

2.0 INTRODUCTION AND PURPOSE

2.1 PURPOSE OF THE EIR

The previously circulated Draft Environmental Impact Report (EIR) for the Poseidon Seawater Desalination Project (now entitled the “Seawater Desalination Project at Huntington Beach”) was made available for public review on September 19, 2002 for a period of 45-days. The purpose of the previously circulated Draft EIR was to review existing conditions, analyze potential environmental impacts and suggest feasible mitigation measures to reduce significant adverse environmental effects of the proposed “Seawater Desalination Project at Huntington Beach” (unless otherwise noted, “project” refers to all aspects of the proposed Seawater Desalination Project at Huntington Beach, including temporary construction-related effects and long-term effects associated with project buildout and implementation).

A total of 21 comment letters were received from federal, state, and local regulatory/trustee agencies. In addition, several interested parties testified and provided written comments during the public review period. A Responses to Comments document (dated March 21, 2003), provided responses to each of the 21 formal comment letters received on the Draft EIR, and was utilized as part of the Final EIR considered by the City of Huntington Beach Planning Commission and City Council. After several public hearings, the Planning Commission certified the EIR on August 12, 2003. On appeal, the City Council voted to deny certification of the EIR on December 15, 2003, citing a lack of sufficient information in regards to marine biology (entrainment and impingement), growth inducement, and product water compatibility (the Planning Commission and City Council public hearing process are described in further detail below, in Section 2.4, *PUBLIC SCOPING PROCESS*).

As such, the previously circulated Draft EIR has been revised as part of this Recirculated EIR in order to address the concerns expressed during review of the previous EIR. No impact conclusions have changed as part of the Recirculated EIR, although a substantial amount of information has been added throughout the document to clarify and further support the conclusions provided. It is the intent of this Recirculated EIR to provide construction-level environmental documentation for the project by utilizing the most current and detailed plans, technical studies and related information available. For more detailed information regarding the proposed development, refer to Section 3.0, *PROJECT DESCRIPTION*.

This Recirculated EIR will be used by the City of Huntington Beach and other responsible agencies and interested parties to evaluate the environmental impacts of the proposed project (refer to Section 3.6, *AGREEMENTS, PERMITS AND APPROVALS*, for a list of responsible agencies and project approvals).

2.2 COMPLIANCE WITH CEQA

This Recirculated EIR has been prepared in conformance with the California Environmental Quality Act (CEQA) Statutes (as amended through January 2005) and the CEQA Guidelines, particularly California Code of Regulations, Article 7, Section 15088.5 (recirculation of an EIR) and Article 9, Section 15120 through 15132 (content of an EIR). As a Recirculated EIR, this document will serve as the comprehensive compliance with the California Environmental Quality Act pursuant to CEQA Guidelines.

CEQA Guidelines Section 15088.5(g) provides: “When recirculating a revised EIR, either in whole or in part, the lead agency shall, in the revised EIR or by an attachment to the revised EIR,

summarize the revisions made to the previously circulated draft EIR.” The following language is provided in compliance with Section 15088.5(g). The previously circulated Draft EIR has been revised as summarized below:

- ❖ This EIR includes a summary description of the areas of controversy and issues raised during the hearings held before the City of Huntington Beach Planning Commission and City Council (see Section 2.4, *PUBLIC SCOPING PROCESS*).
- ❖ This EIR includes technical references with new and updated information (see Section 2.7, *INCORPORATION BY REFERENCE*, Section 10.0, *BIBLIOGRAPHY*, and Section 11.0, *APPENDICES*).
- ❖ Section 3.0, *PROJECT DESCRIPTION* has been revised to include: 1) more detail concerning the interaction between the project and the Huntington Beach Generating Station (HBGS) operated by Applied Energy Services Corporation (AES); 2) more detail about the project’s off-site improvements; and 3) to eliminate discussion of the aboveground product water storage tank as an option to the underground product water storage tank. The project now includes an aboveground product water storage tank.
- ❖ As in the previously circulated EIR, this Recirculated EIR provides a description of existing conditions/environmental setting as a precursor to the discussion of potential environmental impacts (see Section 5.0, *ENVIRONMENTAL ANALYSIS*). However, a new Section (Section 4.0, *EXISTING CONDITIONS*) has been included to provide additional information regarding the existing conditions and environmental setting of the project. This new section provides additional background and baseline information in order to assist decision makers and the public in their analysis of the potential environmental impacts of the project.
- ❖ This EIR includes an updated analysis of all of the impact areas that were analyzed in the previous EIR (the analysis that was in Section 4.0, *ENVIRONMENTAL ANALYSIS* of the previous EIR is now found in Section 5.0 of this Recirculated EIR). A separate and more detailed analysis of two impact areas (with additional background and baseline information) is included in this EIR:
 - Section 5.10 – *OCEAN WATER QUALITY AND MARINE BIOLOGICAL RESOURCES*; and
 - Section 5.11 – *PRODUCT WATER QUALITY*.
- ❖ The discussion of Growth Inducing Impacts of the Proposed Action has been updated and revised (see Section 6.2).
- ❖ The discussion of Cumulative Impacts has been updated and revised (see Section 6.3).
- ❖ The discussion of Alternatives to the Proposed Action has been updated and revised (see Section 7.0).

As part of the review process, the Draft Recirculated EIR is subject to a 45-day public review period by responsible and concerned agencies and interested parties. Following this period, responses to comments received from these agencies will be prepared. The Final Recirculated EIR will consist of the Draft Recirculated EIR or a revision of the draft, as well as comments received on the Draft Recirculated EIR and the responses to these comments. The Recirculated EIR will be considered by decision makers prior to action on the project.

2.3 SCOPE OF THE EIR

As stated above, this Recirculated EIR has been prepared in order to address the concerns expressed during the previous EIR process. No impact conclusions have changed as part of the Recirculated EIR, although a substantial amount of information has been added throughout the document to clarify and further support the conclusions provided. Much of the information and analysis within the original Draft EIR has been rearranged to better assist agencies/interested parties in reviewing the document. Issues discussed within this EIR are as follows:

- Land Use/Relevant Planning
- Geology, Soils, and Seismicity
- Hydrology, Drainage, and Storm Water Runoff
- Air Quality
- Noise
- Public Services and Utilities
- Aesthetics/Light & Glare
- Hazards and Hazardous Materials
- Construction Related Impacts
- Ocean Water Quality and Marine Biological Resources
- Product Water Quality
- Additional CEQA-mandated discussion (alternatives, growth, cumulative impacts).

2.4 PUBLIC SCOPING PROCESS

The original Draft EIR process for the Seawater Desalination Project at Huntington Beach included public scoping in order to gather information on concerns and issues that the general public may have regarding the project and the EIR. Two public scoping meetings were held on June 6, 2001 (2:30pm and 7:15pm), at Edison Community Center in the City of Huntington Beach. Participants at both meetings consisted primarily of local residents, City staff, and representatives from the Southeast Huntington Beach Neighborhood Association (SEHBNA) and the Southeast Homeowner's Association (SEHOA). A summary of issues and concerns raised at each scoping meeting are described below:

❖ Land Use/Relevant Planning

- Local homeowners will be directly impacted by another industrial use nearby their residences.
- Implementation of the project should not cost the City or taxpayers any money.
- If the desalination plant is built, local residents should receive some sort of direct benefit.
- The potential implementation of a City water storage facility nearby the proposed Poseidon Desalination Project should be planned carefully to avoid impacting local residents.

❖ Air Quality

- The proposed desalination project should not contribute to the HBGS's pollutant emissions.

- The desalination project should not create fugitive dust or odors.
- ❖ **Noise**
 - All stationary noise sources should be properly attenuated.
- ❖ **Public Services and Utilities**
 - The proposed plant's electrical demand should be regulated, as electricity is in short supply statewide.
- ❖ **Ocean Water Quality and Marine Biological Resources**
 - The brine discharge from the proposed desalination plant should not change the temperature of discharge from the AES outfall into the ocean.
- ❖ **Product Water Quality**
 - Poseidon should be cautious to ensure that their product water is compatible with water already being distributed within the County.

In addition to the public scoping meeting process for the previously circulated Draft EIR, numerous public hearings were conducted by the City of Huntington Beach Planning Commission (a total of five public hearings) and City Council (a total of two public hearings) to consider certification of the EIR. A description of the primary areas of controversy and issues raised during the public hearing process is provided below:

Planning Commission/City Council Public Hearings

- ❖ **Land Use/Relevant Planning**
 - Local homeowners will be directly impacted by another industrial use nearby their residences.
 - Implementation of the project should not cost the City or taxpayers any money.
 - If the desalination plant is built, local residents should receive some sort of direct benefit.
 - Desalination plant may impact wetland area adjacent to the project site.
 - The proposed project may have lighting, noise, and drainage impacts.
 - Proposed pipeline construction may impact residential areas.
 - The proposed desalination facility would extend the life of the HBGS, given that the desalination plant would utilize the existing HBGS cooling water system for operation.
- ❖ **Hydrology, Drainage, and Storm Water Runoff**
 - Storm water runoff from the proposed project site may impact adjacent uses.
- ❖ **Air Quality**

- The proposed project would result in air emissions impacting adjacent land uses.
- The proposed desalination project should not contribute to the HBGS's pollutant emissions.
- The desalination project should not create fugitive dust or odors.

❖ **Noise**

- The proposed project would result in noise impacting adjacent land uses.
- All stationary noise sources should be properly attenuated.

❖ **Public Services and Utilities**

- The brine discharge from the proposed desalination facility should be sent to the Orange County Sanitation District (OCSD) wastewater treatment facility instead of being returned to the HBGS cooling water outfall.
- The proposed plant's electrical demand should be regulated, as electricity is in short supply statewide.

❖ **Aesthetics/Light and Glare**

- The proposed desalination plant would result in further aesthetic impacts to surrounding receptors in an existing industrial area.
- The project may result in aesthetic/land use impacts due to nighttime lighting.

❖ **Construction Related Impacts**

- The project should ensure that significant biological impacts do not occur as a result of underground booster pump station construction near the pump station proposed in unincorporated Orange County (at the existing OC-44 distribution system connection). This location is situated adjacent to a Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP) reserve.

❖ **Ocean Water Quality and Marine Biological Resources**

- The brine discharge from the proposed desalination plant should not change the temperature of discharge from the AES outfall into the ocean.
- The proposed project must not intake or contribute to the ocean bacterial plume known to periodically exist off-shore in the vicinity of HBGS and the OCSD wastewater treatment facility.
- The proposed project should not result in impingement (when marine organisms are trapped against screening devices at the HBGS cooling water intake) or entrainment (when marine organisms are circulated through the HBGS cooling water system) beyond existing levels.
- Implementation of the proposed project would result in elevated salinity levels surrounding the HBGS outfall, thus adversely affecting marine biological resources.

❖ **Product Water Quality**

- Desalinated product water may affect the existing potable water distribution system through adverse mixing conditions, resulting in possible lead leaching or corrosion impacts.
- Distribution of desalinated seawater may impact the Irvine Ranch Water District's (IRWD) ability to comply with current National Pollution Discharge Elimination System (NPDES) permit requirements for recycled water.

❖ **Long-Term Implications of the Proposed Project**

- Growth inducement impacts of the project cannot be determined since water purchase agreements with local water agencies have not yet been executed. Growth effects would be most evident in South Orange County.

❖ **Alternatives to the Proposed Action**

- Alternative site locations have not been adequately analyzed. The EIR should include additional analysis of alternative locations at San Onofre and San Juan Capistrano.
- The EIR needs to examine alternative seawater intake methods to minimize impingement and entrainment impacts.

Agency Consultation Meeting – December 7, 2004

The City of Huntington Beach conducted a consultation meeting for the Recirculated EIR per Sections 15086 and 15088.5(d) of the CEQA Guidelines to receive agency input on potential impacts of the proposed project. Agencies attending the consultation meeting consisted of the California Division of Oil, Gas, and Geothermal Resources (DOGGR), Orange County Sanitation District (OCSD), Mesa Consolidated Water District (MCWD), and the Municipal Water District of Orange County (MWDOC). Issues discussed at the meeting included:

❖ **Hazards and Hazardous Materials**

- As the project area is known to have been utilized for historical oil production use, the project must comply with applicable DOGGR specifications in regards to development over plugged/abandoned wells.

❖ **Ocean Water Quality and Marine Biological Resources**

- The proposed project does not include the installation of a diffuser mechanism (or any other modification) at the HBGS outfall structure.

❖ **Product Water Quality**

- Desalinated product water may affect the existing potable water distribution system through adverse mixing conditions, resulting in possible lead leaching or corrosion

impacts.

2.5 EIR ORGANIZATION

The Draft Recirculated EIR is organized into 11 sections:

- Section 1.0, EXECUTIVE SUMMARY, provides a brief project description and summary of the environmental impacts, and the mitigation measures for each impact.
- Section 2.0, INTRODUCTION AND PURPOSE, provides CEQA compliance information.
- Section 3.0, PROJECT DESCRIPTION, provides a project location, background and history, project characteristics, project objectives, phasing, agreements and approvals which are required for the project.
- Section 4.0, EXISTING CONDITIONS/ENVIRONMENTAL SETTING, provides information regarding the existing environment at and surrounding the proposed project site and pipeline alignments.
- Section 5.0, ENVIRONMENTAL ANALYSIS, discusses the existing conditions for each environmental issue area. This section will describe the methodology for significance determination and identifies short-term and long-term environmental impacts associated with the project and their level of significance before mitigation, recommends feasible mitigation measures to reduce the significance of impacts, and identifies areas of unavoidable significant impacts after mitigation.
- Section 6.0, LONG-TERM IMPLICATIONS OF THE PROPOSED PROJECT, discusses the significant environmental changes that would be involved in the proposed action, should it be implemented; growth-inducing impacts; and cumulative impacts associated with General Plan buildout and concurrent surrounding projects.
- Section 7.0, ALTERNATIVES TO THE PROPOSED ACTION, describes alternatives to the project, some of which may be considered during project deliberations.
- Section 8.0, EFFECTS FOUND NOT TO BE SIGNIFICANT, provides an explanation of potential impacts which have been determined not to be significant in the Initial Study checklist.
- Section 9.0, ORGANIZATIONS AND PERSONS CONSULTED, identifies the lead agency, preparers of the EIR, all federal, state and local agencies and other organizations and individuals consulted during the preparation of the EIR.
- Section 10.0, BIBLIOGRAPHY, identifies reference sources utilized for the EIR.
- Section 11.0, APPENDICES.

2.6 USE OF THE EIR

This Recirculated EIR is part of the environmental review process for the Seawater Desalination Project at Huntington Beach. It is the intent of this Recirculated EIR to enable the City of Huntington Beach and other responsible agencies and interested parties to evaluate the

environmental impacts of the proposed project. (Please refer to Section 3.6, *AGREEMENTS, PERMITS AND APPROVALS*, for a list of responsible agencies having approval authority over the project.) This Recirculated EIR suggests measures to mitigate potentially significant impacts of the proposed project.

2.7 INCORPORATION BY REFERENCE

Pertinent documents relating to this Recirculated EIR have been cited and incorporated by reference, in accordance with Section 15148 and 15150 of the CEQA Guidelines, to eliminate the need for inclusion of voluminous engineering and technical reports within this environmental document. This EIR incorporates the following documents by references, which are available for review at the City of Huntington Beach Planning Department (located at 2000 Main Street, Huntington Beach, California):

City of Huntington Beach General Plan EIR, 1995

This document addresses the environmental impacts of General Plan buildout, including development of the proposed project site, as well as analysis of cumulative and growth-inducing impacts.

Huntington Beach Generating Station Phase II Environmental Site Assessment, November 27, 1996

The purpose of the Phase II Environmental Site Assessment (ESA) performed at the Huntington Beach Generating Station (HBGS) was to evaluate the environmental condition of the facility by investigating site features that have potential recognized environmental conditions. A secondary objective was to obtain initial information pertaining to the nature and extent of air quality compounds of potential concern and to identify areas that may require future investigation or remediation. The project site is located within the study area limits of this assessment.

City of Huntington Beach General Plan, 1996

The General Plan for the City of Huntington Beach is a policy planning document which provides the framework for management and utilization of the City's physical, economic and human resources. This document guides civic decisions regarding land use, the design and/or character of buildings and open spaces, the conservation of existing housing and the provision of new dwelling units, the provisions of supporting infrastructure and public services, the protection of environmental resources, the allocation of fiscal resources, and the protection of residents from natural and human-caused hazards.

City of Huntington Beach Local Coastal Program, 2001

In accordance with the California Coastal Act, this document consists of a land use plan, zoning ordinances, district maps, and other actions which, when taken together, implement the policies of the Coastal Act at the local level. The Local Coastal Program allows the City of Huntington Beach to have jurisdiction over Coastal Development Permits within the coastal zone portion of the City, as would be applicable to the Seawater Desalination Project at Huntington Beach.

Southern California Edison Huntington Beach Fuel Oil Storage Tank Removal Project Environmental Assessment, April 20, 2000

The Southern California Edison Huntington Beach Fuel Oil Storage Tank Removal Project Environmental Assessment assesses the significance of any environmental impacts associated with the removal of numerous high capacity aboveground storage tanks used to store fuel oils. Information regarding existing environmental conditions, site status, and tank capacities exists within the document.

Phase I Environmental Site Assessment for Edison Pipeline and Terminal Company Huntington Beach, May 2000

The Phase I ESA for Edison Pipeline and Terminal Company (EPTC) Huntington Beach identifies recognized environmental conditions as defined by the American Society for Testing and Materials (ASTM), with regards to hazardous materials. In addition to recognized environmental conditions, the document identifies "areas of potential concern" to address those environmental issues that do not specifically meet the definition of a recognized environmental condition, but may warrant further investigation. The project site is located within the study area limits of this assessment.

2000 Regional Urban Water Management Plan, Municipal Water District of Orange County, December 2000.

This document analyzes water supply and water use efficiency measures unique to the Municipal Water District of Orange County's (MWDOC) service area. It also summarizes the current and proposed water management activities of MWDOC.

AES Huntington Beach Generating Station Surf Zone Water Quality Study (Final Draft), 2003.

Komex H2O Science Inc. prepared this document for the California Energy Commission (CEC). The CEC required this study as part of the HBGS's retooling project. This study included an intensive water quality monitoring/dye study program that was conducted during the summer of 2002. This study was performed to determine if the HBGS was a source of chronic fecal indicator bacteria problem in the surf zone near Huntington Beach. Samples were collected daily from a number of locations at the HBGS from mid-July to mid-October. In addition, samples were collected every three hours from four locations during a two-week intensive study. Data were also collected in the ocean near the intake and outfall of the generating station. The study found that urban runoff from an area adjacent to the HBGS that is discharged to the discharge vault of the HBGS contained high levels of fecal indicator bacteria. Because the urban runoff is blended with cooling water from the HBGS, the HBGS discharge contained much lower concentrations of fecal indicator bacteria.

A dye study was also conducted to determine if the HBGS discharge has the potential to reach the surfzone. Dye was injected into the discharge vault at HBGS five times in one day in August 2002. The dye surfaced over the outfall and then spread radially in all directions. The average dilution between the discharge and the beach was 277 to one, while the lowest calculated dilution was 36 to one. Based on the water quality sampling and the modeling studies, Komex concluded that the HBGS was not contributing to the beach contamination problem.

Integrated Water Resources Plan (IRP), 2003 Update, Metropolitan Water District of Southern California, May 2004.

The original 1996 IRP provided a 20-year resource plan that brought a balance between locally developed resources and imported supplies. It called for investments in water conservation, recycling, groundwater treatment storage and water transfers, and in return brought diversity and stability. The 2003 Update builds upon the original 1996 IRP in an effort to ensure that the original vision of reliability, diversity, and flexibility continues to be successful. The 2003 Update had three

objectives: 1) to review the goals and achievements of the 1996 IRP; 2) to identify changed conditions for water resource development; and 3) to update the resource targets for 2006.

Water Quality Control Plan, Ocean Waters of California (California Ocean Plan), State Water Resources Control Board, 2001.

This document serves to protect the quality of ocean waters for the public's use and enjoyment through the regulation of waste discharges into the ocean. The Plan establishes water quality objectives in regards to bacteria, physical characteristics, chemicals, biological characteristics, and radioactivity. It also provides methods/programs for the implementation of these water quality objectives. It should be noted that an amendment to the 2001 California Ocean Plan (in regards to "indicator organisms" and "quality-based effluent limitations") is proposed and has been circulated in draft form.¹

California Water Plan, Bulletin 160-98, State Department of Water Resources, Division of Planning and Local Assistance, 1998.

The Bulletin 160 (California Water Plan) series assesses California's agricultural, environmental, and urban water needs and evaluates water supplies, in order to quantify the gap between future water demands and the corresponding water supplies. The series presents a statewide overview of current water management activities and provides water managers with a framework for making water resources decisions. Much of Bulletin 160-98 (the update of the Water Plan performed in 1998) is devoted to identifying and analyzing options for improving water supply reliability. It should be noted that an update to Bulletin 160-98 ("Update 2004") has commenced and a Final Water Plan Update is anticipated to be complete in April 2005.²

2.8 TECHNICAL REFERENCES

In accordance with CEQA Guidelines Section 15148, the Seawater Desalination Project at Huntington Beach Recirculated EIR cites appropriate technical studies and other reference documents, as indicated throughout the EIR and listed in Section 10, BIBLIOGRAPHY. These technical studies are available for review at the City of Huntington Beach Planning Department located at 2000 Main Street, Huntington Beach, California.

¹ <http://www.swrcb.ca.gov/plnspols/oplans/>

² <http://www.waterplan.water.ca.gov/b160/workgroups/chapterreviewgroup.htm>