City of Carlsbad
Planning Department

October 24, 2007

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CARLSBAD ENERGY CENTER PROJECT (07-AFC-6) – CITY OF CARLSBAD ISSUES OF CONCERN

Dear Dr. Reed:

Thank you for the opportunity to identify and submit issues of concern on the Carlsbad Energy Center LLC's Application for Certification (AFC). The AFC proposes construction of a new combined cycle generating facility on the grounds of the existing Encina Power Station. Additionally, the City of Carlsbad appreciates your extension of the deadline to submit these comments from October 19 to October 24, 2007.

Below is a list of our concerns. They derive from a preliminary review of the AFC and discussions by city staff. This by no means represents a complete list of the City's concerns; staff anticipates making additional comments as project review continues and public comment occurs.

Furthermore, the list below has been prepared by staff and does not necessarily reflect the views of the City of Carlsbad City Council or Housing and Redevelopment Commission. Both review bodies reserve the right to comment and to process and approve or deny parallel permits.

AFC Cover letter

1. The fourth bullet references "brownfield" redevelopment of an existing power plant site. The AFC should clarify the meaning of this term.

2. The fifth bullet references that the CECP "sets in motion actions that are likely to facilitate the eventual retirement of Units 4 and 5 at the Encina Power Station." A more specific link between this project and the existing facilities at Encina would be desirable.

AFC Section 1.0 Executive Summary

3. Section 1.7.8, Socioeconomics, paragraph 6, page 1-11, refers to the City of Carlsberg. This should be changed to Carlsbad.

Air Quality

4. It is likely that air pollution will be generated by not just one, but two power plants for many years. While the AFC indicates the proposed energy center project will facilitate the

retirement of current Encina generating units 1, 2, and 3, there is no guarantee when or if this retirement will occur, and, with or without retirement, existing units 4 and 5 will continue to operate. The City cannot stress enough the importance of (1) ensuring the application of state of the art air quality measures such that pollution from all existing and future operating units is significantly better than current power plant pollution output, and (2) that the AFC clearly demonstrates these measures to adjacent and downwind residents and businesses.

Facility Design

5. It is difficult to assess facility design due to the lack of full size, detailed plans. Site plans and full elevations are needed with complete information and dimensions, including but not limited to heights and setbacks of structures, construction materials and colors used, grading and topographic details.

6. The extension of reclaimed and potable water lines will have to address a number of potential conflicts from existing utilities. Submittal should include a full-scale site plan drawing with accurate location of all existing and proposed easements and utility lines (sewer, potable water, reclaimed water, storm drain, gas, electric, etc.).
7. AFC Figure 2.2-9, showing the extent of intermediate berm removal, also depicts the existing fuel oil tank locations. For clarity, the tank numbers should be depicted on this, and all other diagrams that show the tank locations.

8. The design of the project should be consistent with its location near existing residential and a significant recreational and aesthetic resource – Batiquitos Lagoon. Furthermore, project design should also consider adjoining future uses. For example, directly opposite the project site and on the east side of Interstate 5 is a large, undeveloped property designated for Travel/Recreation Commercial uses. Furthermore, the City anticipates the existing Encina Power Station may redevelop with public and visitor-serving uses, as further discussed below. Partly because of this redevelopment potential, Carlsbad required the recently approved Carlsbad Desalination Project to have a high quality design more typical of an office building rather than an industrial use.

9. The City of Carlsbad's Vista-Carlsbad Interceptor Sewer runs along the east side of the railroad tracks through the Encina Power Station. The AFC should address the potential impacts between the existing sewer line and the proposed natural gas line connection. Additionally, the City will be constructing a new sewer line in this area in the near future. Close coordination will be required between the proposed CECP and the City's sewer lines.

Geological Hazards

10. AFC Figure 5.4-3 (CECP Plot Plan) shows the two northerly tanks on the west side of the railroad tracks (presumably tanks number 1 & 2, although not labeled) being used for construction laydown areas. There is no specific reference to these tanks being removed as part of this project, which would need to occur to utilize these tank sites as laydown areas. Additionally, any impacts to the proposed desalinated water project would need to be addressed.

Hazardous Materials Handling

11. With regards to transportation/delivery of hazardous materials, it seems the more appropriate route to deliver such materials would be through use of the Avenida Encinas entrance off Cannon Road, rather than the Carlsbad Boulevard entrance. Use of the Avenida Encinas

entrance is already proposed for some construction vehicles. The advantages of the Avenida Encinas entrance are two-fold:

a. The Avenida Encinas entrance is nearest Interstate 5 and its use would avoid trucks traveling through residential and often-crowded beach areas.
b. Use of the Avenida Encinas entrance would avoid crossing of the railroad tracks.

12. The AFC should clarify whether any hazardous materials would be delivered by train and provide a risk analysis if such is proposed.

Land Use

13. The Carlsbad Desalination Project, approved by the City in June 2006 for construction at the Encina Power Station, is now in the process of securing its final approvals from the State Lands Commission and California Coastal Commission. Hearings before these review bodies are scheduled for this October and November, respectively.

    The desalination project is a very important component of the City's effort to achieve sustainability and a drought-proof water supply. The City has an approved purchase contract with Poseidon Resources to supply all of the potable water needs of the Carlsbad Municipal Water District.

    The expectation of the City of Carlsbad is that design, construction, and operation of a new generating facility at the Encina Power Station will not interfere with the ability to complete the desalination plant nor its successful operation.

14. The Encina Power Station is within the boundaries of the Encina Specific Plan, SP 144. The Carlsbad City Council has long held the position that any proposed development in the specific plan must comprehensively update the document to determine the future vision for all properties located within the specific plan. This policy is established in City Council Resolution 98-145 and more recently, as part of the review of the Carlsbad Desalination Project, Resolution 2003-208. For your information, while the City Council did not require the comprehensive update as part of the desalination project, it did require the project applicant to incorporate the project (as well as its accompanying Precise Development Plan) into the specific plan so that all features within the specific plan could continue to be addressed through the update requirement.

    Carlsbad Energy Center LLC's AFC does not address this comprehensive update requirement. Without the update, it is not possible to determine the appropriateness of the new power plant and whether it helps to fulfill the vision for the Encina Specific Plan area. For example, the City is concerned that further industrialization of the project area, especially in light of no guarantee of removal of the existing plant, may be counter to goals it wishes to achieve.

    Some goals the comprehensive update would address are expressed in various regulatory documents, such as the Agua Hedionda Land Use Plan and South Carlsbad Coastal Redevelopment Plan (SCCRP). As expressed in the SCCRP, these goals include: Eliminating blight and environmental deficiencies in the Project Area.

    a. Assembling of land into parcels suitable for modern, integrated development with improved pedestrian and vehicular circulation in the Project Area.
    b. Replanning, redesigning, and developing properties which are stagnant or improperly utilized.
    c. Developing new beach and coastal recreational opportunities.

d. Facilitating the redevelopment of the Encina power generating facility to a smaller, more efficient power generating plant.
e. Strengthening the economic base of the Project Area and the community by the installation of needed on- and off-site improvements to stimulate new commercial/industrial expansion, employment, and economic growth.
f. Increasing parking and open spaces amenities.
g. Implementing performance criteria to assure quality site design environmental standards to provide unity and integrity to the entire Project Area development.

In summary, the comprehensive update of the Encina Specific Plan should be a requirement of the processing of the new power plant proposal.

15. The SCCRP requires a redevelopment permit for all development occurring within its boundaries, which includes the Encina Power Station. While a redevelopment permit will not be required for the power generating facilities which are regulated by the PUC/CEC, a redevelopment permit will be required for all other accessory uses such as maintenance facilities, offices, etc. Whether or not a project component is subject to a redevelopment permit, the AFC should demonstrate compliance with SCCRP's goals, some of which are listed above, as well as the findings necessary to grant a redevelopment permit. These findings include the requirement that the land use serve an "extraordinary public purpose."

16. A goal of the SCCRP, as identified above, is "facilitating the redevelopment of the Encina power generating facility to a smaller, more efficient power generating plant." The purpose in moving toward a smaller, more efficient plant is to free up property along the Pacific Ocean and create more public and visitor-serving open space and recreational opportunities, which are other redevelopment plan goals. While the proposal certainly helps to fulfill this objective, it also creates concerns that this objective and its purpose will be difficult to ever completely achieve for the following reasons:
    a. There are no guarantees of the retirement of existing generating units 1, 2, and 3; thus, increased industrialization, rather than redevelopment, may result.
    b. Even if units 1, 2, and 3 are retired, the massive structure housing the existing units would remain, and there is no timetable for its removal.
    c. Retirement of existing units 4 and 5 is not planned.
    d. The new power plant is reliant on the existing switchyards and existing combustion turbine generator; these existing facilities are located in the center of the existing power station area west of the railroad tracks.
    e. Connection of the new power plant with the existing switchyard is proposed by tall, 138 and 230 kV transmission towers; these towers border the north and west sides of the switchyards.

17. The AFC seems to contain only a broad brush compliance review with the various governing documents. For example, Section 5.6 identifies the applicable local facilities management plan thresholds but there is no subsequent analysis to show how the project complies with these thresholds. Overall, it appears adequate analysis of compliance with several documents is lacking, including but not limited to:
    a. Precise Development Plan
    b. South Carlsbad Coastal Redevelopment Plan
    c. Agua Hedionda Land Use Plan
    d. Local Facilities Management Plan

18. The applicant has submitted amendments to Precise Development Plan PDP 00-02 and Specific Plan 144. (The amendment proposed to the specific plan is not the comprehensive amendment required by City Council policy and discussed above.) The applicant needs to

continue to diligently process these and any other local applications that may be determined necessary.

19. The Agua Hedionda Land Use Plan, adopted in 1982 after major generating improvements were completed at the Encina Power Station, limits building and structure heights to 35 feet. AFC Table 5.13-2 indicates a number of project improvements would exceed this maximum height. An analysis of project compliance with this standard is needed.

20. Approval of PDP 00-02 by the City Council in June 2006 as part of the desalination plant included several conditions requiring fulfillment either prior to issuance of permits or occupancy for the desalination plant or any owner-initiated development which requires formal amendment to the PDP. Since the Carlsbad Energy Center project proposes to formally amend the PDP, fulfillment of these conditions is now required.

    Further, the City believes the conditions required prior to issue of permits for the desalination plant should also be applied to the Energy Center project as well. In this way, fulfillment of the conditions would be more likely and would occur with whichever project occurs first. These conditions are concentrated in Planning Commission resolutions 6088 and 6091 (both approved by the City Council and Housing and Redevelopment Commission), and include the following improvements and dedications:

    a. Condition 13 b. of Resolution 6088 requires construction of a decorative screen wall or fence and, where feasible, landscaping along the Encina Power Station's Carlsbad Boulevard frontage.
    b. Conditions 15, 16 a. and 16 b. of Resolution 6088 require annexation into a Street Lighting and Landscaping District, several land dedications for public use and recreation and marine research, and dedication for street widening.
    c. Condition 16 c (iii) of Resolution. 6088 requires that the power plant owner make an irrevocable offer to dedicate a public drainage easement over the existing main storm drain line carrying public drainage water across the Precise Development Plan (PDP) property, concurrent with the proposal of any amendment to the PDP.
    d. Condition 16 d. of Resolution 6088 requires dedication of an easement for the Coastal Rail Trail (CRT) in a location within the boundaries of the PDP acceptable to the City and applicant. The CRT is a regional trail and Encina Power Station is a critical missing link in the path.
    e. Condition 16 e. of Resolution 6088 requires dedication of easements for the Agua Hedionda Lift Station site and Vista Carlsbad Interceptor Sewer pipeline within the boundaries of the PDP in locations acceptable to the City and applicant.
    f. Condition 17 of Resolution 6088 requires the power plant owner to pay PLDA fees for the entire PDP area (except desalination plant development), and construct that portion of Drainage Master Plan facility BAA within the PDP area.
    g. Condition 31 of Resolution 6091 requires improvements to Caltrans standards of the Carlsbad Boulevard bridge over the Encina Power Station warm water jetty.

21. In addition to the improvements identified above, the Carlsbad Energy Center project should be required to complete full street improvements to Carlsbad Boulevard and Cannon Road. These improvements would be in conformance with the City's major arterial standards, would include median islands, and would be required generally along the Power Station's frontage and Cannon Road west of Interstate 5.

22. Along with the CRT, new power plant design and planning also needs to consider the widening of Interstate 5. Plans should document how the proposal would fit with a widened freeway. Additionally, widening also impacts visual resources, as explained below. Project

coordination with Caltrans regarding the CRT, project screening, and power plant placement should occur.

23. Public input and awareness is essential and we recommend an abundance of opportunities for the public to comment. As much as possible, we recommend hearings be held locally, and the City is willing to assist in providing or helping to find meeting space.

    For public meetings, we would like to discuss with your staff expanding the minimum public noticing requirements.

    We also suggest the applicant may want to consider neighborhood meetings, mailings and a website to keep people informed. The applicant's efforts to alert people regarding potential noise impacts, as presented on page 5.7-16 of the AFC, is a good example of public contact and input.

24. Please provide clarification regarding plan check services for project code compliance. We recommend the City's plan check consultant be retained for these services.

Socioeconomics

25. The City believes all costs it incurs in processing and reviewing this project should be borne by the applicant. These would include any costs above and beyond the fees already paid by the applicant for the precise development plan and specific plan amendments.

Noise

26. The AFC should address any increase in noise due to train deliveries of heavy equipment.

27. As a mitigation measure, the City recommends the applicant obtain an exception from the City Manager before any construction work occurs outside the hours listed in Carlsbad Municipal Code Section 8.48.010. The manner to obtain the exception is explained in Section 8.48.020.

Traffic

28. The traffic analysis should discuss any increase in the frequency of trains and any disruption heavy equipment deliveries may cause to traffic.

29. The applicant should demonstrate that access from Cannon Road to the project site is legally achievable by easement or other means and available for all types of access, rather than just emergency access, for example.

30. The project may have potential impacts to air navigation due to structure heights and pressure, thermal, and water vapor changes to ambient conditions caused by stack exhaust or other components. The project should be reviewed by the San Diego Regional Airport Authority for compliance with both the existing and proposed Comprehensive Land Use Plans for McClellan-Palomar Airport.

31. Contrary to AFC Section 5.12.5, Cumulative Effects, staff believes the certified EIR for the Carlsbad Desalination Project provides construction and operational traffic data sufficient to help determine cumulative traffic impacts and any access conflicts between desalination plant and power plant traffic.

32. A right of way permit(s) with approved Traffic Control Plans (TCPs) will be required for all construction related activities that impact the public rights of way. Any flagging and traffic control for construction access to and from the site will need to be coordinated with the City. AFC Section 5.12.7.5 acknowledges this requirement but seems to indicate that the Compliance Project Manager will have approval authority and that the applicant need only "consult" with the City. It is not clear whom the Compliance Project Manager represents or their relationship to the City. The City shall have complete authority to issue right of way permits and approve TCPs for work within the public rights of way.

Visual Resources

33. The planned widening of Interstate 5 may remove some or all of the significant vegetation and berm that many visual simulations show would help screen the project. The AFC needs to provide additional simulations based on a widened freeway condition.

34. Regardless of freeway widening, trees and other vegetation bordering the north, west, and east sides of the proposed power plant site may be of an age such that they cannot be counted on to always provide the screening depicted in the visual simulations. The AFC should include an assessment of existing screening vegetation health and probable longevity as well as a plan for maintenance and succession planting.

    Based on existing vegetation health, it may be necessary to consider other means of screening (e.g., berms and walls) along with the planting of new, specimen trees to complement and/or replace existing landscaping. Additionally, lowering the proposal further below grade may also be needed to achieve necessary screening.

35. Furthermore, to ensure adequate screening, the City should have authority at its discretion to require replacement planting as it deems necessary throughout the life of the project. Additionally, the project applicant should be required to guarantee the maintenance, health, and effectiveness of all necessary screening for the life of the project. To this end, an annual evaluation should be performed and appropriate actions taken. All costs associated with maintaining the visual screening of the CECP should be the responsibility of the CECP operators. Any additional landscape screening of the CECP should have similar requirements.

36. AFC Table 5.13-2, page 5.13-11, includes the dimensions of the major proposed structures. There are 6 structures greater than 75' in height. The height of these structures has potentially significant impacts of the ultimate aesthetic appearance of the site. None of the visual simulations seem to be showing the view from the area of the existing power plant site west of the railroad tracks that would ultimately be redeveloped to include public uses and viewing areas. It is essential that the visual impacts of the proposed project be considered with respect to foreseeable future redevelopment; accordingly, visual simulations should be provided from an internal power plant viewpoint.

37. A visual simulation or other plan needs to show the appearance of the proposal from passing railroad cars. As the AFC notes, the City's Scenic Guidelines require a quality design as viewed from the railroad; at present, based on the information provided, compliance cannot be assessed.

38. The City recommends that all transmission lines be placed underground, rather than on above ground poles or towers.

39. The AFC should clarify if the proposed stacks would have lights and assess any related visual impacts.

40. The City is concerned about the possible appearance of any stack plumes.

Water Resources

41. Potable water shall only be used for domestic purposes, fire protection and as an emergency water supply for the project. Recycled water would be required to be used for all process water needs for the project. The City has adequate supplies and distribution capacity to meet the domestic and fire protection needs of the project. The project would be responsible for the actual connections and associated costs. Analysis would need to be provided to verify that adequate supplies exist to provide potable water as an emergency water supply for the process water needs of the project.

42. Project impacts on sewer pipe capacity and Encina Water Pollution Control Facility capacity need to be addressed and analyzed. Further, availability of reclaimed water and impacts of the proposal's discharge on reclaimed water production also need analysis.

43. The extension of reclaimed and potable water lines would have to address a number of potential conflicts from existing utilities. Submittal should include a full-scale site plan drawing with accurate location of all existing and proposed easements and utility lines (sewer, potable water, reclaimed water, storm drain, gas, electric, etc.).

44. It needs to be stressed that the project would need to comply with all federal, state and local storm water regulations. The proximity to Agua Hedionda Lagoon will make this a high priority project and the construction will be closely monitored by City staff and the Regional Water Quality Control Board. The AFC does reference most of the governing laws and documents. However, considering the number of potential pollutants and the proximity of the project to the lagoon, the treatment or structural BMPs appear to be minimal. Proper integration of site design, source control and treatment control BMPs will be essential for storm water compliance.

    To this end, the project shall complete the City Stormwater BMP Applicability Checklist. The Preliminary Storm Water Management Plan (SWMP) prepared for the project should propose an appropriate level of source and treatment control BMPs based on the project's priority. Project plans and preliminary hydrology calculations should show existing and proposed drainage patterns and subareas. And, the location of all proposed and existing drainage structures should be identified on the site plan.

45. Preliminary design of onsite utilities should include the construction of the Drainage Master Plan (DMP) facility across the PDP area.

46. The project should demonstrate how the design incorporates Low Impact Design (LID) principles to comply with Regional Water Quality Control Board (RWQCB) and City requirements.

47. The City does not have adequate recycled water production capacity to satisfy the process water demands of the CECP in the peak summer months. The applicant would need to provide solutions, acceptable to the City, to provide adequate recycled water supplies throughout the year. The project would be responsible the actual connections and associated costs, as well as the costs associated with improvements necessary to satisfy the recycled water demands of the project. Any additional improvements required to provide adequate recycled water supplies would need to be analyzed as part of the overall project review.

48. The waste water (sewer) needs consist of two components; domestic waste and industrial waste. The City has adequate capacity and treatment capabilities for all domestic needs identified in the AFC. The industrial waste, as described in the AFC would be transmitted via a dedicated pipeline to the ocean outfall system located at the Encina Water Pollution Control Facility (EWPCF). This direct delivery of industrial waste water would not require treatment at the EWPCF if the quality of the waste water meets all applicable requirements. The line needed to transmit the industrial waste water shall be constructed and maintained by the CECP. The line shall be owned by the CECP and all costs associated with the construction, operation and maintenance of the line shall be the responsibility of the CECP.

Should you have any questions regarding this letter, please contact Scott Donnell, Senior Planner, at (760) 602-4618 or sdonn@ci.carlsbad.ca.us.

Sincerely,

Chris DeCerbo for

DON NEU
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