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DOCKET
07-AFC-6
DATE JAN 05 2010
RECD. JAN 06 2010

Tuesday, January 5, 2010

Commissioner Karen Douglas
Commissioner James Boyd
California Energy Commission
1516 Ninth Street
Sacramento, CA 95814

Docket No. 07-AFC-6

Dear Commissioners:

Please find attached the Opening Testimony from Intervener Power of Vision. We have diligently prepared and worked hard on behalf of the citizens of Carlsbad and Coastal North County. We look forward to the February 1-4 Evidentiary Hearings in Carlsbad and an opportunity to present out testimony.

Regards,

Arnold Roe, PhD
Julie Baker

Attachments

STATE OF CALIFORNIA

Energy Resources Conservation
And Development Commission

In the Matter of:	)	
	)	
The Application for the Certification for the	)	**Docket No. 07-AFC-6**
	)	
CARLSBAD ENERGY CENTER PROJECT	)	
	)	

POWER OF VISION'S OPENING TESTIMONY, PRELIMINARY IDENTIFICATION OF CONTESTED ISSUES

January 6, 2010

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Exhibit 700

FSA EXECUTIVE SUMMARY, Recommendations, page 1-8 states, "The project, as a hybrid base-load/peaking project, with an enforceable operating limitation less than 60% of capacity (4,100 hours per year)…"

Question: Where in the Proposed Conditions of Certification does it enforce the limitation of either 60 % of capacity or 4100 hours per year of operation?

Question: How will limitations be enforced?

Exhibit 701

FSA DESCRIPTION, Proposed Desalination System, page 3-2 states, "Of this 4.32 mgd needed for CECP's operation, the applicant would be responsible for 1.32 mgd, given the minimum daily intake of 3 mgd that EPS uses for daily system circulation, regardless of the level of operation of Units 1-5." **This appears to be new information, not previously provided in the AFC, PEAR, or PSA.**

Question: When did Staff become aware of this new information?

Question: What are the configuration of the piping and the capacity of the pumps that are used to provide this minimum daily intake of 3 mgd?

Comment: Since the CECP application is for a stand-alone project, and since the expected life span of once through cooling systems such as used by the EPS is probably limited, the applicant should be responsible for the full 4.32 mgd of seawater usage, rather than 1.32 mgd.

Exhibit 702

FSA AIR QUALITY, Facility Operation, page 4.1-24 states, "The Energy Commission 2007 Integrated Energy Policy Report (IEPR) forecasts an increasing demand for electricity in the San Diego Region…"

Question: Why does the FSA not include data from the more recent CEC 2009 IEPR (Exhibit 739, Reference 1), which shows a lower forecast for electricity consumption than the 2007 report, and the CEC California Energy Demand 2010-2020 Staff Final Report, September 2009 (Exhibit 739, Reference 2) which shows lower peak power demand for the San Diego Region than prior reports? Also, why does the FSA fail to mention the California ISO 2011-2013 Local Capacity Technical Analysis, December 29, 2008 (Exhibit 739, Reference 3) which predicts that for years 2011-2013 there will be no Category B capacity deficiency for the San Diego Region?

Exhibit 703

FSA AIR QUALITY, Project Operating Emissions, page 4.1-26 states, "The applicant also requested an allowance for increased NOx 1-hour average emissions up 12 ppm (or six times

higher than normally allowed)…during transient conditions…The District…determined that there was insufficient documentation to support the need for this additional exception to the 2.0 ppm NOx limit, but the District does allow for…the limits to be based on a 3-hour average during transient conditions rather than a one-hour average." Applicant's letter dated January 5, 2009 to the SDAPCD (Exhibit 739, Reference 4) requesting a variance on the 2.0 ppm 1-hour limit was presumably based on an attached document from Siemens indicating that up to 12 ppm of NOX emissions could occur at ramp rates as low as 5 MW/minute and that higher ramp rates could produce emissions as high as 20 ppm. The Siemens turbines are capable of ramp rates much greater than 5 MW/minute.

Question: What is the justification for changing the transient average from one hour to three hours?

Question: Did Siemens' letter raise questions during Staff's analysis that the proposed configuration, which has not been in operation elsewhere in the world, may have problems meeting normal emission standards?

Question: Since Siemens' letter, showing NOx emissions during steady state operation of the turbines of around 9 ppmvd prior to treatment by a Selective Catalytic Reduction (SCR) system, did Staff investigate whether the applicant's choice of an SCR system will be able to lower stack emissions to the required 2 ppmvd?

Exhibit 704

FSA AIR QUALITY, Project Operating Emissions, pages 4.1-27 and 4.1-28 show Encina Power Plant Units 1-3 Emissions Baseline, and therefore emission increases subject to ERC as 32.21 tons/year, based on a five year average period, determined in accordance with SDAPCD's Rule 20.1(d)(2)(i)(B). In the present application, this rule results in greater emissions than would be allowed under EPA rules, which is the average of any consecutive two years the applicant chooses from the years 2005-2009; the worse two years for NOx would be 2005 and 2006 with emissions of 31.73 and 16.17 tons/year, for an average of 28.85 tons/year.

Question: Shouldn't the more stringent rules apply?

Exhibit 705

FSA AIR QUALITY, Operation Impacts and Mitigation, Tables 21, 22, & 24, pages 4.1-36 to 39 show that PM 10 and PM2.5 significantly exceed standards during various operating conditions and staff has indicated five methods for mitigation in AQ-SC10.

Question: Can the applicant indicate which method of mitigation will be used?

Exhibit 706

FSA AIR QUALITY, Combustion Turbine Conditions, AQ-10 and AQ-11, page 4.1-68. There is an inconsistency between the definitions of a shutdown and startup period. A shutdown period begins when a turbine load drops below 114 MW. However, there is no restriction that a startup shall end when the turbine load reaches 114 MW (which can occur within 22 minutes). Instead AQ-11 allows a startup period to continue for 60 minutes after fuel first flows, thereby extending the period of higher emission allowances.

Question: Would Staff consider amending AQ-11 to include limiting a startup period to the time it takes to reach 114 MW, not to exceed 60 consecutive minutes?

Exhibit 707

FSA AIR QUALITY, AQ-20, page 4.1-70 states, "…operation at low load shall not exceed…an aggregate of 780 unit operating minutes in any calendar year." AQ-44, page 4.1-77 limits the aggregate emissions of NOx to 72.11 tons for each rolling 12-calendar month period. Note that at base load continuous operation, the aggregate emissions can be more than twice 72.11 tons/year.

Question: In view of the "enforceable operation limitations" mentioned in the Executive Summary, and in view of the fact that shutting down the new units when such limits are reached could have serious consequences to the electrical network, would staff consider amending AQ-20 and AQ-44 to include a provision whereby the applicant is required to inform the San Diego Air Pollution Control District and the California ISO when 90 % of the limits are reached?

Exhibit 708

FSA Land Use, page 4.5-3 states, "In September 1997, the city began to identify options for an action to eliminate or reduce the environmental impacts of the existing EPS and to achieve more compatible land uses along its coastline. The city no longer considered the industrial land uses represented by the EPS to be the best used of coastal property. As a result, the city formed the South Carlsbad Coastal Redevelopment Area (SCCRA) and the associated redevelopment plan (Exhibit 739, Reference 5). The underlying intent of the redevelopment plan was to convert the industrial land west of the railroad tracks to another land use that would provide a greater benefit to the community and would eliminate the possibility of an intensification of industrial uses at the EPS site. The plan's intent is to encourage the redevelopment of the EPS site and decommissioning of the existing power plant."

Comment: Power of Vision believes the CECP violates the original intent of SCCRA in that the application is an intensification of use that no longer meets the needs of residents.

Exhibit 709

FSA Land Use, page 4.5-6. The list of surrounding uses fails to mention high density residential 1/3 mile north of the proposed site on the north shore of Agua Hedionda Lagoon.

Exhibit 711

FSA Land Use, page 4.5-7, Educational Facilities

Pine Elementary school no longer exists.
La Palma High school no longer exists and was never a for-profit school

Exhibit 712

FSA Land Use, page 4.5-7 Project Site, states, "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."

Question: Will the approval of the project by CEC trigger this requirement by the City of Carlsbad?

Exhibit 713

FSA Land Use, page 4.5-8, Method and Thresholds for Determining Significance, states, "Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction, or that would normally have jurisdiction, over the project. This includes, but is not limited to, a General Plan, redevelopment plan, or zoning ordinance."

Question: How does CECP comply with this requirement?

Exhibit 714

FSA Land Use, page 4.5-8, Method and Thresholds for Determining Significance, states, "Individual environmental effects, which, when considered with other impacts from the same project or in conjunction with impacts from other closely related past, present, and reasonably foreseeable future projects, are considerable, compound, or increase other environmental impacts."

Question: How does CECP comply with this requirement?

Exhibit 715

FSA Land Use, page 4.5-8, Method and Thresholds for Determining Significance, states, "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."

Comment: A 550 mega-watt power plant is inconsistent with tourist and recreational activities that are directly adjacent to the CECP. The addition of a 2nd power plant is not

conducive to tourism and its related activities. There has been a desire by residents to clean up the beachfront area of Carlsbad for the benefit of citizens and visitors. The unsightly towers and related structures of CECP will have a negative impact on surrounding land uses such as the lagoon, beaches, hotels, LegoLand California, strawberry fields, flower fields and state camp grounds.

Exhibit 716

FSA Land Use, page 4.5-11, California Coastal Act Consistency Determination, states, "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."

Question: Since CECP uses desalinated ocean water, how does this project lessen Coastal Commission concerns about the use of ocean water?

Exhibit 717

FSA Land Use, page 4.5-12 states, "While the CECP would not use ocean water for once-through cooling and on this basis may not be considered coastal dependent, locating the CECP at the site of the existing EPS (which is a coastal dependent use) and the proposed ocean-water purification system would make the project a coastal-dependent facility. Locating the CECP and its associated facilities/features on-site at the EPS allows the CECP to utilize the plant's infrastructure, thereby avoiding offsite construction of linear facilities or other infrastructure. Constructing the CECP on this site would avoid the need to develop in areas of the city of Carlsbad unaccustomed or unsuited to this type of industrial development"

Question: CECP will use ocean water. What difference does it make if it's for once-through cooling or desalinated water for use by the turbines?

Question: What happens when EPS is completely decommissioned and its circulating water is no longer available for the CECP desalination plant?

Question: The City of Carlsbad has general plan designated/zoned areas for industrial uses, why were these ignored?

Exhibit 718

FSA Land Use, page 4.5-12 states, "The region needs additional electric generation and constructing the CECP on the existing EPS site prevents the need for development of this type of industrial facility in another area of the Coastal Zone or elsewhere outside the Coastal Zone.

Comment: The FSA fails to reference recent reports such as: the CEC 2009 IEPR (Exhibit 739, Reference 1) which predicts a drop in power consumption for the San Diego Region; the CEC California Energy Demand 2010-2020 Staff Final Report, September 2009 (Exhibit 739, Reference 2), which shows lower peak power demand for the San Diego Region than prior reports; the California ISO 2011-2013 Local Capacity Technical Analysis, December 29, 2008 (Exhibit 739, Reference 3) which predicts that for years 2011-2013 there will be no Category B capacity deficiency for the San Diego Region.

Exhibit 719

FSA Land Use, page 4.5-13, states, "The EPS has been an established industrial site since the early 1950s. The existence of two major transportation corridors (i.e., the NCTD Rail Corridor and I-5) on either side of the proposed CECP site indicates that the parcel would remain as an industrial site, because the future siting of land use types other than industrial between these heavily- traveled transportation corridors would likely be incompatible."

Question: Is the idea to make ugly uglier? In what way do the transportation corridors preclude other kinds of development?

Question: Is it safe to locate large industrial facilities between two transportation corridors?

Exhibit 720

FSA Land Use, page 4.5-15, State Agencies, states, "The proposed CECP would be located entirely within the EPS. The Coastal Commission has not designated the existing EPS power generation facility site as a site that is inappropriate for the facility or for reasonable expansion."

Question: Why was The Coastal Commission 1990 report, (Exhibit 739, Reference 6) issued as a result of NOI by SDG&E to build a 2nd facility on the EPA site, not included in the FSA? This report determined that the site is not appropriate for a 2nd power plant. If it was not an appropriate site in 1990, what has changed?

Exhibit 721

FSA Land Use, page 4.5-21, LAND USE TABLE 2-B, CARLSBAD GENERAL PLANNING, states, "The General Plan Land Use Element designates the entire Encina Power Station (EPS), which includes the CECP site, for Public Utilities ("U")."

Question: Is CECP a public utility? As NRG is a merchant power producer, does the land use designation Public Utility apply? A general plan consistency finding must be made to determine if CECP does meet the general plan requirement of Public Utility.

Exhibit 722

FSA Land Use, page 4.5-22, states, "Carlsbad Zoning Ordinance, Chapter 21.36, Consistency: Based on the proposed CECP's zoning and land use designation for Public Utilities ("PU" and "U," respectively), and the fact that both designations allow for electrical generation, staff concludes that the proposed CECP is consistent with the City of Carlsbad Zoning Ordinance."

Question: Since CECP is not processing a Precise Development Plan as required by Carlsbad Ordinance; on what basis does CEC staff determines CECP complies with the General Plan?

Exhibit 723

FSA Land Use, page 4.5-30**,** City of Carlsbad Compliance Requirements/Consistency Determination by City of Carlsbad.

Question: Does the absence of comments from the CEC staff indicate an acceptance of the City of Carlsbad's requirements for development within the SCRA?

Question: Since CECP cannot demonstrate an extraordinary public benefit, is CEC recommending an override?

Exhibit 724

FSA Noise, section 4.6.

Question: If a wall is to be constructed on the western sides of the CECP, what noise modeling studies were done regarding the effect of I-5 noise bouncing off the wall and impacting residents to the east?

Question: If a wall is to be constructed on the eastern side of the CECP, what noise modeling studies were done regarding the effect of passing trains or power plant noise bouncing from the wall and affecting residents to the west?

Exhibit 725

FSA Socio-Economic, 4.8-3

Within the six-mile radius, staff identified a total population of 196,209 persons and a total minority population of 125,882 persons, resulting in a 35.84 percent minority population**.**

Question: Do you mean 64.16% minority?

Exhibit 726

FSA Soil and Water Resources.

After publication of the FSA, the applicant docketed on December 17, 2009 letters to the San Diego Regional Water Quality Control Board (SDRWQCB) dated September 22, 2009 and December 14, 2009 indicating that CECP will not seek a NPDES permit for the ocean water used in conjunction with the PEAR proposed desalination plant. **This is new information, not previously available to us, and, coming at this late date, limits our capability to do discovery and analysis.** That being said, and realizing that the closure of the EPS is a foreseeable event; we strongly believe that, as a stand alone project, the CECP should be required to obtain a NPDES permit from the SDRWQCB prior to breaking ground at the proposed site. We therefore urge that following new Soil & Water condition be added:

SOIL&WATER-9: Prior to commencement of groundbreaking, the project owner shall obtain a NPDES permit from the SDRWQCB for the discharge of ocean water from the CECP desalination plant. This permit will be separate from the current NPDES permit for the Encina Power Station.

Verification: Prior to groundbreaking, the project owner shall provide the CPM with a copy of the NPDES permit from the SDRWQCB.

Exhibit 727

FSA Visual, page 4.12-9 states, "The Agua Hedionda Lagoon is an intensively used recreational destination and a highly scenic landscape feature that defines the project view shed. While the proposed project site is located on the edge of the lagoon, the project would not directly affect the lagoon or its scenic value."

Comment: Photos will be submitted to dispute this statement.

Exhibit 728

FSA Visual, page 4.12-11 states, "Overall visual dominance of the project would remain visually subordinate to the much larger and taller EPS structure. The vertical form and line of stacks and HRSGs would silhouette against the sky (sky-line) above the tree canopy to a degree, increasing dominance and attracting attention to a moderate degree. The project would not block high quality or scenic views from key viewpoints in this general area. Vertical features would intrude into the sky, but remain visually subordinate."

Comment: Staff clearly states CECP will be visible above the tree line. The contention that CECP is visually subordinate to the taller EPS structure is a matter of opinion and point of perspective. While it is true that EPS currently dominates the landscape of coastal Carlsbad, it is possible that the current EPS smokestack can be reduced in height since EPS no longer burns fuel oil. Also, EPS will be dismantled in the foreseeable future. In this case, would CECP, as the visually dominant stand-alone application, be considered visually acceptable? The project may not "block" views but it will be visible for many locations throughout Carlsbad.

Exhibit 729

FSA Visual, Sensitivity, 4.12-13, states, "Residents in general are considered to have potentially high levels of viewer concern due to the long periods of viewing time, typically high levels of concern for their place of residence, and concern with potential effects on property values. Those residents most likely to experience visual impact would be a limited number of viewers north of the lagoon whose views of the site are not obstructed by other homes, terrain, or trees."

Question: Since approximately 43,000 residents have views of EPS and the proposed CECP, what would CEC consider a limited number of residents?

Exhibit 730

FSA Visual, page 4.12-13states, "Also, staff recommends Condition of Certification VIS-2, which requires additional perimeter landscape screening, and replacement planting to enhance screening of tall project features in the long term. In this case, in-fill planting of trees, and additional tall tree screening extending farther south on the eastern berm along I-5 would be important in achieving long term screening from views in this portion of the lagoon."

Question: What species of tree that is allowed in the coastal zone will grow tall/wide enough to adequately screen CECP as suggested mitigation by CEC staff?

Exhibit 731

FSA Visual.

Comment: Throughout the Visual section of the CEC FSA, staff admits that recreational users, motorists, residents, beach goers, everyone will have a view of CECP. Yet Staff believes these views will be minimized by painting CECP a dark color, planting trees and shrubs, and generally assuming that because EPS is unsightly, CECP is cumulatively not-so-bad. Residents of Carlsbad have been subjected to the visual degradation of our community since 1953; it is unconscionable to continue to assume the community should have to put up with an intensification of unsightly, inappropriate industrial uses in an area that one-day could be a treasure of the north San Diego coastline. The rational for the visual section seems to be: It's already ugly, so more ugly won't unduly harm residents and visitors. We beg to differ.

Photos taken from a variety of viewpoints will be submitted.

Exhibit 732

FSA WORKER SAFETY AND FIRE PROTECTION, Widening of Interstate-5 and Mitigation, page 4.14-15 states, "The loss of the existing above-grade "ring" road is offset by the required below-grade perimeter road for emergency response vehicles…"

Question: Has Staff analyzed the relative importance of the above grade and below grade access roads in combating a major fire?

Exhibit 733

FSA WORKER SAFETY AND FIRE PROTECTION, Operation of the Power Plant, page 4.14-17. We are happy to see that condition Worker Safety-8 was added to insure that a minimum of two workers is always present at the CECP site. At the workshop where this recommendation was made, it was also recommended that an operating cubicle be provided at the CECP site so that the plant could be shut down in an emergency.

Question: Does the current design of CECP show such an operating room, and if not, would you recommend adding one?

Exhibit 734

FSA POWER PLANT EFFICIENCY, on page 5.3-2 states,
"Method and Threshold for Determining the Significance of Energy Resources

CEQA guidelines state that the environmental analysis '…shall describe feasible measures which could minimize significant adverse impacts, including where relevant, inefficient and unnecessary consumption of energy' (Title 14 CCR §15126.4[a][1]). Appendix F of the guidelines further suggests consideration of such factors as the project's energy requirements and energy use efficiency; its effects on local and regional energy supplies and energy resources; its requirements for additional energy supply capacity; its compliance with existing energy standards; and any alternatives that could reduce the wasteful, inefficient, and unnecessary consumption of energy (Title 14, CCR §15000 et seq., Appendix F).

"The inefficient and unnecessary consumption of energy, in the form of non-renewable fuels such as natural gas and oil, constitutes an adverse environmental impact. An act can be considered significant if it results in:

• Adverse effects on local and regional energy supplies and energy resources;

• A requirement for additional energy supply capacity;

• Noncompliance with existing energy standards; or the wasteful, inefficient, and unnecessary consumption of fuel or energy.

"Project Energy Requirements and Energy Use Efficiency

Any power plant large enough to fall under Energy Commission siting jurisdiction (50 MW or greater) will, by definition, consume large amounts of energy. Under normal conditions, CECP would burn natural gas at a maximum rate of approximately 3,770 million British thermal units (MMBtu) per hour, LHV, during base load operation (CECP 2007a, AFC §2.3.3). This is a substantial rate of energy consumption that could potentially impact energy supplies. Under expected project conditions, electricity would be generated at a base load efficiency of approximately 48 percent LHV (CECP 2007a, AFC §2.3.3, Figure 2.2-5).

This efficiency level compares favorably with the average fuel efficiency of a typical base load power plant."

Comment: The FSA conclusion that, "This efficiency level compares favorably with the average fuel efficiency of a typical base load power plant" is contradicted on FSA page 5.3-4 where efficiencies of 55.5% are quoted for alternative equipment.

Exhibit 735

FSA POWER PLANT EFFICIENCY, Equipment Selection, page 5.3-4 states, "For each power train, the applicant would install one Siemens SCC6-5000F…turbine generator….(that) would produce approximately 260 MW….at 48.0 percent net plant efficiency…" Also, page 4.1-111 states that "CECP would have a net heat rate as low as 7,147 Btu/kWh. Since 1 kWh = 3412.4 Btu, the net plant efficiency based on this reported lowest heat rate would be 3412.4/7,147 = 47.74 %.

Question: The PSA indicated much higher net plant efficiency for the Siemens units. **The lower efficiency stated in the FSA is new information.** When did Staff learn about the lower efficiency, and why were interested parties not informed?

Question: Does the 47.7 % net plant efficiency take into account the energy used in the desalination plant, and if not, by how much would the net plant efficiency be reduced?

Exhibit 736

FSA POWER PLANT EFFICIENCY, Equipment Selection, page 5.3-4 states, "One possible alternative is the general Electric's (GE) Frame 7F Rapid Response (Op-Flex) technology…produces 270 MW at 55.5 percent efficiency…" The difference between the Siemens and GE units is a **very significant 7.5 % and runs counter to the CEQA guidelines quoted in Exhibit 733.**

Question: Is Staff aware that using the less efficient Siemens units instead of the more efficient GE units will result in the consumption of approximately 40,000 additional metric tonnes of natural gas per year (enough to run a 50 MW plant for a year)?

Question: Is Staff aware that using the less efficient Siemens units instead of the more efficient GE units will result in the discharge of approximately 63,000 additional metric tonnes of greenhouse gas emissions per year and additional NOx emissions?

Question: Has Staff consulted with the California ISO to determine whether the few minutes of purported shorter start up time for the Siemens units vs. the GE units is more important for system operation than the significantly lower operating efficiency of the Siemens units during their projected 4100 hours of normal operation a year?

Question: Do the Siemen's units meet the CEC's requirement that new power plants have the best available technology? Recently installed power plants in the region, such as the one in Otay Mesa, have a much higher efficiency than the proposed CECP.

Exhibit 737

FSA POWER PLANT EFFICIENCY, page 5.3-5 states,

"Another possible alternative to the F-class advanced gas turbine is an H-class next generation machine with a claimed fuel efficiency of 60 percent LHV at ISO conditions. This high efficiency is achieved through a higher-pressure ratio and firing temperature, made possible by cooling the initial turbine stages with steam instead of air. This first Frame 7H application is currently under construction at the Inland Empire Energy Center in Riverside County, California. Given the lack of commercial experience with this machine and the project load requirements, staff agrees with the applicant's decision to use F-class machines."

Comment: The efficiency difference between the latest available technology and the proposed CECP units is an **extremely significant 12%, increasing the tonnes of additional fuel required and tonnes of greenhouse gas and NOx emissions above those mentioned in Exhibit 736!** And the FSA should have indicated that the less efficient Siemens units proposed for the CECP also lacks commercial experience.

Exhibit 738

Additional Comments.

Nearly 2400 signatures of those opposed to the siting of a 2nd coastal power plant will be submitted at the hearing.

Exhibit 739

References.

1. CEC 2009 Integrated Energy Policy Report (IEPR), page 51, Figure 5.

2. CEC California Energy Demand 2010-2020 Staff Final Report, September 2009, page 84, Figure 71.

3. California ISO 2011-2013 Local Capacity Technical Analysis, December 29, 2008, page 2.

4. Applicant's letter dated January 5, 2009 to the SDAPCD, docketed Jan 05 2009.

5. South Carlsbad Coastal Redevelopment Area Plan, approved by the Carlsbad Housing Redevelopment Commission, 2000.

6. California Coastal Commission Report to the California Energy Commission on San Diego Gas and Electric's Proposal for a New Power Plant at Encina or South Bay in San Diego County (89-NOI-1), August 31, 1990.

Exhibit 740

POWER OF VISION'S REBUTTAL OF APPLICANT'S OPENING TESTIMONY

Applicant's Exhibit A-1, AQ-83.

Power of Vision objects to the change to AQ-83 suggested by the applicant. Applicant has provided no rationale for eliminating emissions during commissioning and low load operation. Power of Vision was assured by the SDAPCD at the December 2nd workshop that these emission would be included in calculation of aggregate emissions.

Applicant's Exhibit A-2, Land-1.

"If the project owner and the City of Carlsbad cannot reach agreement on the location of the easement (for example due to public safety and security reasons) the project owner shall provide funds to the city of Carlsbad for use in the development of the Coastal Rail Trail within the city of Carlsbad."

Power of Vision objects to this proposal. CECP is providing no public amenities or benefits to the citizens of Carlsbad and the region. As a matter of fact, it is a major negative to the community to have the 2nd power plant located on prime coastal property. It should be required, at a minimum, to create a feasible alignment for the Costal Rail Trail for recreational activities. Such a minor facility as a trail should be a requirement for CECP.

Applicant's Exhibit A-3, VIS-5.

Power of Vision objects to the change to VIS-5 suggested by the applicant. Eliminating the relocation of the berm to no later than the start of project operation would not allow for sufficient time for growth of new visual mitigation tree plantings.

Applicant's Exhibit A-3 VIS-5

"In Addition, the applicant shall work with Caltrans to develop a Mitigation Plan for accommodating the widening project while maintaining visual screening of the CECP to acceptable levels."

Power of Vision wants to know acceptable to whom? As the CECP will affect the residents, the City of Carlsbad must be a partner in approving mitigation screening.

Applicant's Exhibit A-5, WORKER SAFETY-8.

Power of Vision objects to the change to Worker Safety-8 suggested by the applicant. Addition of the sentence, "When units are dispatched from a shutdown condition, project owner shall send two workers to the site while commencing startup and the two workers shall proceed directly to the site" is confusing and subject to interpretation, but seems to be more restrictive than the original Worker Safety-8 proposed in the FSA.

Exhibit 741

Testimony of Witness Julie Nygaard

What are your qualifications?

I have served as a City Council member for the City of Carlsbad for 15 years, now retired. I currently serve on the City's Planning Commission. Regionally, I served on the North County Transit District Board for many years, serving as Chair through a significant transition. I am a long time member of the LOSSAN Corridor Agency that manages the rail from San Luis Obispo to San Diego, serving as their chair for many years. This rail corridor is the second busiest in the United States. Before serving on the City Council I served on various community and city boards and committees including the Open Space Advisory Committee, the trails planning committee and many more. I was an Incorporator of the Agua Hedionda Lagoon Foundation, the lagoon that the proposed project sits on. I was involved in the l986 Growth Management Plan Campaign that set the planning rules for our community's development. I have lived in Carlsbad since 1976. My first community involvement occurred when the current power plant was being increased from three units to five and the new smoke stake was installed.

Question: What is your testimony as it relates to Land?

Response: As a city council member, I spent many years administering our Growth Management Plan, which includes an extensive level of evaluation of each new project that comes to Carlsbad. All development in our community must adhere to the strict Growth Management Rules, which were enacted by a vote of our citizens. Our standards are high.

Question: What is your testimony as it relates to Safety?

Response: I find it incomprehensible that the FSA would find that all the safety standards have been satisfied. You will hear testimony that our Fire Chief has not received sufficient information to make a thorough evaluation of this project from the applicant. How can you say that the Safety aspect has been satisfied when you do not have his final evaluation? The Safety issue must be clearly evaluated to ensure that the plant and the community around it can be kept safe. Our city would not accept a project with this weak evaluation. I also think there is a potential problem with the site. There may not be enough area at the site to ensure its safety. I am concerned about the proposed location. Siting a potentially explosive plant (possible terrorist plot) between the Interstate 5 Freeway, one of only two mayor highways running North and South in our county and the LOSSAN corridor, the second busiest rail corridor in the Nation, with the second track now underway, seems unwise. The potential for disruption from a major incident is huge. For me, Safety is the most important question. It has not been adequately addressed. The people deserve better.

Question: What is your testimony as it relates to Visual Impact?

Response: For many years, the citizens of Carlsbad have been promised that the existing power plant would go away. With the widening of Interstate 5 and double tracking of the rail corridor, currently underway, the old landscaping that would have served as a visual buffer will disappear. We will be left looking at a huge ugly power plant. Why can the applicant not

drop the plant farther into the hole to make it less visible? The old power plant sits much lower, so the excuse of the water table simply does not hold water, excuse the pun. We have looked at the old power plant for over 50 years; it's not fair that we will have another 50 years of an ugly industrial use on our Coast. This will create a negative visual impact and blight on our City.

Question: What is your testimony as it relates to Air Quality?

Response: The old plant is a peaker plant. It operates about 7 to 8 per cent of the time. The new plant will operate up to 60 per cent of the time. It is true that the new plant will be cleaner and much more efficient per unit of energy produced, but what the Staff has left out is that it will run four times more often and put our four times more pollution. It is not acceptable to only require a 1.1 ration to buy emissions credits. It should be at least 3.1, as was requested from the State Lands Commission for the Poseidon project. We do not want to return to the old days when our air was so dirty from pollution that the power company was forced to repaint cars and homes in the local neighborhood. The citizens need your protection now.

Question: What is your testimony as it relates to Water?

Response: The proposed new power plant will require approximately 4.32 million gallons of ocean water per day (MGD) to generate approximately 700,000 gallons of the purified industrial water needed during peak generation. The Coastal Commission has repeatedly advocated for a decreased use of seawater. The project still needs the approval of State Lands Commission if it is to produce its own desalinated water. To say that the new plant will use the existing water flow for EPS units 4 & 5 until they are retired and then figure out where to get its water is not very far sighted. Will the plant be shut down until the water supply is secured? Where will the water come from?

Question: What is your testimony as it relates to Alternative Sites?

Response: Why would you place an intensified use on the Coast, on one of the very few natural lagoons in the State of California, especially when the plant does not require seawater cooling? Recently, a new power plant was opened in Otay Mesa. At the Grand Opening ceremony, all the speakers spoke about how good it was that the new plant was off the Coast. The Coastal Commission in 1990 took a position opposing the siting of a new power plant in the exact location currently being proposed for the CECP. Why does the Coastal Commission remain silent now, nothing has changed except they are even more protective of the Coast, except in this instance. The Coastal Commission should be required to weigh in on this project. To simply say that they are too busy is not a good excuse. Today the statement that this is a Brownfield site anyway, is not an excuse for its reuse in the same manner. When land is redeveloped, old uses must be evaluated to make sure it is still the best use for the land. In this case, it is not. The Energy Commission should be congratulated on its foresight in not sighting a power plant on the coast in the South Bay. You do have a choice.

Question: What is your testimony as it relates to Public Participation?

Response: The FSA states that there has been an unprecedented level of public participation. We have a petition with 2,400 signatures from people all over the county opposing this project. The people of Carlsbad have been promised that the old power plant would one day go away.

They are surprised that what is planned to replace it is even bigger, adding more pollution than what we currently have. Just to say there has been Public Participation does not satisfy the public's concern. You must consider their concerns.

SUMMARY

In summary, the safety question has not been thoroughly vetted. Water has not been secured. The use of prime Coastal land for an industrial use has not been answered. These questions must be evaluated and addressed before you make a final decision. Why are we in such a hurry to put in a plant that will last for another 50 years when technology is changing so fast? We could take some time and thoroughly answer these questions and then move forward with an informed decision that will be good for the people, the city, and the State of California.

BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION OF THE STATE OF CALIFORNIA
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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, Julie Baker, declare that on January 6, 2010, I served and filed copies of the attached Power of Vision Opening Testimony, dated January 6. 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/carslbad/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 by:

Electronically to all email addresses on the Proof of Service list;

AND

Sending an original paper copy and one electronic copy, mailed and emailed respectively, to the address below (preferred method):

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Attn: Docket No. 07-AFC-6
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I declare under penalty of perjury that the foregoing is true and correct.

Julie Baker

January 6, 2010