

HAYNES GENERATING STATION UNITS 5 & 6 REPOWERING PROJECT

Final Environmental Impact Report (EIR)

(SCH#2005061111)



Los Angeles Department of Water and Power
Environmental Services
111 North Hope Street, Room 1044
Los Angeles, CA 90012

With Technical Assistance By:

AECOM
2737 Campus Drive
Irvine, CA 92612

APRIL 2010

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April 2010

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SECTION 1.0 INTRODUCTION

1.1 ORGANIZATION OF THE DOCUMENT

This document is the Final Environmental Impact Report (Final EIR) for the Haynes Generating Station (HnGS) Units 5 and 6 Repowering Project. It includes the Response to Comments on the Draft EIR in accordance with the California Environmental Quality Act (CEQA) Guidelines, Section 15088. According to CEQA, the lead agency must review, evaluate, and prepare written response to comments on environmental issues received on an EIR. This document has been prepared by the lead agency, the Los Angeles Department of Water and Power (LADWP).

According to the CEQA Guidelines (Section 15132), a Final EIR must include the following elements:

- The Draft EIR or a revision of that draft
- Comments and recommendations received on the Draft EIR either verbatim or in summary
- A list of persons, organizations, and public agencies that commented on the Draft EIR
- The response of the lead agency to significant environmental points raised in the review and consultation process
- Any other information added by the lead agency

This Final EIR includes the following:

Section 1.0 – Introduction: This section provides an overview of the Final EIR, the project environmental review process, a list of comment letters received on the Draft EIR, and a project summary.

Section 2.0 – Comment Letters and Responses: This section provides a list of persons commenting on the Draft EIR, copies of the written comments (numerically coded for references), and the lead agency responses to those comments.

Section 3.0 – Changes to the Draft EIR: This section includes all corrections and additions to the Draft EIR text made as a result of comments received. Any changes in text are indicated by underline/strikeout revision.

Appendix A – Mitigation Monitoring and Reporting Program: This appendix includes the Mitigation Monitoring and Reporting Program (MMRP) required by the CEQA Guidelines (Section 15097).

Although not included within the cover of this Final EIR, the Draft EIR (both the primary volume and appendices), as issued for public review on January 28, 2010, is incorporated herein by reference and is revised as shown in Section 3.0. Collectively, this document and the Draft EIR, as revised by Section 3.0 herein, constitute the Final EIR.

1.2 ENVIRONMENTAL REVIEW PROCESS

LADWP issued a Notice of Preparation (NOP) of Draft EIR on April 15, 2009, announcing preparation of an environmental document for the proposed HnGS Units 5 and 6 Repowering Project (proposed project).

The NOP with a CEQA Initial Study (IS) was sent to various persons, agencies, and organizations that would likely be interested in or affected by the proposed project (see Appendix A of the Draft EIR). Additionally, a public notice was published informing agencies and persons about the environmental process, where to review copies of the NOP/IS, and how to participate in the process. A total of six comment letters was received during the NOP review period, which began on April 16, 2009, and ended on May 15, 2009. The comments on the NOP were considered by the lead agency in determining the scope of issues to be addressed in the environmental document.

Upon completion and finalization of the Draft EIR, it was circulated for the CEQA mandated 45-day review period, which began on January 28, 2010, and ended on March 15, 2010. A total of four comment letters was received on the Draft EIR.

The City of Los Angeles Board of Water and Power Commissioners (Board) will consider the Haynes Generating Station Units 5 and 6 Repowering Project for approval at a regularly scheduled board meeting (the specific date of the meeting is to be announced). The Board will hold a public hearing regarding the project and must certify the Final EIR prior to making a decision to approve the project.

The Board will consider all information in the record, including the Draft EIR, response to comments, findings, MMRP, and any testimony, prior to making its decision. The Board will consider staff recommendations, including:

- A recommendation as to whether the Final EIR document has been completed in accordance with CEQA and should be certified by the Board;
- A recommendation regarding selection of an appropriate project alternative (including the proposed project, and the “No Project” alternative);
- A recommendation regarding adoption of the MMRP; and
- A recommendation regarding findings and possible conditions that may override significant environmental impacts of the project

Should the Board approve the proposed project, LADWP will file a Notice of Determination (NOD) with the Los Angeles County Clerk and the State Clearinghouse. The filing of the NOD completes the CEQA environmental review process.

1.3 COMMENT LETTERS

During the public review period, a total of four comment letters on the Draft EIR were received by LADWP. The comment letters were received from:

1. Native American Heritage Commission – February 17, 2010
2. Airport Land Use Commission for Orange County – March 10, 2010
3. City of Seal Beach – March 11, 2010

4. South Coast Air Quality Management District – March 12, 2010

LADWP's responses to these comment letters are contained in the Section 2.0 of this document.

1.4 PROJECT SUMMARY

LADWP proposes to construct a new electrical simple cycle generating system (SCGS) at the existing HnGS in Long Beach, California. The proposed SCGS would include six new natural gas-fired combustion turbine (CT) generators (at 100 MW net capacity each), associated cooling and pollution control systems, and other ancillary facilities. The new generation units would provide a total net generating capacity of 600 MW. The proposed project includes decommissioning of two existing steam boiler generators (Units 5 and 6) that also have a total net generation capacity of 600 MW. The proposed project is being implemented in part pursuant to a formal Settlement Agreement between LADWP and the South Coast Air Quality Management District (SCAQMD) related to air pollutant emissions from stationary sources under the Regional Clean Air Incentives Market (RECLAIM) program. The proposed SCGS would substantially improve the LADWP generation system efficiency, reliability, and flexibility compared to the existing steam boiler units it would replace. It would also provide effective load following capability that would maximize the utilization of wind power within the LADWP generation system. Specific objectives of the proposed project include:

- Achieving a net reduction in air pollutant emissions at HnGS by repowering pursuant to the 2003 Settlement Agreement between LADWP and SCAQMD
- Reducing the consumption of natural gas and, as a result, the production of greenhouse gases
- Facilitating the integration of wind power resources into the LADWP generation system
- Providing for the energy demands of the City of Los Angeles
- Increasing the reliability of the electrical power generation system
- Eliminating the need to use ocean water for cooling on this project and reducing the use of ocean water for generator cooling at HnGS

The Draft EIR for the project was prepared in accordance with CEQA as amended (Public Resource Code Section 21000 et seq.) and the State Guidelines for Implementation of CEQA (CEQA Guidelines) as amended (California Administrative Code Section 15000 et seq.). The Draft EIR complies with rules, regulations, and procedures of CEQA Guidelines Section 15080 through 15097 regarding the EIR process.

The Draft EIR analyzed the potentially significant environmental impacts of the proposed project. The potential cumulative impacts, which are the effects of the proposed project in conjunction with past, present, and reasonably foreseeable future project in the surrounding area, were also analyzed. The Draft EIR found that implementation of the proposed project would not result in significant environmental effects that could not be mitigated to a less than significant level with implementation of mitigation measures, with the exception of certain temporary impacts related to noise and air quality. Short-term construction noise occurring from pile driving activity and short-term air quality impacts associated with commissioning and testing of the SCGS were determined to be significant and unavoidable. There are no long-term significant impacts identified for the proposed project.

Table 1-1 provides a summary of the potential impacts analyzed in the Draft EIR, indicating the level of significance of the impacts based on the analysis conducted for the EIR, feasible mitigation measures necessary to lessen significant impacts, and the level of significance of the impacts after the application of the mitigation measures. Table 1-1 incorporates changes to the mitigation measures implemented as part of the Final EIR preparation in response to comments received on the Draft EIR.

The Draft EIR also identified alternatives to the proposed project as a means to reduce or avoid the potentially significant environmental impacts. The alternatives to the proposed project presented in the Draft EIR include one that proposes that no project be implemented (Alternative 1); one that proposes to relocate the SCGS within the HnGS property (Alternative 2); one that proposes modifications to existing generator Units 5 and 6 (Alternative 3); one that proposes project development at an alternative location outside HnGS (Alternative 4); and two that develop or acquire energy from other sources to replace the generation capacity of HnGS Units 5 and 6 (Alternatives 5 and 6). Table 1-2 provides a summary of the alternatives to the proposed project.

**Table 1-1
Project Impact Summary**

IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES	RESIDUAL IMPACT AFTER MITIGATION
Air Quality			
AIR1 During project construction, less than significant amounts of criteria pollutants would be emitted from earthmoving, construction worker travel, and general construction activities.	Less than significant	No specific mitigation measures required outside of regulatory requirements that include compliance with SCAQMD standard rules such as Rule 403 (dust mitigation) and Rule 1113 (architectural coatings).	Less than significant
AIR2 During construction, traffic would generate less than significant localized CO hot spot impacts. The project would not significantly affect traffic levels of service in the area; therefore, no CO hot spots would occur.	Less than significant	No mitigation measures are necessary.	Less than significant
AIR3 During construction, the proposed project would have significant short-term impacts on air emissions during SCGS testing and commissioning. Based on the required testing scenario, pollutant thresholds for mass daily emissions would be exceeded.	Significant	No mitigation measures are feasible to reduce mass daily emissions related to commissioning to less than significant.	Significant; However, though the pollutant emissions thresholds are exceeded, modeling shows that localized air quality impacts resulting from air pollutant concentrations would not exceed ambient air quality standards. Commissioning emissions are also short-term in duration.
AIR4 During construction, the proposed project would create less than significant GHG emissions during project construction. Based on the proposed inventory of construction equipment to be utilized, SCAQMD thresholds for GHG emissions during construction would not be exceeded.	Less than significant	No mitigation measures are necessary.	Less than significant

IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES	RESIDUAL IMPACT AFTER MITIGATION
<p>AIR5 During operations, the proposed project would generate less than significant criteria pollutant emissions on a daily basis. The proposed SCGS results in a net reduction in criteria pollutants compared to the existing Units 5 and 6 that are being replaced. RECLAIM program NO_x emissions are also reduced with the proposed project.</p>	Less than significant	No specific mitigation measures are required outside of the pollution control packages integrated with the SCGS.	Less than significant
<p>AIR6 During operations, the proposed project would create less than significant public health impacts due to Toxic Air Contaminant emissions from the SCGS. Based on results of the risk assessment, the project poses an insignificant incremental cancer risk and non-cancer health risk impact.</p>	Less than significant	No mitigation measures are necessary.	Less than significant
<p>AIR7 During project operations, the project would emit less than significant amounts of GHG. The proposed project reduces the amount of GHG emitted at HnGS and would not exceed the SCAQMD interim significance threshold of 10,000 metric tons per year of CO₂e for industrial projects.</p>	Less than significant	No mitigation measures are necessary.	Less than significant
Marine Resources (Water Quality and Biology)			
<p>MWQ1 Discontinuation of cooling water flows associated with the decommissioning of Units 5 and 6 would not have an adverse impact on key water quality parameters in Alamos Bay. LADWP modeled the flow characteristics and water quality (dissolved oxygen and chlorophyll <i>a</i>) impacts in Alamos Bay that would result from the cessation of ocean water cooling. No significant impacts to water quality are expected.</p>	Less than significant	No mitigation measures are required.	Less than significant

IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES	RESIDUAL IMPACT AFTER MITIGATION
<p>MWQ2 Discontinuation of cooling water flows associated with decommissioning Units 5 and 6 would not have an adverse impact on key water quality parameters in the HnGS intake channel. LADWP modeled the flow characteristics and water quality (dissolved oxygen and chlorophyll <i>a</i>) impacts in the HnGS intake channel that would result from the cessation of ocean water cooling. No significant impacts to water quality are expected.</p>	Less than significant	No mitigation measures are required.	Less than significant
<p>MWQ3 Discontinuation of cooling water flows associated with decommissioning of Units 5 and 6 would not have an adverse impact on key water quality parameters in the San Gabriel River. LADWP modeled the flow characteristics and water quality impacts in San Gabriel River Channel that would result from the cessation of ocean water cooling. Less than significant impacts are expected.</p>	Less than significant	No mitigation measures are required.	Less than significant
<p>MBIO1 No adverse impacts to eelgrass would occur due to changes in water quality and flow associated with the proposed project. Changes in flows through the Alamitos Bay and the Haynes intake channel would not affect sensitive eelgrass beds.</p>	Less than significant	No mitigation measures are necessary.	Less than significant
<p>MBIO2 No adverse impacts to marine turtles in the San Gabriel River Channel would occur due to changes in water quality and flow associated with the proposed project.</p>	Less than significant	No mitigation measures are required.	Less than significant
<p>MBIO3 No adverse impacts to Pacific Groundfish and Coastal Pelagics would occur due to changes in water quality and flow associated with the proposed project. Changes in water temperature caused by cessation of cooling water discharges would not significantly or adversely alter habitat conditions in the San Gabriel River or Alamitos Bay.</p>	Less than significant	No mitigation measures are required.	Less than significant

IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES	RESIDUAL IMPACT AFTER MITIGATION
MBIO4 No adverse impacts to marine resources would occur during project construction. No in-water construction would occur under the proposed project.	No impact	No mitigation measures are required.	No impact
Water Runoff, Supply, and Treatment			
WATER1 Construction and operation of the proposed project would not create significant impacts related to the alteration of on-site surface drainage patterns. Minor changes to on-site drainage would be made in conjunction with project construction necessitating regulatory amendment of the storm water pollution prevention plan and storm water discharge permits.	Less than significant	No mitigation measures are necessary.	Less than significant
WATER2 The proposed project would not create a significant impact related to an increased requirement for water resources. There would be an incremental reduction in water demand associated with the implementation of the proposed project, and there would be no impact related to water resources.	No impact	No mitigation measures are necessary.	No impact
WATER3 The proposed project would not create a significant impact related to quantity of wastewater generated and discharged to the San Gabriel River from on-site treatment facilities. There would be an incremental reduction in wastewater generation associated with the implementation of the proposed project, and there would be no impact related to wastewater flow.	No impact	No mitigation measures are required.	No impact
WATER4 The use of reclaimed water would not create a significant water quality impact related to the discharge of wastewater generated by the proposed project.	Less than significant	No mitigation measures are required.	Less than significant

IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES	RESIDUAL IMPACT AFTER MITIGATION
<p>WATER5 The proposed project would not adversely affect the capacity of industrial wastewater treatment facilities at HnGS. The proposed project would result in a net reduction in wastewater flow of about 140,000 gallons per day. Therefore, the proposed project would benefit the wastewater operation by reducing treatment demand.</p>	<p>Less than significant</p>	<p>No mitigation measures are required.</p>	<p>Less than significant</p>
<p>Noise & Vibration</p>			
<p>N1 Significant short-term noise impacts will result from general construction activities.</p>	<p>Significant</p>	<p>N1-1 All construction equipment shall be properly maintained and equipped with mufflers and other suitable noise attenuation devices.</p> <p>N1-2 Where line-of-sight exists between the source of construction noise and sensitive receptors in Leisure World residential community, a solid physical barrier shall be used to block the line-of-sight to minimize general construction noise (i.e., from the operation of ground-level equipment and trucks as opposed to pile driving). This barrier shall not have perforations or gaps. Prior to the installation of any barriers, LADWP will meet and confer with the City of Seal Beach and Golden Rain Foundation (Leisure World) to consider any concerns of these organizations.</p> <p>N1-3 Grading and construction contractors shall endeavor to use quieter equipment as opposed to noisier equipment (such as rubber-tired equipment rather than track equipment).</p>	<p>Less than significant</p>

IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES	RESIDUAL IMPACT AFTER MITIGATION
		<p>N1-4 A public liaison for project construction shall be identified who shall be responsible for addressing public concerns about construction activities, including excessive noise. The liaison shall determine the cause of the concern (e.g., starting too early, bad muffler, etc.) and shall be authorized to implement reasonable measures to address the concern. The public liaison shall prepare a monthly report for the City of Long Beach, the City of Seal Beach, and the Golden Rain Foundation summarizing all public concerns received regarding construction activity and the actions implemented to address those concerns.</p> <p>N1-5 Leisure World residential community, which may potentially be affected by construction activity, shall be sent a notice through the Golden Rain Foundation regarding the construction schedule of the proposed project. The notice shall indicate the dates and duration of construction activities, as well as provide a telephone number for the public liaison where residents can inquire about the construction process and register concerns. The public liaison shall prepare a monthly report for the City of Long Beach, the City of Seal Beach, and the Golden Rain Foundation summarizing all public concerns received regarding construction activity and the actions implemented to address those concerns.</p>	

IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES	RESIDUAL IMPACT AFTER MITIGATION
		<p>N1-6 A Construction Staging Area Plan indicating areas to be used for stockpiling of construction materials, temporary construction offices, construction equipment parking, and construction worker parking shall be sent to the City of Seal Beach and the Golden Rain Foundation prior to the commencement of construction activities. In the development of the plan, the construction contractor shall endeavor to locate such uses in such a manner that they minimize the noise impacts to the Leisure World community as much as practical.</p>	
<p>N2 Construction noise generation that is not consistent with the Long Beach Municipal Code may result in a significant impact.</p>	Significant	<p>N2-1 The construction contractor shall plan work such that activities that would generate loud or unusual noise that would disturb a reasonable person of normal sensitivity will not be started during the hours codified in the LBMC (between 7:00 p.m. and 7:00 a.m. on weekdays, between 7:00 p.m. on Fridays and 9:00 a.m. on Saturdays, and between 6:00 p.m. on Saturdays and 7:00 am on Mondays).</p>	Less than significant
<p>N3 Short-term significant noise impacts will result from construction pile driving.</p>	Significant	<p>N3-1 Pile-driving shall be limited to between the hours of 8:00 a.m. and 6:00 p.m. on weekdays. No pile-driving activity shall occur on Saturdays, Sundays, or federal or state holidays. The program shall include notification to the Golden Rain Foundation of the period when such pile-driving operations will take place.</p>	Significant; Measures N3-1, N3-2, and N3-3 would substantially reduce the short-term construction-related noise impacts from pile driving, but a significant exterior noise impact from pile driving in relation to the existing ambient noise environment in the portions of Leisure World closest to HnGS would remain. No other reliable mitigation measures to reduce pile driving noise are available.

IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES	RESIDUAL IMPACT AFTER MITIGATION
		<p>N3-2 LADWP shall employ noise reduction techniques related to pile driving operations that may include, but not be limited to, the use of shock-absorbing material in the anvil chamber of the pile driver, acoustical enclosures around portions of the pile driving equipment, and the application of noise dampening compounds to the piles. The actual noise reduction achieved will depend on the feasibility and combination of techniques employed. However, a minimum reduction of 8 dBA below the unmitigated 101 dBA sound level of pile driving when measured at 50 feet from the source is considered achievable and will be required as part of the project construction specifications.</p> <p>N3-3 To further reduce noise impacts related to construction pile driving, sound-attenuating replacement windows shall be installed in any existing windows in the following buildings at Leisure World where the existing windows in these buildings also face the project:</p> <p>Mutual 8: Building 190 Building 199 Building 201 Building 202 Building 203 Building 204 Building 205</p> <p>Mutual 9: Building 209 Building 210 Building 211 Building 214</p>	

IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES	RESIDUAL IMPACT AFTER MITIGATION
		This window replacement shall be completed prior to the start of pile driving activities. LADWP will endeavor to work with the specified Mutuals and residents within Leisure World to install the replacement windows in a timely manner. If a Mutual within Leisure World will not provide the necessary approvals for said window replacement program, LADWP shall provide proof of said denial of permission to the Director of Development Services of the City of Seal Beach. The City of Seal Beach shall have 15 days after said notification of denial by LADWP to meet with and attempt to resolve said denial of permission with the appropriate Mutual. If said Mutual continues to deny said request, the City shall so inform LADWP, and LADWP shall be relieved of providing windows to individual living units within that particular Mutual.	
N4 A less than significant short-term noise impact results from construction delivery trucks. Noise generated by construction delivery truck would not exceed the significance threshold.	Less than significant	No mitigation measures are required.	Less than significant
N5 Long-term noise impacts resulting from new stationary noise sources would be less than significant. Operational noise would not exceed the City of Long Beach Noise District Four requirements of 65 dBA at the boundary limits.	Less than significant	No mitigation measures are required.	Less than significant
N6 Short-term ground-borne vibration impacts from construction activity would be less than significant.	Less than significant	No mitigation measures are required.	Less than significant

IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES	RESIDUAL IMPACT AFTER MITIGATION
Transportation and Traffic			
TT1 The proposed project would have less than significant impact relative to construction traffic. The addition of project construction traffic would not result in any intersection changing during one or both peak hours from good Level of Service (LOS A, B, C, and D) to poor LOS (LOS E and F).	Less than significant	No mitigation measures are required.	Less than significant
TT2 The proposed project is consistent with the Los Angeles County and Orange County CMPs. There would be no Los Angeles County freeway monitoring locations in the project vicinity. In addition, due to the project's peak daily trip generation forecast, the project is exempt from further analysis that the County of Orange CMP would otherwise require for roadway segments or freeway segments.	No impact	No mitigation measures are required.	No impact

**TABLE 1-2
SUMMARY OF ALTERNATIVES**

Alt.	Description	Feasibility	Attainment of Proposed Project Objectives	Eliminate/Substantially Reduce Proposed Project Impacts	Additional Impacts
1	No Project	Technically feasible, but would violate SCAQMD Settlement Agreement	<ul style="list-style-type: none"> • Would <u>not</u> achieve a net reduction in air pollutant emissions • Would <u>not</u> reduce the consumption of natural gas or the production of GHGs • Would <u>not</u> facilitate integration of wind power resources into LADWP generation system • Would provide for the energy demands of the City of Los Angeles • Would <u>not</u> increase the reliability of the electrical power generation system • Would <u>not</u> reduce the use of ocean water cooling at HnGS 	<ul style="list-style-type: none"> • Would eliminate short-term construction impacts to air quality at HnGS • Would eliminate short-term construction impacts related to noise at HnGS 	<ul style="list-style-type: none"> • Would result in greater long-term impacts to air quality • Would result in greater long-term impacts related to fuel consumption and GHGs
2	Relocate the SCGS within the HnGS Property	Infeasible	<ul style="list-style-type: none"> • Not applicable due to infeasibility 	<ul style="list-style-type: none"> • Not applicable due to infeasibility 	<ul style="list-style-type: none"> • Not applicable due to infeasibility
3	Modify Units 5 & 6	Infeasible	<ul style="list-style-type: none"> • Not applicable due to infeasibility 	<ul style="list-style-type: none"> • Not applicable due to infeasibility 	<ul style="list-style-type: none"> • Not applicable due to infeasibility
4	Construct SCGS at an alternative location (outside HnGS)	Technically feasible, but potentially cost prohibitive and may violate SCAQMD Settlement Agreement	<ul style="list-style-type: none"> • Would achieve a net reduction in air pollutant emissions • Would reduce the consumption of natural gas and the production of GHGs • Would facilitate integration of wind power resources into LADWP generation system • Would provide for the energy demands of the City of Los Angeles • May <u>not</u> increase the reliability of the electrical power generation system • Would reduce the use of ocean water cooling at HnGS 	<ul style="list-style-type: none"> • Would eliminate short-term construction impacts to air quality at HnGS • Would eliminate short-term construction impacts related to noise at HnGS 	<ul style="list-style-type: none"> • May result in similar or greater short-term construction-related impacts at alternative location • Would likely result in significant long-term impacts to aesthetics, noise, safety. • May result in other long-term impacts to resources (biological, cultural, traffic, localized air quality) that cannot be accurately predicted.

Alt.	Description	Feasibility	Attainment of Proposed Project Objectives	Eliminate/Substantially Reduce Proposed Project Impacts	Additional Impacts
5	Develop Alternative Energy Sources	Infeasible	<ul style="list-style-type: none"> • Not applicable due to infeasibility 	<ul style="list-style-type: none"> • Not applicable due to infeasibility 	<ul style="list-style-type: none"> • Not applicable due to infeasibility
6	Purchase Additional Energy from Outside Sources	Feasible	<ul style="list-style-type: none"> • May <u>not</u> achieve a net reduction in air pollutant emissions • May <u>not</u> reduce the consumption of natural gas and the production of GHGs • Would <u>not</u> facilitate integration of wind power resources into LADWP generation system • Would partially provide for the energy demands of the City of Los Angeles • Would <u>not</u> increase the reliability of the electrical power generation system • Would reduce the use of ocean water cooling at HnGS 	<ul style="list-style-type: none"> • Would eliminate short-term construction impacts to air quality at HnGS • Would eliminate short-term construction impacts related to noise at HnGS 	<ul style="list-style-type: none"> • May result in additional but currently <i>unpredictable and nonquantifiable</i> impacts not created by the proposed project related to the production and transmission of purchased energy

SECTION 2.0 COMMENT LETTERS AND RESPONSES

2.1 INTRODUCTION

This section provides response to the written comments made on the Haynes Generating Station Units 5 and 6 Repowering Project Draft EIR during the public review period. The comment letters received on the Draft EIR are numbered, as listed below, and are included in this section along with the formal response prepared for the comments. To assist in referencing comments and responses, each specific comment is numbered and refers to a statement or paragraph in the corresponding letter. The response to that comment has the same number. Where changes to the Draft EIR text result from response to comments, those changes are included in Section 3.0, Changes to the Draft EIR. Comments which raise issues not directly related to the substance of the environmental analysis in the Draft EIR are noted without a detailed response.

2.2 LIST OF COMMENTERS

The comment letters received on the Draft EIR are listed below. The comments and associated responses are arranged by date of receipt, with the older dates listed first. The paragraphs in the letters have been numbered and are referred to in the responses that directly follow the comment letter.

Letter Number	Agency/Signatory	Date
1	Native American Heritage Commission	February 17, 2010
2	Airport Land Use Commission	March 10, 2010
3	City of Seal Beach	March 11, 2010
4	South Coast Air Quality Management District	March 12, 2010

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STATE OF CALIFORNIA

Arnold Schwarzenegger, Governor

NATIVE AMERICAN HERITAGE COMMISSION

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February 17, 2010

Ms. Adrene Briones, Planner

CITY OF LOS ANGELES DEPARTMENT OF WATER & POWER

111 North Hope Street, Room 1044
 Los Angeles, CA 90012

Re: SCH#2005061111 CEQA Notice of Completion; draft Environmental Impact Report (SEIR) for the Haynes Generating Station Units 5 & 6 Repowering Project; located in Long Beach; Los Angeles County, California

Dear Ms. Briones:

The Native American Heritage Commission (NAHC) is the state 'trustee agency' pursuant to Public Resources Code §21070 for the protection and preservation of California's Native American Cultural Resources.. (Also see *Environmental Protection Information Center v. Johnson (1985) 170 Cal App. 3rd 604*) The California Environmental Quality Act (CEQA - CA Public Resources Code §21000-21177, amended in 2009) requires that any project that causes a substantial adverse change in the significance of an historical resource, that includes archaeological resources, is a 'significant effect' requiring the preparation of an Environmental Impact Report (EIR) per the California Code of Regulations §15064.5(b)(c)(f) CEQA guidelines). Section 15382 of the CEQA Guidelines defines a significant impact on the environment as "a substantial, or potentially substantial, adverse change in any of physical conditions within an area affected by the proposed project, including ...objects of historic or aesthetic significance." In order to comply with this provision, the lead agency is required to assess whether the project will have an adverse impact on these resources within the 'area of potential effect (APE), and if so, to mitigate that effect. To adequately assess the project-related impacts on historical resources, the Commission recommends the following.

The Native American Heritage Commission did perform a Sacred Lands File (SLF) search in the NAHC SLF Inventory, established by the Legislature pursuant to Public Resources Code §5097.94(a) and Native American Cultural resources were not identified within the APE. Early consultation with Native American tribes in your area is the best way to avoid unanticipated discoveries once a project is underway. Enclosed are the names of the nearest tribes and interested Native American individuals that the NAHC recommends as 'consulting parties,' for this purpose, that may have knowledge of the religious and cultural significance of the historic properties in the project area (e.g. APE). We recommend that you contact persons on the attached list of Native American contacts. A Native American Tribe or Tribal Elder may be the only source of information about a cultural resource.. Also, the NAHC recommends that a Native American Monitor or Native American culturally knowledgeable person be employed whenever a professional archaeologist is employed during the 'Initial Study' and in other phases of the environmental planning processes.. Furthermore we suggest that you contact the California Historic Resources Information System (CHRIS) at the Office of Historic Preservation (OHP) Coordinator's office (at (916) 653-7278, for referral to the nearest OHP Information Center of which there are 11.

Consultation with tribes and interested Native American tribes and interested Native American individuals, as consulting parties, on the NAHC list, should be conducted in compliance with the requirements of federal NEPA (42 U.S.C. 4321-43351) and Section 106 and 4(f) of federal NHPA (16 U.S.C. 470 (f) *et seq.*), 36 CFR Part 800.3, the President's Council on Environmental Quality (CSQ; 42 U.S.C. 4371 *et seq.*) and NAGPRA (25 U.S.C. 3001-3013), as appropriate. The 1992 *Secretary of the Interior's Standards for the Treatment of Historic Properties* were revised

1-1

so that they could be applied to all historic resource types included in the National Register of Historic Places and including *cultural landscapes*.

Lead agencies should consider avoidance, as defined in Section 15370 of the California Environmental Quality Act (CEQA) when significant cultural resources could be affected by a project. Also, Public Resources Code Section 5097.98 and Health & Safety Code Section 7050.5 provide for provisions for accidentally discovered archeological resources during construction and mandate the processes to be followed in the event of an accidental discovery of any human remains in a project location other than a 'dedicated cemetery. Discussion of these should be included in your environmental documents, as appropriate.

The authority for the SLF record search of the NAHC Sacred Lands Inventory, established by the California Legislature, is California Public Resources Code §5097.94(a) and is exempt from the CA Public Records Act (c.f. California Government Code §6254.10). The results of the SLF search are confidential. However, Native Americans on the attached contact list are not prohibited from and may wish to reveal the nature of identified cultural resources/historic properties. Confidentiality of "historic properties of religious and cultural significance" may also be protected under Section 304 of the NHPA or at the Secretary of the Interior' discretion if not eligible for listing on the National Register of Historic Places. The Secretary may also be advised by the federal Indian Religious Freedom Act (cf. 42 U.S.C, 1996) in issuing a decision on whether or not to disclose items of religious and/or cultural significance identified in or near the APE and possibly threatened by proposed project activity.

1-1
Cont'd

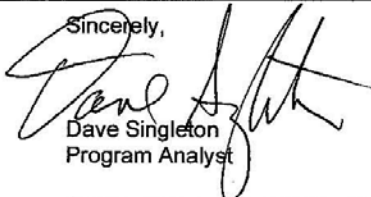
CEQA Guidelines, Section 15064.5(d) requires the lead agency to work with the Native Americans identified by this Commission if the initial Study identifies the presence or likely presence of Native American human remains within the APE. CEQA Guidelines provide for agreements with Native American, identified by the NAHC, to assure the appropriate and dignified treatment of Native American human remains and any associated grave liens.

Health and Safety Code §7050.5, Public Resources Code §5097.98 and Sec. §15064.5 (d) of the California Code of Regulations (CEQA Guidelines) mandate procedures to be followed, including that construction or excavation be stopped in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery until the county coroner or medical examiner can determine whether the remains are those of a Native American. . Note that §7052 of the Health & Safety Code states that disturbance of Native American cemeteries is a felony.

Again, Lead agencies should consider avoidance, as defined in §15370 of the California Code of Regulations (CEQA Guidelines), when significant cultural resources are discovered during the course of project planning and implementation

Please feel free to contact me at (916) 653-6251 if you have any questions.

Sincerely,



Dave Singleton
Program Analyst

Attachment: List of Native American Contacts

Cc: State Clearinghouse

**Native American Contacts
Los Angeles County
February 17, 2010**

LA City/County Native American Indian Comm
Ron Andrade, Director
3175 West 6th Street, Rm.
Los Angeles , CA 90020
randrade@css.lacounty.gov
(213) 351-5324
(213) 386-3995 FAX

Gabrielino Tongva Nation
Sam Dunlap, Chairperson
P.O. Box 86908
Los Angeles , CA 90086
samdunlap@earthlink.net
Gabrielino Tongva
(909) 262-9351 - cell

Ti'At Society
Cindi Alvitre
6515 E. Seaside Walk, #C
Long Beach , CA 90803
calvitre@yahoo.com
(714) 504-2468 Cell
Gabrielino

Gabrielino Tongva Indians of California Tribal Council
Robert F. Doramae, Tribal Chair/Cultural
P.O. Box 490
Bellflower , CA 90707
gtongva@verizon.net
562-761-6417 - voice
562-925-7989 - fax
Gabrielino Tongva

Tongva Ancestral Territorial Tribal Nation
John Tommy Rosas, Tribal Admin.
tattnlaw@gmail.com
310-570-6567
Gabrielino Tongva

Gabrielino-Tongva Tribe
Bernie Acuna
501 Santa Monica Blvd, #
Santa Monica CA 90401
(310) 587-2203
(310) 428-7720 - cell
(310) 587-2281
Gabrielino

Gabrieleno/Tongva San Gabriel Band of Mission
Anthony Morales, Chairperson
PO Box 693
San Gabriel , CA 91778
(626) 286-1262 -FAX
(626) 286-1632
(626) 286-1758 - Home
(626) 286-1262 Fax
Gabrielino Tongva

Shoshoneon Gabrieleno Band of Mission Indians
Andy Salas, Chairperson
PO Box 393
Covina , CA 91723
gabrielenoindians@yahoo.
626-926-4131
(213) 688-0181 - FAX
Gabrieleno

1-1
Cont'd

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code. Also, federal National Environmental Policy Act (NEPA), National Historic Preservation Act, Section 106, and federal NAGPRA.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH#2005061111; CEQA Notice of Completion: Haynes Generating Station Units 5 & 6 Repowering Project; located in Long Beach; Los Angeles County, California.

**Letter No. 1,
Continued**

Native American Contacts
Los Angeles County
February 17, 2010

Gabrielino-Tongva Tribe
Linda Candelaria, Chairwoman
1875 Century Park East, Suite 1500
Los Angeles, CA 90067 Gabrielino
(310) 587-2203
310-428-5767- cell
(310) 587-2281
lcandelaria1@gabrielinoTribe.org

1-1
Cont'd

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code. Also, federal National Environmental Policy Act (NEPA), National Historic Preservation Act, Section 106, and federal NAGPRA.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed CH#2005061111; CEQA Notice of Completion; Haynes Generating Station Units 5 & 6 Repowering Project; located in Long Beach; Los Angeles County, California.

**Response to Letter No. 1
Native American Heritage Commission – February 17, 2010**

Response 1-1

The comment is acknowledged, but does not raise an issue regarding the environmental analysis contained in the Draft EIR; therefore, no response is warranted.

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Letter No. 2



AIRPORT LAND USE COMMISSION

FOR ORANGE COUNTY

3160 Airway Avenue • Costa Mesa, California 92626 • 949.252.5170 fax: 949.252.6012

March 10, 2010

Adrene Briones
Department of Water and Power
City of Los Angeles
111 North Hope Street, Room 1044
Los Angeles, CA 90012

Subject: DEIR Comments for Haynes Generating Station Units 5 and 6 Repowering Project

Dear Ms. Briones:

Thank you for the opportunity to review the Draft Environmental Impact Report (DEIR) for the Haynes Generating Station Units 5 and 6 Repowering Project in the context of the Commission's *Airport Environs Land Use Plan (AELUP) for Joint Forces Training Base (JFTB) Los Alamitos*. The Airport Land Use Commission (ALUC) for Orange County is reviewing the project due to its location within the Notification Areas for JFTB Los Alamitos.

2-1

The proposed project includes the construction of a 600-megawatt (MW) electrical simple cycle generating system (SCGS) at the existing Haynes Generating Station (HnGS) in Long Beach, California. In reviewing the DEIR, the document does include a description of the proposed structure elevations in relation to the Federal Aviation Regulation (FAR) Part 77 Notification Area for JFTB Los Alamitos. The DEIR states that the proposed project is below the FAR Part 77 100:1 imaginary surface for JFTB Los Alamitos. Should there be any changes to the project which would result in the penetration of the notification surface for JFTB Los Alamitos, the project applicant shall file a Form 7460-1 Notice of Proposed Construction or Alteration with the FAA. We request that you also provide our ALUC with a copy of the FAA aeronautical study if one is completed.

2-2

Thank you for the opportunity to comment on this DEIR. Please contact Lea Umnas at (949) 252-5123 or via email at lumnas@ocair.com if you need any additional details or information.

2-3

Sincerely,

Kari A. Rigoni
Executive Officer

Response to Letter No. 2
Airport Land Use Commission for Orange County – March 10, 2010

Response 2-1

The comment is acknowledged, but does not raise an issue regarding the environmental analysis contained in the Draft EIR; therefore, no response is warranted.

Response 2-2

The comment is acknowledged, but does not raise an issue regarding the environmental analysis contained in the Draft EIR; therefore, no response is warranted.

Response 2-3

The comment is acknowledged, but does not raise an issue regarding the environmental analysis contained in the Draft EIR; therefore, no response is warranted.

March 11, 2010

Ms. Adrene Briones
Department of Water and Power
City of Los Angeles
111 North Hope Street, Room 1044
Los Angeles, CA 90012

Dear Ms. Briones:

SUBJECT: CITY OF SEAL BEACH COMMENTS RE: "DRAFT ENVIRONMENTAL IMPACT REPORT – HAYNES GENERATING STATION UNITS 5 & 6 REPOWERING PROJECT"

The City of Seal Beach has reviewed the above referenced Draft Environmental Impact Report (DEIR) and has several comments relative to the document. Given the proximity of the proposed project to Leisure World the City of Seal Beach is particularly concerned.

3-1

1. Support for Long-Term Air Quality Improvements:

The City of Seal Beach supports the long-term air quality improvements that the proposed project will create. The replacement of out-moded power generating equipment and the resultant reductions in criteria air pollutants is of great overall benefit to the surrounding region and in particular to the residents of Leisure World. The identified reductions in criteria pollutants, toxic air contaminants, and greenhouse gas emissions are very important to our community.

3-2

Reduction of Criteria Pollutants:

As indicated in Table 4.4-16, "*Net Overall Daily Operational Emissions*," the project will result in net overall peak daily operational mass emission reductions of criteria pollutants as follows:

- 100.75 pounds per day of NO_x;
- 9,661.39 pounds per day of CO;
- 450.41 pounds per day of VOC;

City of Seal Beach Comment Letter re: Draft EIR
Haynes Generating Station Units 5 & 6 Repowering Project
March 11, 2010

- 22.81 pounds per day of SO_x; and
- 400.87 pounds per day of PM₁₀.

Reduction of Toxic Air Contaminant Emissions:

The Toxic Air Contaminant (TACs) analysis presented indicates that the operational phase of the proposed project will not have significant impacts upon residents within the surrounding area of the facility or to workers at the facility. The residential exposure was based on a 70-year residential exposure, in accordance with SCAQMD Rule 1401 requirements.

The identified risk is set forth in Table 4.4.20, *Maximum Predicted Health Risk Impacts* and indicates the worst-case cancer risk of 0.28-in-one-million for the residential 70-year exposure scenario, which is significantly lower than the SCAQMD T-BACT threshold of 10-in-one-million for cancer risk and a "Chronic Hazard Index" (HI) of 0.0093 and an "Acute HI" of 0.03, both of which are also significantly lower than the SCAQMD threshold of 1.0 for Chronic HI and Acute HI.

3-2
Cont'd

Reduction of Greenhouse Gas Emissions:

In addition, the proposed project will reduce greenhouse gas emissions during the operation of the facility. As indicated in Table 4.4-21, *Summary of GHG Emissions during Operation*, the project will result in net overall peak daily operational mass emission reductions of greenhouse gas emissions as follows:

- 86,309 million tons per year of CO₂;
- 2 million tons per year of CH₄, and
- 86,393 million tons per year of CO₂e.

2. Support for Dry Cooling System:

The City of Seal Beach also supports the proposed "dry cooling system" for Units 5 & 6, which will substantially reduce the maximum potential intake and discharge volumes of ocean water at the facility. The dry cooling system will assist DWP and other regulatory agencies in implementing the recent reclassification of the San Gabriel River as an estuarine environment, which will result in the establishment of more stringent standards regarding the temperature of cooling water discharged into the river than are currently in force.

3-3

Utilization of this dry cooling system will result in an identified reduction of 0.14 million gallons per day of wastewater generation from the facility from the current wastewater generated by Units 5 & 6, or 37 percent of the current wastewater generation.

3. Concern regarding Environmental Analysis – Noise:

3-4

City of Seal Beach Comment Letter re: Draft EIR
Haynes Generating Station Units 5 & 6 Repowering Project
March 11, 2010

The City's major concern is related to the noise impacts of the pile-driving aspects of the proposed project. On page 4.7-14 the discussion regarding construction pile driving noise impacts indicates that:

“Construction of the proposed project will require the driving of up to 3,000 piles up to 80 feet into the ground. Pile driving activity at the site will include two impact hammer pile drivers, one hydraulic crane, and several other pieces of equipment. The combined noise level from all equipment would produce a noise level of approximately 104 dBA at 50 feet. Table 4.7-6 presents noise levels for pile driving activity at sensitive receptors. Regarding Leisure World, pile driving activity noise levels would exceed the 10-dBA threshold of significance and would result in a significant impact without mitigation. Regarding the Island Village residential community, pile driving noise activity noise levels would not exceed the 10-dBA threshold of significance, and would result in a less-than-significant impact. Pile driving activity would take place during day time hours only, and would not occur during nighttime hours.”

3-4
Cont'd

Those impacts are discussed in Section 4.7.6, *Significance of Impacts after Mitigation*. The discussion indicates that pile driving noise impacts are estimated to result in a temporary increase of approximately 24 dBA at the boundary of Leisure World, and then an incremental noise level increase of 10 dBA or more would result in a significant impact. There is no discussion in the document as to the distance into Leisure World at which the pile driving noise impacts would result in an incremental noise level increase of 10 dBA or more.

The City requests that section 74.7.6.1 (Noise) be revised to clearly set forth the overall area within Leisure World, including a noise contour map indicating incremental pile driving construction activity noise level increases of 5, 10, 15, 20, and 25 dBA over the current ambient noise levels. That analysis should also include an estimate of the total number of living units within Leisure World that would be impacted by the pile driving noise increases.

This additional information allows for full disclosure to the resident's of Leisure World where the anticipated noise impacts from the pile driving activity will be expected to occur.

4. Requested Modification of Mitigation Measures:

The City of Seal Beach requests the following modifications to the language of the proposed "Mitigation Measures," as set forth in Table 1.6-1, *Summary of Environmental Impacts and Mitigation Measures*, and as appropriate within the body of the Final EIR document, and the inclusion of an additional "Noise" Mitigation Measure:

3-5

*City of Seal Beach Comment Letter re: Draft EIR
Haynes Generating Station Units 5 & 6 Repowering Project
March 11, 2010*

“Noise” Mitigation Measures:

The City of Seal Beach requests that mitigation measures be revised as follows:

“N1-2 A solid physical barrier shall be used on the perimeter of construction sites to block the line-of-sight from receptor to source, ~~when feasible and necessary,~~ to minimize noise to nearby noise-sensitive receptors. This perimeter fencing shall not have perforations or gaps. Prior to the City of Long Beach granting approval of such physical barrier, it shall meet and confer with the City of Seal Beach and Golden Rain Foundation (Leisure World) to consider any concerns of these organizations prior to approving the installation of any such solid physical barrier.”

“N1-4 A public liaison for project construction shall be identified who shall be responsible for addressing public concerns about construction activities, including excessive noise. The liaison shall determine the cause of the concern (e.g., starting too early, bad muffler, etc.) and shall be authorized to implement reasonable measures to address the concern. The public liaison shall prepare a monthly report for the City of Long Beach, the City of Seal Beach, and the Golden Rain Foundation summarizing all public concerns received and the actions implemented to address those concerns.”

“N1-5 Leisure World residential community, which may potentially be affected by construction activity, shall be sent a notice regarding the construction schedule of the proposed project. The notice shall indicate the dates and duration of construction activities, as well as provide a telephone number for the public liaison where residents can inquire about the construction process and register concerns. The public liaison shall prepare a monthly report for the City of Long Beach, the City of Seal Beach, and the Golden Rain Foundation summarizing all public concerns received regarding construction activity and the actions implemented to address those concerns.”

“N1-6 ~~The construction contractor shall ensure that all stockpiling and vehicle staging areas are located away from noise concitive receivers, to the extent feasible.~~ The City of Long Beach shall review and approve a “Construction Staging Area Plan” which shall indicate areas proposed for stockpiling of construction materials, temporary construction offices, construction equipment parking, and construction worker parking. The “Construction Staging Area Plan” shall endeavor to locate such uses as far from the Leisure World community as practical.

“N2-1 The construction contractor shall plan work such that activities that generate high noise levels will not be started during the hours codified in the LBMC, ~~and all reasonable efforts to conclude work in progress prior to the hours codified in the LBMC will be taken by the construction contractor.~~

3-5
Cont'd

*City of Seal Beach Comment Letter re: Draft EIR
Haynes Generating Station Units 5 & 6 Repowering Project
March 11, 2010*

Prior to construction occurring outside of the periods specified in the noise ordinance, the construction contractor shall obtain authorization from the City of Long Beach. Prior to the City of Long Beach granting such authorization, it shall meet and confer with the City of Seal Beach and Golden Rain Foundation (Leisure World) to consider any concerns of these organizations prior to granting such requested authorization.

3-5
Cont'd

5. Additional "Noise" Mitigation Measures regarding Pile-Driving Activities:

The City of Seal Beach requests incorporation of the following additional Noise Mitigation Measures in the Mitigation Monitoring Program. This will address the unmitigated noise impacts of the proposed project:

"N3-1 In order to minimize noise emanating from pile-driving construction operations, the contractor shall implement a construction noise control program acceptable to the City of Long Beach. The program shall limit hours of pile-driving and related heavy equipment operations to occur between the hours of 8:00 a.m. and 4:00 p.m. on weekdays. No pile-driving activity shall occur on Saturday, Sunday, and on federal or state holidays. The program shall include notification of Leisure World of the period when such pile-driving operations will take place. The City of Long Beach shall meet and confer with the City of Seal Beach and Golden Rain Foundation (Leisure World) to receive comments and suggestions regarding the proposed pile-driving construction noise control program prior to approving said program. The project applicant shall reimburse City costs of an independent third party review of this program"

3-6

"N3-2 The applicant shall design and implement a window replacement program within Leisure World to provide double-pane windows on the appropriate sides of all impacted residential units within Leisure World that are determined to be exposed to an incremental noise level increase of 10 dBA as a result of pile-driving activities. The City of Long Beach shall have prepared a detailed noise impact analysis of the areas within Leisure World that would be anticipated to be exposed to an incremental noise level increase of 10 dBA, and such noise impact analysis shall specify the separate living units determined to be impacted by such incremental noise level increase.

Said window replacement program shall be completed prior to the issuance of demolition, grading or construction permits related to the project. If a Mutual within Leisure World will not provide the necessary approvals for said window replacement program, the applicant shall provide proof of said denial of permission to the Director of Development Services of the City of Seal Beach. The City of Seal Beach shall have 30 days after said notification of denial by applicant to meet with and attempt to resolve said denial of permission with the appropriate Mutual. If said Mutual continues to

**Letter No. 3,
Continued**

*City of Seal Beach Comment Letter re: Draft EIR
Haynes Generating Station Units 5 & 6 Repowering Project
March 11, 2010*

deny said request, the City shall so inform applicant, and applicant shall be relieved of providing windows to individual living units within that particular Mutual."

3-6
Cont'd

We believe the modified mitigation measures as outlined above are necessary and will result in substantial relief to residents of Leisure World. I look forward to continued cooperation between the City of Long Beach, the Los Angeles Department of Water and Power, and the City of Seal Beach in this important matter. Seal Beach is requesting receipt of a hard copy and electronic version of the Final EIR.

3-7

Thank you for your consideration of our comments. I can be reached at telephone (562) 431-2527, extension 1313, or by e-mail at mpersico@ci.seal-beach.ca.us.

Sincerely,

Mark Persico, AICP
Director of Development Services
City of Seal Beach

cc:
City Council
Planning Commission
Environmental Quality Control Board
City Manager
Dan Schaffer, Golden Rain Foundation/Leisure World

Response to Letter No. 3
City of Seal Beach – March 11, 2010

Response 3-1

The comment is acknowledged, but does not raise an issue regarding the environmental analysis contained in the Draft EIR; therefore, no response is warranted.

Response 3-2

The City of Seal Beach's support for long-term air quality improvements associated with the proposed project is acknowledged. Since this comment does not raise an issue regarding the environmental analysis contained in the Draft EIR, no response is warranted.

Response 3-3

The City of Seal Beach's support for the dry cooling system, a component of the proposed project, is acknowledged. Since this comment does not raise an issue regarding the environmental analysis contained in the Draft EIR, no response is warranted.

Response 3-4

In consultation with the City of Seal Beach Department of Development Services and based on a revised noise contour plan that considers the pile driving noise attenuation resulting from Mitigation Measure N3-2 (see Response 3-6, below), the living units within Leisure World that would be significantly impacted by temporary construction-related pile driving noise have been identified and are included in the list of buildings that will receive replacement sound attenuation windows as per Mitigation Measure N3-3 (see Response 3-6, below).

Response 3-5

In consultation with the City of Seal Beach Department of Development Services, the following mitigation measures have been revised (see Chapter 3 of the Final EIR for errata related to these mitigation measures).

- N1-2 Where line-of-sight exists between the source of construction noise and sensitive receptors in Leisure World residential community, a solid physical barrier shall be used to block the line-of-sight to minimize general construction noise (i.e., from the operation of ground-level equipment and trucks as opposed to pile driving). This barrier shall not have perforations or gaps. Prior to the installation of any barriers, LADWP will meet and confer with the City of Seal Beach and Golden Rain Foundation (Leisure World) to consider any concerns of these organizations.

- N1-4 A public liaison for project construction shall be identified who shall be responsible for addressing public concerns about construction activities, including excessive noise. The liaison shall determine the cause of the concern (e.g., starting too early, bad muffler, etc.) and shall be authorized to implement reasonable measures to address the concern. The public liaison shall prepare a monthly report for the City of Long Beach, the City of Seal Beach, and the Golden Rain Foundation summarizing all public concerns received regarding construction activity and the actions implemented to address those concerns.

- N1-5 Leisure World residential community, which may potentially be affected by construction activity, shall be sent a notice through the Golden Rain Foundation regarding the

construction schedule of the proposed project. The notice shall indicate the dates and duration of construction activities, as well as provide a telephone number for the public liaison where residents can inquire about the construction process and register concerns. The public liaison shall prepare a monthly report for the City of Long Beach, the City of Seal Beach, and the Golden Rain Foundation summarizing all public concerns received regarding construction activity and the actions implemented to address those concerns.

- N1-6 A Construction Staging Area Plan indicating areas to be used for stockpiling of construction materials, temporary construction offices, construction equipment parking, and construction worker parking shall be sent to the City of Seal Beach and the Golden Rain Foundation prior to the commencement of construction activities. In the development of the plan, the construction contractor shall endeavor to locate such uses in such a manner that they minimize the noise impacts to the Leisure World community as much as practical.
- N2-1 The construction contractor shall plan work such that activities that would generate loud or unusual noise that would disturb a reasonable person of normal sensitivity will not be started during the hours codified in the LBMC (between 7:00 p.m. and 7:00 a.m. on weekdays, between 7:00 p.m. on Fridays and 9:00 a.m. on Saturdays, and between 6:00 p.m. on Saturdays and 7:00 am on Mondays).

Response 3-6

In consultation with the City of Seal Beach Department of Development Services, the following mitigation measures have been added related to construction pile driving activity (see Chapter 3 of the Final EIR for errata related to these mitigation measures).

- N3-1 Pile-driving shall be limited to between the hours of 8:00 a.m. and 6:00 p.m. on weekdays. No pile-driving activity shall occur on Saturdays, Sundays, or federal or state holidays. The program shall include notification to the Golden Rain Foundation of the period when such pile-driving operations will take place.
- N3-2 LADWP shall employ noise reduction techniques related to pile driving operations that may include, but not be limited to, the use of shock-absorbing material in the anvil chamber of the pile driver, acoustical enclosures around portions of the pile driving equipment, and the application of noise dampening compounds to the piles. The actual noise reduction achieved will depend on the feasibility and combination of techniques employed. However, a minimum reduction of 8 dBA below the unmitigated 101 dBA sound level of pile driving when measured at 50 feet from the source is considered achievable and will be required as part of the project construction specifications.
- N3-3 To further reduce noise impacts related to construction pile driving, sound-attenuating replacement windows shall be installed in any existing windows in the following buildings at Leisure World where the existing windows in these buildings also face the Project:

Mutual 8: Building 190
 Building 199
 Building 201
 Building 202

Building 203
Building 204
Building 205

Mutual 9: Building 209
Building 210
Building 211
Building 214

This window replacement shall be completed prior to the start of pile driving activities. LADWP will endeavor to work with the specified Mutuels and residents within Leisure World to install the replacement windows in a timely manner. If a Mutual within Leisure World will not provide the necessary approvals for said window replacement program, LADWP shall provide proof of said denial of permission to the Director of Development Services of the City of Seal Beach. The City of Seal Beach shall have 15 days after said notification of denial by LADWP to meet with and attempt to resolve said denial of permission with the appropriate Mutual. If said Mutual continues to deny said request, the City shall so inform LADWP, and LADWP shall be relieved of providing windows to individual living units within that particular Mutual.

The revised and additional mitigation measures discussed in Responses 3-5 and 3-6, above, would substantially reduce the short-term construction-related noise impacts from pile driving to the Leisure World community. As discussed above, a minimum reduction of 8 dBA below the unmitigated 101 dBA sound level of pile driving when measured at 50 feet from the source is considered achievable. Practical mitigation measures that might further reduce noise from pile driving, while possible, are not considered reliable to the extent that they can dependably achieve additional impact reduction. Therefore, a significant exterior noise impact from pile driving activity in relation to the existing ambient noise environment in the portions of Leisure World closest to HnGS would remain after the implementation of the proposed mitigation measures. This impact would be temporary, occurring only during the period of construction pile driving activities.

Response 3-7

The comment is acknowledged, but does not raise an issue regarding the environmental analysis contained in the Draft EIR; therefore, no response is warranted.

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**South Coast
Air Quality Management District**

21865 Copley Drive, Diamond Bar, CA 91765-4182
(909) 396-2000 • www.aqmd.gov

E-MAILED: MARCH 12, 2010

March 12, 2010

Ms. Adrene K. Briones Adrene.Briones@ladwp.com
Environmental Services
Los Angeles Department of Water and Power
111 North Hope Street, Room 1044
Los Angeles, CA 90012

**Draft Environmental Impact Report (Draft EIR) for the Proposed Haynes
Generating Station Units 5 & 6 Repowering Project (SCH#2005061111)**

The South Coast Air Quality Management District (SCAQMD) appreciates the opportunity to comment on the above-mentioned document. The following comments are meant as guidance for the Lead Agency and should be incorporated into the Recirculated Draft EIR or Final EIR.

4-1

SCAQMD staff identified potentially significant discrepancies in the Draft EIR that require further analysis. These include an incomplete description of potential localized air quality impacts during construction and commissioning, potentially under-reported and significant short term NO₂ impacts during operation, and inconsistencies between the permit application and the Draft EIR. If further analysis of any of these factors reveals significant impacts, then all feasible mitigation measures should be considered in the Recirculated Draft EIR or Final EIR. The comments on the following pages describe these concerns in greater detail.

4-2

Pursuant to Public Resources Code Section 21092.5, please provide the SCAQMD with written responses to all comments contained herein prior to the adoption of the Final Environmental Impact Report. The SCAQMD staff would be happy to work with the Lead Agency to address these issues and any other questions that may arise. Please contact Gordon Mize, Air Quality Specialist – Inter-Governmental Review, at (909) 396-3302, if you have any questions regarding these comments.

4-3

Sincerely,

Ian MacMillan
Program Supervisor, Inter-Governmental Review
Planning, Rule Development & Area Sources

cc: Li Chen, SCAQMD

DM:JK:LC:GM
LAC100127-01
Control Number

Ms. Adrene K. Briones

March 12, 2010

Environmental Analysis

1. In the Draft EIR in Chapter 4.0 Environmental Analysis, the lead agency states on page 4.2-6 that there are no schools located within a quarter of a mile of the proposed project site. Upon review, the Rosie the Riveter Charter Public High School appears to be located to the west less than one-quarter mile from the proposed project site. This school site should be included in either the Recirculated Draft EIR or the Final EIR and incorporated in any applicable air quality analysis including the health risk assessment.

4-4

Localized Significance Thresholds

2. Although the lead agency evaluated localized operational air quality impacts, the SCAQMD staff requests that the lead agency also evaluate the project's localized construction air quality impacts to ensure that nearby sensitive receptors are not adversely impacted by the construction activities that would occur at the project site. SCAQMD staff notes that on page 3-2 and in Exhibit 3-2 that sensitive receptors (i.e., residential developments) are located along the entire eastern boundary, to the south, and to the northeast of the proposed project site. The SCAQMD's guidance for performing a localized air quality analysis is available at the following web address: <http://www.aqmd.gov/ceqa/handbook/LST/LST.html>.

4-5

In the event that the lead agency's localized air quality analysis requested above demonstrates that any criteria pollutant exceeds SCAQMD's localized significance threshold, the SCAQMD staff recommends, that, if feasible, the lead agency consider the mitigation measures found at the following website: http://www.aqmd.gov/ceqa/handbook/mitigation/MM_intro.html.

3. The background air quality data presented in Table 4.4-2 presents the observed air concentrations from years 2005 through 2007. This table should be updated to include the most recent three years of data available, 2006-2008.
4. Potential localized effects from commissioning activities are presented in the Draft EIR for NO₂ and CO, but not for PM₁₀ or PM_{2.5}. Localized impacts from particulate matter emissions during commissioning should be analyzed in the Recirculated Draft EIR or Final EIR.

4-6

4-7

Potential Export and Disposal of Contaminated Soils

5. On page 3-5, the lead agency states that existing aboveground tanks formerly utilized to store fuel oil will be dismantled prior to project construction. SCAQMD staff is concerned that this demolition project may have never undergone CEQA review pursuant to §15378 of the CEQA guidelines. Potential emissions from this activity include diesel exhaust from heavy duty construction equipment and trucks, fugitive dust from demolition activity, and release of volatile organic compounds from

4-8

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potentially contaminated soils surrounding the tanks. An analysis of these potential emissions should be included in the Final EIR either as a part of the project, or as a cumulative impact. In addition, potential cumulative impacts from the Studebaker LB, LLC Tank Removal Project (MND 15-09, City of Long Beach) occurring less than one-quarter mile to the west should be addressed in either a Recirculated Draft EIR or in the Final EIR.

4-8
Cont'd

6. On page 3-19 of the project description in the Draft EIR, the lead agency states that fuel oil tanks located on the project site will be demolished and the associated berms will be removed prior to project. A description of potential soils contamination is not included in the Hazards and Hazardous Materials section of the Draft EIR. In the event that any potential excavation activities disturb soil that has the potential to be classified as a hazardous waste, (e.g., petroleum hydrocarbons, etc.) contaminated sites would be subject to SCAQMD Rule 1166 – Volatile Organic Compound Emissions from Decontamination of Soil and that compliance should be referenced in the Final EIR.

4-9

Dispersion Modeling

7. On Page 36, Table 4.2-16 of the Air Quality Study, the stack parameters shown in this table for the Internal Combustion Engines (ICE) do not match the modeled stack parameters in the electronic input and output files provided. In the Final EIR, the table or modeling should be revised to reflect the correct parameters for the ICE.

4-10

8. The project impacts from the 1-hour NO₂ modeled scenario in the Draft EIR may have been under-estimated. The worst-case 1-hour nitrogen dioxide (NO₂) scenario modeled in the permit application consisted of 35 minutes of startup emissions and 25 minutes of normal operating emissions, compared to 20 minutes of startup and 40 minutes of normal operations modeled in the Draft EIR. Therefore, the emission rate of 5.235 grams per second used in the permit application is higher than the emission rate of 3.33 grams per second used in the Draft EIR, yielding a potential under-estimation of NO₂ impacts. In the Recirculated Draft EIR or Final EIR, modeling should be revised to be consistent with the emission rate used in the permit application or an explanation should be provided for this discrepancy.

4-11

9. In Table 4.4-18 (Air Quality Impact Modeling Results) of the Draft EIR, the reported background concentration of 37 micrograms per cubic meter (µg/m³), or 0.02 parts per million (ppm), for NO₂ is incorrect. For 2005-2007, the maximum NO₂ background concentration was 263.2 µg/m³ (0.14 ppm), as reported in Table 4.4-2. When added with the project's maximum predicted impact, the total would be 460.84 µg/m³ (0.24 ppm), which would exceed the current California Ambient Air Quality Standards (CAAQS) of 0.18 ppm and result in a significant impact.

4-12

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The project team expressed in a phone call with SCAQMD staff that the $37 \mu\text{g}/\text{m}^3$ cited in Table 4.4-18 was the ambient value of NO_2 for the highest modeled hour of operational emissions. This methodology is not consistent with SCAQMD methodology as it may under-report potential worst case conditions. For example, the highest NO_2 ambient concentration for the period 2005-2007 is 0.14 ppm. Project operational impacts that contribute only 0.04 ppm or greater at this time would present an exceedance of the CAAQS.

<p>4-12 Cont'd</p>

Please revise the table in the Recirculated Draft EIR or Final EIR with the correct background concentration and reconsider the significance determination. In light of this significant new information, all feasible mitigation measures should be explored to reduce this impact should it remain significant.

10. The project impacts from the annual NO_2 modeled scenario in the Draft EIR are potentially under-estimated. Although the description of the worst-case annual NO_2 scenario modeled in the Draft EIR matches that of the permit application, the emission rate of 1.828 grams per second used in the permit application is higher than the emission rate of 1.46 grams per second used in the Draft EIR, yielding a potential under-estimation of NO_2 impacts. In the Recirculated Draft EIR or Final EIR, modeling should be revised to be consistent with the emission rate used in the permit application or an explanation should be provided for this discrepancy.

<p>4-13</p>

11. The project impacts from the 8-hour carbon monoxide (CO) modeled scenario in the Draft EIR were likely over-estimated. The worst-case 8-hour CO scenario modeled in the permit application consisted of two startup and two shutdown events, compared to three startup and two shutdown events modeled in the Draft EIR. Therefore, the emission rate of 2.872 grams per second used in the permit application is lower than the emission rate of 3.18 grams per second used in the Draft EIR, yielding a potential over-estimation of CO impacts. In the Recirculated Draft EIR or Final EIR, modeling should be revised to be consistent with the emission rate used in the permit application or an explanation should be provided for this discrepancy.

<p>4-14</p>

Health Risk Assessment (HRA)

12. The diesel fuel storage tank parameters used in the HRA modeling were not listed in the Air Quality Study. Please include a table in the Air Quality Study which summarizes the modeled parameters for the tank.

<p>4-15</p>

13. On Page 28, Table 4.2-5 of the Air Quality Study, the polycyclic aromatic hydrocarbons (PAHs) are speciated, which is consistent with the approach in the HRA submitted with the permit application. However, in the Hot Spots Analysis Reporting Program (HARP) model run, the PAHs were not speciated. Benzo(a)anthracene was not listed as a Toxic Air Contaminant in the HRA submitted

<p>4-16</p>

**Letter No. 4,
*Continued***

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for the permit application. In the Final EIR, the HARP model run should be revised with the speciated PAHs or an explanation provided for this discrepancy.

4-16
Cont'd

Response to Letter No. 4
South Coast Air Quality Management District – March 12, 2010

Response 4-1

The comment is acknowledged, but does not raise an issue regarding the environmental analysis contained in the Draft EIR; therefore, no response is warranted.

Response 4-2

The comment is acknowledged. Please see Responses 4-4 through 4-16 below for responses to specific comments to the Draft EIR.

Response 4-3

The comment is acknowledged, but does not raise an issue regarding the environmental analysis contained in the Draft EIR; therefore, no response is warranted.

Response 4-4

The SCAQMD noted that a public high school is located within one-quarter mile of the proposed project site. LADWP has confirmed that Rosie the Riveter Charter Public High School is located within the existing AES power generating station property boundaries, approximately 0.24 miles (1,271 feet, 387 meters) west of the western perimeter of the Haynes facility, and therefore should be considered in all applicable air quality analyses related to be health risk assessment (HRA) and localized significance thresholds (LST).

The localized significance threshold for Rosie the Riveter Charter Public High School would be based on a receptor distance of 200 meters (the closest inside distance for an LST receptor located 387 meters from the project site). Because the LST analysis for the DEIR used a modeling receptor distance of 50 meters based on its proximity of Leisure World, potential localized impacts at Rosie the Riveter would be less than those experienced at Leisure World, as evaluated in the existing LST analysis and determined to be less than significant. No additional LST analysis for Rosie the Riveter High School is required.

Health risks at Rosie the Riveter Charter Public High School have now been assessed as a sensitive receptor location (UTM coordinates 398018, 3736843) using the HARP risk assessment model. Cancer risk for child resident and worker exposures, and non-cancer chronic and acute health hazard indices for the school are shown below. These impacts are below the level that would cause a significant health risk impact. This evaluation does not change the conclusions of the DEIR.

Health Risk Assessment Results – Rosie the Riveter Charter Public High School			
Receptor/Exposure	Cancer Risk ¹	Chronic HI ²	Acute HI ²
Worker Exposure	0.05	0.0093	0.03
Child Exposure	0.002	0.000035	0.00076
<i>Significance threshold</i>	<i>10.0</i>	<i>1.0</i>	<i>1.0</i>
¹ Cancer risk is reported in additional cases per one million exposures. ² HI = health index			

Response 4-5

The SCAQMD requested that a localized air quality impact analysis for short-term construction be evaluated. LADWP has provided an evaluation of localized construction air quality impacts in accordance with SCAQMD guidelines. Daily emissions used in the construction LST analysis are presented to include particulate controls identified in the DEIR to comply with SCAQMD Rule 403 (Table 4.1-2 of the DEIR shows unmitigated daily emissions).

LST mass emission rates are based on a maximum daily project construction area of 5 acres and a receptor distance of 25 meters, the closest receptor distance provided by SCAQMD guidance, to ensure that nearby sensitive receptors along the eastern, southern, and northeastern boundary of the project site would not be adversely impacted by the construction activities. The results are presented below. All values are below significance thresholds with implementation of the SCAQMD Rule 403 controls, as required by the project and stated in the DEIR. Evaluating LST construction activities has been completed for informational purposes to address the SCAQMD comment and does not represent a change in the DEIR conclusions.

Construction Emissions – Localized Impact Analysis ¹				
	NOx	CO	PM ₁₀	PM _{2.5}
Peak Daily, Controlled (lbs/day)	98.6	73.96	9.99 ²	5.64 ²
LST for 5-acre site	123	1,530	14	8
Significant?	NO	NO	NO	NO
1. Localized impact analysis based on a maximum daily disturbance of 5 acres; Source Receptor Area (SRA) No. 4 (South Coastal Los Angeles) at receptor distance equal to 25 meters. 2. Peak daily PM ₁₀ and PM _{2.5} emissions of 84.32 lbs and 20.66 lbs respectively were presented in the DEIR. Peak daily emissions have been revised to reflect controls implemented in compliance with SCAQMD Rule 403 Best Management Practices (i.e. application of soil stabilizers, watering site two-three times daily, watering during loading/unloading, reduced vehicular speed on unpaved roads).				

Response 4-6

Revised background air quality data to reflect 2006 through 2008 values for South Coastal Los Angeles Monitoring Station (ID 072) are provided in the table below. Please note that the maximum 1-hour NO₂ concentration for this period is 0.125 parts per million (ppm), or 235 micrograms per cubic meter (µg/m³).

Background Air Quality Data for (2006 - 2008)						
Pollutant	Averaging Period	Ambient Air Quality Standards		Maximum Observed Concentration (number of exceedences)		
		State	Federal	2006	2007	2008
CO	1-hr	20.0 ppm	35.0 ppm	4.0	3.0	3.0
	8-hr	9.0 ppm	9.0 ppm	3.4	2.6	2.6
Ozone	1-hr	0.09 ppm	---	0.08	0.099 (1 day)	0.093 (1 day)
	8-hr	0.07 ppm	0.075 ppm	0.058	0.073 (1 day)	0.074 (1 day)
NO ₂	1-hr	0.18 ppm	--- ¹	0.102	0.107	0.125
	Annual	0.030 ppm	0.053 ppm	0.0215	0.0207	0.0208
SO ₂	1-hr	0.25 ppm	---	0.03	0.11	0.09
	3-hr	---	0.5 ppm	---	---	---
	24-hr	0.04 ppm	0.14 ppm	0.01	.011	0.012
	Annual	---	0.03 ppm	---	0.0027	0.0022
PM ₁₀	24-hr	50 µg/m ³	150 µg/m ³	78 (6 days)	75+ (5 days)	62 (1 day)
	Annual	20 µg/m ³	--	31.1	30.2+	29.1
PM _{2.5}	24-hr	12 µg/m ³	35 µg/m ³	58.5 (5 days)	82.9 (12 days)	57.2 (8 days)
	Annual	---	15 µg/m ³	14.2	14.6	14.2
Lead	30-day	1.5 µg/m ³	---	0.01	0.02	0.01
	Calendar Qtr	---	1.5 µg/m ³	0.01	0.01	0.01
Sulfates	24-hour	25 µg/m ³	---	17.8	11.1 (0 days)	11.1

¹ EPA adopted a federal ambient air quality standards for 1-hour NO₂ of 0.10 ppm based on an eighth highest three year average. This standard was not in effect during the EIR process and therefore not evaluated for this proposed action.

Response 4-7

The SCAQMD requested that localized effects from commissioning activities be evaluated for PM₁₀ and PM_{2.5} emissions. Based on the emissions data presented in the DEIR, maximum daily emissions of PM₁₀ are estimated to be 160 lbs/day, or 0.86 grams/second (see Table 4.1-5 of the DEIR). To evaluate PM₁₀ emissions from commissioning with localized ambient air quality, air dispersion modeling was performed to determine maximum ground-level concentrations impacts. To ensure that the worst-case particulate matter concentration was predicted, conservative stack parameters were used based on the commissioning phase (i.e., low exhaust velocity of 8.27 meters/second, compared to 32.55 m/s during normal operation) for the entire 24-hour averaging period for all hours of the day including evenings when lower winds and more stable air produce the highest impacts.

Air dispersion modeling predicted a maximum PM₁₀ ground-level concentration of 7.7 µg/m³ based on a 24-hour averaging period. For evaluating fine particles from combustion sources, PM_{2.5} emissions can be assumed to be a 99% fraction of PM₁₀. Results of the modeling analysis and comparison with SCAQMD 24-hour CEQA thresholds are presented in the table below. Based on these results, the project will not cause any significant impacts due to PM₁₀ and PM_{2.5} emissions from commissioning activities.

Commissioning Modeling Results				
Pollutant	Averaging Period	Ambient Air Quality Thresholds ($\mu\text{g}/\text{m}^3$) ¹	Maximum Predicted Impact ($\mu\text{g}/\text{m}^3$)	Significant?
PM ₁₀ / PM _{2.5}	24-hr	10.4	7.7	No
¹ Localized ambient air quality thresholds are presented for construction is appropriate since commissioning activities are temporary and is a one-time occurrence, similar to construction activities. Thresholds for construction activities are based on SCAQMD Rule 403, as referenced in the SCAQMD Handbook.				

Response 4-8

Section 21084 of the Public Resources Code requires the CEQA Guidelines to include a list of classes of projects which have been determined not to have a significant effect on the environment and which shall, therefore, be exempt from the provisions of CEQA. In response to that mandate, the Secretary of the Resources Agency has found certain classes of projects, which are listed in Article 19 of the Guidelines, to be categorically exempt from the requirement for the preparation of environmental documents.

The removal of the aboveground tanks formerly utilized to store fuel oil is typical, routine maintenance and is therefore categorically exempt as a type of project listed under Class 1 (b). Section 15301 of the Guidelines exempts maintenance or minor alteration of existing public facilities involving negligible or no expansion of an existing use. Subsection (b) specifically lists existing facilities of publicly-owned utilities used to provide electric power.

LADWP authorized, through the issuance of a purchase order in September 2009, the tank removal activities. It is expected that the contractor will begin these activities by this spring. The work will take approximately 12 weeks to complete the entire process and will be finished prior to the start of construction of the proposed repowering of Units 5 & 6. Therefore, there will not be any cumulative impact. Similarly, it is expected that the Studebaker LB, LLC Tank Removal Project will also be completed by the start of construction and will not lead to any cumulative impacts.

Response 4-9

The three fuel oil tanks have been emptied and cleaned to the level acceptable for scrap steel. Based on a visual inspection of the bottom steel plates after cleaning was completed, the tank bottoms have been determined to be intact. The bottoms of these tanks are constructed of approximately 1-1/2" thick steel bearing plates, and 5/16" thick steel floor plates. These steel plates generally do not corrode due to the lack of oxygen above and below the plates, thereby preventing oxidation, which could lead to leaks and contamination of the soils beneath the tanks. Due to their inaccessibility, the soils under the tanks have not been sampled and analyzed. After removal, soil samples will be taken from under the tanks and analyzed to detect any contamination present. Soil samples have been taken from areas near the berms and no volatile organic compounds were detected. In addition, one similar tank that also stored fuel oil was removed several years ago, and no contamination was found beneath the tank. Soil samples from beneath the former tank were recently collected and analyzed. No volatile organic compounds were present. Based on this information, no contaminated soil is expected to be encountered during tank removal activities. However, if any is found, it will be handled in

compliance with all applicable laws and regulations, including SCAQMD Rule 1166- Volatile Organic Compound Emissions from Decontamination of Soil.

Response 4-10

Stack parameters for the internal combustion engines (ICE) shown in the electronic modeling files is correct. The correct stack parameters are shown in the table below.

Modeled Stack Parameters				
Source	Stack Height (m)	Stack Diameter (m)	Stack Temp. (K)	Stack Velocity (m/s)
ICE	5.48	0.51	921.9	5.9

Response 4-11

The SCAQMD requested that project impacts to the short-term 1-hr NO₂ standard be modeled based on the same maximum hourly emission rate used in the permit application for the turbines.

The discrepancy noted by the SCAQMD was a result of more refined information on turbine operations becoming available after submittal of the permit application. The per turbine emission rate of 3.33 grams/second (g/s) used in the CEQA document represents a more realistic hourly emission rate for start-up than that used in the permit application. Following submittal of the permit application, LADWP received estimates from the turbine manufacturer for start-up duration, which showed an average start-up time of 20 minutes, rather than the 35 minutes of start-up used in the permit application. This information was used in the CEQA document for estimating maximum hourly emission rates, but because these refinements did not require any changes to the permit application (i.e., the permit application was analyzed using more conservative emissions), no further permitting action was performed.

However, to demonstrate consistency with the permit application, LADWP has remodeled 1-hour NO_x emissions from the turbines based on a 35 minute startup and 25 minutes of normal operations, or 5.235 g/s. Modeling results using the higher emission rates produced a ground-level concentration of 28.11 µg/m³, compared to 15.78 µg/m³ using the emissions modeled in the DEIR. These results are included in the modeled impacts presented in response to SCAQMD Comment No. 9 (Response 4-12). Note however that the maximum 1-hour NO₂ impact is primarily based on the emergency engines and occurs at a different location than the turbine. Modeling using the permitted values was completed for informational purposes to address the SCAQMD comment and does not represent a change in the DEIR conclusions.

Response 4-12

The SCAQMD requested that the project evaluate compliance with California Ambient Air Quality Standard for 1-hour NO₂ concentrations using the maximum NO₂ background concentration based on a three year average as reported in the DEIR (Note that in response to SCAQMD Comment No. 3 [Response 4-6], the maximum 1-hour NO₂ measured nearest the project site in the last three years is 235 µg/m³, followed by a second high of 207 µg/m³).

Our original modeling analysis used a refined modeling method to convert oxides of nitrogen (NO_x) to ambient ground-level NO₂ concentrations based on the limitation of available oxygen in the atmosphere through the presence of ozone (O₃). Although it is standard practice to use a maximum 1-hour NO₂ concentration when evaluating potential impacts to ensure a margin of

safety, this is not necessary to ensure that background levels do not increase above ambient air thresholds. This is because the maximum 1-hour NO₂ concentration will never occur at the same time as the maximum 1-hour ozone concentration due to the atmospheric conversion. As a result, using the 1-hour NO₂ concentration observed at the time of the maximum predicted project impact is more accurate since this is the time when ozone would be most available for conversion. Moreover, some agencies (e.g., California Energy Commission) have requested projects to reassess potential impacts using actual hourly ozone and hourly NO₂ background data to reduce the conservatism of the modeling results. Following this method, the actual ground-level NO₂ concentration (i.e., 37 µg/m³ as observed on the peak modeled impact hour), would be used as background concentration to determine a potential for exceedence of the 1-hour standard. We understand this is not SCAQMD policy; however it is worth noting that the use of any maximum 1-hour NO₂ values is a conservative approach that can be refined while maintaining the protection of public health.

In late 2009, EPA issued a corrected version of AERMOD, the air dispersion model used in the DEIR, which revised an algorithm so that the ozone concentration is used to calculate conversion of all sources as a group rather than adding the available ozone repeatedly to the results for each emission source (this would imply an unlimited amount of ozone is available for conversion). Using the most recent version of AERMOD and an ozone source group, maximum predicted project 1-hour NO₂ impacts are estimated to be 127.6 µg/m³ for all sources (compared to 197 µg/m³ as reported in the DEIR). It should be noted that 115.3 µg/m³ or over 90% of the project impact is attributable to the assumption that both emergency engines would operate concurrently during maintenance testing. Testing both engines at the same time would not occur due to logistics of the test crew, and if it ever did, would not be coincident with the peak 1-hour NO₂ levels in the ambient air (note that maintenance testing of emergency engines are exempt from ambient air modeling requirements permitting because of their short-term use). Therefore, the ozone group method was also used to estimate impacts with all six turbines and only one engine operating in any given hour. This resulted in an 82.2 µg/m³ maximum NO₂ project concentration.

To be conservative, the maximum background concentration for the most recent three years of observations was compared with the maximum predicted project 1-hour NO₂ impacts assuming only one engine operating with all turbines. The revised 1-hr NO₂ modeling concentration is presented in the table below. Annual NO₂ and 1-hour carbon monoxide (CO) values, which address SCAQMD Comment Nos. 10 and 11 (Responses 4-13 and 4-14), are also presented in the table. As shown in the table, the project would not cause an exceedence of any short-term ambient air quality standard.

Air Quality Impact Modeling Results						
Pollutant	Averaging Period	California Ambient Air Quality Thresholds (µg/m ³)	Background Concentration (µg/m ³) ¹	Maximum Predicted Impact (µg/m ³)	Total Conc. (µg/m ³)	Significant?
NO ₂	1-hour	339	235	82.2	317.2	No
	Annual	57	42.5	0.47	40.97	No

Air Quality Impact Modeling Results						
Pollutant	Averaging Period	California Ambient Air Quality Thresholds ($\mu\text{g}/\text{m}^3$)	Background Concentration ($\mu\text{g}/\text{m}^3$) ¹	Maximum Predicted Impact ($\mu\text{g}/\text{m}^3$)	Total Conc. ($\mu\text{g}/\text{m}^3$)	Significant?
CO	1-hour	23,000	4,850	103.5	4953.5	No
	8-hour	10,000	3,895	10.9	3905.9	No

¹ Background concentrations obtained for the Source Receptor Area 4, South Coastal LA County 1, District Station ID 072 (North Long Beach Monitoring Station). The background concentration of 235 $\mu\text{g}/\text{m}^3$ for 1-hr NO_2 is based on the highest ambient 1-hour NO_2 concentration observed in 2008.

Response 4-13

The SCAQMD requested that compliance with the annual NO_2 standard be modeled using an emission rate of 1.828 g/s for consistency with the permit application. Similar to the discrepancy noted by the SCAQMD in Comment No. 8 (Response 4-11), the annual NO_2 emission rate used in the DEIR was the result of more refined information becoming available for the duration and frequency of hot and cold starts after submittal of the permit application. However, to show consistency with the permit application, the results are included in the modeled impacts presented in response to SCAQMD Comment No. 9 (Response 4-12) for informational purposes.

Response 4-14

The SCAQMD requested that compliance with the 8-hour CO standard be modeled using an emission rate of 2.872 g/s for consistency with the permit application. Similar to the discrepancy noted by the SCAQMD in Comments No. 8 and 10 (Responses 4-11 and 4-13), the 8-hour CO emission rate used in the DEIR was the result of more refined information becoming available for the duration and frequency of hot and cold starts after submittal of the permit application. To show consistency with the permit application, the results are included in the modeled impacts presented in response to SCAQMD Comment No. 9 (Response 4-12) for informational purposes.

Response 4-15

Modeling parameters for the diesel fuel storage tank are presented in the table below.

Storage Tank Modeled Stack Parameters					
Source	Source Type	Stack Height (m)	Stack Diameter (m)	Stack Temp. (K)	Stack Velocity (m/s)
Storage tank	Area	3.048	-	-	-

Response 4-16

The SCAQMD noted that the HARP analysis completed for the DEIR did not contain speciated polycyclic aromatic hydrocarbons (PAHs). This was done intentionally as a screening-level

analysis specific for treating PAH emissions where the sum of the mass from all emitted species was attributed to benzo(a)pyrene [(B(a)P), CAS number 1151]. Section 8.2.3 of the OEHHA Health Risk Assessment Guidelines allows the use of B(a)P as a surrogate for total PAH emissions when speciation is not available because “the surrogates are the most or nearly-the-most potent carcinogens in the class, use of the cancer potency factors for these with total emissions will overestimate the risk.” However, because speciation is available, the HARP model was run for informational purposes to address the SCAQMD comment and does not represent a change in the DEIR conclusion. The results of the HRA based on speciated PAH emissions are provided in the table below. These impacts are below those reported in the DEIR.

Maximum Predicted Health Risk Impacts			
Receptor Exposure	Maximum Cancer Risk	Chronic HI	Acute HI
Residential Exposure	0.17	0.004	0.01
Worker Exposure	0.03	0.004	0.01

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SECTION 3.0 CHANGES TO THE DRAFT EIR

3.1 INTRODUCTION

The text revisions and table modifications included in this section have resulted from the comments on the Draft EIR during the public review period. In some instances, recommendations and questions raised in the comments have necessitated revisions to the Draft EIR text. Where appropriate, the response directs readers to a specific page or pages in the Draft EIR. Changes made to the Draft EIR text in response to comments are indicated in ~~strikeout~~ (deletion) and underlined (addition) text. The errata starting in Section 3.2 reflect these changes and modifications to the Draft EIR. The changes to the Draft EIR as reflected in this section do not affect the overall conclusions of the environmental analysis relative to significance of impacts.

3.2 ERRATA

Mitigation Measure N1-2 on page 4.7-24 and in Table 1.6-1 on page 1-21 of the Draft EIR is revised as follows:

N1-2 Where line-of-sight exists between the source of construction noise and sensitive receptors in Leisure World residential community, a solid physical barrier shall be used on the perimeter of construction sites to block the line-of-sight from receptor to source, when feasible and necessary, to minimize general construction noise (i.e., from the operation of ground-level equipment and trucks as opposed to pile driving) noise to nearby noise-sensitive receptors. This perimeter fencing barrier shall not have perforations or gaps. Prior to the installation of any barriers, LADWP will meet and confer with the City of Seal Beach and Golden Rain Foundation (Leisure World) to consider any concerns of these organizations.

Mitigation Measure N1-4 on page 4.7-24 and in Table 1.6-1 on page 1-21 of the Draft EIR is revised as follows:

N1-4 A public liaison for project construction shall be identified who shall be responsible for addressing public concerns about construction activities, including excessive noise. The liaison shall determine the cause of the concern (e.g., starting too early, bad muffler, etc.) and shall be authorized to implement reasonable measures to address the concern. The public liaison shall prepare a monthly report for the City of Long Beach, the City of Seal Beach, and the Golden Rain Foundation summarizing all public concerns received regarding construction activity and the actions implemented to address those concerns.

Mitigation Measure N1-5 on page 4.7-24 and in Table 1.6-1 on page 1-21 of the Draft EIR is revised as follows:

N1-5 Leisure World residential community, which may potentially be affected by construction activity, shall be sent a notice through the Golden Rain Foundation regarding the

construction schedule of the proposed project. The notice shall indicate the dates and duration of construction activities, as well as provide a telephone number for the public liaison where residents can inquire about the construction process and register concerns. The public liaison shall prepare a monthly report for the City of Long Beach, the City of Seal Beach, and the Golden Rain Foundation summarizing all public concerns received regarding construction activity and the actions implemented to address those concerns.

Mitigation Measure N1-6 on page 4.7-24 and in Table 1.6-1 on page 1-21 of the Draft EIR is revised as follows:

N1-6 ~~The construction contractor shall ensure that all stockpiling and vehicle staging areas are located away from noise sensitive receivers, to the extent feasible. A Construction Staging Area Plan indicating areas to be used for stockpiling of construction materials, temporary construction offices, construction equipment parking, and construction worker parking shall be sent to the City of Seal Beach and the Golden Rain Foundation prior to the commencement of construction activities. In the development of the plan, the construction contractor shall endeavor to locate such uses in such a manner that they minimize the noise impacts to the Leisure World community as much as practical.~~

Mitigation Measure N2-1 on page 4.7-24 and in Table 1.6-1 on page 1-21 of the Draft EIR is revised as follows:

N2-1 ~~The construction contractor shall plan work such that activities that would generate high-loud or unusual noise levels that would disturb a reasonable person of normal sensitivity will not be started during the hours codified in the LBMC, and all reasonable efforts to conclude work in progress prior to the hours codified in the LBMC will be taken by the construction contractor (between 7:00 p.m. and 7:00 a.m. on weekdays, between 7:00 p.m. on Fridays and 9:00 a.m. on Saturdays, and between 6:00 p.m. on Saturdays and 7:00 am on Mondays).~~

The following is added to Section 4.7.5, Mitigation Measures, on page 4.7-24 and to Table 1.6-1 on page 1-22, under Impact N3:

The following measures are provided to mitigate the significant noise impact from construction pile driving activities (Impact N3).

N3-1 Pile-driving shall be limited to between the hours of 8:00 a.m. and 6:00 p.m. on weekdays. No pile-driving activity shall occur on Saturdays, Sundays, or federal or state holidays. The program shall include notification to the Golden Rain Foundation of the period when such pile-driving operations will take place.

N3-2 LADWP shall employ noise reduction techniques related to pile driving operations that may include, but not be limited to, the use of shock-absorbing material in the anvil chamber of the pile driver, acoustical enclosures around portions of the pile driving equipment, and the application of noise dampening compounds to the piles. The actual

noise reduction achieved will depend on the feasibility and combination of techniques employed. However, a minimum reduction of 8 dBA below the unmitigated 101 dBA sound level of pile driving when measured at 50 feet from the source is considered achievable and will be required as part of the project construction specifications.

N3-3 To further reduce noise impacts related to construction pile driving, sound-attenuating replacement windows shall be installed in any existing windows in the following buildings at Leisure World where the existing windows in these buildings also face the Project:

Mutual 8: Building 190
Building 199
Building 201
Building 202
Building 203
Building 204
Building 205

Mutual 9: Building 209
Building 210
Building 211
Building 214

This window replacement shall be completed prior to the start of pile driving activities. LADWP will endeavor to work with the specified Mutuels and residents within Leisure World to install the replacement windows in a timely manner. If a Mutual within Leisure World will not provide the necessary approvals for said window replacement program, LADWP shall provide proof of said denial of permission to the Director of Development Services of the City of Seal Beach. The City of Seal Beach shall have 15 days after said notification of denial by LADWP to meet with and attempt to resolve said denial of permission with the appropriate Mutual. If said Mutual continues to deny said request, the City shall so inform LADWP, and LADWP shall be relieved of providing windows to individual living units within that particular Mutual.

The first two paragraphs on page 4.4-4 of the Draft EIR are revised as follows:

The SCAQMD monitors levels of various pollutants at its 33 monitoring stations within the SCAB. The closest ambient air quality monitoring station to the HnGS is the South Coastal Los Angeles County monitoring station. Background ambient air quality data from 2004-2006 through 2007-2008 for criteria pollutants measured at the South Coastal Los Angeles County monitoring station are presented in Table 4.4-2. Ambient air quality was compared to the most stringent of either the California Ambient Air Quality Standards (CAAQS) or the National Ambient Air Quality Standards (NAAQS) to determine exceedance of the standard. In all cases, CAAQS are the most stringent.

The air quality data indicates that the area is in compliance with both CAAQS and NAAQS for CO, nitrogen dioxide (NO₂), and SO₂. Additionally, lead (Pb) and sulfate concentrations

measured were below state and national standards. State O₃, particulate matter less than 10 microns in diameter (PM₁₀), and particulate matter less than 2.5 microns in diameter (PM_{2.5}) standards were exceeded on several days each year. The state 1-hour and 8-hour O₃ standards was were each exceeded once in 2007 and once in 2008; however, the federal 1-hour and 8-hour ozone standards were not exceeded. At this monitoring station, peak 24-hour PM₁₀ concentrations ranged from varied between 66 µg/m³ in 2005, 78 µg/m³ in 2006, and 75 µg/m³ in 2007, and 62 µg/m³ in 2008. The number of observed exceedances of the state 24-hour PM₁₀ standard varied from between five days in 2005 and 2007 to six days in 2006, five days in 2007, and one day in 2008. The station recorded five exceedances of the 24-hour PM_{2.5} standard in 2006, and 12 exceedances in 2007, and 8 exceedances in 2008.

Table 4.4-2, which begins on page 4.4-4 of the Draft EIR, is replaced in its entirety as follows:

Table 4.4-2
Background Air Quality Data for the South Coastal Los Angeles County Station
(2006-2008)

Pollutant	Averaging Period	Ambient Air Quality Standards		Maximum Observed Concentration (number of exceedances)		
		State	Federal	2006	2007	2008
CO	1-hr	20.0 ppm	35.0 ppm	4.0	3.0	3.0
	8-hr	9.0 ppm	9.0 ppm	3.4	2.6	2.6
Ozone	1-hr	0.09 ppm	---	0.08	0.099 (1 day)	0.093 (1 day)
	8-hr	0.07 ppm	0.075 ppm	0.058	0.073 (1 day)	0.074 (1 day)
NO ₂	1-hr	0.18 ppm	---	0.102	0.107	0.125
	Annual	0.030 ppm	0.053 ppm	0.0215	0.0207	0.0208
SO ₂	1-hr	0.25 ppm	---	0.03	0.11	0.09
	3-hr	---	0.5 ppm	---	---	---
	24-hr	0.04 ppm	0.14 ppm	0.01	.011	0.012
	Annual	---	0.03 ppm	---	0.0027	0.0022
PM ₁₀	24-hr	50 µg/m ³	150 µg/m ³	78 (6 days)	75+ (5 days)	62 (1 day)
	Annual	20 µg/m ³	---	31.1	30.2+	29.1
PM _{2.5}	24-hr	12 µg/m ³	35 µg/m ³	58.5 (5 days)	82.9 (12 days)	57.2 (8 days)
	Annual	---	15 µg/m ³	14.2	14.6	14.2
Lead	30-day	1.5 µg/m ³	---	0.01	0.02	0.01
	Calendar Qtr	---	1.5 µg/m ³	0.01	0.01	0.01
Sulfates	24-hour	25 µg/m ³	---	17.8	11.1 (0 days)	11.1

Source: SCAQMD Historical Data – Air Quality Data Table, South Coastal LA Monitoring Station

Appendix A

Mitigation Monitoring and Reporting Program (MMRP)

MITIGATION MONITORING AND REPORTING PROGRAM (MMRP)

Haynes Generating Station Units 5 and 6 Repowering Project Final Environmental Impact Report (SCH#2005061111)

Introduction

This Mitigation Monitoring and Reporting Program (MMRP) has been prepared pursuant to the California Environmental Quality Act (CEQA) and the State CEQA Guidelines to provide for monitoring of the mitigation measures required by certification of the Haynes Generating Station (HnGS) Units 5 and 6 Repowering Project EIR. Section 21081.6 of the State of California Public Resources Code and Section 15091(d) of the State CEQA Guidelines require public agencies “to adopt a reporting or monitoring program for changes to the project which it has adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment”. The lead agency must define specific reporting and/or monitoring requirements to be enforced during project implementation prior to final approval of the proposed project.

The Los Angeles Department of Water and Power (LADWP) is the lead agency for the proposed project and is responsible for administering and implementing the MMRP. The MMRP stipulates how all required mitigation measures are to be implemented and completed during the appropriate project phase. It also facilitates the documentation necessary to verify that mitigation measures were in fact properly implemented.

Mitigation measures provided in this MMRP were initially identified in Chapter 4.0, Environmental Analysis, of the Draft EIR. As a result of comments received during project review of the Draft EIR, several of the measures have been revised, and some new measures have been added.

Mitigation Monitoring and Reporting Program Procedures

Since the proposed mitigation measures apply to the construction of the proposed project, the MMRP will be in effect, as applicable, during pre-construction activities and during the construction period. This MMRP gives LADWP the primary responsibility for taking all actions necessary to implement the mitigation measures according to the specifications provided for each measure and for demonstrating that the action has been successfully completed. LADWP’s designated environmental monitor will track and document compliance with mitigation measures, note any problems that may result, and take appropriate action to remedy problems. LADWP, at its discretion, may delegate responsibility for measure implementation or monitoring, or portions thereof, to other responsible individuals, such as a licensed contractor. Specific responsibilities of LADPW include:

- Coordination of all mitigation monitoring activities
- Management of the preparation, approval, and filing of monitoring or permit compliance reports
- Maintenance of records concerning the status of all approved mitigation measures
- Quality control assurance of field monitoring personnel
- Coordination with other agencies regarding compliance with mitigation or permit requirements
- Reviewing and recommending acceptance and certification of implementation documentation
- Acting as a contact for interested parties or surrounding property owners who wish to register complaints, observations of unsafe conditions, or environmental violations; verifying any such circumstances and developing any necessary corrective actions

Resolution of Noncompliance Complaints

Any person or agency may file a complaint about noncompliance with the mitigation measures addressed in the MMRP. The complaint shall be directed to LADWP (111 North Hope Street, Room 1044, Los Angeles, California 90012) in written form providing detailed information on the purported violation. LADWP will investigate any complaints filed to determine the validity of the complaint. If noncompliance with a mitigation measure is verified, LADWP shall take the necessary action(s) to remedy the violation. The complaint shall receive written confirmation indicating the results of the investigation or the final corrective action that was implemented in response to the specific noncompliance issue.

Mitigation Monitoring and Reporting Plan Matrix

The MMRP is organized in a matrix format. The first column identifies the mitigation measure number. The second column identifies the mitigation measures. The third column, entitled "Time Frame for Implementation," refers to when monitoring will occur. The timing for implementing mitigation measures and the definition of the approval process has been provided to assist LADWP staff to plan for monitoring activities. The fourth column, entitled "Responsible Monitoring Agency," refers to the agency responsible for ensuring that the mitigation measure is implemented. The fifth column, entitled "Verification of Compliance," has subcolumns for initials, date, and remarks. This last column will be used by the lead agency to document the person who verified that the mitigation measure was satisfactorily implemented, the date on which this verification occurred, and any other notable remarks.

MITIGATION MONITORING AND REPORTING PROGRAM
SCH #2005061111

HAYNES GENERATING STATION UNITS 5 & 6
REPOWERING PROJECT
ENVIRONMENTAL IMPACT REPORT

No.	Mitigation Measure	Time Frame for Implementation	Responsible Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
Noise & Vibration						
N1-1	All construction equipment shall be properly maintained and equipped with mufflers and other suitable noise attenuation devices.	During construction	LADWP			
N1-2	Where line-of-sight exists between the source of construction noise and sensitive receptors in Leisure World residential community, a solid physical barrier shall be used to block the line-of-sight to minimize general construction noise (i.e., from the operation of ground-level equipment and trucks as opposed to pile driving). This barrier shall not have perforations or gaps. Prior to the installation of any barriers, LADWP will meet and confer with the City of Seal Beach and Golden Rain Foundation (Leisure World) to consider any concerns of these organizations.	During construction	LADWP			
N1-3	Grading and construction contractors shall endeavor to use quieter equipment as opposed to noisier equipment (such as rubber-tired equipment rather than track equipment).	During construction	LADWP			

No.	Mitigation Measure	Time Frame for Implementation	Responsible Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
N1-4	A public liaison for project construction shall be identified who shall be responsible for addressing public concerns about construction activities, including excessive noise. The liaison shall determine the cause of the concern (e.g., starting too early, bad muffler, etc.) and shall be authorized to implement reasonable measures to address the concern. The public liaison shall prepare a monthly report for the City of Long Beach, the City of Seal Beach, and the Golden Rain Foundation summarizing all public concerns received regarding construction activity and the actions implemented to address those concerns.	During construction	LADWP			
N1-5	Leisure World residential community, which may potentially be affected by construction activity, shall be sent a notice through the Golden Rain Foundation regarding the construction schedule of the proposed project. The notice shall indicate the dates and duration of construction activities, as well as provide a telephone number for the public liaison where residents can inquire about the construction process and register concerns. The public liaison shall prepare a monthly report for the City of Long Beach, the City of Seal Beach, and the Golden Rain Foundation summarizing all public concerns received regarding construction activity and the actions implemented to address those concerns.	Prior to construction and during construction	LADWP			

No.	Mitigation Measure	Time Frame for Implementation	Responsible Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
N1-6	A Construction Staging Area Plan indicating areas to be used for stockpiling of construction materials, temporary construction offices, construction equipment parking, and construction worker parking shall be sent to the City of Seal Beach and the Golden Rain Foundation prior to the commencement of construction activities. In the development of the plan, the construction contractor shall endeavor to locate such uses in such a manner that they minimize the noise impacts to the Leisure World community as much as practical.	Prior to construction	LADWP			
N2-1	The construction contractor shall plan work such that activities that would generate loud or unusual noise that would disturb a reasonable person of normal sensitivity will not be started during the hours codified in the LBMC (between 7:00 p.m. and 7:00 a.m. on weekdays, between 7:00 p.m. on Fridays and 9:00 a.m. on Saturdays, and between 6:00 p.m. on Saturdays and 7:00 am on Mondays).	During construction	LADWP			
N3-1	Pile-driving shall be limited to between the hours of 8:00 a.m. and 6:00 p.m. on weekdays. No pile-driving activity shall occur on Saturdays, Sundays, or federal or state holidays. The program shall include notification to Golden Rain Foundation of the period when such pile-driving operations will take place.	During Construction	LADWP			

No.	Mitigation Measure	Time Frame for Implementation	Responsible Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
N3-2	LADWP shall employ noise reduction techniques related to pile driving operations that may include, but not be limited to, the use of shock-absorbing material in the anvil chamber of the pile driver, acoustical enclosures around portions of the pile driving equipment, and the application of noise dampening compounds to the piles. The actual noise reduction achieved will depend on the feasibility and combination of techniques employed. However, a minimum reduction of 8 dBA below the unmitigated 101 dBA sound level of pile driving when measured at 50 feet from the source is considered achievable and will be required as part of the project construction specifications.	Prior to Construction and During Construction	LADWP			
N3-3	To further reduce noise impacts related to construction pile driving, sound-attenuating replacement windows shall be installed in any existing windows in the following buildings at Leisure World where the existing windows in these buildings also face the Project: Mutual 8: Building 190 Building 199 Building 201 Building 202 Building 203 Building 204 Building 205 Mutual 9: Building 209 Building 210 Building 211 Building 214	Prior to Start of Pile Driving	LADWP			

No.	Mitigation Measure	Time Frame for Implementation	Responsible Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
	<p>This window replacement shall be completed prior to the start of pile driving activities. LADWP will endeavor to work with the specified Mutuels and residents within Leisure World to install the replacement windows in a timely manner. If a Mutual within Leisure World will not provide the necessary approvals for said window replacement program, LADWP shall provide proof of said denial of permission to the Director of Development Services of the City of Seal Beach. The City of Seal Beach shall have 15 days after said notification of denial by LADWP to meet with and attempt to resolve said denial of permission with the appropriate Mutual. If said Mutual continues to deny said request, the City shall so inform LADWP, and LADWP shall be relieved of providing windows to individual living units within that particular Mutual.</p>					