

DOCKETED

| | |
|-------------------------|-------------------------------------|
| Docket Number: | 07-AFC-06C |
| Project Title: | Carlsbad Energy Center - Compliance |
| TN #: | 203547 |
| Document Title: | Power of Vision Comments on PSA |
| Description: | N/A |
| Filer: | Arnold Roe, Ph.D. |
| Organization: | Power of Vision |
| Submitter Role: | Intervenor |
| Submission Date: | 1/21/2015 3:31:30 PM |
| Docketed Date: | 1/21/2015 |

Power of Vision

Julie Baker
Arnold Roe, PhD
4213 Sunnyhill Dr
Carlsbad, CA 92008
julbaker@pacbell.net
roe@ucla.edu

Via E Filing
January 21, 2015
Carlsbad Energy Center Project (07-AFC-06C)

CEC Staff
California Energy Commission
1516 Ninth Street
Sacramento, CA 95814-551

Power of Vision Comments on the PSA

Power of Vision appreciated the opportunity to discuss some of our issues with the proposed amended Carlsbad Energy Center project with Energy Commission Staff and applicant at the workshop held in Carlsbad Jan 12-13. We were under the impression there would be an opportunity to have a clearer and more in-depth dialogue with the applicant, NRG, and CEC staff concerning the transmission lines adjacent to the I-5 corridor. As residents of Carlsbad, our intention in these proceedings is to make sure the amended CECP complies with residents' goal of improving the view shed currently occupied by the Encina power Station (EPS). We applaud the intention of the applicant to demolish the existing EPS site and remediate the property to a level of use to be determined in the future. With the old EPS gone, the view-shed corridors will change dramatically, shoving the amended CECP into the forefront. Power of Vision requests Staff to include in the FSA requirements for the applicant to screen the project to a high degree, realizing its intrusion on the ocean views of thousands of Carlsbad residents, visitor and drivers on the I-5. Our specific comments for the various sections of the PSA follows.

Introduction 2.1

On page 2-2 of the Introduction, the last sentence states "...the modifications comply with all applicable laws, ordinances, regulations, and standards (LORS) at the local, state and federal level. As Bob Torkelson, representing the City of Carlsbad at the recent workshop pointed out, there is a City height ordinance in the proposed project area (35 ft) that would require a Commission override. **Please correct the last sentence.**

Project Description 3-1

Figures 1 & 5 correctly show the currently proposed transmission tie line locations. Figures 2,3,4, & 8 show a superseded configuration for the transmission tie line. **All figures should be consistent in the FSA.**

Air Quality 4.1

On pages 18 thru 20 of Air Quality Appendix - AQ1, Staff correctly points out that the amount and type of power generation needed for each area of California is determined by the CPUC, not the CEC for the local area in which the amended CECP has been proposed, CPUC's order D.14-03-004 authorized SDG&E to procure by 2020 500-800 Mw of capacity, at least 200 Mw of which must be preferred resources. Thus, up to 300-600 Mw may be from natural gas fired generation, and the CPUC does not specify that all of this natural gas fired generation need be concentrated in one location. On the contrary, grid reliability considerations would suggest otherwise. **We believe that the FSA should point out that arguments currently being discussed at the CPUC concern whether all of the allowed maximum 600 Mw should be permitted at the Carlsbad site.** The FSA should also include such statements as "there will be no shortage of generation in the local area prior to 2018, even considering the shutdown of SONGS and the imminent shutdown of EPS. Also, grid reliability considerations may not require more than 200 Mw of natural gas fired generation in the local area. Furthermore, as Staff pointed out at the bottom of page 19 and top of page 20 of AQ-1, the Commission should avoid doing anything that "...would reduce the number of projects that could compete in utility RFOs...(which) could lead to non-competitive solicitations, unnecessarily raising ratepayer costs." Arguments currently before the CPUC state that SDG&E's request for approval of their PPA prior to SDG&E having the results from their most recent RFO, prematurely precludes the possibility that viable offers for a better mix of renewable and gas fired generation can be found for the San Diego LCA. Also, the PSA' statement that the market will determine whether or not a project will be cost-effective is belied by the fact that SDG&E's sole source PPA agreement with NRG has not been subject to competitive bidding via an RFO, so we do not know if there are other more cost-effective and/or lower GHG emission solutions.

The PSA contains many references to the need for fast startup and ramping generation to help implement fuller use of renewable energy sources. However, no information has been provided as to how much fast startup and ramping generation is needed in the San Diego LCA. 300 Mw of such generation has already been approved at the Pio Pico site. **Do we need 200 Mw more, 400 Mw more? Has there been any study of how much more fast startup generation is needed in the immediate future?**

On page 29 of Air Quality Appendix - AQ1, Greenhouse Gas Figure 3 shows a current California average heat rate for gas fired electric generation at about 8,500 Btu/kWh, whereas the best heat rate for the proposed GE LMS100s operating at peak performance is 9,474 Btu/kWh. Yet, immediately below Figure 3, the first sentence of the Conclusions states "The project will lead to a

net reduction in GHG emissions across the California electricity system." **We suggest that this first sentence of the Conclusion be stricken or elaborated upon.**

Alternatives 4.2

The Commission is required to examine the full project (600 Mw) and the no project alternative (0 Mw). However, this does not preclude the Commission for considering intermediate size projects (say, 400 Mw). As alluded to above, in the Air Quality comments, there are good reasons to consider a 400 Mw alternative, such as allowing the possibility of more than the required minimum of 200 Mw preferred generation resources in the San Diego LCA. Also, if the Commission limits the project to 400 Mw, there would be no need to expand the project footprint beyond that which was accepted in the approved CECP. Also, a 400 Mw project would eliminate the negative visual impact of the two 106 ft transmission line poles next to the I-5 freeway at the Southern end of the amended project. **We urge that the FSA consider the 400 Mw alternative.**

Land Use 4.6

Power of Vision request the language on the Coastal Rail Trail dedication and/or offer of funds should an alignment not work out be strengthened to insure the residents of Carlsbad receive the benefit due them under provision of the Warren Alquist Act. Since the City of Carlsbad and the applicant have entered into an agreement wherein the City of Carlsbad no longer offers opposition to proposals by the project owner, the residents desire assurances that the Rail Trail requirement will be met. While we are not asking for an exact alignment at this time, we ask for strong language that would guarantee the land dedication/easement, rather than funding which may or may not be used for public enjoyment. **We also believe that Staff should make certain that there is at least one feasible location for the Coastal Rail Trail "...within the boundaries of the overall Encina Power Station Precise Development Plan area", as stipulated in LAND-1.**

Noise and Vibration 4.7

We were glad to hear from Staff at the recent workshop that they will investigate noise levels from GE LSM100 and Siemens combined cycle units currently in operation in California so that we can have a comparison in the projected noise levels of the approved and amended CECP projects.

Also, we second the suggestion made at the workshop by the City of Carlsbad to **include in NOISE-4 the statement that the generating units will not be operated between the hours of midnight and 6 AM.**

Socioeconomics 4.9

Power of Vision requests CEC staff includes the proposed Caruso Affiliated project, directly across I-5 in their analysis of the project. While it is accurate that a plan for the property has not been filed, Caruso Affiliated has publicly made know their plans to develop an outdoor commercial shopping center. It is our understanding they are getting ready to start the approval process with the Carlsbad Planning Department. **It is critical that this project be included in the list as it is a large project, adjacent to the proposed project.**

Visual Resources 4.13 & Transmission Line Safety & Nuisance, 4.12 & Transmission System Engineering 5.5

Our concerns about the transmission line are primarily related to their negative visual impact in this scenic corridor when located near the I-5 freeway. We recommend that Staff review the issues we raised in a letter to the Commissioners, TN# 203512, dated January 21, 2015, on **Power of Vision's Response to Project Owners Supplemental Response to Data Request Set 3 (TN 203512).**

We now have drawings and letters from Caltrans showing where the proposed grading for the widened I-5 project will go, and how this grading will eliminate the current berms and screening trees on the project property, so there is no uncertainty as to the cumulative effects. What is uncertain is whether or not there exists a feasible future screening solution other than undergrounding the transmission line. The critical screening problem comes from the transmission line with its attendant cross arms and wires viewed as a continuous structure by the over 200,000 daily users of the I-5 freeway. Its closer proximity to the freeway than the exhaust stacks increases its visual dominance. In the currently proposed configuration the three northerly poles will rise 80 ft above grade and the two southerly poles will rise 106 ft above grade. To the best of our knowledge, there is no available screening system that can mitigate the visual impact of such a transmission line, particularly considering the narrow strip of land that will be available after I-5 widening to place mitigating screening. Therefore, the current language of VIS-5 should be changed to:

Since effective visual screening of a transmission line adjacent to the I-5 freeway may not be feasible unless it is placed underground, in no event shall an above ground transmission line shall be located on the eastern side of the project.

In order to address potential cumulative visual impacts **of the power generating units and their smokestacks** resulting from I-5 widening, the project owner shall maintain a permanent buffer zone, including the existing vegetative visual screening, on the eastern portion of the CECF site, between the existing NRG fence line and storage tank perimeter road. This measure shall be coordinated with Conditions of Certification LAND-1 and HAZ- 8. The existing landscape screening within the buffer zone shall be maintained and enhanced per Condition of Certification VIS-2 after start of project construction. The buffer zone shall be kept

available to maintain existing visual screening, accommodate future possible I-5 widening to the extent necessary, and to accommodate both future hazard protection features and visual screening.

In addition, the applicant project owner shall work with Caltrans to develop a Mitigation Plan for accommodating the widening project while maintaining visual screening of ~~CECP~~ **the power generating units and their smokestacks** to acceptable levels. This plan could include complete or partial avoidance of the CECP site, complete or partial berm retention or replacement, complete or partial retention of existing landscape screening, and replacement screening. ...etc., etc.

The prohibition against an above ground transmission line located on the eastern side of the project would be similar to the HAZ-9 statement that "In no event shall the project owner grant or dedicate an easement for the Coastal Rail Trail east of the Rail Corridor on the CECP site."

Since the widening of I-5 is a known project, with letters from CalTrans docketing details of their preferred alignment, Power of Vision asks, as a Condition of Certification, that the project owner underground the transmission lines or move them from the eastern side of the project during the construction phase of the amended CECP, rather than at a later date. The economies of scale would suggest the cost of such an undertaking will be less for the applicant now, than in the future. Undergrounding or moving the transmission lines, now the dominant feature of the view-shed, would solve the major source of visual blight to the surrounding residents and motorist. The Commissioners have stated their interest in solutions to screening the transmission lines.

Power of Vision also agrees with staff recommendation that the project owner must complete planting and seek the approval of the CPM prior to start of project operation.

Some corrections for the FSA:

a) On page 4.13-24, the three northerly transmission poles have been moved down only 18 fr, not 25 - 30 ft (see Figures DRPOV 5-2 & 3 revised as shown in TN#20343).

b) On page 4.13-34, the tallest feature of the amended CECP is not the stack, which only rises 65 ft above grade, but are the transmission poles, which rise 106 ft and 80 ft above grade.

c) At the workshop, the recommendation was made to clarify VIS-2 by changing the first sentence to read, "The project owner shall provide perimeter landscaping that reduces the

visibility of the power plant structures **and transmission lines** ~~in accordance with local policies and ordinances.~~

Julie Baker

Arnold Roe, Ph.D.