materials and other equipment would also be delivered by truck, accessed from Cannon Road.”

There needs to be strict restrictions on the time of day and the length of time the train would idle during delivery. The train is noisy and highly polluting and is very disruptive to the neighborhoods surrounding the Encina site, especially Terramar.

Exhibit 307

p. 4.1-29” Cumulative impacts analysis assesses the impacts that result from the proposed project’s incremental effect viewed over time, together with other closely related past, present, and reasonably foreseeable future projects

whose impacts may compound or increase the incremental effect of the proposed project. (Pub. Resources Code § 21083; Cal. Code Regs., tit. 14, §§ 15064(h), 15065(c), 15130, and 15355.) Additionally, cumulative impacts are assessed in terms of conformance with the District's attainment or maintenance plans."

Supported by the letter docketed with the CEC from Caltrans dated May 6, 2009, the widening of the I-5 is a reasonably foreseeable future project.

The I-5 is a related past project.

The Encina plant is a related past project.

The railway is a related past project.

The proposed CECP is the proposed project.

Therefore, all of these projects should be evaluated together per the above quote from the FSA.

Cumulative impacts evaluations are something we have implored the SDAPCD to perform. So far neither CEC staff nor the SDAPCD has evaluated all of these projects together to identify the cumulative effects. It needs to be done. Terramar residents live in a nonattainment area facing two major emission projects being added to the three already in existence.

Exhibit 308

p. 4.1-31" As can be seen from the modeling results provided in AIR QUALITY Table 20, the construction impacts have the potential to worsen the existing violations of the PM10 and PM2.5 ambient air quality standards and are, therefore, potentially significant and, 2) The modeled emissions are based on an earlier construction equipment emission estimate that was somewhat higher than the latest emission estimate shown in AIR QUALITY Tables 11 and 12. AIR QUALITY 4.1-32 November 2009 require all feasible mitigation. The applicant's construction modeling analysis indicates that the maximum NO₂, CO and SO₂ impacts would remain below the CAAQS and NAAQS. The NO_x and VOC emissions from construction, when considering their potential secondary ozone formation added to the existing ozone "background", have the potential to contribute to existing exceedances of the ozone standard and are therefore potentially significant and staff recommends all feasible mitigation."

The construction impacts should be evaluated with the cumulative impacts including Encina, the I-5, the rail way and any proposed CECP commissioning impacts that occur at the same time as construction.

Exhibit 309

p.4.1-37 "In light of the existing PM10 and PM2.5 non-attainment status for the project site area, staff considers the modeled impacts to be significant and, therefore, we recommend mitigation."

Aside from living in the San Diego air basin designated as nonattainment for these health risk pollutants, the neighborhoods to the north, south and east of the Encina property are influenced by two high level pollution sources – the I-5 Interstate (slated for widening), and the Encina Power Station. The neighborhood to the south, Terramar, is also exposed to the emissions from the railway, as trains frequently sit behind the neighborhood while waiting for an approaching train. Many of us are very concerned with the additional emissions from a second power plant, the proposed CECP, for our surrounding area.

Regional mitigation and pollution credits are not acceptable solutions for residents closely surrounded by all of these major emission projects.

Exhibit 310

p. 4.1-38 “The early morning pollution event, called fumigation, usually lasts approximately 30 to 90 minutes. Fumigation conditions are short-duration events and are generally only compared to one-hour standards. Two types of fumigation are analyzed using the SCREEN3 model: inversion breakup and shoreline. Inversion breakup fumigation occurs under low-wind conditions when a rising morning mixing height caps a stack (i.e., is at or right above the stack height) limiting plume rise and mixing which fumigates the air below. Shoreline fumigation occurs near a large water body shoreline when a roughness boundary causes turbulent dispersion to be much more enhanced near the ground, fumigating air below.”

The coastal areas surrounding the Encina property (including the site for the proposed CECP) are used daily by residents, visitors and tourists for exercise during the early morning hours. This is when “fumigation” is occurring. Many exercise strenuously and breathe deeply causing greater exposure to the health risks from emissions during “fumigation”. This is another example showing the *incompatibility* of coastal land used for an industrial purpose.

Exhibit 311

p. 4.1-40 “The applicant’s impact analysis indicates that the project’s maximum initial commissioning emission impacts are below the most stringent ambient air quality standards for NO₂ and CO.”

PM is not included in this statement. Does that mean that PM emissions are not below the most stringent ambient air quality standards?

Exhibit 312

p. 4.1-50 “The results of the applicant’s cumulative modeling analysis are provided in AIR QUALITY Table 27.”

“The results of this modeling effort, AIR QUALITY Table 27, show that CECP, along with the existing Encina Power Station, would not contribute to new short-term AAQS violations for NO₂ or CO. The CECP would mitigate emissions through the use of BACT and District required and staff recommended banked or new, owner-funded, emission reductions. Therefore, the cumulative operating impacts after mitigation

are considered to be less than significant.” Footnote “The CECP operation and the I-5 widening construction are expected to have maximum air quality impacts in different locations due to the differences in the types emission sources and their relative buoyancy and downwind dispersion. Therefore, significant cumulative impacts from the CECP operation and I-5 widening construction are not expected.”

The staff modeled the CECP and Encina cumulative impacts. Staff needs to evaluate all possible impacts- Encina, CECP, and I-5 widening, and for the Terramar neighborhood there are the additional diesel emissions from the train.

Exhibit 313

p. 4.1-66 “Power block Unit #6 consisting of one nominal 208 MW (219 MW with steam augmentation) natural-gas fired combined-cycle Siemens SGT6-PAC5000F combustion turbine generator, serial number to be determined, with an ultra low NOx (ULN) combustor, an evaporative inlet air cooler, a heat recovery steam generator with a selective catalytic reduction unit, an oxidation catalyst, and a steam turbine generator and associated air-cooled heat exchanger to condense the exhaust steam from the steam turbine.” And “augmentation) natural-gas fired combined-cycle Siemens SGT6-PAC5000F combustion turbine generator, serial number to be determined, with an ultra low NOx (ULN) combustor, an evaporative inlet air cooler, a heat recovery steam generator with a selective catalytic reduction unit, an oxidation catalyst, and a steam turbine generator and associated air-cooled heat exchanger to condense the exhaust steam from the steam turbine.”

Has this equipment been partially or completely purchased?

Exhibit 314

a) p. 4.1-72 “AQ-28 When a combustion turbine is combusting fuel (operating), the emission concentration of oxides of nitrogen (NOx), calculated as nitrogen dioxide (NO₂), shall not exceed 2.0 parts per million by volume on a dry basis (ppmvd) corrected to 15% oxygen, except during commissioning, low load operation, startup, shutdown, or tuning periods for that turbine. For purposes of determining compliance based on CEMS data, the following averaging periods calculated in accordance with the CEMS protocol shall apply:

- a. For any transient hour, a 3-clock hour average, calculated as the average of the transient hour, the clock hour immediately prior to the transient hour and the clock hour immediately following the transient hour.**
- b. For all other hours, a 1-clock hour average.”**

If a 1-clock hour average was used, would the emission concentration of oxides of nitrogen exceed 2.0 parts per million by volume on a dry basis corrected to 15% oxygen? If so, why was this 3-clock hour average allowance made?

b) p.4.1-72“AQ-29 When a combustion turbine is operating, the emission concentration of carbon monoxide (CO) shall not exceed 2.0 ppmvd corrected to 15 % oxygen, except during commissioning, low load operation, startup, shutdown, or tuning periods for that turbine. For purposes of determining compliance based on CEMS data, the following averaging periods calculated in accordance with the CEMS protocol shall apply;
a. For any transient hour, a 3-clock-hour average, calculated as the average of the transient hour, the clock hour immediately prior to the transient hour and the clock hour immediately following the transient hour.”

If a 1-clock hour average was used, would the emission concentration of carbon monoxide exceed 2.0 ppmvd corrected to 15% oxygen? If so, why was this 3-clock hour average allowance made?

Exhibit 315

a) p. 4.1-73 “AQ-30 When a combustion turbine is operating, the volatile organic compound (VOC) concentration, calculated as methane, measured in the exhaust stack, shall not exceed 1.5 ppmvd corrected to 15% oxygen, except during commissioning, low load operation, startup, shutdown, or tuning periods for that turbine. For purposes of determining compliance based on the CEMS, the District approved CO/VOC surrogate relationship, the CO CEMS data, and the following averaging periods calculated in accordance with the CEMS protocol shall be used:.
a. For any transient hour, a 3-clock-hour average, calculated as the average of the transient hour, the clock hour immediately prior to the transient hour and the clock hour immediately following the transient hour.”

When a combustion turbine is operating, if a 1-clock hour average was used to measure the volatile organic compound concentration, calculated as methane, measured in the exhaust stack would the emission concentration exceed 1.5 ppmvd corrected to 15% oxygen? If so, why was this 3-clock hour average allowance made?

b) p,4.1-73 “AQ-33When a combustion turbine is operating with post-combustion air pollution control equipment that controls oxides of nitrogen (NOx) emissions, the emission concentration NOx, calculated as nitrogen dioxide (NO₂), shall not exceed 12.9 ppmvd calculated over each clock hour period and corrected to 15% oxygen, except for periods of startup and shutdown, as defined in Rule 69.3.1. This limit does not apply during any period in which the facility is subject to a variance from the emission limits contained in Rule 69.3.1. [Rule 69.3.1]”

If the CECP is required to use BACT, why would they be allowed to run without the post-combustion air pollution control equipment that controls NOx?

Exhibit 316

a) p. 4.1-86 “AQ-69 The CEMS shall be in operation in accordance with the District approved CEMS protocol at all times when the turbine is in operation a copy of the District approved CEMS monitoring protocol shall be maintained on site and made available to District personnel upon request. [Rules 69.3, 69.3.1, and 20(d)(1) and 40 CFR Part 60 Subpart KKKK, and 40 CFR Part 75]”
“AQ-70 When the CEMS is not recording data and the combustion turbine is operating, hourly NOx emissions for purposes of calendar year and rolling 12-calendar-month period emission calculations shall be determined in accordance with 40 CFR 75 Subpart C.”

AQ-69 states the CEMS shall be in operation at all times when the turbine is in operation. AQ-70 states, “When the CEMS is not recording data and the combustion turbine is operating...”

These two conditions of certification seem to oppose each other. Please explain.

b) p. 4.1-86 “AQ-71 Any violation of any emission standard as indicated by the CEMS shall be reported to the District’s compliance division with 96 hours after such occurrence.”

- What does the District do with this violation information and how quickly do they respond?
- Is this information available to the public?
 - If so, where is it available and how soon?
- How does the District proceed when a violation is found that was not reported?
- How many of the staff is employed by the SDAPCD to audit around the county for violations?
- How often would the SDAPCD audit the proposed CECP to ensure all regulations are followed?
- Do auditors ensure all regulations are being followed or do they audit various regulations?
- Are audits random or are they scheduled?

Exhibit 317

p. 4.1-90 AQ-82 “Beginning with the initial startup of Turbine A”

Regarding turbine A, has it been clearly stated that A is defined as the first turbine to be installed?

Exhibit 318

pp. 4.1-91, 92

AQ-85, AQ-86, Aq-87

What is the difference between AQ-86 and AQ-87?

Regarding AQ-85, why is there not another general condition for Turbine B?

Exhibit 319

p 4.1-93 AQ-89 “For each combustion turbine, the project owner shall submit the following notification to the District and U.S. EPA, Region IX:

- a. A notification in accordance with 40 CFR Section 60.7(a)(1) delivered or postmarked not later than 30 calendar days after construction has commenced;**
- b. A notification in accordance with 40 CFR Section 60.7 (a)(3) delivered or postmarked within 15 calendar days after initial startup; and**
- c. An Initial Notification in accordance with 40 CFR Section 63.6145(c) and 40 CFR Section 63.9(b)(2) submitted no later than 120 calendar days after the initial startup of the turbine. In addition, the applicant shall notify the District when:**
 - 1. construction is complete by submitting a Construction Completion Notice before operating any unit that is the subject of this permit,**
 - 2. each combustion turbine first combusts fuel by submitting a First Fuel Fire Notice within five calendar days of the initial operation of the unit, and**
 - 3. each combustion turbine first generates electrical power that is sold by providing written notice within 5 days of this event.**

Are notices of this sort posted anywhere by the District?

Exhibit 320

**Greenhouse Gas Emissions
Testimony from Lane Sharman**

CARLSBAD ENERGY PROJECT
ISSUES PERTAINING TO LAW OF THE IMPACTS FROM THE PROPOSED ENERGY PLANT

Q. ARE THERE LAWS OR NORMS THAT THE PROPOSED PLANT VIOLATE?

International protocols (Kyoto, Copenhagen, et al), federal and state laws are rapidly developing to meet the policy objectives and science-based imperatives of capping and then reducing CO₂ and CO₂-equivalent content in the atmosphere. The science (James Hansen, IPCC, et al) has made clear that the unmitigated forcing effect of increased CO₂ will amplify and induce feedback loops to magnify the impacts of both temperature and ocean level increases resulting in global catastrophe.

Evidence of global warming has been overwhelming for more than 20 years. Policy development under the Clinton and Bush administrations amounted to greenwashing. Hence,

federal laws and rules to regulate CO₂, did not come to fruition under either regime. This inaction is being rectified under the Obama administration (House Climate Bill, EPA Findings, et al).

By contrast, the State of California enacted "[Global Warming Solutions Act of 2006](#)". The overarching stipulation of this law is that California's Emissions (CO₂, Methane, et al) be at 1990 levels by 2020. CEQA, by law, will demand GHG impact assessment and mitigation of all projects starting January 1, 2010. State agencies are enacting rules and regulation as quickly as possible to meet this statutory requirement: *reduce CO₂ equivalents in the atmosphere through immediate adoption of renewable energy generation, stimulate electric vehicle and rapid transit use, improve energy efficiencies, and impose moratoriums and closures on fossil-fuel based energy plants.* The sum total of all these actions are essential to stabilize CO₂ levels. Agencies in San Diego County have completed Greenhouse Gas Inventories (City of Solana Beach, et al). They are doing so in order to create action-plans to be in compliance with this statutory requirement by 2020.

How the Carlsbad project addresses CEQA regulation is particularly troubling. It has been claimed by CEC staff in the FSA that the Carlsbad Plant will result in a cumulative net reduction of GHG Emissions because older, less efficient plants will be decommissioned. This claim by staff is conjecture and was admitted as such in a public hearing. The applicant makes no promises to guarantee a net reduction of GHG other than decommissioning three ancient plants on-site. A normal interpretation of these facts is that the plant is creating a new source of CO₂ and, independently, older plants may or may not cease to operate due to cost or obsolescence. No linkage is promised and therefore none can be extrapolated. The FSA goes to great lengths to suggest otherwise. Again, there is no guarantee.

The applicant, under rules of mitigation, makes no assurance or guarantee to reduce on a 1:1 or greater basis the plant's emission impacts. There is no overriding need for this plant. Better incentives for rooftop solar are coming online and will tamp peak demand in San Diego. NRG can participate economically in this domain. While desert solar projects are being challenged to make imponderable 5:1 land set-asides, the FSA makes no such demands for Carlsbad's emission impacts. In effect, the CEC contemplates on the one hand destroying the economics of projects which are emission-free and no mitigation demands on those that add to emissions. How can that be deemed fair or just?

If permitted, the emission increase, to be fair, would be allocated regionally in San Diego. Shouldn't the applicant be obliged to make a promise of financial assistance to any agency in San Diego seeking to reduce its emission footprint to 1990 levels by 2020? Why is this not a condition of approval?

The Carlsbad Energy Project proposes to be granted the right to emit annually 846,076 Metric Tons of new CO₂-equivalents into the atmosphere. The addition is both significant and destabilizing as that the plant can be expected to operate for 50 or more years. In light of global and domestic law on emission reduction and stabilization, the issuance of an operating permit would violate both the letter and the spirit of the numerous laws and rules intended to reduce, not increase GHG Emissions. Neither the moral imperative nor the letter

of new laws allow this plant to be approved without substantial and verifiable guarantees of 1:1 or greater GHG reductions to offset the proposed additions.

Exhibit 321
Greenhouse Gas Emissions
Testimony from Lane Sharman

CARLSBAD ENERGY PROJECT
ISSUES PERTAINING TO THE SCIENCE OF THE IMPACTS FROM THE PROPOSED
ENERGY PLANT

What is Science telling us today about the impacts of carbon dioxide in the atmosphere? (The following excerpt is taken from page 164 of James Hansen's book, *Storms of my Grandchildren. The Truth about the Coming Climate Catastrophe and Our Last Chance to Save Humanity*. Mr. Hansen granted Lane Sharman permission to quote from his book for the purpose of this testimony).

In addition to paleoclimate data, my talk covered ongoing observations of five phenomena, all of which imply that an appropriate initial target should be no higher than 350 ppm. In brief, here are the five observations.

(1) The area of the Arctic sea ice has been declining faster than models predicted. The end-of-summer sea ice was 40 percent less in 2007 than in the late 1970s when accurate satellite measurements began. Continued growth of carbon dioxide levels will surely result in an ice-free end-of-summer Arctic within several decades, with detrimental effects on wildlife and indigenous people. It is difficult to imagine how the Greenland ice sheet could survive if Arctic sea ice is lost entirely in the warm season. Retention of warm-season sea ice likely requires the restoration of the planet's energy balance. At present our best estimate is that there is that there is about 0.5 watts per square meter of more energy coming into the planet than is being emitted to space as heat radiation. A reduction of carbon dioxide amount from the current 387 ppm to 350 ppm, all other things being unchanged, would increase outgoing radiation by 0.5 watt, restoring planetary energy balance.

(2) Mountain glaciers are disappearing all over the world. If business-as-usual greenhouse gas emissions continue, most of the glaciers will be gone within fifty years. Rivers originating in glacier regions provide fresh water for billions of people. If the glaciers disappear, there will be heavy snowmelt and floods in the spring, but many dry rivers in the late summer and fall. The melting of glaciers is proceeding rapidly at current atmospheric composition. Probably the best we can hope for is that the restoration of planet's energy balance may halt glacier recession.

(3) The Greenland and West Antarctica ice sheets are losing mass at more than 100 cubic kilometers per year, and sea level is rising at more than 3 centimeters per decade. Clearly, the ice sheets are unstable with the present climate forcing. Ice shelves around Antarctica are melting rapidly. It is difficult to say how far carbon dioxide must be reduced to stabilize the ice sheets, but clearly 387 ppm is too much.

(4) Data show that subtropical regions have expanded poleward by 4 degrees of latitude on average. Such expansion is an expected effect of global warming, but the change has been faster than predicted. Dry regions have expanded in the southern United States, the Mediterranean, and Australia. Fire frequency and area in the western United States have increased by 300 percent over the past several decades. Lake Powell and Lake Mead are now only half full. Climate change is a major cause of these regional shifts, although forest management practices and the usage of fresh water aggravate the resulting problems.

(5) Coral reefs, where a quarter of all marine biological species are located, are suffering from multiple stresses, with two of the most important stresses, ocean acidification and warming surface water, caused by increasing carbon dioxide. As carbon dioxide in the air increases, the ocean dissolves some of the carbon dioxide, becoming more acidic. This makes it more difficult to animals with carbonate shells to survive - indeed, sufficiently acidic carbonate water dissolves carbonates. Ongoing studies suggest that coral reefs would have a better chance of surviving modern stresses if carbon dioxide were reduced to less than 350 ppm.

Exhibit 322
Greenhouse Gas Emissions
Testimony from Lane Sharmon

CARLSBAD ENERGY PROJECT
ISSUES PERTAINING TO SOCIETY OF THE IMPACTS FROM THE PROPOSED
ENERGY PLANT

WHAT ARE THE CONSEQUENCES TO SOCIETY OF THE PROPOSED PLANT?

Only a few parties are deeply educated on earth science and empowered to make decisions that impact global conditions now and tomorrow. The CEC is one such governing body. A decision by the CEC to add CO₂ to the atmosphere undermines society locally and globally.

This moment in time is singular. CEC commissioners have both the responsibility and the knowledge to comprehend net additions of CO₂ to the atmosphere. Since the project makes no CO₂ mitigation guarantee other than to decommission ancient on-site generators, commissioners have to weigh, on the merits of known science, a net increase of CO₂ into the atmosphere from the operation of this plant.

Any deliberation permitting an increase of CO₂ levels into the atmosphere raises ethical and moral questions. In the absence of a guarantee to mitigate GHG emissions on a 1:1 or greater basis, the operation of the plant troubles every informed citizen. Granted, the plant is more efficient - less emissions per MWH. Yet, I submit that any new material source of emissions cannot be permitted on a going-forward basis without violating the norms of protecting the Greater Good of Society.

During the last decade, James Hansen, the nation's leading scientist on climate change, has completed numerous studies examining climate sensitivity relative to the paleoclimate record

and current models. His findings are most recently discussed in Storms of My Grandchildren. His latest interpretation of the historical record and the rates of change in ice sheet melt compel him to recommend that CO2 stabilize at 350 PPM. CO2 today is 387 PPM. The atmosphere contains about 800 Billion Metric Tons of CO2. Of the man-made CO2 in the atmosphere, the United States cumulative contribution is about 27%, three times greater than Chinas'. California's cumulative contribution is a significant percentage of the country's total. The proper question before the CEC commission is "do we have an obligation to society to reduce man-made CO2 in the atmosphere through energy solutions which are emission-free? Is this our overriding priority?"

The CEC must account for the societal impacts of net CO2 additions each year as a result of the State's energy budget. The calculus is dire. Each day, month and year during which power plants emit CO2 at colossal, cumulative rates on behalf of the State's energy diet is another strike against the State as a responsible global citizen. The sensitivity of the climate to warm quickly with slight changes in variables means that small increases of atmospheric CO2 may amplify geophysical positive feedbacks such as the release of colossal methane hydrates stored in the ocean bottom.

Our current climate models have underestimated the rate at which ice sheets are melting. Geologic time was measured in millions of years. Now, in the short span of two hundred years, society has inadvertently dumped billions of new CO2 into the atmosphere creating a net imbalance of radiant energy in and thermal energy out. The only possible result of this equation is a warming of the ocean, a melting of the Artic, Greenland, and finally Antartica. With Business As Usual, we condemn society of tomorrow to sea level rise not seen in millions of years. Billions living in coastal regions will have to migrate. This picture is real and imminent. It is neither a hoax nor a theory. Ice is melting and coming off the shelves and into the ocean. The rise of tides is underway and it spells societal calamity unless informed citizens in the control tower stop the plane on the runway. With Business As Usual, the plane does not have enough runway to take off. The collapse of modern society will be inevitable.

Exhibit 323
Greenhouse Gas Emissions
CV from Lane Sharman

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Summary

Lane is a management and financial consultant developing solar, water and farming assets in the Southwest of the United States. Currently, he is an equity partner for Solarpack Development Corporation. In this capacity, he sites and permits municipal-scale solar

facilities in Southern California. He also consults to water agencies. Lane is the founder of California's first independent water exchange, the Borrego Water Exchange. It facilitates sales, leases, purchases, and transfers of water resources, rights, and credits. Recent accomplishments include:

- Acquisition and interconnection development for a 40 acre parcel in San Bernardino County and a 60 acre parcel in LA County on behalf of Solarpack.
- Develop, negotiate, and close a 50 year land and water lease between an Arizona land owner and a Spanish solar thermal engineering company with a subsidiary in the United States. The assignment includes on-going due diligence, legal support, stakeholder communication, regulatory analysis, and financial management. Lane represents the land owner.
- Negotiated and closed the first citrus grove following in Borrego Springs. Borrego Water District was the buyer and the grove owner was the seller. It resulted in significant aquifer savings and created a pool of water credits which have been purchased by subdividers who, in following CEQA, offset new water demands in Borrego with the purchase of water credits created by the water rights conveyed.
- Secured under contract Solana Energy Farms, a 2,400 acre historic farm in Western Imperial County. This farm will host one of the great solar plants in North America when fully built out. Lane has completed a contract for siting an energy facility.
- Moderated the Utility Panel for Imperial County's First Renewable Energy Summit in April, 2008.
- Active in local community affairs, green policy development, and politics. He is a member of the Clean and Green Committee for the City of Solana Beach.

Lane provides management services throughout the West negotiating transactions with counter-parties for solar, water and land. In this capacity, he is meeting his personal objective to advance the mission of making the Southwest the preeminent capital for renewable energy generation in the United States. These activities are aligned to economic and environmental aspirations.

Mr. Sharman has held executive level and senior management positions providing operational, financial, engineering, and marketing support. He has excellent communication and computer skills; works well with diverse stakeholders; and, has strong entrepreneurial instincts. His network of associates in the West is extensive.

Management Positions

Local Partner Solarpack Development Corporation	2009-Present	Responsible for all project development in Southern California for municipal scale PV projects.
Solana Energy Managing Director	2004-Present	Develop solar farming asset for Aguasol Holdings, Imperial County, CA; Manage the close of a large solar transaction in Kingman, AZ; Organize and

		launch the Borrego Water Exchange providing water transfers and aquifer sustainability through the development of California's first water environmental exchange. Participate in the development of the solar industry in Imperial County, CA. Formalize remote solar as an economic methodology for commercial solar deployment in the Southwest.
Open Doors Software CTO	1996-2004	Develop financial exchange, costing, and security software allowing large scale enterprises to manage projects, timelines, conflicts, activities, billing and cash flow.
Resource Systems Group Management Consultant	1977-1996	Project management services and software development to Walt Disney, DSR Corporation, Bien Logic and NCR Corporation.

Activities

- Moderator, First Imperial County Renewable Energy Summit
- Member, Energy Committee, Imperial County Economic Development Corporation
- Member, Solana Beach Clean and Green Committee
- Member, San Diego Sustainable Energy Advisory Board
- Member, Conservation Committee, Borrego Water District
- Member, Groundwater Resources Association of California
- Member and past Vice-President, Infragard, San Diego Chapter. The largest security consortium in the United States between the FBI, the Department of Homeland Defense, and the private sector.
- Computer aid and volunteer at St Vincent de Paul, a center to support the homeless.
- Cultural and social exchange development with France
- Mathematics Tutor, Borrego Springs High School

Education

- American College In Paris
- UC Santa Barbara
- San Francisco State University, Graduated 1977
Bachelor of Arts, Mathematics and Computer Science, 3.7GPA
- Post-Graduate Studies in Computer Simulation, Finance, Accounting and Real Estate

Other

- Fluent In French
- Solid Business and Technology Network
- Security Clearance granted by US Government

- Excellent health
- Published in Professional Journals
- Developer of numerous software architectures including the Web Manufacturing Template (wmt.opendoors.com) and security services (www.spamfactor.com)

References

Richard Walker, Retired Immigration Officer	760-767-4928
Judy Meier, Editor & General Manager, Borrego Sun	760-767-5338
Rudy Monica, Client	760-207-2000
Michael Hetz, Partner	619-298-3500
Olaf Walter, Business Associate	858-208-6296
Erika Foxworth, FBI Special Agent	858-499-7926

Other references available on request including letters of reference.

Exhibit 324

p. 4.1-102” The project would be consistent with the requirements of SB 1368 (Perata, Chapter 598, Statutes of 2006) and the Greenhouse Gas Emission Performance Standard even though the project, as a peaking or mid-merit project with an enforceable operating limitation less than 60 percent of capacity, is not subject to the requirements of SB 1368 and the Greenhouse Gas Emission Performance Standard.”

The CECP has the ability to produce over its 60 percent capacity though NRG has chosen to follow the path of steering below the SB 1368 threshold during the approval process. Two grave concerns emerge if the project is approved:

1. CAISO could call on the project enough to push the CECP over its emission limits. This could cause NRG to request variances from SDAPCD and CEC to increase operating capacity even though the entire license approval process was completed on the basis of below 60 percent capacity and therefore bypassing SB1368.
2. CAISO could call on the project and push the CECP over its emission limits. NRG could choose to request the CECP run permanently on a higher than 60% capacity.

If approved, this backdoor path to higher capacity use of the proposed CECP could deny interveners the opportunity to oppose higher capacity prior to its construction.

What can be done to prevent this from occurring?

Exhibit 325

Based on the Greenhouse Gas table 10 on page 4.1-118 of the FSA, listing the contracts that will not be renewed because of coal fired or petroleum coke-fired fuel, do we face the possibility of CECP being upgraded to 100% capacity?
Could units 1, 2, or 3 be brought back on line?

Exhibit 326

p. 4.1-131 "Air Quality Comment 3

The plant should meet the same NOx emissions requirements (without the applicant requested waivers for transient load operations) as permitted for other similar power plants.

Staff Response

The SDAPCD has not allowed the applicant's request for significantly increased NOx emissions during transient load operation, and have only allowed an increase in the compliance period from a one-hour average to a three-hour average during transient load operation. Staff concurs with the District and has provided additional information about the request for transient load emission levels and the District's denial of the applicant's request in the FSA."

I concur with Power of Vision in their air quality comment here and dispute the answer received from staff. I have grave concerns for those of us living next to the plant knowing that the three hour averaging appears to allow the CECP to go above the one hour levels so the exceedances can even out.

Exhibit 327

p. 4.1-132 "Air Quality Comment 4 The applicant should provide actual data for the same plant as proposed for this project and under the same modes of operations (Staff notes this is a follow-up of Air Quality Comment 3).

Staff Response

Actual data for this type of plant/turbine in commercial operation does not yet exist. Please also see the response to Comment 3 directly above."

Applicant information provided is theoretically speculative; therefore we must rely on the honesty and reliability of the information provided by NRG.

Please refer to the Terramar Intervener Status Report #7 docketed on June 4, 2009. The status report includes a letter to David Crane (CEO of NRG) dated May 26, 2009. In that letter it states, "NRG West has been mailing out copies of the "Carlsbad Energy Center Powering California with NRG" that include many misleading statements and manipulation of information."

The letter points out specific examples where NRG has mislead the public in their publications. No response was ever received from NRG regarding this letter.

Following the SDAPCD publishing of their FDOC, the Applicant mailed out the following notice to the public,

“NOTICE OF FINAL DECISION TO APPROVE A SOURCE OF AIR POLLUTION BY THE SAN DIEGO AIR POLLUTION CONTROL DISTRICT

The San Diego Air Pollution Control District ("District") Air Pollution Control Officer has made a final decision to approve the Carlsbad Energy Center LLC's proposed development of the Carlsbad Energy Center Project (District Application Nos. 985745, 985747, and 985748), a 558-megawatt combined-cycle power plant consisting of two natural gas-fired combustion turbine generators, each with a heat recovery steam generator and emission control equipment, and a diesel fire pump engine, to be located at 4600 Carlsbad Boulevard, Carlsbad, California. The District performed an evaluation of the air pollution impacts of this proposal and the equipment is expected to operate in compliance with all applicable District Rules and Regulations and all applicable federal requirements. The District published notice of the proposed installation of the new equipment on November 25, 2008, in accordance with District Rule 20.3(d)(4). The District's proposed action and Preliminary Determination of Compliance was available for public comment from November 25, 2008 to December 24, 2008. The District considered all comments received before taking this final action. The Final Determination of Compliance incorporates conditions necessary to ensure compliance with all federal and District requirements. The District's Final Determination of Compliance is available for public review at the District office located at 10124 Old Grove Road, San Diego, California 92131. Should you have questions for the District or wish to make an appointment with the District to review documents related to this action, please contact Steven Moore at (858) 586-2750.”

This notice is also very misleading to the public. Terramar docketed this notice to the CEC in its status report on Sept. 2, 2009 with a note stating,

“... attached is a copy of a piece of communication that was sent out by the applicant to the community regarding the FDOC. Underlined in the communication it reads, "The Final Determination of Compliance incorporates conditions necessary to ensure compliance with all federal and District requirements."

Is it true that the SDAPCD ensures compliance with all federal requirements? This is a question for the CEC and the APCD to answer. Wouldn't a federal agency make that determination, like the EPA? If this statement is inappropriate or inaccurate, it has been sent out to the public.”

Rob Simpson, an intervener on this project, made an attempt to challenge the FDOC and was denied a hearing by the San Diego Air Pollution Control District due to the fact that the FDOC was not a final document.

Once again NRG has misled the public. Many people called me when they received this notice because they were convinced that the project was approved.

a) What assurances can the CEC give the public that the facts provided by the applicant in the FSA are legitimate and truthful?

- b) If the plant is built and emissions are found to be larger than stated in the FSA what actions will the CEC take?
- c) If it is found that any facts have been exaggerated or misstated what actions will the CEC take?

Exhibit 328

p. 4.1-134” Page 1 Comment 4

Has the analysis included assessment of worst-case emissions of proposed Units 6 and 7 along with worst-case emission of existing Units 4 and 5 along with worst-case emissions from the I-5 during rush hour cumulatively, as required by CEQA?

Staff Response

Yes, the modeling analysis has included an assessment of the cumulative impacts of the new proposed CECP emission sources, along with the existing Encina units 4 and 5, along with worst-case ambient pollutant background conditions (see Air Quality Table 27). In the Air Quality PSA this table just reported short-term impacts for NOx and CO, but in the Air Quality FSA, Table 27 has been amended to include all relevant Ambient Air Quality Standards and averaging periods.”

As a closely related past project, the I-5 should be included in the cumulative impacts analysis as well as the railway per quote from p. 4.1-29” Cumulative impacts analysis assesses the impacts that result from the proposed project’s incremental effect viewed over time, together with other closely related past, present, and reasonably foreseeable future projects whose impacts may compound or increase the incremental effect of the proposed project. (Pub. Resources Code § 21083; Cal. Code Regs., tit. 14, §§ 15064(h), 15065(c), 15130, and 15355.)

Exhibit 329

p. 4.1-136” Page 2 Comment 8

The operation of Units 1, 2, and 3 at the Encina power station has declined in recent past years. Wouldn’t the past two years be more appropriate for the San Diego Air District to use to calculate the proposed CECP 6 and 7 pollution credits?

Staff Response

First, staff notes that while we have commented on certain specifics of the PDOC, we do not argue the general appropriateness of the District’s regulations that are approved both by CARB and U.S.EPA to implement the state and federal Clean Air Acts, including the those regulations that cover methods of how to calculate net emission changes. The District addressed Energy Commission staff’s comments and concerns regarding this issue during the discovery phase of the project and has dealt with the emission estimation basis issues for years 2002 and 2003 and has painstakingly gone over the emission estimates, including the most recent proposed reductions

in the NOx emission estimate provided by the applicant, to determine the appropriate emission reductions from the closure of Encina Units 1, 2, and 3.

Second, NRG could have operated Units 1, 2, and 3 to the exclusion of Units 4 and 5 to significantly increase their baseline emissions for these units after they knew they were going to propose the CECP, but they did not.

Third, it is possible that Encina Units 1, 2, and 3 would need to increase its capacity factor and emissions in the future, at least for some period of time, if the CECP or other proposed new power plants were not built.

Finally, staff is in agreement with the methods that the District used to determine the emission baseline for Units 1, 2 and 3.”

If it is actually the case that NRG could have ramped up the use of their least efficient units to up their pollution credits for the proposed CECP, then the rules need to be addressed restricting inappropriate actions like that from occurring.

Exhibit 330

p. 4.1-140”Comment V. Secondary PM10 Emissions

The PSA states that PM10 emissions “are not estimated to be higher or lower during startup and shutdown events than during normal operations”.

However, PM10 precursor emissions (NOx) are higher during startup, so the applicant should be required to quantify the potential formation of secondary particulate and the information should be incorporated in the PSA.

Staff Response

In the citation, the PSA is referring to the stack emissions of PM10, not to the secondary PM10 formation that will be occur after stack exhaust is released into the atmosphere. Also, staff notes that PM10 emissions during startup and shutdown events are likely to be lower than normal operations, and other applicants have assumed fuel use proportionality for their PM10 emissions during startup and shutdown events, which has not been assumed for this project.

Secondary particulate formation is discussed in the PSA (see pages 4.1-40, 41). The specific amount of secondary particulate formation cannot be reasonably estimated, AIR QUALITY 4.1-140 November 2009 either during short-term startup events or over the long term, due to the complexity of the reactions that cause secondary particulate formation and the variability of the ambient conditions that influence this process.

Through a combination of the District required NOx offsets; the shutdown of Encina Units 1, 2, and 3; and staff’s required offsets for PM10 and VOC there will be no permitted emission increases of particulate emission or criteria pollutant particulate precursor emissions.”

I would like to see these calculations as PM emissions are so dangerous.

Hazardous Materials

Exhibit 331

a) p. 4.4-15”

It is possible that an earthquake could cause the failure of a hazardous materials storage tank. An earthquake could also cause failure of the secondary containment system (berms and dikes), as well as the failure of electrically controlled valves and pumps. The failure of all of these preventive control measures might then result in a vapor cloud of hazardous materials that could move off site and affect residents and workers in the surrounding community.”

For the neighborhoods surrounding the proposed CECP this is a significant concern. Not only is there a concern with the proposed CECP, during a significant event such as an earthquake there is also a concern with the ammonia tanks at the Encina location and what could happen if one or both failed. Is there an evaluation for this?

b) p. 4.4-15”

Therefore, on the basis of what occurred in Northridge with older tanks, and the lack of failures during the Nisqually earthquake (with newer tanks), staff determined that tank failures during seismic events are not probable and do not represent a significant risk to the public.”

For the neighborhoods surrounding the proposed CECP this is a significant concern. Not only is there a concern with the proposed CECP, during a significant event such as an earthquake there is also a concern with the ammonia tanks at the Encina location and what could happen if one or both failed. Has the CEC staff analyzed what the impacts would be if both failed?

Exhibit 332

a) p. 4.4-16 “On April 9, 2007, the U.S Department of Homeland Security published in the Federal Register (6 CFR Part 27) an interim final rule requiring that facilities that use or store certain hazardous materials conduct vulnerability assessments and implement certain specified security measures. This rule was implemented with the publication of Appendix A, the list of chemicals, on November 2, 2007. While the rule applies to aqueous ammonia solutions of 20% or greater and this proposed facility plans to utilize a 19% aqueous ammonia solution, staff still believes that all power plants under the jurisdiction of the Energy Commission should implement a minimum level of security consistent with the guidelines listed here.”

What is the most appropriate % solution to use in the SCR?

Is aqueous ammonia used in any type of bomb making?

What happens when natural gas (from a leak) mixes with aqueous ammonia (from a leak)?

b) p. 4.4-16 “Staff determined that this project would fall into the category of medium vulnerability due to the urban setting and close proximity to sensitive receptors. Staff therefore proposes that certain security measures be implemented but does not propose that the project owner conduct its own vulnerability assessment.”

Placing a power plant in-between two major sensitive receptors (an interstate and the railway) creating a medium vulnerability safety risk could lead to significant impacts for the whole coastal region of San Diego if an incident were to occur. Once the I-5 is widened, is there anywhere else in the State of California where a power plant (of this size) is sandwiched in between two such major receptors with nearby residential? If so, where?

Exhibit 333

a) p. 4.4-17 “Another site security issue involves the proposed routes for a Coastal Rail Trail. Staff is very concerned about the safety and security of the CECP should the project be certified and built, and should the Coastal Rail Trail be built. Staff will avoid discussing the obvious safety and public health issues of placing a trail for use by hikers, bikers, and runners along a rail corridor that goes through a heavily industrialized area, thus resulting in among other things, a trail-user’s exposure to intermittent high concentrations of Diesel Particulate Matter from passing trains. Instead, staff believes placing the Coastal Rail Trail on the eastern side of the railroad ROW -- an option under consideration -- raises several security, safety, and fire access problems. Staff discusses the security and safety concerns in this section of the FSA and refers the reader to the Worker Safety and Fire Protection section for discussion of the fire access issues.”

Staff is concerned about trail user’s exposure to intermittent high concentrations of Diesel Particulate Matter (DPM) from passing trains. Nowhere in the FSA does staff show equal concern for the DPM created by the trains idling behind the Terramar homes for lengthy periods of time. While Terramar residents endure the health impacts from the idling train DPM emissions, we also breathe the Particulate Matter exposure from the Encina Power Station and from the nearby I-5 (slated for future expansion).

Increasing Particulate Matter for Terramar and surrounding neighborhoods (next to the train tracks) from the proposed CECP and the proposed I-5 widening should be a major cumulative emission impact concern for staff based on staff’s concern for the trail user’s short duration exposure.

b) p. 4.4-17 ” As seen in Appendix D photo 063, the current rail corridor is single-track and sunken below existing grade as it goes by the power plant site. Staff understands that one option for the LOSSAN Rail Corridor would have two tracks within this area and sink the new side-by-side tracks a bit further below grade. This will add to the safety by reducing the chances that a derailment will jump the “depression” and result in railcars going through the CECP western fence and onto the power plant site”

This quote identifies just one of the significant safety issues involved with placing a power plant in between two major transportation corridors.

Land Use

Exhibit 334

p. 4.5-7 “The “PU” Zone also specifies that the issuance of any building permits or entitlements cannot occur until a Precise Development Plan (PDP) has been approved by the City of Carlsbad for the property”

Does this mean that the license can be issued but the City of Carlsbad controls whether the plant can be built?

Exhibit 335

a) p. 4.5-9 “In general, a power plant and its related facilities may also be incompatible with existing or planned land uses, resulting in potentially significant impacts, if: they create unmitigated noise, dust, or a public health or safety hazard or nuisance; result in adverse traffic or visual impacts; or preclude, interfere with, or unduly restrict existing or future uses.”

While Encina Power Station has moved toward retirement, Carlsbad by the Sea has developed into a tourist town. The industry has blossomed during the fifteen years that I have lived in Carlsbad. Just in the area near the proposed CECP, Legoland, The Carlsbad Sheraton Resort, The Grand Pacific Palisades Resort, The West Inn and Suites, The Crossings Golf Course, The Hilton Garden Inn and The Premium Outlet have all been constructed. In addition many restaurants and stores have been built. Plans for more hotel/resort businesses have been approved by the Carlsbad Planning Commission that will be constructed along the coastline of Carlsbad both north and south of the proposed CECP site.

Common sense tells us that tourism and industrial use are not compatible land uses. The siting of the proposed CECP next to the major thoroughfare of Carlsbad could significantly impact the city’s current and developing tourism industry.

b) 4.5-9 “The proposed project would not disrupt or divide an established community”

See the response to the page 4.5-9a quote above in Exhibit 335.

Exhibit 336

p. 4.5-11 “The Coastal Commission further noted that the CECP (as well as other power plants located in the coastal zone) is proposing to end the environmentally destructive use of seawater for once-through cooling and instead employ dry cooling technology, which the Coastal Commission has strongly supported during past power plant reviews. The move away from

once-through cooling reduces the Coastal Commission's concerns about the type and scale of impacts associated with these proposed projects and about the ability of these projects to conform to Coastal Act provisions. As such, the Coastal Commission's letter encourages the Energy Commission to incorporate some aspects of Coastal Act conformity into our review."

The quote clearly states the Coastal Commission wants "to end the environmentally destructive use of seawater for once-through cooling". Impingement and entrainment are the reasons the Coastal Commission wants to end once through cooling. They didn't say slow down or reduce. They said end.

By installing a desalinization unit for the proposed CECP the destructive impacts of impingement and entrainment continue. The impacts do not end. Ending the impacts is the message of the Coastal Commission.

Exhibit 337

p. 4.5-12 "The existing EPS is a "coastal dependent use" pursuant to the Coastal Act, inasmuch as it uses once-through cooling technology. Coastal dependent uses are encouraged to expand "within existing sites and shall be permitted reasonable long-term growth where consistent with this division" (Public Resources Code, Section 30260). Even though the existing EPS steam boiler Units 1, 2, and 3 would be retired upon successful commercial operation of the new CECP generating units, the other existing EPS Units 4 and 5 would continue operating. Therefore, the EPS would continue to be a coastal dependent facility. Thus, the addition of the proposed project (i.e., CECP generating units 6 and 7) is an expansion of a coastal dependent use that is consistent with provisions of the Coastal Act. In addition, at this point, it appears that the most feasible source of water for the new CECP facility would be the proposed oceanwater purification system, which would make the CECP a coastal-dependent use."

On page 4.5-12 staff is declaring a coastal dependency for CECP due to the use of once through cooling.

On page 4.5-11 staff discusses the Coastal Commission's desire to end once through cooling by saying, "The Coastal Commission further noted that the CECP (as well as other power plants located in the coastal zone) is proposing to end the environmentally destructive use of seawater for once-through cooling.

The Coastal Commission quote proves the CECP is ending once through cooling. CEC staff can no longer use this (once through cooling) technicality to declare CECP coastally dependent. By ending once through cooling CECP is not coastally dependent, technically or otherwise.

Exhibit 338

p. 4.5-14 “The Visual Resources section of this document addresses the CECP’s visual impacts on surrounding land uses (including recreational resources), and how the proposed CECP would comply with this section of the Coastal Act.”

Staff has ignored a prior Coastal Commission report from 1990 that was docketed with the CEC by the City of Carlsbad on May 13, 2009 that states on pages 32, 33 and 45 the following:

D. VISUAL IMPACTS

Section 30251 of the Act states, in part:

The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas.

In addition, Section 30413(d)(3) requires the Commission to consider the impacts of the proposed facility upon the aesthetic values of the area.

Existing Visual Environment

The Encina facility with its 383 foot high stack is the single dominant feature upon the landscape of the Agua Hedionda Lagoon area. The facility is visible not only from beach areas, but from virtually the entire Agua Hedionda Plan area and from outside the coastal zone to the east. Although the coastal lagoons of San Diego County are, generally speaking, areas of great visual interest and sensitivity, Agua Hedionda Lagoon has been visually degraded to some extent by the presence of the Encina Power Plant and associated transmission structures. Views along Carlsbad State Beach are disrupted by the chain link and barbed wire fence that encloses the outfall structure.

The visual interest and importance of the area is reflected by the fact that numerous vista points and scenic roadways are identified in the certified Agua Hedionda segment Land Use Plan (LUP). The LUP designates Carlsbad Boulevard as a scenic roadway, and requires additional landscaping on development adjacent to Carlsbad Blvd. to screen development from the roadway. In addition, the LUP requires additional design criteria for development adjacent to the roadway, although no specific criteria are stated. The Encina site is also visible from Park Drive, which has also been identified in the LUP and the City of Chula Vista General plan as a scenic roadway. Finally, Adams Avenue and El Camino Real are identified as potential scenic corridors in the City's general plan.

The LUP also designates a number of vista points throughout the Agua Hedionda area. The Encina Site is most visible from two unnamed vista points on the north shore of the outer and middle basins, but, due to the size of the 383 foot stack, the Encina structures are visible from all north shore vista points. Views to the ocean are also available from a number of sites on the south shore, including the projected alignment of Cannon Road. Views from sites surrounding the lagoon are protected under Policy 8.4 of the Agua Hedionda LUP, which requires all development to be consistent with the Scenic Preservation Overlay Zone. This overlay zone seeks to protect the scenic qualities of the coastal area through the regulation of signs, landscaping, setbacks, building bulk, etc. Development controls are applied through the special use permit process.

p.33

Given the size of the existing structure with its 383 foot stack, and its prominent location near the shoreline, the existing plant has had a significant adverse impact upon the visual environment of this coastal area. The outfall structure, enclosed in a chain-link and barbed wire fence, detracts from the visual enjoyment of the shoreline area.

Visual Impact of Proposed Expansion

The plant expansion would result in the addition of two 150 foot high stack structures, and a 75,000 square foot building. These new structures would increase the massiveness of the facility. While these 150 foot high stack structures and new building would represent only an incremental increase in the level of impact upon the visual resources of the area, the impact will nevertheless be significant.

p.45

Cumulative Visual and Public Access Impacts

The existing Encina Power Plant with its 383-foot-high stack and massive generating facilities substantially degrades the visual quality of the beach and shoreline. The addition of the proposed combined cycle project with its two 150-foot-high stacks will add significantly to the existing impacts. As well, the across-the-beach discharge visually degrades the beach and disrupts full public access and use of the beach. The addition of the new, proposed Encina power plant would extend the size and life of this discharge channel and on a cumulative basis significantly impact beach use and the visual environment.

The above quote is from the Coastal Commission Report 1990 docketed May 13, 2009.

Carlsbad residents have lived with the Encina Power Station for over fifty years. At the time it was built, it was coastally dependent because of “once through cooling”. Now it is old. It sits on the coast highway looking like a giant concrete box.

Carlsbad is a tourism town. That is a fact.

The following quote is taken directly from the website of the Sheraton Carlsbad Resort and Spa, www.sheratoncarlsbad.com

“The Sheraton Carlsbad Resort & Spa is a refreshing Carlsbad hotel located in the charming coastal community of Carlsbad in San Diego North.

With beautiful Contemporary Mediterranean architecture, rolling lawns, flowering shrubs and nearby pristine beaches, the Carlsbad hotel offers a beautiful setting sure to inspire guests of every kind. The

hotel sits alongside the Crossings at Carlsbad Golf Course and LEGOLAND California Resort, providing access to a wide variety of exciting things to see and do.”

The following quote is taken directly from the website of the Grand Pacific Palisades Resort and Hotel, www.grandpacificpalisades.com (click on “the resort”)

“Welcome to Grand Pacific Palisades Resort and Hotel...

*Breathtaking panoramic ocean views.
Hued sunsets dancing on the horizon...
A cool breeze drifting across the balcony...*

This is the captivating appeal of the Grand Pacific Palisades Resort and Hotel.

The Resort's 12.2 lushly landscaped acres stretch along a ridge overlooking the Pacific Ocean and the Carlsbad Flower Fields and contain a wide array of recreational **amenities** such as an Olympic-sized pool, three spas, a children's interactive waterpark and family pool, a fully-equipped fitness center and an activity center and game room for the kids. The property features 161 beautifully appointed **vacation villas**, many with commanding panoramic ocean views, a luxurious 90-room hotel, 10,000 square feet of **meeting and banquet facilities**, as well as several outdoor venues for weddings, social gatherings and group activities. To make your working stay easier, we have a full service Business Center that can take care of those last minute copies and faxes for you. Also on site is the award-winning **Karl Strauss Brewery Restaurant** ~ enjoy the tantalizing cuisine for breakfast, lunch or dinner! **Click here** for more information about restaurants in the area.

This stunning Southern California resort is located near the charming seaside village of Carlsbad, California. Just north of **San Diego** and south of Anaheim, **Carlsbad** is Vacation Central! Miles of sandy beaches, world-class golf courses, fine dining and great shopping are all within minutes.”

Grand Pacific Palisades call Carlsbad, “Vacation Central”.

Both of these resort land uses is located between the Cannon Rd and Palomar exits off of the I-5 with ocean views.

From the websites quoted above, Carlsbad’s greatest drawing point is our beautiful coastline. People love to walk on the beach, watch the sunset, have family picnics and get-togethers, surf, swim, canoe, and so many other types of relaxation and exercise.

People avoid being near power plants, especially when they are on vacation. They want to avoid pollution and be somewhere that is beautiful so they have a choice to vacation near a power plant or away from a power plant.

The argument that the proposed CECP is coastally dependent is based on the technicality of once through cooling. Since the proposed CECP plant will not use once through cooling it does not need to reside on the coast.

If the proposed CECP is built next to the freeway, once the I-5 widening occurs it will rise straight up 109 ft. It will be hard to miss in “Vacation Central” per the Grand Pacific Palisades website. The millions of people who drive by the power plant will remember how

unsightly it is when they are making their decisions of where to spend their weekend, or their vacation, or even what beach to visit.

I know this is true because I avoid Long Beach for the very same reason. When I tell people that the proposed CECP could create a similar look to Long Beach they know exactly what I mean.

If this prime coastal land was allowed to return to its highest and best use, it could be very positive for the tourism industry in Carlsbad and spill over into other businesses and industries in the city and region. These are tough economic times and the future economic benefits to Carlsbad by the Sea should be of prime consideration in this important decision. Tourism dollars can create a great income stream for the future of Carlsbad.

Exhibit 339

p. 4.5-17 “In addition, the ongoing use of the CECP site, while predominantly industrial, would not preclude the public’s use and enjoyment of adjacent coastal lands, as is currently the case with the EPS and surrounding coastal lands.”

Here staff hits the nail on the head. In discussing the rail trail staff identifies being inside the site and outside of the site are not compatible by stating, “the ongoing use of the CECP site, while predominantly industrial, would not preclude the public’s use and enjoyment of adjacent coastal lands”. The adjacent coastal lands create public enjoyment, separate from the industrial CECP site, making the land uses incompatible. The coastal site is not appropriate for the proposed CECP.

Exhibit 340

p. 4.5-33 “A proposed siting location may be considered inappropriate if a new source of pollution or hazard is located within close proximity to a sensitive receptor. From a land use perspective, sensitive receptor sites are those locations where people who would be more adversely affected by pollutants, toxins, noise, dust, or other project-related consequence or activity are likely to live or gather. Children, those who are ill or immune-compromised, and the elderly are generally considered more at risk from environmental pollutants. Therefore, schools, along with day-care facilities, hospitals, nursing homes, and residential areas, are considered to be sensitive receptor sites for the purposes of determining a potentially significant environmental impact.”

Though Terramar is not within the defined area of a sensitive receptor it is very close to the proposed site. We have many elderly, cancer patients, and children with illnesses living in our neighborhood.

Noise and Vibration

Exhibit 341

p. 4.6-5 “Ambient Noise Monitoring

In order to establish a baseline for comparison of predicted project noise to existing ambient noise, the applicant has presented the results of an ambient noise survey (CECP 2007a, AFC § 5.7.4.1; Tables 5.7-5 through 5.7-12; Figure 5.7-3). The survey was conducted July 23 through 25, 2007, and monitored existing noise levels at the following locations, shown on NOISE AND VIBRATION Figure 1:”

An ambient noise survey conducted two and a half years ago for a total of three days can not characterize the ambient noise levels in our community. I have lived in many different areas of the country and have never experienced the varied levels of ambient noise that I have experienced living in Terramar.

Ambient noise varies greatly depending on weather conditions and wind direction. There are nights when I can hear barking seals located on the buoys off the coast from the Encina Plant. There are times when the Encina Plant blows steam and depending on the direction of the wind and the weather conditions, it isn't audible in Terramar but is heard inland in old Carlsbad. Other times the opposite is true.

Noise from the I-5 is another example. Sometimes it is overwhelmingly noisy and other times it is barely audible.

After visiting the Otay Mesa plant to hear its noise level, I and those who visited with me realized that the residents north of the Agua Hedionda Lagoon could be highly impacted by the noise from the proposed CECP. Much of the distance between the proposed CECP and that neighborhood is over water. I saw nowhere in the FSA where that was taken into consideration while evaluating impacts. I am able to hear the seals on the buoys barking from my back yard and that is a much farther distance than the residents north of the lagoon to the proposed CECP. This is an issue that needs to be addressed.

More noise evaluation is necessary due to our vastly changing site conditions. The Otay Mesa plant had buffers on it for sound and it was still very annoying. Fortunately that plant is surrounded by empty land. The proposed CECP has residents on both sides. It is hard to imagine that any sound mitigation would be enough to eliminate the additional noise and tonal nuisance

Exhibit 342

p. 4.6-9 “The primary noise sources of the CECP include the gas turbine generators, gas turbine air inlets, heat recovery steam generators and their exhaust stacks, fin-fan cooler fans, electrical transformers, fuel gas compressors and metering equipment, and various pumps and fans (CECP 2007a, AFC § 1.2).”

The proposed CECP project is theoretical and not built in this country anywhere. This creates concerns about the projected noise levels in this report since they are projections based on theory. Terramar residents have endured over fifty years of living next to the noise of a power plant, a train and a freeway. We are well aware of how annoying noise can be.

Now there are many more residences surrounding the Encina site. Between neighborhoods is not the appropriate place to put a noisy power plant.

During our visit to the Otay Mesa plant I found the constant noise was overwhelming and caused a headache. Upon departing, it felt like a vice was lifted off of my head.

I also have serious noise concerns for the residents living north of the lagoon directly across from proposed CECP site. Has staff included in their modeling how the noise impacts are affected by bodies of water?

Exhibit 343

a) p. 4.6-11 “The applicant specifically states that the CECP is intended to operate primarily as an intermediate duty power plant, running chiefly on summer afternoons when called upon. Nighttime operation should be relatively rare (CECP 2007a, AFC §§ 1.2.1, 2.2.16, 2.3.2.1, 2.3.3, 5.7.5.3.2).”

The CECP has the ability to produce over its 60 percent capacity though NRG has chosen to follow the path of steering below the SB 1368 threshold during the approval process.

Two concerns emerge if the project is approved,

1) CAISO could call on the project and push the CECP over its emission limits. This could cause NRG to request variances from SDAPCD and CEC to increase operating capacity even though the entire license approval process was completed on the basis of below 60 percent capacity.

2) CAISO could call on the project and push the CECP over its emission limits. NRG might choose to request the CECP permanently run on a higher than 60% capacity.

If approved, this backdoor path to higher capacity production denies interveners the opportunity to oppose the nighttime noise issues from increased production hours. The CECP would already be constructed and the residents could do nothing to stop the noise impacts. Nighttime noise is an especially important issue for the residents living north of the Agua Hedionda Lagoon.

What can be done to prevent this from occurring?

b) p. 4.6-11 “NOISE Table 6 Power Plant Noise Impacts at Nearest Sensitive Receptor

Why did staff choose to leave M6 out of this table? M6 showed by far the lowest nighttime levels. It is a very important location to measure.

Exhibit 344 p. 4.6-12 “One possible source of annoyance would be strong tonal noises. Tonal noises are individual sounds (such as pure tones) that, while not louder than permissible levels, stand out in sound quality. The applicant plans to avoid the creation of annoying tonal (pure-tone) noises by balancing the noise emissions of various power plant features during plant design (CECP 2007a, AFC § 5.7.5.3.3). To ensure that tonal noises do not cause annoyance, staff proposes Condition of Certification NOISE-4, below.”

I visited the Otay Mesa plant to see what a similar plant might sound like. After being there for a couple of hours, the constant noise was overwhelming and caused a headache. After departing, it felt like a vice was lifted off of my head. The Otay Mesa plant has many sound buffers installed and yet the tone and the sound was very annoying.

Exhibit 345

p. 4.6-19 “A. When the project first achieves a sustained output of 80 percent or greater of rated capacity, the project owner shall conduct a community noise survey at monitoring location M7 or at closer locations acceptable to the CPM. This survey shall be performed during power plant operation and shall also include measurement of one-third octave band sound pressure levels to determine whether new pure-tone noise components have been caused by the project.”

If the proposed CECP is approved and constructed, Terramar should be offered a survey also.

Exhibit 346

a) p. 4.6-24 “It has been found that “A-weighting” of sound intensities best reflects the human ear’s reduced sensitivity to low frequencies and correlates well with human perceptions of the annoying aspects of noise.”

What about people who are extremely sensitive to sound?

b) p. 4.6-24 ‘Noise levels above 45 dBA at night can result in the onset of sleep interference effects.’

Carlsbad is a beach community with temperate weather. The vast majority of Terramar residents have their windows open day and night most months of the year. I assume this is the case with most of the Carlsbad beach communities. Most residents don’t have any air-conditioning. Very small changes in the sound levels are easy to notice, especially at night when trying to sleep.

Exhibit 347

p. 4.6-27 “Doubling the distance from a noise source reduces the sound pressure level by 6 dB.”

Is this true over water? Much of the distance between the residents north of the Agua Hedionda Lagoon and the proposed CECP is over water. I saw nothing that evaluated this and it needs to be evaluated.

Cumulative noise issues that are not addressed by the FSA arise with possible mitigation surrounding the future widening of the I-5. If any type of sound or security wall is built there are unsolved issues of noise. Could the wall cause I-5 traffic noise to bounce back toward the residents to the east of the proposed site? Could Encina and proposed project noise bounce back to toward the residents to the northwest and southwest of the site?

None of this has been addressed in the FSA, yet staff knows that the I-5 widening is a future project per Caltrans. Therefore cumulative impacts should be assessed per p. 4.1-29 “Cumulative impacts analysis assesses the impacts that result from the proposed project’s incremental effect viewed over time, together with other closely related past, present, and reasonably foreseeable future projects whose impacts may compound or increase the incremental effect of the proposed project. (Pub. Resources Code § 21083; Cal. Code Regs., tit. 14, §§ 15064(h), 15065(c), 15130, and 15355.)”

Public Health

Exhibit 348

p. 4.7-1 “Staff has also conducted a cumulative health risk assessment that evaluated emissions from both the proposed CECP and the existing Encina Power Station (EPS), and has determined that the concurrent operation of both power plants will not result in a significant risk to the public or on-site workers.”

In order to evaluate cumulative health risk assessment for the areas near the proposed CECP shouldn’t staff include (along with the emissions from the existing Encina Power Station) the emission impacts from the I-5 and the railway?

In fact, the railway Diesel Particulate Matter emissions are noted in the Hazardous Materials section, page 4.4-17’ “Staff will avoid discussing the obvious safety and public health issues of placing a trail for use by hikers, bikers, and runners along a rail corridor that goes through a heavily industrialized area, thus resulting in among other things, a trail-user’s exposure to intermittent high concentrations of Diesel Particulate Matter from passing trains.” These same trains often sit behind the neighborhood of Terramar, therefore exposing the residents to an extended period of time of the high concentrations of Diesel Particulate Matter.

A cumulative health risk assessment is needed that evaluates all of these health risks together before adding any more emissions to this area as stated on p. 4.1-29” Cumulative impacts analysis assesses the impacts that result from the proposed project’s incremental effect viewed over time, together with other closely related past, present, and reasonably foreseeable future projects whose impacts may compound or increase the incremental effect of the proposed project. (Pub. Resources Code § 21083; Cal. Code Regs., tit. 14, §§ 15064(h), 15065(c), 15130, and 15355.)”

Exhibit 349

a) p. 4.7-3 “The nearest residence is approximately 0.44 miles northeast of the site,”

On page 4.6-5 is states, “Measuring Location M7: On a bluff at the end of Harbor Drive, overlooking the Agua Hedionda Lagoon and Interstate 5, approximately 1,750 feet north

northwest of the center of the project site. This represents the residential receptor nearest the site.”

These statements show a difference of almost 600 ft. This can be a significant difference in a health risk assessment. Which one is correct? If this is an error, they can diminish the quality of the report as it is dependent on correct numbers. If an error was made, the numbers for noise and health risk need to be reassessed with the correct numbers.

b) p. 4.7-3 “The topography of the site is essentially flat (about 29 feet above sea level) with the pacific ocean lying to the west and hills rising to the north, east, and south of the project site.”

The Agua Hedionda Lagoon is missing from the description. It is a very important feature in the topography of the land surrounding the site as it will affect issues of sound.

Exhibit 350

p. 4.7-13 “Staff conducted additional modeling to evaluate the cumulative risks posed by the existing Encina Power Station and the proposed CECP and this assessment is different from the following “combined risks” assessment.”

Staff should assess cumulative impacts including the I-5 (both before and after widening) and the railway and add those into their cumulative impacts analysis. We asked for this from SDAPCD and they said cumulative impact assessments are the responsibility of the CEC. All projects need to be added into a cumulative impacts analysis as stated on p. 4.1-29 “Cumulative impacts analysis assesses the impacts that result from the proposed project’s incremental effect viewed over time, together with other closely related past, present, and reasonably foreseeable future projects whose impacts may compound or increase the incremental effect of the proposed project. (Pub. Resources Code § 21083; Cal. Code Regs., tit. 14, §§ 15064(h), 15065(c), 15130, and 15355.)”

Exhibit 351

p. 4.7-22 “Since the maximum cancer risk for emissions from the CECP (calculated by staff as scenario 4 above) is 0.89 in one million, staff believes that this additional increment would not cause a significant cumulative impact.”

Please tell me where the value 0.89 can be found in scenario 4.

Exhibit 352

p. 4.7-27 “Response: Staff has conducted a cumulative human health risk assessment that addresses the emissions of TACs from both facilities and has included start-up and shut-down of the proposed CECP. Staff has not evaluated the impacts of I-5 traffic...”

p. 4.7-28”..emissions as they now exist because those emissions are included in the background risk to public health from all other sources. Any new increased emissions that may occur from increased traffic on I-5 should be

assessed in the EIR of the I-5 expansion because if the project is certified by the Commission, the CECP would be built and running long before the I-5 corridor is expanded and the increase or decrease in emission (due to increased fuel economy, decreased emissions from vehicles, and the increased use of ZEVs) would be considered at that time.”

The I-5 expansion is a project that will affect millions of people. It is a higher needs foreseeable project for the area than the proposed CECP. The I-5 expansion can occur in only one place; and that is where the I-5 currently exists. The proposed CECP can be located in other places. The CEC knows that the I-5 widening project is set to occur and yet so far staff hasn't evaluated its effects on the air quality of an area with one power plant and possibly a second one (and a railway) even though it is states on p. 4.1-29” Cumulative impacts analysis assesses the impacts that result from the proposed project's incremental effect viewed over time, together with other closely related past, present, and reasonably foreseeable future projects whose impacts may compound or increase the incremental effect of the proposed project. (Pub. Resources Code § 21083; Cal. Code Regs., tit. 14, §§ 15064(h), 15065(c), 15130, and 15355.)”

Visual

Exhibit 353 pp. 4.12-1 – 4.12.22

Views of the coast and its unique surroundings only occur at the coast. These are treasured pictures in our minds. This is where we go to relax, exercise, pray, renew, and spend time with the beauty of nature. We day-dream these treasured views while at work. It helps us get through the day. These views are the subject of calendars, paintings, photographs, coffee cups, marketing materials, books, and the list goes on and on.

The suggestion of painting a power plant to trick us into thinking it blends into nature reminds me of a children's book called, **“The Emperor's New Clothes”**. **Per Wikipedia**, **““The Emperor's New Clothes”** (**Danish**: *Kejserens nye Klæder*) is a short tale by **Hans Christian Andersen** about two weavers who promise an Emperor a new suit of clothes invisible to those unfit for their positions or incompetent. When the Emperor parades before his subjects in his new clothes, a child cries out, "But he isn't wearing anything at all!" The tale has been translated into over a hundred languages.^[1]”

I feel like that child when I read the “Residual Impact Significance After Mitigation with Staff-Recommended Measures” and I am told that if we paint the power plant green and the stacks to match the sky that I won't notice the plant is there. I will definitely notice that there is a power plant there and that the power plant is painted green. You can't trick people into thinking that a power plant is part of nature. That is why even though we have paintings of the ocean, people need to go and see the ocean itself. There is an enormous difference

between a tree and a green power plant. There is an enormous difference between the sky and a painted power plant emissions stack. These items do not blend.

This mitigation suggestion is unacceptable. Power plants are not compatible with the coast no matter how much paint you use.

Exhibit 354

p. 4.12-1 “A potentially significant cumulative visual impact may be created as a result of the combination of the proposed Carlsbad Energy Center Project and the North Coast Interstate 5 HOV/Managed Lanes Project being proposed by the California Department of Transportation (Caltrans) which affects U.S. Interstate 5 bordering the Carlsbad Energy Center Project site. Construction is scheduled to begin five to ten years from the time it releases its preferred alignment, or January 2015 at the earliest.”

The I-5 widening is a future project and therefore a visual cumulative impacts analysis should be completed before any decision on licensing can occur per the FSA statement on p. 4.1-29 “Cumulative impacts analysis assesses the impacts that result from the proposed project’s incremental effect viewed over time, together with other closely related past, present, and reasonably foreseeable future projects whose impacts may compound or increase the incremental effect of the proposed project. (Pub. Resources Code § 21083; Cal. Code Regs., tit. 14, §§ 15064(h), 15065(c), 15130, and 15355.)”

Exhibit 355

p. 4.12-2 “The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the state Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.”

The above quote from the California Coastal Act is meant to protect coastal areas as a resource of public importance. The California Energy Commission is also supposed to protect the coastal areas through the Warren Alquist Act. by acting as the Coastal Commission. Please protect our coastal area. Do not allow this power plant to enhance industrial impacts of this beautiful coastal zone.

Exhibit 356

p. 4.12-4 “Land uses in the immediate vicinity of the project site are dominated by intensively used, scenically-sensitive recreational destinations, including the adjacent lagoon and associated facilities, and Carlsbad State

Beach. Highway I-5, an eligible State Scenic Highway, and Carlsbad Boulevard, a locally designated scenic corridor, bound the EPS site to the east and west respectively; and a rail line carrying Amtrak and Coaster regional commuter trains bounds the CECP site to the west. In addition, other designated local scenic roadways and adjoining residences have prominent views to the site over the lagoon. In general scenic quality of the project viewshed is comparatively high, distinguished by views of the Agua Hedionda Lagoon, the Pacific Ocean, substantial areas of agricultural open space, and predominantly residential development with a relatively high degree of visual intactness and unity.”

The idea of placing a power plant in the midst of this area is incomprehensible. The Encina plant is at least inside of a large concrete box. Per the FSA, “the generation structure and stack are large and industrial in character, they present a relatively simple, uncluttered architectural form comparable to a large building.” There was a necessary reason to put Encina along the coast as it needed the water to perform; with new technology that reason has disappeared. Since the Coastal Act states, “where feasible, to restore and enhance visual quality in visually degraded areas”, I implore the Commission to do just that for our community and deny this licensing request.

Exhibit 357

p. 4.12-6 “Transmission Lines - Nine new single-pole transmission towers, ranging in height from 74 to 100 feet (in addition to associated transmission lines and equipment) would be added to the CECP/EPS properties. Four 84-foot poles would be located near the edge of the railroad right-of-way, three of these near the top of the proposed spoil berms on the CECP site’s western boundary (CH2Mhill 2007).”

In addition to the view degradation that the area would suffer from the proposed CECP there would be massive power lines and towers that would spoil views from all angles. Adding to the degradation there is also a proposed 230 kV switchyard that will add significantly to the already degraded views from the proposed plant, power lines and towers.

Staff did not address view issues of transmission lines, poles and the new switchyard in the ‘Proposed Conditions of Certification’. These must be addressed.

Exhibit 358

p. 4.12-22,23 “Project operation impacts from all identified KOPs on the existing visual character and quality of the setting would be less than significant with project owner and staff recommended color mitigation and conditions of certification (Condition of Certification VIS-1), staff and project owner-recommended perimeter landscape screening (Condition of Certification VIS-2 staff-recommended screening of construction staging sites D and E (Condition of Certification VIS-3) and project owner and staff recommended lighting mitigation (Condition of Certification VIS-4). With these measures, the impacts from project at operation would not substantially

degrade the existing visual character or quality of the site and its surroundings, as perceived by sensitive receptors in the project viewshed, although in some cases in the long term.”

How many years is long term?

How did staff arrive at the locations chosen for views KOP1 – KOP 11?

Did staff take the pictures? How did staff decide where the maximum view impact would be in each location?

Did staff perform the graphics to depict how the proposed CECP would look?

The City requested site KOP 10 be evaluated. Other than this location, did staff ask the City of Carlsbad for input on the locations chosen for view evaluation?

Exhibit 359

p. 4.12-25, 26 “*Visual Resources Figure 14a and -14b (KOP 11)* depicts the CECP as it would appear to users of the proposed Coastal Rail Trail, looking south approximately 500 feet from the project site assuming that the trail were to be located within the existing railroad right-of-way (PEAR Figure DR 68-6)(SR 2008h).

From the trail, visual change would progress from moderate to strong levels as one approached the power plant. However, as trail users approached the power plant, screening of the earthen berm would also become increasingly effective. With staff-recommended Condition of Certification VIS-2 and project owner-proposed landscape plantings on the north- and west-facing berms, overall impacts of the project to trail users would be less than significant, declining over time with landscape maturity.”

How can staff make this determination? Throughout the FSA the location of the Coastal Rail Trail has been an issue.

Exhibit 360

p.4.12-27 “The cumulative visual effect introduced by the proposed CECP in combination with the I-5 widening project would thus nullify the less-than-significant visual impact discussed in this analysis for KOPs 2, 3, 4 (north shore of lagoon), and 6 and 7 (Highway I-5), since that determination was dependent upon the presence of the existing berm, existing landscape screening, and the staff-recommended planting of additional in-fill landscape screening. Absent mitigation, it currently appears that a significant cumulative visual impact could occur in the absence of modification to either the I-5 widening project alternatives, the CECP, or both.

In addition, the cumulative effects resulting from a removal of the existing berm and trees, and the exposure of the CECP and EPS power plants would not, absent mitigation, conform to California Coastal Act Policy 30251 which states “*permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually*

degraded areas.” It would also not be consistent with the City of Carlsbad Scenic Roadways Goal A which is to...“*preserve and enhance the visual ...characteristics of the local community through sensitive planning and design of transportation and utility corridors,*” and the city’s Scenic Roadway Policy C.2 which identifies this portion of I-5 as a “Community Scenic Corridor.”

Per the FSA statement on p. 4.1-29 “Cumulative impacts analysis assesses the impacts that result from the proposed project’s incremental effect viewed over time, together with other closely related past, present, and reasonably foreseeable future projects whose impacts may compound or increase the incremental effect of the proposed project. (Pub. Resources Code § 21083; Cal. Code Regs., tit. 14, §§ 15064(h), 15065(c), 15130, and 15355.)” The I-5 widening issue is enormous when it comes to cumulative impacts for our community. Caltrans has made it clear that this project is going to happen. The impacts must be addressed in full before any licensing can be contemplated.

Exhibit 361

There are statements in the visual section that refer to views from trains, cars, and the coastal rail trail as “brief”. Staff feels that “brief” views are not significant and do not affect views significantly. I disagree with staff. Often a “brief” view is very significant. Carlsbad is a tourist town that depends on a “brief” view to attract individuals to come to our city for enjoyment. Therefore I disagree with staff in their KOP evaluations that diminish “brief” views.

Worker Safety

Exhibit 361

p. 4.14-1 “The Carlsbad Fire Department has stated that its ability to respond during a major crisis may very well be impacted by the operation of this power plant. Staff has thoroughly reviewed this matter, listened to comments from the applicant and the Carlsbad Fire Department, encouraged the applicant and the fire department to meet (which they did), and has reviewed written comments and reports on this matter. Staff has also conducted an initial assessment and after consideration of all information available to date, particularly the applicant’s Fire Needs Assessment (SR 2008t), staff has determined that while this project may have an impact on the fire department’s ability to respond to a fire or other emergency under unique catastrophic circumstances, the potential for impact is below staff’s level of significance. Therefore, staff agrees with the applicant that mitigation is not required.”

As a resident living approximately ½ mile from the Encina property I am concerned with the above quote regarding emergency and fire safety. The Carlsbad Fire Department has stated concerns regarding the project per the above quote and docketed letters. They have not as

yet received from the applicant the appropriate information requested to properly assess the dangers associated with the project.

As a resident of Carlsbad living in a neighborhood extremely close to the project site, the Carlsbad Fire Department holds the most merit regarding the fire and emergency safety issues for the City of Carlsbad. The California Energy Commission staff resides far from the site and work on multiple projects around the state at the same time. The Carlsbad Fire Department's single focus is to protect the City of Carlsbad and its residents.

If the Carlsbad Fire Department states that its ability to respond during a major crisis may be impacted by the operation of the plant, they have the experience and knowledge of this area and know how to protect me and my City.

Staff determined, "that while this project may have an impact on the fire department's ability to respond to a fire or other emergency under unique catastrophic circumstances, the potential for impact is below the staff's level of significance."

Has staff taken into consideration the accidents that could occur because the CECP site will sit so close to the I-5 freeway when it is widened?

After the I-5 widening any unusual, visible activity or sound occurring at the CECP site has a chance of distracting I-5 drivers. The loss of driving concentration could easily create a "looky-lou" type of accident on the I-5. This accident could ultimately shut down all or part of our major thoroughfare.

If a fire or an emergency occurred at the CECP site, it could result in the I-5 freeway being shut down due to safety concerns created by the close proximity of the site to the I-5. In this case the fire department would have to respond to the emergency on site and on the I-5.

These two examples, (though not catastrophic) caused due to the location of the proposed CECP so close to the I-5, could create a major crisis for our fire department and detract from the department's availability for the rest of our community.

The LOSSAN rail corridor is extremely close to the CECP site. This is a significant type of transportation for people and commodities. A major accident at the CECP site could shut down this transportation corridor and the Carlsbad Fire Department could have a major crisis on their hands. An accident involving a train jumping the track and impacting the proposed CECP (as discussed in the FSA) would be another type of major occurrence that the Carlsbad Fire Department would have to handle.

Proposing to place a power plant in between two major transportation corridors in a very small area creates many dangerous possibilities and with the widening of the I-5 the possibilities increase. The Carlsbad Fire Department has to be cognizant of the possibilities and be ready to protect the public and maintain safety for the firefighters. The applicant and the California Energy Commission will not be the ones to protect us. It will be the Carlsbad Fire Fighters.

Exhibit 362

p. 4.14-5 “Worker Safety

Industrial environments are potentially dangerous during construction and operation of facilities. Workers at the proposed CECP would be exposed to loud noises, moving equipment, trenches, and confined space entry and egress problems. The workers may experience falls, trips, burns, lacerations, and numerous other injuries. They have the potential to be exposed to falling equipment or structures, chemical spills, hazardous waste, fires, explosions, and electrical sparks and electrocution. It is important for the CECP to have well-defined policies and procedures, training, and hazard recognition and control at its facility to minimize such hazards and protect workers. If the facility complies with all LORS, workers will be adequately protected from health and safety hazards. “

All of the hazards noted in this section could create the secondary visual and noise impacts as discussed in Exhibit 358 for drivers once the I-5 is widened. Ambulances, alarms, etc. are very distracting occurrences that could cause severe impacts on the highway.

Exhibit 363

p. 4.14-11 “During construction and operation of the proposed CECP project, there is the potential for both small fires and major structural fires.”

All of the hazards noted in this section could create the secondary visual and noise impacts for drivers once the I-5 is widened. Ambulances, alarms, etc. are very distracting occurrences that could cause severe impacts on the highway.

Exhibit 364

p. 4.14-15 “Because protection of the nation’s energy infrastructure as well as workers is of paramount importance, staff thus proposes Condition of Certification WORKER SAFETY-7. This condition would require the project owner to place a barrier (earth or other materials) along the entire eastern property line shared by the CECP and Interstate-5 and that it be of sufficient strength and height so as to prevent a runaway car or semi-trailer truck from piercing the barrier and going over the edge and down into the power plant site. This barrier shall also serve to prevent line-of-sight viewing of the power plant site from the shoulder of I-5. In designing the barrier, the project owner will be required to consult with Caltrans and then submit a final plan to the Energy Commission Compliance Project Manager for review and approval. The project owner will be free to negotiate cost-sharing of this barrier with Caltrans and will be required to submit the cost-sharing contract with Caltrans to the CPM for review and approval. Staff believes that this barrier will serve the dual purpose of protecting safety and security. The loss of the existing above-grade “ring” road is offset by the required below-grade perimeter road

for emergency response vehicles that will be built to code specifications as per WORKER SAFETY-6”

Staff’s suggestion for a barrier creates many concerns. These details between the Applicant and Caltrans should be worked out prior to any project licensing. By avoiding this issue, staff is denying interveners the chance to weigh in on the issues. Creating such a barrier affects issues of safety, visual and noise impacts in all directions – north, south, east and west. There is also a huge taxpayer issue created by the cost to Caltrans for their share of this expansive barrier.

Exhibit 365

p. 4.14-16 “Therefore, in order to preserve this road on the western side of the CECP site for emergency response access, staff proposes Condition of Certification WORKER SAFETY-9 which will require the continued presence of this access road and prohibit the placement of a coastal rail trail at this location.”

The rail trail has been in various planning stages for over twenty years and parts of it have already been built. To change the rail trail is a significant impact for the community that could have far reaching impacts in time, and delays. Though the Applicant will bear costs associated with moving the trail as noted in the FSA, there is no way of knowing whether the taxpayers will eventually bear some of these costs.

Alternatives Section

Exhibit 366

a) p. 6-2 “The CECP is being developed to meet regional electrical resource needs anticipated by the California Energy Commission for the San Diego region (CEC 2007).”

Is there a 2009 CEC report that states needs are decreasing due to the economic turndown? Have alternate sources helped to alleviate the projected need?

b) 6-2“The CECP will contribute significant electricity energy and capacity to an identified “load pocket”, as well as local and regional electrical transmission grid support in San Diego County and the greater Southern California region.”

Is the CECP being developed to meet San Diego needs or greater Southern California needs? Does the Applicant need to have a contract with SDG&E for the proposed CECP in order to get approval by the CEC? Is Los Angeles considered to be in the greater Southern California region?

The proposed CECP is considered to be replacement of the Encina units 1, 2, and 3. How many megawatts of added contribution to the grid does CEC consider to be significant?

Exhibit 367

p. 6-4 “Utilize existing infrastructure to accommodate replacement generation and reduce environmental impacts and costs;”

Here is a list of new infrastructure needed for the proposed CECP:

A new desalination plant is to be constructed.

A huge berm is slated for construction to protect the proposed CECP with the widening of the I-5 adding a huge cost to the taxpayers.

The Coastal Rail Trail’s location could be moved causing delays and ultimately be more expensive to the taxpayers if site selection becomes an issue.

A berm to protect the proposed CECP from a derailed train is another cost.

These CECP infrastructure issues exposed throughout the FSA need to be included in the cost evaluation of the proposed CECP site versus alternative sites infrastructure issues.

With the widening of the I-5 the visual impacts from the proposed CECP needs to be part of the alternative view assessment.

All impacts at the proposed CECP versus alternative sites need to be evaluated in order to perform an equal assessment of all sites.

Exhibit 368

p. 6-15 “Even with this great variety of federal, state, and local demand-side management programs, the state’s electricity use is still increasing as a result of population growth and business expansion.”

Please provide evidence that the state’s electricity use is still increasing “as a result of population growth and business expansion” while the state is going through a severe recession.

Exhibit 369

p. 6-18 “If the proposed CECP were not built, certain environmental benefits from the new power plant would not be realized. For instance, all five EPS units would continue to operate “as is” into the foreseeable future, and retirement of the EPS circa 1950’s Units 1 through 3 would be indefinitely delayed. The result would be relatively inefficient electrical generation utilizing over 220 million gallons of ocean water per day for once-through cooling that would otherwise cease to occur. This once-through cooling feature of the old coastal facilities has been found to have high and adverse impacts on marine biota. CAISO has stated that California has a commitment in the shutdown of all older once-through cooling units (CA Assembly 2009). The existing EPS Units 1 through 3, which are based on boilers that must be kept in heated standby status, would consume more fuel and emit more air pollutants per megawatt-hour generated than that of the cleaner and more efficient new turbine CECP units and EPS Units 4 and 5 operating together. Although the identification of a definite No Project Alternative development scenario is not possible, “No Project” would almost certainly result in efforts to find new sites

for dispatchable gas-fired generation that would meet similar project objectives to those of the CECP – providing load pocket reliability and reducing OTC with ocean water. To meet such objectives, the new generation sites would have to be in the San Diego urban area. Any such new generation facility would likely have higher environmental impacts than CECP, particularly if built at a greenfield site.”

a) CEC licensed both the Otay Mesa Plant and the Palomar Plant on greenfields.

b) When units 1, 2, and 3 are not producing power, how many gallons are used daily for once through cooling for these units only?

Exhibit 370

p. 6-21 “Building a new major power plant at an alternative site would increase environmental impacts, as San Diego would have an additional power plant.”

If proposed CECP is built in an alternate location and Encina is eventually removed, we would have the same number of power plants and we would have a large parcel of coastal land restored to coastal use (a huge benefit to all.)

Exhibit 371

p. 6-22 “As the EPS site contains an existing power plant development and related thermal stack, the direct project site visual impacts would be significantly less as compared to developing the CECP at any undeveloped alternative location. Furthermore, due to the elevated topography of all alternative sites, visual prominence of power plant development within these sites would result in increased visual impacts when compared to the CECP, which located within the existing EPS;”

Interestingly enough, there is no alternative site listed that has more visual impact than the CECP site once the I-5 is widened. Thousands of people would be affected every day as they drive by the site.

Exhibit 372

p. 6-22”Under the No Project Alternative, the EPS would continue for the time being to operate under existing conditions until additional projects similar to the CECP would be constructed elsewhere in the San Diego area resulting in an increase to environmental impacts from the siting and operation of additional power plants. Furthermore, the No Project alternative would not achieve critical project objectives.”

If proposed CECP is built in an alternate location and Encina is eventually removed, we would have the same number of power plants and we would have a large parcel of coastal land restored to coastal use (a huge public benefit to all.) This would be the best alternative.

Vision

Exhibit 373

Carlsbad by the Sea is a beautiful coastal town. In the last fifteen years our coastal zone has developed into a much desired vacation destination. This has not happened by chance. There has been a concerted effort on the part of the City, developers and the community to make Carlsbad a vacation spot that people from around the world desire to visit. We have watched the Sheraton Hotel and Resort; the Grand Pacific Palisades Hotel; the Seapointe Resort and Resort; the West Hotel and restaurants; Inns of America; The Crossings golf course and restaurant; the Hilton Garden Inn and the Premium Outlet Center open for business. A huge attraction for Carlsbad is Legoland and soon it will have a companion hotel. The Ponto area is slated for a resort development. Another coastal hotel is to be constructed at the edge of downtown Carlsbad. All of these ocean view developments have been built within the last fifteen years and are within two miles or less of the proposed CECP site (except for Ponto).

We have the famous La Costa Resort as well as the Four Seasons Aviara. We are known for our world famous flower fields. The list goes on and on.

The proposed site for the CECP sits next to the I-5 freeway. The I-5 freeway is the main thoroughfare to every single resort and establishment listed above. When the I-5 widening occurs (and we all know that it will occur) the proposed CECP will be so close to the highway that every tourist, commuter, and local will see it rising out of the ground 109 ft. into the air. No matter what color you paint it or what bushes you plant in front of it, everyone will see it.

Instead of Carlsbad by the Sea, we will be referred to as Carlsbad by the Two Power Plants.

Terramar has expressed our concerns regarding the CECP application in the areas of safety, noise, air quality, visual, technology, land use, biological, water resources, greenhouse gas emissions, LORS, and more. Now it is time for the California Energy Commission (CEC) to understand how their decision will affect the vision of Carlsbad.

The City of Carlsbad understands the importance of the energy commission's decision. The city has spent an extraordinary amount of time and money to preserve the future vision of our city. As intervener, Kerry and I have spent an extraordinary amount of time and our own funds to fight the licensing of the proposed CECP. We have also watched the Power of Vision interveners spend extraordinary time and money to stop this fatal mistake for our city.

Every day the Encina plant gets closer to retirement. When that happens, Carlsbad will finally have a chance to see the industrial blight removed from our beautiful coast. Let this happen for us. There is no mitigation that the Applicant or the California Energy Commission could recommend that could offset the vision loss our city would endure if another power plant is built on our coastline.

There is simply no value for the citizens of Carlsbad and surrounding cities with this proposed project.

Exhibit 374

Testimony of Bailey Noble

What is your name and address?

Bailey Noble. I live at 5470 Los Robles, Carlsbad, Ca. 92008

Are you retired from the Marine Corps?

Yes.

Explain your service.

I served in the Marines for 27 years. I began as a private and retired as a Lt. Colonel.

How long have you lived in Carlsbad?

I moved here in 1971.

Are you a resident of Terramar?

Yes

How many years were you the President of the Terramar Association of Homeowners?

14 Years.

Did you serve on the Carlsbad Planning Commission? And when?

Yes, for 8 years, from 1981-1989.

What other service have you done for our community?

Boys and Girls Club Lifetime Board of Directors since 1998 to current

Vice-President of North County Transit Management Authority 1995

Alumni Board of Directors for Western New Mexico University 1991 to current,

Past President

Carlsbad Charity Foundation 2007 to current

Served on many other Carlsbad committees and boards, including the Desalination Board

Were you chosen as Carlsbad's 2001 Outstanding Citizen of the Year?

Yes

Do you have a problem with the construction of power plants?

No. We need power.

Do you see any problems with the construction of the proposed CECP?

Yes.

Why?

Coastal land is not an appropriate location for a power plant. Power plants do not have to be built on the coastline any more.

Would the proposed CECP affect the vision of Carlsbad you helped to create on the Planning Commission? How?

Yes. For me, the vision of Carlsbad was a safe community for families and an inviting atmosphere for visitors. A power plant right next to the widened I-5 is not inviting and goes against the vision I have had for Carlsbad.

Are there any other issues that concern you regarding the proposed CECP?

I have concerns with the additional air pollution. I have a big concern because the Fire Department has safety concerns. We don't want more visual blight or the noise from another plant.

Is there anything else that you would like to say on this subject?

Yes, I have been on many boards and have had to make a lot of hard decisions. I have weighed this project very fairly and if I were making this decision I wouldn't approve the project in this location.

Exhibit 375

Testimony of Dianne Wist

What is your name and address?

Dianne Wist and I live at 5440 Los Robles Dr, Carlsbad, Ca. 92008

Are you currently employed, where and what are your responsibilities?

I am currently employed at Del Mar Pines School, a K-6th grade private elementary school. I graduated from Arizona State University with a Bachelors Degree in Social Work and Northern Arizona University with a Masters Degree in Educational Psychology. My responsibilities as a principal of Del Mar Pines School are to oversee the social, emotional and educational needs of my student body.

How long have you lived in Carlsbad?

I have lived in Carlsbad ten years.

Are you a resident of Terramar?

Yes

.As a resident of Terramar, what are your concerns with the proposed CECP?

Once the I-5 is widened the visual impacts from the proposed CECP will change how Carlsbad residents and visitors feel about spending their time and money in our community. The proposed expansion of the power plant is not the backdrop that individuals and their

families are looking for when spending time on our California Coastline. I am confident that this will have a negative impact on the tourism industry in Carlsbad.

Noise pollution is another concern. Varied weather conditions directly impacts the noise in our neighborhood. We are already dealing with big noise impacts from the Encina plant and the I-5.

I am also very concerned about the safety issues that have been expressed by the Carlsbad Fire Department concerning the proposed project. As resident and potential neighbor to the proposed project I have safety concerns for my family and neighbors. The safety of our community and its members is an essential right that is owed to each and every one of us.

As the principal of a school, what are your concerns with the proposed CECP?

Increased air pollution would be my first concern. We are already in nonattainment for Particulate Matter and Ozone. Adding more pollution to the San Diego Air Basin is a real concern no matter how much mitigation is done. From what I have read, Particulate Matter causes lung damage especially to children with asthma. You can't mitigate that.

Greenhouse Gas Emissions (GHG's) are also of grave concern. Being a principal, the future of our children is always on my mind and being good stewards of the planet is one way of insuring a better future for our younger generations. From what I have read the GHG's from this plant are 850,000 tons/year. So far there is no mitigation for that either

As an educator and advocate for children and their families I often read the works of Richard Louv, a local journalist to our responsibility we have to one another, our community and nature. He writes;

Nature comes in many forms: a new calf steaming, a pet that lives and dies, a woods with beaten paths and stinging thistles. Whatever form nature takes, it offers children a world separate from parents and older than them—a kind of greater father and mother; it gives children a sense of their place in time. Unlike television, nature does not steal time from adults or children; it augments that time, makes the time fuller, richer. And for those children for whom family life is destructive, nature can offer healing.

Nature also serves as a blank slate upon which children may draw the fantasies supplied by the culture; nature nurtures creativity in children, in part by demanding visualization, the full use of the senses.

We do not fully understand how much we wound children by our destruction of nature. The preservation of nature should be among our essential goals when we weave the web of life, not only for the protection of the least tern, but also for the mental health and the creativity of the next generation.

Chief Seattle said,

“Man did not weave the web of life.
He is merely a strand in it.
Whatever he does to the web
He does to himself.



BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT
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APPLICATION FOR CERTIFICATION
FOR THE **CARLSBAD ENERGY
CENTER PROJECT**

**Docket No. 07-AFC-6
PROOF OF SERVICE**
(Revised 12/30/2009)

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DECLARATION OF SERVICE

I, Kerry Siekmann, declare that on JAN. 6, 2010, I served and filed copies of the attached, Testimony for Terrain, dated 1/6/2010. 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: [\[http://www.energy.ca.gov/sitingcases/carlsbad/index.html\]](http://www.energy.ca.gov/sitingcases/carlsbad/index.html). The document has 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:

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

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:

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

Attn: Docket No. 07-AFC-6
1516 Ninth Street, MS-4
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I declare under penalty of perjury that the foregoing is true and correct.

Kerry Siekmann