

CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET
SACRAMENTO, CA 95814-5512



March 26, 2001

Ronald Cabe
Senior Director, Project Development
Dynegy Marketing and Trade
1000 Louisiana Street
Houston, Texas 77002

Dear Mr. Cabe

**EL SEGUNDO POWER REDEVELOPMENT PROJECT
2nd ROUND DATA REQUESTS**

Pursuant to Title 20, California Code of Regulations, section 1716, the California Energy Commission staff requests the information specified in the enclosed data requests. The information requested is necessary to: 1) more fully understand the project, 2) assess whether the facility will be constructed and operated in compliance with applicable regulations, 3) assess whether the project will result in significant environmental impacts, 4) assess whether the facilities will be constructed and operated in a safe, efficient and reliable manner, and 5) assess potential mitigation measures.

This set of data requests (#90-134) is being made in the areas of cultural resources, hazardous materials management, noise, socioeconomics, transmission systems engineering, visual resources, worker safety, water and soil resources and requests from the California Coastal Commission. Written responses to the enclosed data requests are due to the Energy Commission staff on or before April 18, 2001, or at such later date as may be mutually agreed.

If you are unable to provide the information requested, need additional time, or object to providing the requested information, you must send a written notice to both Commissioner Robert Pernell, Presiding Committee Member for the Nueva Azalea Power Plant Project proceeding, and to me, within 15 days of receipt of this notice. The notification must contain the reasons for not providing the information, the need for additional time and the grounds for any objections (see Title 20, California Code of Regulations section 1716 (e)).

If you have any questions, please call me at (916) 653-1245, or E-mail me at jreede@energy.state.ca.us.

Sincerely,

James W. Reede, Jr.
Energy Facility Siting Project Manager

Enclosure
cc: POS

**El Segundo Power Redevelopment
Data Requests
(00-AFC-14)**

Technical Area: Cultural Resources

Author: Dorothy Torres

BACKGROUND

The applicant has identified a “zone of water line alternatives” and requested input from the City of El Segundo and Commission staff. It appears from recent data responses that most of the potential historic resources within the “zone” are located on Richmond and Concord Streets.

DATA REQUEST

90. Please address the feasibility of using El Segundo St. as a portion of the water line route.
91. Please provide a map of the “zone of water line alternatives” that identifies potential water line routes that are designed to avoid Richmond and Concord Streets.

**EI Segundo Power Redevelopment
Data Requests
(00-AFC-14)**

Technical Area: Hazardous Materials Management
Author: Ramesh Sundareswaran

BACKGROUND :

Section 3.7.5 of the AFC suggests that the proposed aboveground aqueous ammonia pipeline will be constructed to meet state and local regulations and applicable industrial standards.

DATA REQUEST

92. Please identify and cite all those regulations that apply and the applicable industrial standards. Also, provide a description of the operating conditions of the pipeline and related safety features that would be incorporated. Further, demarcate segments of the pipeline that would be underground, if applicable.

BACKGROUND

Section 5.15.2.3.3 details the modeling and associated results associated with two ammonia release scenarios based on a 200-ppm ammonia endpoint. Staff routinely uses a 75-ppm endpoint with a 30-minute exposure for evaluation of significant public health impacts associated with potential ammonia releases. The 200-ppm criterion is more a planning and emergency response guideline unlike the 75-ppm criterion, which is a public exposure criterion.

DATA REQUEST

93. Please revise the OCA to include the 75-ppm –30-minute criterion and document the corresponding results. Also, estimate and document probability estimates (yearly and plant life) for both release scenarios.

BACKGROUND :

Table 5.15.2 suggests that hydrazine is to be stored and used on site. Hydrazine is a poison, flammable and corrosive and can pose a potential for significant public health impacts though it's stored at levels below CALARP thresholds.

**EI Segundo Power Redevelopment
Data Requests
(00-AFC-14)**

DATA REQUEST

94. Conduct an OCA for two release scenarios- one involving a storage tank rupture and the other a release during product unloading. Use similar climatic conditions as that for ammonia but use either the SCREEN3 or ISCST3 model.

BACKGROUND

Table 5.15.2 indicates 70,000 cubic feet of flammable hydrogen would be stored onsite in a carbon steel tank. Pertinent details about the specifications of the tank are however lacking.

DATA REQUEST

95. Please provide specifications about the tank including inherent safety features and the construction and operational codes and standards.

**El Segundo Power Redevelopment
Data Requests
(00-AFC-14)**

Technical Area: Socioeconomics

Author: Michael Fajans

BACKGROUND

Table 5.10-5 in the AFC presents the allocation of property taxes by agency for the El Segundo area. Section 5.10.2.3 describes the capital cost of the project and potential tax revenues to the City of El Segundo.

DATA REQUEST

96. Please provide information on the assessed value of the present plant components to be removed and a projection of the value of the improvements (the capital cost).
97. Please provide the background for the statement that the project will generate \$1 to \$3 million in incremental tax revenues for the City of El Segundo.

**EI Segundo Power Redevelopment
Data Requests
(00-AFC-14)**

Technical Area: Transmission System Engineering

Author: Linda Davis

BACKGROUND

In the System Impact Study (January 15, 2001), the applicant identifies four base case power flow scenarios on which conclusions were based.

DATA REQUEST

98. Please provide the all base case power flow scenarios in PSLF data format for CEC staff power flow analysis.

**EI Segundo Power Redevelopment
Data Requests
(00-AFC-14)**

Technical Area: Visual Resources

Author: William Kanemoto and William Walters

BACKGROUND

In Figures 3.4-1 and 3.4–2, major *functional* components of the proposed project are depicted, but the visible, external physical enclosures, which will ultimately determine the visual effects of the project, are not. Consequently staff was unable to clearly understand the footprints of the proposed, visually prominent enclosure structures, including the central steam turbine generator building, the HRSG enclosures and structural support, air inlets, and other major visible structures. Staff requires this information to assist in performing the visual analysis.

DATA REQUEST

99. Please provide a plan similar to Figure 3.5-1A (i.e., with topographic elevation layer) that illustrates the footprints of the major enclosure structures and other major project components. Please provide this file in CAD form as well as hard copy form.

BACKGROUND

Figure 3.4-3C provides a scaled north elevation of the proposed project. However, no similar west or east elevation was provided. Staff requires these to assist in performing visual analysis.

DATA REQUEST

100. Please provide scaled west and east elevations of the proposed project similar to that provided in Figure 3.4-3C for the north elevation. If the south elevation differs from the north elevation, please provide the south elevation as well.

BACKGROUND

The existing plant represents a prominent existing adverse visual impact in the scenically sensitive coastal zone. The proposed project could potentially increase the apparent bulk, height and massing of the facility as seen from various sensitive viewpoints in comparison to the Unit 1 and 2 structures that it would replace, thus potentially intensifying this adverse influence on the scenic resources of the coastal zone. Applicant has proposed landscape screening and painting measures that address such concerns in part. However, additional visual mitigation measures, potentially including both architectural and landscape treatments, which would mitigate adverse visual impacts, help to improve conformance with local policies, and are acceptable to the affected communities, may be needed.

DATA REQUEST

101. Please provide a description in scaled plan form of opportunity sites for establishment of enhanced screening vegetation on or near all four boundaries of the project plant.

**EI Segundo Power Redevelopment Project
Data Requests
(00-AFC-14)**

102. Please provide a description in scaled plan form of constraints to establishment of screening vegetation on or near the power plant boundaries such as utilities, pipelines, etc.
103. Please provide a scaled conceptual screening plan and architectural elevation views, including landscape and architectural elements as appropriate, that would contribute to substantial screening of the proposed plant from foreground views on Pacific Coast Highway (PCH) and adjacent beaches. Screening of the proposed plant from foreground locations on PCH, and of the proposed plant and associated tank farm in views from Dockweiler Beach to the north and northwest are of particular concern.
104. Please provide a list of suitable tree and large shrub species that would, in the opinion of a qualified arborist familiar with local conditions, be the optimal choices for landscape screening on the project site per Data Request 6.
105. Please provide additional architectural screening treatment concepts, such as architecturally-designed or modified enclosures or other feasible techniques, for the proposed HRSGs and exhaust stacks, that would enhance their visual compatibility with the scenic coastal zone and reduce the industrial character of the more prominent structures.
106. Please provide simulations depicting the landscape and architectural screening concepts described above, from viewpoints described under Data Requests (12, 13), below. Landscaping should be depicted at an age of approximately 5 years after installation, and at maturity. Please provide five sets of 11' x 17" high quality color photocopies of the simulations that will reproduce a life-size viewing scale when viewed at a normal reading distance of approximately 18 inches.

BACKGROUND

Aesthetic mitigation measures such as those requested in Data Requests 5 and 7 must ultimately be acceptable to the affected local communities and be found to comply with local plans and policies regarding visual resources of the coastal zone.

DATA REQUEST

107. In conjunction with the responses to Data Requests 5 and 7, please provide a proposal for a design development process involving the affected communities that would allow for community input into the design and encourage ultimate design consensus.

BACKGROUND

The viewpoints selected for simulations in the AFC do not capture worst-case but frequently encountered views of the proposed project. In particular, two adjacent,

**EI Segundo Power Redevelopment Project
Data Requests
(00-AFC-14)**

heavily used viewing locations, Dockweiler Beach State Park and Pacific Coast Highway, regularly have very high numbers of sensitive viewers directly adjacent to (within 100 feet of) the project site. Staff requires visual simulations depicting such worst-case but very frequently encountered views experienced by beach visitors and travelers on PCH.

DATA REQUEST

108. Please provide five sets of high quality color photocopies of a photo of the existing site and simulation of the proposed plant from PCH at an immediate foreground distance (approximately half the distance depicted in Figure 5.13-8b). The view locations and lens setting should be selected to be as near to the plant as possible while including all major visible proposed structures (e.g., top of stacks). The photocopies need to be at life-size scale when viewed at a normal reading distance (approximately 18 inches) with a minimum vertical image dimension of 9". Please specify the lens setting used. Please also provide three CDs of electronic copies of the images.
109. Please provide five sets of 11' x 17" high quality color photocopies of a photo of the existing site and a simulation of the proposed plant from Dockweiler Beach at an immediate foreground distance (within 200-300 feet) as described under Request 10, i.e., as near as feasible while including all major visible structures. The photocopies need to be at life-size scale when viewed at a normal reading distance (approximately 18 inches) with a minimum vertical image dimension of 9". Please also provide three CDs of electronic copies of the images.

BACKGROUND

The visible water vapor plume discussion provided in the Visual Resources section of the AFC (Section 5.13) does not provide enough information for staff to duplicate the modeling results summarized in Table 5.13-7. Additionally, Table 5.13-8 does not provide HRSG stack data for all three operating loads modeled by the Applicant, and staff believes that the stack diameter and water content provided in this table are not correct, and that the values given in this table could not have been modeled to obtain the results provided in Table 5.13-7. Previous experience shows water contents for combined cycle turbine exhausts to be around five to seven percent by weight rather than the fifteen percent by weight stated as in Table 5.13-8. Additionally, if the applicant did model plume frequencies using fifteen percent by weight water at the referenced exhaust temperature there would be considerably more hours with plume predicted than given in Table 5.13-7.

Staff will conduct a plume modeling analysis to replace the Applicants modeling results regarding the project's exhaust stack plume frequency and size characteristics, and staff will also model the existing plant's stack exhausts for current and post project conditions to determine the baseline plume conditions and post-project conditions. Staff will require additional project and site data to complete this analysis.

**EI Segundo Power Redevelopment Project
Data Requests
(00-AFC-14)**

DATA REQUEST

110. Please provide the following information regarding the existing operating units' exhaust parameters and the proposed project exhaust parameters.
- a. Stack Exhaust Temperature;
 - b. Moisture Content (% by Weight);
 - c. Mass Flow (1000 lbs/hr), and;
 - d. Average Molecular Weight (lbs/mole).

The Applicant may provide these exhaust parameters, in tabular form, for the range of ambient conditions (i.e. ambient temperature and relative humidity) and load conditions that can be reasonably expected occur at the project site location; or if the Applicant desires they may provide a worst case exhaust condition that staff will model throughout the year. If a single worst-case condition is supplied the applicant will provide information to verify the worst-case assumptions of that condition.

If for some reason the post project exhaust conditions for existing Units 3 and 4 will be different than existing conditions then please provide pre-project and post-project data for these stacks. All data provided should indicate units and be provided by stack name as appropriate for clarity.

111. Please provide hourly meteorological data files from a meteorological monitoring station located near the project site that includes, at a minimum, the following parameters:
- e. Year, Month, Day, Hour
 - f. Ambient Temperature and Relative Humidity
 - g. Wind Speed and Wind Direction (from Direction)
 - h. Stability Class

A minimum of five sequential years should be provided. Additional meteorological parameters, such as fog or other visibility obscuring phenomena (i.e. rain, haze), should be provided if available (as is found in HUSWO data). Please provide the meteorological data files in an ASCII space delimited, or spreadsheet, form for ease of

El Segundo Power Redevelopment Project
Data Requests
(00-AFC-14)

use. Also, please provide the name and location (in UTM or other standard coordinate system) of the meteorological data station. The Applicant should also provide a copy of the meteorological data that they used in their initial modeling assessment if different from the meteorological data provided to meet the requirements of this data request.

Staff currently has a six-year (1990 through 1995) data set from a Long Beach monitoring station that can be used if the applicant considers Long Beach data to be reasonably representative of the site in El Segundo, or if no better data source is available. However, staff believes that appropriate meteorological data is likely to be available from meteorological station(s) located at LAX.

Please provide any available information regarding prior complaints about the existing exhaust stack visual plumes that have been received by the Applicant, the City of El Segundo, or SCAQMD.

**EI Segundo Power Redevelopment
Data Requests
(00-AFC-14)**

TECHNICAL AREA: Soils and Water Resources

AUTHOR: Tim Landis, Joe Crea, Dominique Brocard

BACKGROUND

The maximum waste heat rejection rate for the current power plant is variously characterized as 119,820 Million BTU/min (AFC, p.5.5-8) and 119,820 MMBtu/day (AFC, p. 5.5-16).

DATA REQUEST

112. Please clarify the maximum heat rejection rate of the plant.

BACKGROUND

The cooling water flowrate and temperature rise for the proposed project will remain essentially the same as those of the existing power plant. Therefore, the thermal plume will remain the same as that of the existing plant (when at full load). The AFC states that the ocean surface area with a temperature rise of 1^oF or more is 30 to 40 acres (p.5.5-38), with a more or less circular shape. Further, the AFC states that the temperature rise falls below 4^oF within less than 1,000 ft from the discharge point, thereby complying with the California Thermal Plan. This characterization, however, is based on the assumption that the temperature rise is zero at a point approximately 1,500 ft southwest of the outfall (Thermal Effect Study, 1973, AFC Appendix H, Attachment 6, p. 11), and this assumption is not realistic.

An estimate of the thermal plume size can be made using the type of heat balance analysis mentioned in the Mixing Zone Analysis (AFC, Appendix H, Attachment 14). Assuming a radial temperature distribution of gaussian shape, one finds the 1^oF temperature rise isotherm to have an area of about 3,000 acres, and the 4^oF temperature rise to persist 2,500 to 3,000 ft from the discharge point.

The thermal monitoring data can also be used to develop an estimate of the thermal plume. For example, data are provided from a survey conducted on February 24, 1999 (AFC, p. 5.5-19). Using station RW 4, located about 5,000 ft from the outfall, as background gives a temperature rise of 0.3^oF at station RW 3, located 2,000 ft from the discharge. At the time of the survey, the plant was running at about 7% capacity. Prorating the temperature rise to full capacity gives a temperature rise of 4.5^oF at RW 3, which is consistent with the results presented in the previous paragraph.

DATA REQUEST

113. Please provide a realistic characterization of the thermal plume, in terms of temperature rise isotherms over natural temperatures. Because the closest monitoring station is about 2,000 ft from the discharge, and the other stations are even farther away, mathematical modeling, or a reinterpretation of the 1973 thermal survey will be needed.

**EI Segundo Power Redevelopment Project
Data Requests
(00-AFC-14)**

114. Please provide a revised estimate of the distance needed for the temperature rise to reach 4°F.

BACKGROUND

Based on the above, it is questionable whether the existing outfall meets the requirement of the California Thermal Plan.

DATA REQUEST

115. Provide a discussion of alternate outfall configurations, such as multiport diffusers, which would meet the Thermal Plan.

BACKGROUND

The statement is made in the AFC that "*considerable cold water is entrained by the rising water is evident from the diameter of the surface manifestations and from their temperatures, which may be only 5°F above natural*" (pp 5.5-16, 5.6-53). The source is given as the Thermal Effects Study (Benson 1973 - AFC Appendix H, Attachment 2) where the same statement is made. However, it is not clear what the basis for this statement is. At the same time, the Mixing Zone Analysis (AFC Appendix H, Attachment 14) indicates a centerline dilution at the surface of 1.0, i.e. no dilution, and an average dilution of up to 1.7. Thus, according to the Mixing Zone Analysis the temperature rise at the center of the boil would be about 20°F and the average temperature rise in the boil would be 12°F.

DATA REQUEST

116. Please provide basis for statement that "*considerable cold water is entrained by the rising water that is evident from the diameter of the surface manifestations and from their temperatures, which may be only 5°F above natural*", or provide corrected information on temperature rises in the area where the thermal plume impinges on the water surface.

BACKGROUND

The AFC states that "*the system uses velocity cap proposed by the Federal Government as a best available technology for minimizing the impact of water cooling systems on marine resources.*" (AFC, p. 4-22)

DATA REQUEST

117. Please provide a reference for the Federal Government's designation of the velocity cap as a best available technology (BAT).

BACKGROUND

The AFC states that "*although the intake structure will be for an "existing" facility, it appears that the existing intake structure meets the proposed requirements to reduce impingement of aquatic organisms for a "new" facility*" (AFC, p. 4.5-34). However, one of the requirements of the proposed EPA rule on cooling water intake structures is that

EI Segundo Power Redevelopment Project
Data Requests
(00-AFC-14)

the intake velocity should be less than 0.5 ft/s. This velocity is exceeded by the current intake.

DATA REQUEST

118. Please provide an assessment of alternative cooling water intake designs that would meet the proposed EPA rule.

BACKGROUND

Most of the fish impingement appears to occur in conjunction with the heat treatment of the cooling water intake tunnels.

DATA REQUEST

119. Please provide an assessment of alternative means of controlling biofouling in the intake tunnels.

BACKGROUND

To evaluate the affected environment and potential impacts from storm water runoff, it is necessary to identify run on and run off quantities and quality of the ESPR site and associated facilities. The ESPR site is mostly contained in the current ESGS site, which would represent the current runoff conditions. It is difficult to identify any potential ESPR impacts from stormwater runoff due to the mix of existing and planned runoff discussions in the AFC. In order to evaluate the impacts related to stormwater and erosion/sedimentation, Staff has requested a draft Stormwater Pollution Prevention Plan (SWPPP) for previous power plant projects. Stormwater and erosion/sediment control plans are components of the SWPPP. These plans are crucial to evaluate impacts related to ESPR stormwater quantity and quality. A separate draft demolition and construction plan is also needed as part of the SWPPP.

DATA REQUEST

120. Please provide the pre- and post-discharge for the 100-year frequency and 24-hour duration runoff event. Provide supporting data regarding the routing of off- and on-site runoff during these runoff events.

121. Please provide the location of Discharge structure No. 002 on the mapping so Staff can evaluate the entire existing and proposed drainage routes for discharge capacity.

122. Provide a draft stormwater and an erosion/sediment control plan for the facility and associated linear facilities that includes the following:

- Map drawings of 1'=100' or less that depict existing and proposed topography (contours) with labeled elevation numbers, structures, facilities, staging areas, and soil stockpile areas on the drawings (both on site and off site)
- Best Management Practices and a construction sequence on the drawings

**EI Segundo Power Redevelopment Project
Data Requests
(00-AFC-14)**

- A complete mapping symbols legend on the drawings
- On site stormwater calculations in the narrative
- Address procedures that used to handle potential construction runoff impacts.
- Maintenance and monitoring protocol for erosion, stormwater runoff control and stabilization procedures.

123. Provide a draft hazardous materials storage and disposal plan that includes spill prevention and containment measures. Provide draft work plan needs that addresses the handling and disposal of contaminated sediments/groundwater.

BACKGROUND

The AFC mentions that major cut and fill operations are not anticipated. Staff has requested conceptual volumes of cut and fill for previous power plants. The volume of cut versus fill will allow Staff to analyze grading impacts and to determine impacts related to the handling and/or disposal of excess fill.

DATA REQUEST

124. Please provide a conceptual volume of cut versus fill for grading and as excess spoil material.

BACKGROUND

The AFC water resource section discussions rely heavily on the current and future requirements of the NPDES and associated permits. In order to assess how the potential water resource impacts are going to be mitigated, please furnish data and analysis to show how these conceptual permit conditions will be addressed. For example, on page 5.5-2 there is a bullet that is one of a list of additional key characteristics that the ESPR team has developed which states "*Extensive pre-submittal consultation with the following agencies or city entities.*" One of the key regulatory agencies will be the Los Angeles RWQCB.

DATA REQUEST

125. Please list any local RWQCB water resource concerns that were the result of these pre-submittal consultations and how they will be met by the AFC.

BACKGROUND

A new, amended, or revised NPDES permit will be required for the project. A letter to the LARWQCB is included in ACF Appendix H asking for a determination of the projects status as new a or existing discharge .

**EI Segundo Power Redevelopment Project
Data Requests
(00-AFC-14)**

DATA REQUEST

126. Provide a copy of the NPDES permit application/Report of Waste Discharge submitted to the LARWQCB requesting a new/amended/revised NPDES permit for the project.
127. Provide copies for all correspondence transmitted to, or received from the LARWQCB related to the new permit. Provide this information on an on-going basis.
128. Provide an estimate of when the draft NPDES permit will be available, and a copy of the draft NPDES permit when it is available.
129. Provide a copy of the recently renewed NPDES permit for the existing project (NPDES Number CA0001147).

BACKGROUND

The project intends to use potable water supplied by the City of El Segundo for not only potable uses, but also for plant and equipment drains, evaporative cooler makeup and quench water needs (AFC sec 5.5.2.1.2). The water supply needs for these purposes will apparently increase from 49,940 gpd to 93,000 gpd for a net increase of 43,060 gpd.

The existing project uses reclaimed water provided by the West Basin Municipal Water District. The AFC (sec 5.5.2.1.2) does not provide adequate discussion of the potential for use of additional reclaimed water in place of potable water for the uses described above.

DATA REQUEST

130. Discuss in detail the availability of additional reclaimed water from WBMWD for these purposes, and how this water can be used to mitigate the increase in potable water use of 43,060 gpd.

BACKGROUND

The project intends to meet its water supply requirement using several different sources. The City of El Segundo will be providing potable water to the project, and the West Basin Municipal Water District will be providing reclaimed water. Will serve letters from the suppliers of both the potable and reclaimed water are necessary to confirm that this water is actually available to the project. Since the City of Manhattan Beach has been identified as a backup source of potable water for the project (AFC sec 3.4.7), a will serve letter should be requested for this source also.

DATA REQUEST

131. Provide will serve letter for all sources of water for the project. These letters should state that the provider has adequate capacity and will provide the project

**El Segundo Power Redevelopment Project
Data Requests
(00-AFC-14)**

with the required amount of water. They should include any conditions or restrictions on either providing the water or the use of the water.

**EI Segundo Power Redevelopment
Data Requests
(00-AFC-14)**

Technical Area: Worker Safety

Author: Rick Tyler

BACKGROUND :

Section 5.17.2 indicates a Fire Protection Plan would be developed and implemented during construction and plant operation. It does not indicate whether the Applicant would be negotiating a first responder agreement with the City of EI Segundo Fire Department for confined space and elevated height incidents as part of this Plan.

DATA REQUEST :

132. Please clarify whether such agreements would be obtained and indicate the timelines.

**El Segundo Power Redevelopment
Data Requests
(00-AFC-14)**

Technical Area: Noise

Author: J.W. Reede

BACKGROUND

Numerous residents and the city council of Manhattan Beach have expressed concerns regarding the potential for noise impacts once the storage tanks are removed at the proposed plant site.

DATA REQUEST

133. Please perform ambient monitoring immediately north of the tanks and simultaneously on 45th Street in Manhattan Beach. Include the appropriate level of analysis to ascertain industrial or plant generated noise versus ocean wave and vehicular traffic.
134. Please provide proposed mitigation schemes if the data reveals the potential for noise impact.

**El Segundo Power Redevelopment
Data Requests
(00-AFC-14)**

Technical Area: California Coastal Commission

Author: Thomas Luster

BACKGROUND

The California Coastal Commission (CCC) has commented on additional sections of the AFC and Data Responses from the Applicant. The CCC has requested additional information. The following includes both comments and requests that need to be responded to by the applicant. Where appropriate the applicant shall reference previous responses or provide supplemental or clarifying information.

COASTAL COMMISSION STAFF COMMENTS AND RECOMMENDATIONS ON PROPOSED EL SEGUNDO GENERATING STATION (“EFGS”) POWER REDEVELOPMENT PROJECT

General Comments:

The current and proposed use of an ocean water intake/discharge cooling system may not adequately eliminate, reduce, or mitigate impacts to coastal resources and therefore, may not conform with the Coastal Act:

We continue to be concerned about the effects of the ocean water intake and discharge system on coastal resources, especially as they relate to water quality and biological resources. As part of the CEC’s review of this proposed project, we request several steps be taken to mitigate the ongoing and proposed impacts associated with this facility:

Avoidance and minimization of impacts:

- The CEC should require further evaluation to determine whether the original determination of Best Technology Available (“BTA”) is still applicable to this proposal. The existing BTA is based largely on studies done several decades ago, using study methodologies that may be out-of-date or inadequate, given more recent knowledge about ecosystem functioning, nearshore processes, monitoring, and other elements of BTA review.
- There should be further evaluation of feasible alternatives available that would eliminate or reduce impacts to coastal resources. These alternatives include dry cooling or combined wet/dry cooling systems that would eliminate or reduce ocean water use and the associated impacts.

After findings of this alternatives analysis are reviewed, compensatory mitigation may be required for any remaining unavoidable impacts. The Coastal Commission will include these mitigation evaluations as part of its review.

LORS: The California Coastal Act should be included in applicable LORS sections throughout the document.

**El Segundo Power Redevelopment Project
Data Requests
(00-AFC-14)**

Comments on Specific Elements of the AFC:

Section 3.0: Facility Description:

3.3.1 Topography: Please describe the amount of containment provided for the existing and proposed tanks.

3.3.2.4 Slope Stability: The AFC describes several reasons for potential slope instability at and near the facility. The applicant should provide additional information about when and how the preferred mitigation measures to improve slope stability (e.g., soil nailing, retaining wall, etc.) will be selected. Impacts to coastal resources may vary depending on the method(s) selected, and the Coastal Commission will need to evaluate the preferred measures as part of its review.

3.3.2.5 Shoreline Erosion: The AFC describes two possible methods of shore protection – beach nourishment and enhancement of an existing rock revetment – each of which would affect coastal resources. We are concerned that the site appears to be subject to a relatively high rate of ongoing beach erosion and that placing additional infrastructure on the site will generate the need for additional shoreline protection. [See also Section 5.0 below.]

3.3.3.1 Surface Water: The applicant should provide additional information describing the existing and proposed Best Management Practices for detaining or treating stormwater at the facility.

3.9.2.3.1 Construction Activities: The AFC states that newly installed pipelines will be hydrotested. The applicant should provide additional information about any proposed detention, treatment, or discharge of the water used in this testing.

Section 4.0 Alternatives: See data requests below on alternatives for specific project elements.

Section 5.2 Air Quality –

5.2.1.5 Status of Emission Reduction Credits (ERCs): The application should provide additional information on the current status of proposed or obtained ERCs and any likely impacts to coastal resources (i.e., are ERCs from coastal or non-coastal areas? What are local or dispersed air effects on coastal resources? Etc.).

Section 5.3 Geologic Hazards and Resources –

5.3.1.1.7.4 Slope Stability: The AFC identifies this as a significant geologic hazard at the project site. The applicant should provide additional information on preferred responses

**EI Segundo Power Redevelopment Project
Data Requests
(00-AFC-14)**

to slope instability and the impacts of these responses on coastal resources or on elements of the local coastal plan.

5.3.1.1.7.7 Coastal Conditions: The AFC states that erosion due to coastal processes is possibly significant, and identifies erosion as an ongoing problem at and adjacent to the site. The applicant should provide additional information on the rate of shoreline erosion in the project area and a description of erosion associated with particular storms or events. Information should also be provided on any past or ongoing measures taken to address erosion, any applicable monitoring data, and specific proposed measures to further address the issue. This should include any data available on the existing rock groin and revetment, including ongoing maintenance needs of these structures or proposals to modify or expand them.

5.3.3 Stipulated Conditions: We concur with the applicant's Stipulated Conditions, with a requested change in GEO-2 and GEO-3 that a copy of the liquefaction analysis and the Engineering Geology Report be provided for Coastal Commission review.

5.3.4.3 Flooding: The AFC describes a perimeter containment wall on the west side of the facility to reduce flooding. Additional information should be provided on proposed changes to this wall, especially as they might affect coastal resources or elements of the local coastal plan.

5.3.4.5 Slope Stability, 5.3.4.6 Liquefaction, and 5.3.4.7 Shoreline Erosion: These sections each refer to various options available to address the associated concern, but the applicant has not stated which, if any, will be included as part of the proposed project. Additional information should be provided about preferred measures to address each issue, and how the preferred measures might affect coastal resources or elements of the local coastal plan.

Section 5.4 Agriculture and Soils – The AFC provides some description of contaminated soils on the project site. Additional information should be provided regarding BMPs that will be implemented to address soil contamination (e.g., containment methods, treatment, prevention of contaminated runoff, etc.).

Section 5.5 Water Resources – See our previous letter.

Section 5.6 Biological Resources [Note: these comments are supplemental to those in our February 14, 2001 letter] – The AFC and draft data response state that current and proposed operations at the facility result in negligible entrainment and impingement effects. We have several concerns about this finding, based in part on the following:

- The study area is defined as Santa Monica Bay down to the 90 m depth contour, an area that stretches approximately 40 miles along the coast, and extends about eight miles from the shoreline. This study area is likely too large to use in determining project impacts. No basis was provided for using a 90 m depth to

**EI Segundo Power Redevelopment Project
Data Requests
(00-AFC-14)**

describe impacts to the nearshore area, and no basis was given for extending the study area along the entirety of Santa Monica Bay.

- The study did not consider the cumulative effects of this current and proposed project along with other intakes and/or discharges.
- The study did not consider the existing impaired status of Santa Monica Bay.

We are concerned that impacts of the current and proposed facility operations may have been understated due to the above factors. We believe a new study may be needed to more accurately reflect impacts and determine mitigation needs. At the very least, the applicant should provide additional information about the basis for selecting the study area parameters, how the study area correlates to nearshore habitat features affected by the facility, and how the study evaluated other intakes and discharges to Santa Monica Bay.

Section 5.7 Cultural Resources – [missing]

Section 5.8 Paleontological Resources – did not review.

Section 5.9 Land Use –

5.9.3 Stipulated Conditions: We concur with the Stipulated Conditions, with one change – we request that the CEC request a statement from the City that the proposed project meets applicable requirements of the Local Coastal Plan.

Section 5.10 Socioeconomics – did not review.

Section 5.11 Traffic and Transportation –

5.11.2.1 Construction-Related Impacts: the AFC describes several options available for construction worker parking, including two areas used by the public to access coastal resources. Use of these sites (public parking associated with the County/State Beaches along Vista Del Mar or the Marina del Ray Boat Launch) could limit public access to the beach and would likely require mitigation measures in order to be consistent with policies of the Coastal Act.

We request that, as part of this review, the applicant and Energy Commission determine which off-site parking areas will be used for construction-related work. If public parking areas are to be used, mitigation measures in the form of replacement parking should be included as a condition of project approval. We also request additional information be provided regarding proposed alternatives to the use of public parking areas (e.g., the applicant provides mandatory shuttles from offsite locations for workers, vanpools, etc.).

Section 5.12 Noise – We concur with the Energy Commission’s data request for additional noise monitoring results. We also concur with the applicant’s stipulated conditions.

**EI Segundo Power Redevelopment Project
Data Requests
(00-AFC-14)**

Based on the information provided thus far, it appears that mitigation measures similar to those in Section 5.12.4 of the AFC are appropriate and necessary, and should be a condition of Energy Commission approval. However, these mitigation measures would affect the appearance of the facility and should also be evaluated as part of Section 5.13 Visual Resources.

Section 5.13 Visual Resources – We concur with the applicant’s stipulated conditions in the AFC. We also concur with the Energy Commission’s request for additional data regarding visual impacts of vapor plumes associated with the facility and whether the existing and proposed facility complies with applicable Local Coastal Plans. We recommend that the Energy Commission obtain, as part of its review, a statement from the City of El Segundo regarding the compliance of the existing and proposed facility with the City’s Local Coastal Plan. If the City finds the facility not in compliance and can provide conditions that would allow the facility to comply, we recommend the Energy Commission include those conditions as part of any site certification.

Section 5.14 Waste Management – The AFC states that contaminated groundwater is likely to be encountered during site preparation and that pumping will be required to draw down the groundwater to levels suitable to complete construction. Pumping rates are anticipated to be from 300 to 500 gallons per minute (for a total of 13 to 65 million gallons during the construction period), if one of two types of sheetpiles are installed to reduce connectivity from adjacent areas. Pumped groundwater is then proposed to be treated using a granular activated carbon (GAC) system before being discharged to unspecified receiving waters (presumed to be Santa Monica Bay). This groundwater is likely to exceed discharge limitations for several contaminants, including some noted as reasons for impairment of Santa Monica Bay. The AFC states that a project-specific NPDES permit will likely be required for this proposed discharge, since the discharge is not likely to meet the conditions of the General NPDES Permit for Discharges of Treated Groundwater from Construction and Project Dewatering issued by the Los Angeles Regional Water Quality Control Board (LARWQCB).

The applicant should provide additional information about the effectiveness of the proposed treatment system to remove contaminants to an acceptable level. Also, given the current 303(d) listing of Santa Monica Bay, the applicant should also discuss the possibility that the proposed treatment will not be adequate to meet discharge requirements necessary to protect biological resources pursuant to state and federal water quality effluent limitations and the California Ocean Plan.

Section 5.15 Hazardous Materials Handling – did not review.

Section 5.16 Public Health – did not review.

Section 5.17 Worker Safety – did not review.

**El Segundo Power Redevelopment Project
Data Requests
(00-AFC-14)**

Section 5.18 Transmission Line Safety & Nuisance – did not review.

Section 5.19 Reliability & Efficiency – did not review

Section 5.20 Cumulative Impacts – We are concerned about the likely cumulative impacts of this and other proposed projects on water quality and on marine biological resources.

Regarding water quality – most, if not all, of the proposed projects would eventually discharge stormwater runoff into Santa Monica Bay. Stormwater BMPs generally do not provide adequate treatment to remove some of the contaminants causing impairment in Santa Monica Bay, thus, this proposed project when considered cumulatively with the others, could result in further water quality impairment.

Additional information should be provided regarding stormwater source control or treatment BMPs that could be instituted to avoid or reduce adverse water quality impacts of this and other proposed projects.

Regarding marine biological resources – biological impacts associated with the existing and proposed ocean water cooling systems at El Segundo should be evaluated along with other ocean water cooling systems at the Scattergood Generating Station, the AES Redondo Beach Generating Station, and the Enron Long Beach District Energy Facility. In addition, the cumulative biological impacts of these systems should be considered in light of the above-mentioned water quality impairment in Santa Monica Bay.

Section 6.0 Financial Information – did not review.