

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 E. Copley Drive, Diamond Bar, California 91765-4182**

NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL ASSESSMENT

Project Title:

Proposed AES Alamos, L.L.C. – Selective Catalytic Reduction (SCR) Installation at Alamos Generating Station (Units 1, 2, 3 and 4).

Project Location:

AES Southland, L.L.C. Alamos Generating Station: 690 N. Studebaker Road, Long Beach, CA 90803

Description of Nature, Purpose, and Beneficiaries of Project:

AES Alamos, L.L.C. proposes to demolish two urea tanks; install three 20,000-gallon, above-ground, double-walled, aqueous ammonia (29 percent concentration) storage tanks; construct a containment wall around each ammonia tank; and install SCR catalysts in boiler exhaust units (Units 1, 2, 3 and 4). SCR would be used to reduce nitrogen oxide (NO_x) emissions as part of AES' plan to meet declining facilitywide NO_x emission limits required by South Coast Air Quality Management District's (SCAQMD) Regional Clean Air Incentives Market (RECLAIM) Program.

Lead Agency:

South Coast Air Quality Management District

Division:

Planning - CEQA

Initial Study and all supporting documentation are available at:

SCAQMD Headquarters
21865 E. Copley Drive
Diamond Bar, CA 91765

or by calling:

(909) 396-3600

or by accessing:

<http://www.aqmd.gov/ceqa/nonaqmd.html>

Initial Study Review Period:

November 8, 2000- December 7, 2000

CEQA Contact Person:

Steve Smith, Ph.D.

Phone Number:

(909) 396-3054

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

**Initial Study for:
Proposed AES Alamitos, L.L.C. – Selective Catalytic Reduction (SCR) Installation Project
(Units 1, 2, 3, and 4)**

November 6, 2000

Executive Officer
Barry R. Wallerstein, D. Env.

Deputy Executive Officer
Planning, Rule Development and Area Sources
Jack P. Broadbent

Assistant Deputy Executive Officer
Planning, Rule Development and Area Sources
Elaine Chang, DrPH

Planning and Rules Manager
CEQA, Socioeconomic Analysis, PM/AQMP Control Strategy
Alene Taber, AICP

Prepared for the South Coast Air Quality Management District by:
URS Corporation

Reviewed By:

Jeri Voge – Senior Deputy District Counsel
Steve Smith, Ph.D. – Program Supervisor

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BARRY WALLERSTEIN, D.Env.

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INTRODUCTION

Regulation XX – Regional Clean Air Incentives Market (RECLAIM) is an alternative regulatory program designed and adopted by the South Coast Air Quality Management District (SCAQMD) to reduce oxides of nitrogen (NO_x) and sulfur dioxides (SO_x) emissions from stationary sources in the South Coast Air Basin (Basin) while lowering the cost of attaining clean air through the use of market incentives. The goals of RECLAIM are to give affected facilities added flexibility in meeting their emission reduction requirements, to lower the cost of compliance, and to assist the SCAQMD's efforts to attain and maintain state and federal ambient air quality standards. RECLAIM prescribes only total facility emissions goals, and facility operators are free to choose control strategies that work best for their facility. The emission reduction goals are established in the form of declining annual Allocations. Facilities comply with RECLAIM by installing control equipment that limits their annual NO_x and or SO_x emissions to below or at their annual Allocations or purchase additional RECLAIM Trading Credits (RTCs) to account for any exceedances above their annual Allocations.

AES Southland L.L.C. (AES) proposes to install Selective Catalytic Reduction (SCR) at the Alamitos Generating Station's Units 1, 2, 3 and 4. SCR will be used to reduce NO_x emissions as part of their plan to meet the declining facilitywide NO_x emission limits required by SCAQMD's RECLAIM Program.

To accomplish AES' goal at the earliest possible time and prevent potential future exceedances of their RECLAIM annual Allocations, AES has entered into a compliance agreement with the SCAQMD. The agreement requires that AES begin equipment installation and modifications at the Alamitos facility starting early in 2001, such that affected power generating units will be in use by summer 2001. For a complete description of the proposed project and the anticipated activities, the reader is referred to "Proposed Project Description" below.

LEAD AGENCY

The California Environmental Quality Act (CEQA), Public Resources Code § 21000 et seq., requires that the environmental impacts of proposed projects be evaluated and that feasible methods to reduce, avoid or eliminate significant adverse impacts of these projects be identified and implemented. To fulfill the purpose and intent of CEQA, SCAQMD is the lead agency for this project and has prepared this Initial Study to address the potential environmental impacts associated with the AES Alamitos SCR Project for Units 1, 2, 3 and 4.

The lead agency is the public agency that has the principal responsibility for carrying out or approving a project that may have a significant effect upon the environment (Public Resources Code § 21067). It was determined that the SCAQMD has the primary responsibility for supervising or approving the project and is the most appropriate public agency to act as lead agency (CEQA Guidelines § 15051(b)). The proposed project requires discretionary approval from the SCAQMD.

The Final Environmental Assessment (FEA) for the RECLAIM program (October 1993) analyzed generally the impacts associated with the use of various add-on pollution controls to comply with RECLAIM. In particular, the FEA for the RECLAIM program incorporated by reference specific

environmental analyses conducted for specific add-on pollution controls (e.g., SCR) that could be used by power generating facilities to comply with RECLAIM. To the extent that these analyses adequately address the potential environmental impacts associated with this project, no further analysis will be required (CEQA Guidelines § 15152(d)).

BACKGROUND CEQA DOCUMENTS

This document, together with previously prepared documents as described in the following paragraphs, constitutes the Initial Study for the proposed installation SCR systems at AES' Alamitos Generating Station (Generating Station), Units 1, 2, 3 and 4. In 1993, the SCAQMD prepared a Final Supplemental Environmental Impact Report (EIR) for the SCR system on Unit 5. The Final Supplemental EIR was prepared as a supplement to the Final Subsequent EIR for the storage of aqueous ammonia and associated SCR system for Unit 6, which, in turn, was prepared subsequent to and as a complement of the 1988 Program EIR for Proposed Rule 1135, Emissions of Oxides of Nitrogen from Power Generating Steam Boilers. (SCAQMD, 1993b) These documents are available for review at the SCAQMD's Public Information Center, at the Diamond Bar headquarters or by calling (909) 396-2039.

Initial Study for Alamitos Unit 5 (10/20/92): The Initial Study was prepared pursuant to the state and SCAQMD CEQA Guidelines, and circulated as part of the Alamitos Unit 6 Subsequent EIR. The Initial Study contained the Environmental Checklist and a preliminary identification and discussion of the potential impacts of the proposed project.

Final Subsequent EIR (3/22/93) for Alamitos Unit 6: The Final Subsequent EIR for Unit 6 contained a detailed project description of the Underground Storage Tank (UST) and the SCR system for Unit 6, environmental setting for each potential impact area, analysis of potential environmental impacts (including cumulative impacts), analysis of project alternatives, and other environmental topics as required by CEQA. The discussion of environmental impacts included a detailed analysis of each of the following potential impact areas: air quality, water resources, noise, risk of upset/human health, transportation/circulation, public services, energy/natural resources, and utilities (solid waste). This document was certified by the SCAQMD on March 31, 1993. A mitigation monitoring plan was developed and implemented by Southern California Edison (SCE), the owner of the Alamitos Generating Station at that time, for this project.

Final Supplemental EIR (8/16/93) for Alamitos Unit 5: The Supplemental EIR contained a detailed project description, the environmental setting for each potential impact area, and analysis of potential environmental impacts (including cumulative impacts), as required by CEQA. The discussion of environmental impacts included a detailed analysis of each of the following potential impact areas: air quality, water resources, noise, risk of upset/human health, transportation/circulation, public services, energy/natural resources, and utilities (solid waste).

Since 1993, AES has purchased the Alamitos Generating Station from SCE. However, the location, operation and procedures have not significantly been altered since the change of ownership. The installation of an aqueous ammonia storage tank, SCR units and ancillary features required detailed CEQA analysis via the two EIRs completed in 1993 for SCR installation on Units 5 and 6 at this location. The CEQA documents listed above provide a general description of existing equipment and operations at the Alamitos facility.

PROJECT LOCATION

All new equipment would be located within the existing fenceline of the Alamitos Generating Station, which is located at 690 North Studebaker Road in the City of Long Beach, California. Figure 1 shows the vicinity and the project site location. The Alamitos Generating Station is located on the eastern side of the City of Long Beach, and is bounded by 7th Street to the north, the San Gabriel River to the east, Westminster Avenue to the south, and North Studebaker Road to the west. The City of Seal Beach is adjacent to the eastern edge of the facility across the San Gabriel River. The Alamitos Generating Station occupies about 165 acres and is surrounded by industrial and some residential uses. Figure 2 shows all three proposed aqueous ammonia storage tanks approximately 500 feet from the applicable units, in the central portion of the 165-acre site.

LAND USE AND ZONING

The land use in the vicinity of the Generating Station includes mixed uses, such as power generation, open space and residential. The immediate area of the Generating Station is zoned for planned development (PD-1) as part of the Southeast Area Development and Improvement Plan (SEADIP), Subarea 19, by the City of Long Beach and residential low density (RLD) and residential high density (RHD) by the City of Seal Beach. The land use at the Generating Station is Mixed Uses (7). Subarea 19 is fully developed by the existing permitted industrial uses, i.e., Alamitos and adjacent power generation stations (City of Long Beach, 1999).

PERMITS AND APPROVALS

A Conditional Use Permit would not be required for this project (Bihn, 2000). The Alamitos Generating Station is not located within the Coastal Zone, as defined by the California Coastal Act, and therefore, would not require a Coastal Development Permit (City of Long Beach, 1980).

EXISTING GENERATING STATION CONFIGURATION AND OPERATION

The Alamitos Generating Station has six units actively generating power. Utility boilers at the Generating Station use natural gas as the primary combustion fuel and fuel oil as a backup fuel to produce steam. The steam produced in the utility boiler is vented to steam turbine generators to produce electricity. SCR technology, including a 20,000-gallon underground aqueous ammonia storage tank, was installed at the Generating Station in 1994 on Units 5 and 6. Noise suppression equipment is installed on the forced draft fans for Units 5 and 6.

PROPOSED PROJECT DESCRIPTION

As part of the combustion process, NO_x is produced and emitted to the atmosphere with the other flue gas constituents (mostly nitrogen, carbon dioxide, and water vapor). SCR is an air pollution control technology that uses a reducing agent (ammonia) to reduce NO_x to nitrogen and water in the presence of a catalyst. In an SCR system, ammonia is injected into the boiler flue gas. The ammonia/flue gas mixture flows through a catalyst that accelerates the reaction between the ammonia and the NO_x. Ammonia used for SCR systems is typically stored in one or more storage tanks. The ammonia is piped from the tank to the boiler where it is mixed with flue gas before passing through the catalyst. The catalyst is composed of individually extruded homogenous honeycomb ceramic elements of approximately 6" x 6" x 28" packed into steel support modules of 48" x 11" x 34". Its active elements are formulated from a proprietary mixture of Titanium Dioxide and Vanadium Pentoxide.

The proposed SCR project consists of the installation of four SCR reactor units within the existing boilers of Units 1, 2, 3 and 4; carbon steel assembly comprised of four reactors; three 20,000-gallon double-walled, above ground, and separately contained carbon steel ammonia storage tanks; and, control equipment that would be incorporated into the existing plant distribution control system with new interface hardware. Aqueous ammonia would be transported to the facility via tanker truck along the existing approved route, established prior to the installation of SCR on Units 5 and 6. All new equipment would be located within the existing fence line of the Alamos Generating Station. The SCR reactor units would be encased in the boiler duct works and would not be visible from off-site. All other new components would be installed close to the boiler structure and would not be visible off-site. A temporary construction area would be located at the rear of the units.

CONSTRUCTION

Construction of the proposed project is scheduled to begin February 2001 and be completed by June 2001. Construction activities are anticipated to take place five days per week, Monday through Friday, from 6:00 a.m. to 5:00 p.m. However, night and/or weekend shifts may be required to maintain the construction schedule.

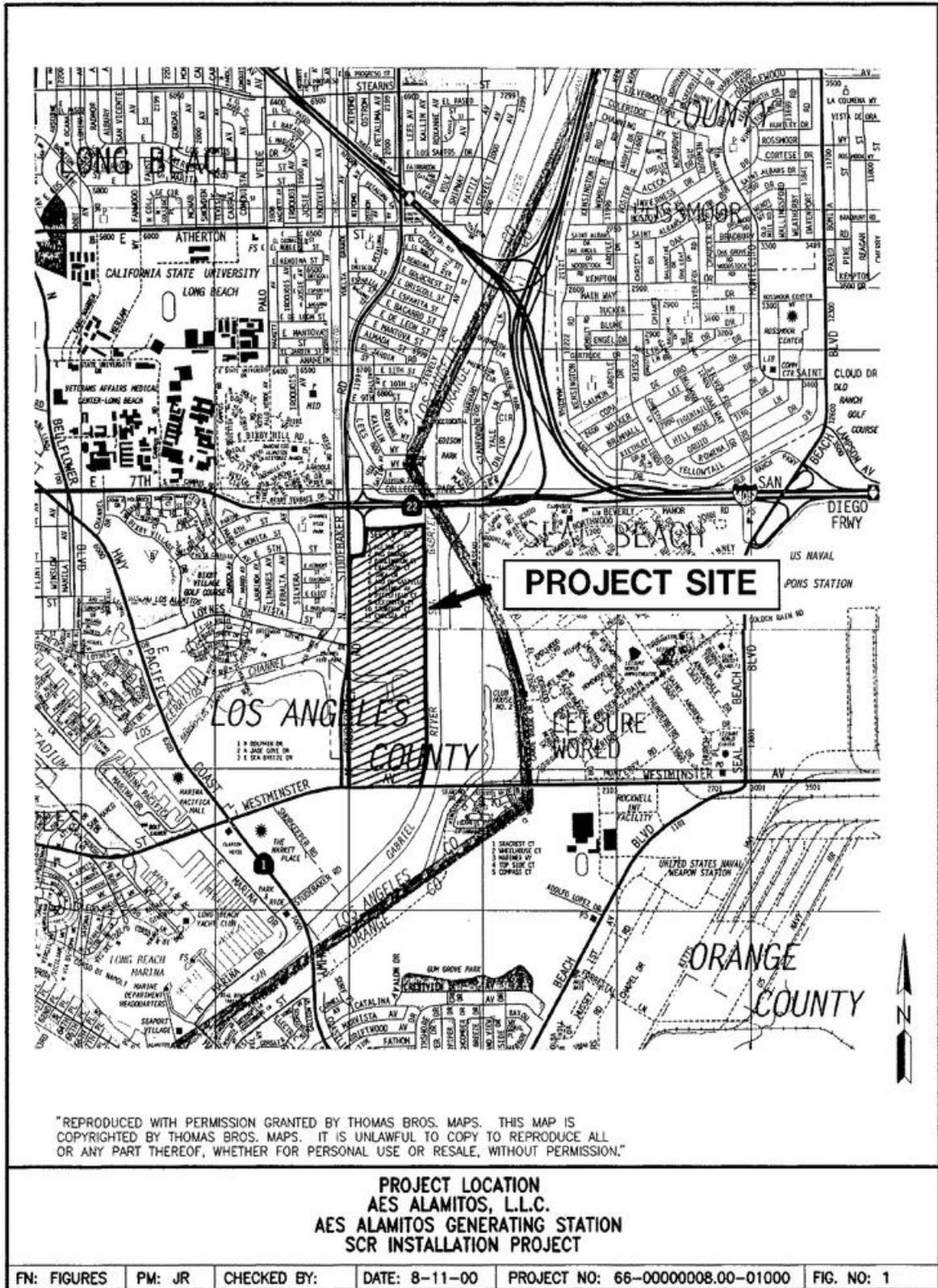
OPERATION

The proposed project would require no additional workers for operations. The project would operate whenever Units 1, 2, 3, and 4 generate electric power, up to 24 hours per day for 365 days per year.

PROJECT ALTERNATIVES

The Draft EIR will discuss and compare alternatives to the proposed project as required by CEQA Guidelines § 15126.6. Alternatives must include realistic strategies for attaining the basic objectives of the proposed project and provide a means for evaluating the comparative merits of each alternative. In addition, the range of alternatives must be sufficient to permit a reasoned choice, it need not include every conceivable project alternative. The key issue is whether the selection and discussion of alternatives fosters informed decision making and public participation. A CEQA document need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative.

Alternatives will be developed based in part on the major components of the proposed project. The rationale for selecting alternatives rests on CEQA's requirement to present "realistic" alternatives; that is, alternatives that can actually be implemented. CEQA also requires an evaluation of a "No Project Alternative." Project alternatives may also be based on suggested alternatives received during the 30-day public comment period for this Initial Study.





INTRODUCTION

The environmental checklist provides a standard evaluation tool to identify a project's adverse environmental impacts. This checklist identifies and evaluates potential adverse environmental impacts that may be created by the proposed project.

GENERAL INFORMATION

Project Title: **Proposed AES Alamitos, L.L.C. – Selective Catalytic Reduction (SCR) Installation (Units 1, 2, 3 and 4)**

Lead Agency Name: **South Coast Air Quality Management District**

Lead Agency Address: **21865 E. Copley Drive
Diamond Bar, CA 91765**

Contact Person: **Steve Smith, Ph.D.**

Contact Phone Number: **(909) 396-3054**

Project Sponsor's Name: **AES Alamitos, L.L.C.**

Project Sponsor's Address: **690 N. Studebaker Road
Long Beach, CA 90803**

General Plan Description: **City of Long Beach General Plan: Mixed Uses (7)**

Zoning: **Planned Development (PD-1): Southeast Area
Development Improvement Plan (SEADIP)**

Description of Project: **AES proposes to install SCR at the Alamitos Generating Station's Units 1, 2, 3, and 4.**

Surrounding Land Uses and Setting: **Mixed Uses and Residential**

Other Public Agencies Whose Approval is Required: **None.**

POTENTIALLY SIGNIFICANT IMPACT AREAS

The following environmental impact areas have been assessed to determine their potential to be affected by the proposed project. As indicated by the checklist on the following pages, environmental topics marked with a "✓" may be adversely affected by the proposed project. An explanation relative to the determination of impacts can be found following the checklist for each area.

- | | | | |
|--|---|-------------------------------|--|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture Resources | 4 | Air Quality |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> | Energy |
| <input type="checkbox"/> Geology/Soils | 4 | Hazards & Hazardous Materials | <input type="checkbox"/> Hydrology/
Water Quality |
| <input type="checkbox"/> Land Use/Planning | <input type="checkbox"/> Mineral Resources | <input type="checkbox"/> | Noise |
| <input type="checkbox"/> Population/Housing | <input type="checkbox"/> Public Services | <input type="checkbox"/> | Recreation |
| <input type="checkbox"/> Solid/Hazardous Waste | <input type="checkbox"/> Transportation/
Traffic | 4 | Mandatory Findings of Significance |

DETERMINATION

On the basis of this initial evaluation:

- I find the proposed project COULD NOT have a significant effect on the environment, and that a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be significant effects in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect(s) on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a "potentially significant impact" on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Date: _____

Signature: _____

Steve Smith, Ph.D.
Program Supervisor

ENVIRONMENTAL CHECKLIST AND DISCUSSION

	Potentially Significant Impact	Less Than Significant Impact	No Impact
I. AESTHETICS. Would the project:			
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Checklist Response Explanation: This section explains each answer checked above, and discusses potentially significant effects and project requirements or measures to substantially reduce or eliminate them.

a,b,c) Construction activities are not expected to adversely impact views and aesthetics since the heavy equipment and activities would occur in the center portion of the Generating Station and would not be visible to areas outside the Generating Station. The majority of construction equipment is low in height and would not be visible to the surrounding area due to the presence of fencing and structures that buffer views of the Generating Station.

The proposed project would introduce a minor visual change to the Generating Station. The appearance of the modified units would not differ substantially from the other SCR units at the Generating Station. Also, the facility has walls, fencing and landscaping that partially obstruct the view of the facility from its perimeter. Also, no scenic highways or corridors are located in the vicinity of the Generating Station.

d) Lighting would be provided as necessary in accordance with applicable safety standards and would be consistent with existing lighting at the Generating Station. Additional lighting may be provided on new structures associated with the proposed project. The new lights would not be expected to create light and glare impacts to areas adjacent to the Generating Station due to their central location within the

existing industrial facility, which would be partially obstructed by other units, equipment and perimeter fence.

Conclusions: No significant impacts on aesthetics are expected from the proposed project and aesthetics will not be evaluated in the draft EIR.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
II. AGRICULTURE RESOURCES. Would the project:			
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Checklist Response Explanation: This section explains each answer checked above, and discusses potentially significant effects and project requirements or measures to substantially reduce or eliminate them.

a,b,c) All proposed modifications would occur within the extent of the existing Generating Station. The project would be consistent with the zoning for the Generating Station and there are no agricultural resources or operations on or near the project site. The proposed project does not conflict with a Williamson Act contract and, since the proposed project occurs entirely within the boundaries of the existing facility, would not involve conversion of farmland to non-agricultural use.

Conclusions: No significant impacts on agriculture resources are expected from the proposed project and these resources will not be evaluated in the draft EIR.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
III. AIR QUALITY. Would the project:			
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute to an existing or projected air quality violation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Diminish an existing air quality rule or future compliance requirement resulting in a significant increase in air pollutant(s)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Checklist Response Explanation: This section explains each answer checked above, and discusses potentially significant effects and project requirements or measures to substantially reduce or eliminate them.

- a) The installation of the SCR systems would allow the facility to implement emission reductions that are necessary to achieve compliance with the SCAQMD RECLAIM program and the associated applicable air quality plan. The RECLAIM program resulted in the determination of site-specific emission allocation caps that decline on an annual basis through the year 2003, in order to achieve the emissions reduction goals of RECLAIM. In recent years, it has become increasingly more difficult for the facility to stay below the cap without installing control equipment or significantly curtailing operations. The installation of the SCRs would reduce facility NO_x emissions by more than 90 percent and facilitate compliance with the facility's RECLAIM Allocation.

- b) The proposed project would not violate any air quality standard or contribute to an existing or projected air quality violation. The proposed project consists of installing control equipment on utility boilers to reduce NO_x emissions compared to the existing emissions. The proposed project is expected to help facilitate attaining and maintaining the state and federal NO₂ and ozone ambient air quality standards.

There is a potential for a slight increase in the secondary formation of particulate emissions resulting from the use of ammonia in the SCR, in the presence of sulfur compounds. Sulfur compounds are contained in small quantities in natural gas. While most of the fuel sulfur is converted to SO₂, approximately 1.5 percent is converted to SO₃ in the presence of the SCR catalyst. In the presence of water in the exhaust, SO₃ reacts with ammonia to form ammonium sulfate and ammonia bisulfate, which is a very fine solid that meets the SCAQMD definition of a noncondensable PM₁₀. Public Utility Commission-grade low sulfur natural gas contains no more than 0.75 grains/ 100 standard cubic feet of gas (roughly equivalent to 10 parts per million (ppm)). Since only a fraction of the sulfur will contribute to the formation of particulate, insignificant quantities of particulate will form as a result of the installation of the SCR system.

Some of the ammonia that is used in the SCR will pass through unreacted with NO_x or sulfur. This is referred to as “ammonia slip.” There are no established air quality standards for ammonia, but permit conditions will be included in the permits obtained from the SCAQMD that will limit ammonia slip emissions. There are potential health concerns and this is discussed in item d), below.

The potential for construction-related impacts may result in potentially significant impacts and will be discussed in the draft EIR.

- c) The proposed project emission reductions are expected to improve overall air quality in the Basin by enhancing the probability of attaining and maintaining state and federal NO₂ and ozone standards. It is anticipated that the SCAQMD will restrict ammonia slip to less than 10 ppm as a condition of the SCR project Authority to Construct and Permit to Operate. The cumulative secondary impacts associated with the ammonia slip and particulate emissions are expected to be insignificant.
- d) Sensitive receptors would be exposed to less NO_x and ozone concentrations as a result of the project. Exposure to secondary particulates may be increased slightly, but is anticipated to be less than significant. To assess the impacts from ammonia slip, a cumulative health risk assessment has been performed for the combined ammonia emissions from all four proposed SCR units. Ammonia is not a carcinogen, but can have chronic and acute impacts. The health risk analysis was performed following conservative California Air Pollution Control Officer Association (CAPCOA) guidelines. The results indicate a hazard index of less than one and therefore sensitive receptors would not be exposed to substantial pollution concentrations. Insignificant impacts are anticipated at an ammonia slip of less than

10 ppm. This issue will be addressed in full detail, including a more thorough description of the modeling assumption, in the draft EIR.

Substantial pollution concentrations could occur in the event of a spill or accident of ammonia during storage or transport. Use of aqueous ammonia, as opposed to anhydrous, would considerably reduce the potential risk. A risk management plan will be prepared as part of the draft EIR to determine the extent of potential exposure.

- e) The proposed project would not create objectionable odors. According to dispersion estimates (Eschenroeder, et al 1988), the buoyancy of ammonia and its dilution into the atmosphere (Benchley and Athey, 1981) would reduce the annual one-hour maximum ground concentration to less than one ppm based on an ammonia slip of 10 ppm. A concentration of one ppm is well below the odor detection maximum limit. This conclusion is similar to the conclusions presented in the previous EIRs (SCAQMD, 1993a,b) prepared for SCR projects at this facility.
- f) The proposed project would not diminish an existing air quality rule or future compliance requirement resulting in a significant increase in air pollutants. The proposed project is being undertaken to comply with Regulation XX annual allocation requirements to reduce NO_x emissions. There would be insignificant increases in secondary particulate emitted as gaseous ammonia. Ammonia emission will be minimal, approximately 10 ppm per unit, and must comply with relevant SCAQMD permit condition requirements.

Conclusions: The air quality impacts associated with the construction and operation of the proposed project may result in potentially significant air quality impacts and would be analyzed in the draft EIR, as described above.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES. Would the project:			
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- | | | | | |
|----|--|--------------------------|--------------------------|-------------------------------------|
| b) | Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) | Have a substantial adverse effect on federally protected wetlands as defined by §404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) | Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) | Conflicting with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) | Conflict with the provisions of an adopted Habitat Conservation plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Checklist Response Explanation: This section explains each answer checked above, and discusses potentially significant effects and project requirements or measures to substantially reduce or eliminate them.

- a-f) The proposed project would be located within the boundaries of an existing and operating power generation station. Past development of the Generating Station virtually eliminated all natural habitat within the Generating Station property boundaries. The project site is located on and surrounded by impervious surface within an operating generating station and, therefore, would not impact species of rare, threatened, or endangered plants or animals located in the immediate vicinity. The project site is not located on or immediately adjacent to wetland habitat, would not create any barriers to the movements of animals, and would not conflict with any habitat conservation plan.

Conclusions: The construction and operation of the proposed project is not expected to have significant impacts to biological resources since no native habitat and no species of rare,

threatened, or endangered plants or animals are located within the confines of the Generating Station boundaries. Biological resources will not be evaluated in the draft EIR.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES. Would the project:			
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of a archaeological resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries.?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Checklist Response Explanation: This section explains each answer checked above, and discusses potentially significant effects and project requirements or measures to substantially reduce or eliminate them.

- a,b,c) Cut and fill operations associated with large earthwork projects would not be necessary for installation of the proposed SCR project. All construction work would occur at an existing disturbed, graded and paved facility. No paleontological resources were uncovered during the installation of SCR on Units 5 and 6.
- d) There are no known human remains or cemeteries within the vicinity of the Generating Station.

Conclusions: No significant impacts on cultural resources are expected from the proposed project and these resources will not be evaluated in the draft EIR.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
VI. ENERGY. Would the project:			
a) Conflict with adopted energy conservation plans?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the need for new or substantially altered power or natural gas utility systems?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Create any significant effects on local or regional energy supplies and on requirements for additional energy?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create any significant effects on peak and base period demands for electricity and other forms of energy?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Comply with existing energy standards?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Checklist Response Explanation: This section explains each answer checked above, and discusses potentially significant effects and project requirements or measures to substantially reduce or eliminate them.

- a, e) The proposed project would not be subject to, nor conflict with, any existing energy conservation plans or energy standards. Additionally, project construction and operation activities would not utilize non-renewable resources in a wasteful or inefficient manner.
- b) No natural gas is necessary for the construction or operation of the proposed SCR project. Therefore, there would be no need for the alteration or creation of natural gas utility systems.

Electrical power may be required for certain construction equipment for approximately 4 months. Due to the variation of equipment used and duration of use during that time, it is not feasible to quantify construction-related electrical use. Electric construction equipment operates at a more efficient and quieter level than comparable diesel equipment. Refer to Section XII, Noise, for a discussion of the benefits of using electric versus diesel construction equipment. The short duration of construction-related energy use would not require the existing power system to be altered. Refer to item c) below regarding the electrical use for the operation of SCR.

The proposed project may increase energy demand because SCR has some level of fuel energy penalty, thus requiring more fuel for a given level of energy generated. SCR may also require small amounts of energy for its operation, including

operation of NO_x emission monitors. As concluded in the two previous SCR installation EIRs for this site, the electrical requirements are not considered to be significant.

- c) Incremental gasoline and diesel usage would occur during construction activities. The maximum consumption of diesel would be approximately 200 gallons per week for operation of a forklift and crane. The use of gasoline (approximately 50 gallons or less a week) and diesel in small quantities for a limited duration (approximately four months) would not create a significant effect on local or regional gasoline and diesel supplies.

The California Independent System Operation (Cal-ISO) manages the delivery of electricity throughout California and between neighboring states and Mexico (Cal-ISO, 2000). The power grid delivers 164 billion-kilowatt (kW) hours of electricity each year. The proposed SCR units would require approximately 46 kW/unit (Units 1 and 2) and 76 kW/unit (Units 3 and 4). This amount of energy used for the proposed SCR system would be insignificant compared to the energy available on the grid. Therefore, the proposed energy use for construction and operation of the proposed project would not have a significant effect on local or regional energy supplies or require additional energy.

- d) Peak electricity demand measures the highest instantaneous consumption of electricity integrated over an hour of time during the calendar year. Coincident peak electricity demand estimates for the planning areas within the SCAQMD's jurisdiction are expected to increase approximately 1.2 percent per year, from 24,116 megawatt (MW) in 1997 to 27,109 MW in 2007 (1998 Baseline Energy Outlook, CEC 1998). The construction of the proposed project would not significantly affect the peak and base demands for energy because of the facility's coordination of outage work with the Cal-ISO and the limited duration of construction (approximately 4 months).

The contribution of approximately 1,000 MW to the power grid by Units 1, 2, 3, and 4 during peak and base period demands for electricity outweigh the energy penalty associated with the operation of the SCR units. Refer to item c) above for a discussion of SCR energy use per unit.

Therefore, the construction and operation of the proposed project would not have a significantly effect on peak and base period demands for electricity and other forms of energy.

Conclusion: No significant impacts to energy resources are expected from the construction/operation of the proposed project. In addition, the impacts associated with the proposed project on other utilities are expected to be less than significant. Therefore, potential energy impacts will not be evaluated in the draft EIR.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
VII. GEOLOGY AND SOILS. Would the project:			
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:			
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. Strong seismic ground shaking?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Checklist Response Explanation: This section explains each answer checked above, and discusses potentially significant effects and project requirements or measures to substantially reduce or eliminate them.

- a) The Los Angeles area is considered a seismically active region with a number of earthquake faults. However, faults identified by the State Geologist as being either active or potentially active are not known to be present on-site. In addition, the site is not located within a State of California designated Earthquake Fault Zone, where a site specific fault investigation would be required. Construction of the proposed

project at the site would subject these facilities to potentially damaging seismic ground shaking from earthquakes on nearby faults. However, the proposed storage tank foundations have been designed by The Industrial Company (TIC) in accordance with the 1997 Uniform Building Code standards for seismic design.

- i. Surface faulting at the site is considered unlikely, according to the *Report of Geotechnical Engineering Study, AES Alamitos Generation Plan Catalytic Converter Installation, Units 3 and 4* (Kleinfelder, 2000).
 - ii. Strong seismic ground shaking may occur on the site due to earthquakes on nearby faults. However, the proposed tanks and piping would be supported and anchored in accordance with seismic design requirements of the 1997 Uniform Building Code.
 - iii. Seismic related ground failure, including liquefaction is addressed in Section VII.c, below.
 - iv. Landslides do not impose a significant impact on the site due to the flat-lying nature of the site.
- b) During construction of the project, the possibility exists for temporary erosion resulting from excavation and grading activities. However, site grading would be extremely limited and soil erosion or the loss of topsoil will be relatively low due to the relatively flat site, and the fact that the site is paved with asphalt concrete. No unstable earth conditions or changes in geologic substructures are expected from the project.
- c) Seismically-induced soil liquefaction is a phenomenon in which loose to medium dense saturated granular materials develop high pore water pressures and lose shear strength due to cyclic ground vibrations induced through earthquakes. Although the project site is located in an area previously mapped to have a significant liquefaction potential (City of Long Beach, 1988), site-specific geotechnical investigation revealed that the soils underlying this site are not conducive to liquefaction. The exploratory borings performed at this site (Kleinfelder, 2000) indicate that the soils are silts and clays to depths of 20 to 25 feet below the existing ground surface. The underlying soils are dense to very dense silty sands and poorly graded sands. Silts and clays and dense sands are not subject to soil liquefaction. The potential for liquefaction at this site is low. The site is not in an area subject to subsidence or collapse, and lateral spreading and landslides impose no significant impact due to the nature of the relatively flat-lying site. No significant impacts are expected from the proposed project due to landslides, soil liquefaction, lateral spreading, or subsidence.
- d) Expansive soils are earth materials with a high percentage of expandable clay materials. These soils can change their volume depending upon water content; they increase in volume when they absorb water and decrease in volume as they dry out. Expansive soils located beneath building foundations can experience volumetric

changes and affect the integrity of support structures. Near surface soils at the site are reported to have a high potential for expansion, as defined in Table 18-1-B of the Uniform Building Code. However, the soils encountered in the borings performed at the site (Kleinfelder, 2000) did not appear to be highly expansive. Two of the three proposed storage tanks would be supported on existing cement pads with pile foundations. The impact of expansive soils supported by structures founded on piles is negligible. The third storage tank would be supported on a mat foundation that has been designed for expansive soils. Therefore, the risks associated with expansive soils have been reduced to less than significant.

- e) The AES Alamitos Generating Station has existing wastewater management systems that would continue to handle wastewater produced at the plant. The proposed project would not impact existing septic systems at the plant. Therefore, the proposed project would not adversely affect soils associated with a septic system or any other alternative wastewater disposal system.

Conclusions: The potential seismic and soils impacts of the proposed project are expected to be less than significant. Therefore, these issues will not be evaluated in the draft EIR.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
VIII. HAZARDS AND HAZARDOUS MATERIALS. Would the project:			
a) Create a significant hazard to the public or the environment through the routine transport, use, disposal of hazardous materials?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions, or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- | | | | |
|--|--------------------------|-------------------------------------|-------------------------------------|
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| i) Significantly increase fire hazard in areas with flammable materials? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Checklist Response Explanation: This section explains each answer checked above, and discusses potentially significant effects and project requirements or measures to substantially reduce or eliminate them.

- a) The proposed SCR air pollution control systems require ammonia to react with NO_x in the exhaust gases to reduce NO_x emissions. The ammonia would be delivered to the facility mixed with water at a concentration of 29.4 percent. Deliveries of the aqueous ammonia solution would be made to the facility by tanker truck traveling on public roads. Trucking of aqueous ammonia is regulated for safety by the U.S. Department of Transportation and California Department of Transportation. The potential risks associated with the transport of aqueous ammonia would be analyzed in the draft EIR.
- b) The proposed SCR systems require the onsite storage of ammonia. The ammonia would be in aqueous solution at a concentration of 29.4 percent. Aqueous ammonia at concentrations greater than 20 percent is considered a regulated toxic substance under federal Risk Management Program requirements (Title 40 of the Code of Federal Regulations, Part 68). This aqueous ammonia is also considered a regulated substance under California Office of Emergency Services (OES) regulations implementing California Accidental Release Program (CalARP) requirements (California Health and Safety Code Section 2770.1). Therefore, the proposed project would be required to submit a risk management plan (RMP) to the

EPA under federal regulations, and also to the City of Long Beach Department of Health and Human Services under the CalARP regulations. Compliance with EPA and CalARP requirements would need to be achieved prior to operation of the new SCR units. The RMP for the proposed new SCR units would need to include an offsite consequence analysis (OCA) for the worst-case accidental release of ammonia from proposed expanded use at the facility, as well as compliance with hazards and process safety review, training and maintenance, and facility emergency response program requirements. The potential risks associated with storage of aqueous ammonia for the proposed project will be analyzed in the draft EIR.

- c) The existing facility is not within one-quarter mile of a school or proposed school. The existing and proposed aqueous ammonia transport route does occur within one-quarter mile of a school. These schools are adjacent to the freeways that the trucker travels. However, aqueous ammonia would not be transported during school hours and therefore, the potential risk would be less than significant. The risk of aqueous ammonia transport, in general, will be evaluated in the draft EIR.
- d) The project would be located on the property of the existing power plant. The existing power plant is not on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 because the facility is not a large-quantity generator of hazardous waste. Therefore, significant hazards associated with disposal of hazardous waste are not anticipated and will not be analyzed in the draft EIR.
- e, f) The project would be located on the existing power plant property and is not within two miles of an airport. The project would not be located near a private airstrip. Therefore, it is not anticipated that the proposed project would interfere with any airport activities. This potential impact will not be further addressed in the draft EIR.
- g) The project would be located on the property of an existing power plant. Procedures for emergency response are provided to all AES employees along with training guidelines in the use of personal protection equipment. An amended emergency response plan would be prepared and submitted in the required updated RMP to address the new ammonia storage and handling facilities. All construction and operation personnel associated with the proposed project would receive safety training in accordance with AES procedures and guidelines. Therefore, it is not expected that the proposed project would interfere with any existing emergency evacuation plans. Based upon the above considerations, this impact issue will not be further analyzed in the draft EIR.
- h) The project would not increase the risk of additional loss, injury or death involving wildland fires, as the project would be constructed within an existing industrial plant and would meet all relevant fire codes. Therefore, this issue will not be evaluated in the draft EIR.

- i) Implementation of the proposed project would not significantly increase the fire hazard at the Generating Station because the implementation of SCR would not increase the amount of flammable materials or provide new ignition sources. During construction, fuels would be temporarily stored in small quantities (one 50-gallon gasoline tank and one 500-gallon diesel tank) at the facility. The gasoline tank would be a pickup truck-mounted, metal auxiliary tank. The diesel tank would be contained within galvanized steel and located on an impervious surface, more than 200 yards from construction and operation activities and structures. Therefore, the project would not significantly increase fire hazard in areas with flammable materials. Fire hazards will not be evaluated in the draft EIR.

Conclusions: The proposed project may have potentially significant hazards and hazardous materials impacts that will be analyzed in the draft EIR, as described above.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
IX. HYDROLOGY AND WATER QUALITY.			
Would the project:			
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g. the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- or Flood Insurance Rate Map or other flood hazard delineation map?
- h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?
 - i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?
 - j) Inundation by seiche, tsunami, or mudflow?
 - k) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?
 - l) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?
 - m) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?
 - n) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?
 - o) Require in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Checklist Response Explanation: This section explains each answer checked above, and discusses potentially significant effects and project requirements or measures to substantially reduce or eliminate them.

- a,f) Accidental spills of aqueous ammonia could occur either from the operation of the SCR system, from piping that transfers ammonia from the storage tanks to the vaporizers, from the unloading operation or from the truck during transport. In the

event of such a spill, a pool of ammonia solution may form on the ground. Potential water quality impacts would occur if the ammonia were washed into the storm drains.

As part of the proposed project, AES would install ammonia vapor detectors with audible and visual (light) notification in the vicinity of the SCR systems and the storage tanks. Thus, it is reasonable to assume that any leak onsite would be detected quickly and signaled to the plant operators in the control room. In response to an ammonia vapor alarm, the operators would shut down the ammonia feed supply to prevent excessive ammonia from being spilled.

AES Alamos Generating Station's *Hazardous Materials Release Contingency Plan* would be updated to reflect the proposed additional storage of aqueous ammonia at the facility. The purpose of the plan is to specify how station personnel would respond to any unplanned release of hazardous materials into the air, soil or surface water. This response includes notifying the proper authorities of the release, controlling and cleaning up the release and restoring the environment as required. The plan identifies sources of hazardous material, responsibilities of employees during a response, a step-by-step plan of how to respond to a release, who to contact, how to contain and remove hazardous material released, restoration of the environment, and creation of an operating record of the incident. The plan also includes maps of the locations of all hazardous materials at the facility.

Though the probability of an ammonia release during transport is extremely small, in the unlikely event that aqueous ammonia enters a storm water drainage system it is anticipated that the solution would be further diluted and broken down prior to reaching the storm drain outfall. In the event of an accidental spill of hazardous material that enters into a storm drain, the Los Angeles County Department of Public Works notifies one of its vendors located throughout the county. The vendors are specialists in containment, neutralization/collection and disposal of hazardous materials. For further discussion of the potential risks associated with aqueous ammonia transport, refer to Section VII, Hazards and Hazardous Materials.

Spill response and clean-up procedures and detection systems should ensure that potential water quality impacts are insignificant. For a discussion of potential public health hazards associated with an accidental release of ammonia during transport, please refer to Section VII, items a) and b).

- b) The proposed project would not utilize groundwater supplies. Also, the project would not substantially reduce ground water recharge at the facility because the project would be located on existing impermeable surfaces. Therefore, the project would neither substantially deplete ground water supplies nor reduce ground water discharge. Therefore, this impact will not be further analyzed in the draft EIR.

- c,d) The installation of the new exposed structure (i.e., containment walls) within the existing paved 165-acre Generating Station would not significantly alter the

- existing drainage pattern or substantially alter the rate or amount of runoff and erosion. Therefore, this impact will not be further analyzed in the draft EIR.
- e,m) The installation of the new exposed structure (containment wall for storage tanks) represents a small area at the existing, 165-acre Generating Station. This structure would not alter the existing drainage pattern nor create runoff or stormwater flows that would exceed existing capacity at the site. As a result, this potential impact will not be further analyzed in the draft EIR.
- g,h,i) The Generating Station is within a Federal Emergency Management Agency (FEMA)-designated 100-year flood zone (Zone A) (Ortega, 2000). However, the proposed structures (three bermed storage tanks) are not residential and would not impede or redirect flow within the 100-year flood plain. The proposed project is within an existing Generating Station and would not require any new employees and, therefore, would not increase the risk of loss, injury or involving flooding. Therefore, this impact will not be further analyzed in the draft EIR.
- j) The City of Long Beach Seismic Safety Element (1988) does not map the site within a tsunami or seiche influence area. Also, due to the site's proximity from any large bodies of impounded water, and according to the County of Los Angeles Safety Element, seiches and tsunamis would not be considered a potential hazard at the facility (Kleinfelder, 2000). Therefore, this impact will not be further analyzed in the draft EIR.
- k,o) No wastewater discharge would be associated with the proposed SCR systems. All byproducts of SCR operation go up the stack. Therefore, no wastewater demand would occur on the Los Angeles County Sanitation District (wastewater treatment provider) for the proposed project. Also, no Regional Water Quality Control Board wastewater treatment requirements would be exceeded. The project would not require modifications to the existing wastewater discharge permit. Therefore, this impact will not be further analyzed in the draft EIR.
- l,n) No wastewater discharge would be associated with the proposed project. The construction of the SCR units would require approximately 150 gallons per week for 24 weeks. This temporary water use would be for construction workers to wash up in a temporary wash basin. No water would be used for dust suppression during construction because construction would occur on impervious surfaces and extremely limited to no grading would occur. No water consumption is necessary for the implementation and operation of SCR at this facility. The increased amount of water demand at the facility is less than the SCAQMD significance criteria of 5,000,000 gallons per day and would not require construction of new water conveyance infrastructure. Therefore, the proposed project would not have a significant impact on water supply or infrastructure and these impacts will not be further addressed in the draft EIR.

Conclusions: The proposed project would not result in significant water or wastewater quality impacts. These water-related impacts will not be evaluated in the draft EIR.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
X. LAND USE AND PLANNING. Would the project:			
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Checklist Response Explanation: This section explains each answer checked above, and discusses potentially significant effects and project requirements or measures to substantially reduce or eliminate them.

- a) The project site is located in an existing power generation facility and would not disrupt or divide an established community. No new property would be acquired by the project proponent so no other potential adverse impacts to established communities are anticipated. Therefore, this topic will not be further analyzed in the draft EIR.

- b,c) The project would be consistent with the zoning for the Generating Station (PD-1) and with the Mixed Uses (7) land use designation within the Long Beach General Plan (City of Long Beach, 1992). The Generating Station is located within the Southeast Area Development Improvement Plan (SEADIP) Planning Area (City of Long Beach), Subarea 19. This subarea is fully developed by the existing permitted industrial uses, i.e.; Alamitos and adjacent Generation Stations (City of Long Beach, 1999). The City of Long Beach has determined that no discretionary permits (i.e. Conditional Use Permit) would be required for the proposed action (Bihn, 2000). The Alamitos Generating Station is not located within the Coastal Zone, as defined by the California Coastal Act (City of Long Beach, 1980).

Conclusion: No impacts are expected from the proposed project on land use or planning and therefore such impacts will not be analyzed in the draft EIR.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
XI. MINERAL RESOURCES. Would the project:			
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Checklist Response Explanation: This section explains each answer checked above, and discusses potentially significant effects and project requirements or measures to substantially reduce or eliminate them.

- a, b) The proposed project would be constructed and implemented within an existing, developed and paved Generating Station. Therefore, the availability of regionally or locally important mineral resources would not be altered by the proposed project.

Conclusion: No significant impacts to mineral resources are expected from the construction and operation of the proposed project and therefore such impacts will not be analyzed in the draft EIR.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
XII. NOISE. Would the project result in:			
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

ambient noise levels in the project vicinity above levels existing without the project?

- | | | | | |
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| e) | For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) | For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Checklist Response Explanation: This section explains each answer checked above, and discusses potentially significant effects and project requirements or measures to substantially reduce or eliminate them.

a,b,c,d) Onsite noise energy and sound/vibration character is almost entirely determined by the equipment presently operating at the facility, project-related construction activities are expected to be encompassed in the ambient noise levels (SCAQMD, 1993b). Though there may occur impulsive or short-period noise at higher levels, the ambient noise characteristic of the facility would not further degrade as a result of the occasional noise peaks produced during construction. AES has mitigated potential construction noise impacts by using electric tools and welding machines (approximately 70-75 decibels) versus air or diesel tools (90-100 decibels). The temporary construction equipment noise would not exceed 90 decibels and thus, would not create a significant impact. Therefore, construction-related noise activities are expected to be insignificant.

Noise from the proposed project could affect the neighboring community. However, AES' current operations have noise impacts that have been mitigated by the use of sound enclosures on existing equipment. For example, Units 5 and 6 have blower equipment that is enclosed within a custom designed insulation shield. AES would incorporate effective noise control methods for the proposed project. For example, the hot gas dilution blowers (four 100-hp/3,600 rpm) used to move the dilution media would be externally insulated for thermal and audible protection. Also, SCR equipment for Units 1 and 2 would be housed within a building, acting as a noise suppression measure. SCR equipment on Units 3 and 4 would be installed on the exterior. However, these units are located in the central portion of the 165-acre generating station and approximately one-half mile from the street and potential noise receptors. The existing noise reduction measures within the generating station, proposed noise reduction measures, and proximity of the units to

the property boundary and noise receptors reduce the potential noise impacts related to SCR operation to less than significant.

- e,f) The proposed project is not located within an airport land use plan, in the vicinity of a private airstrip and therefore, would not expose people in the project area to excessive noise levels (City of Long Beach, 1975a).

Conclusion: The noise impacts associated with the construction and implementation of the proposed project are less than significant and thus will not be evaluated in the draft EIR.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
XIII. POPULATION AND HOUSING. Would the project:			
a) Induce substantial growth in an area either directly (for example, by proposing new homes and businesses) or indirectly (e.g. through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Checklist Response Explanation: This section explains each answer checked above, and discusses potentially significant effects and project requirements or measures to substantially reduce or eliminate them.

- a,b,c) Construction activities at the Generating Station would not involve the relocation of individuals, impact housing or commercial facilities, or change the distribution of the population because the proposed project would occur within an existing industrial facility site. The construction work force, which is temporary, is expected to come from the existing labor pool in the southern California area. Additionally, the project operation would not require any new permanent employees. Since all potential impacts would occur at an existing industrial facility, displacement of housing of any type is not anticipated. Therefore, construction and operation of the proposed project is not expected to have a significant impact on population or housing.

Conclusion: No significant impacts on population and housing are expected due to the proposed project and therefore such impacts will not be analyzed in the draft EIR.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
XIV. PUBLIC SERVICES. Would the proposal result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:			
a) Fire protection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Police protection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Checklist Response Explanation: This section explains each answer checked above, and discusses potentially significant effects and project requirements or measures to substantially reduce or eliminate them.

- a, b) The role of fire departments in relationship to the proposed project is focused on response to emergency situations. Construction activities are not expected to result in an increased need for fire response services and compliance with state and local fire codes is expected to minimize the need for additional fire protection services. The proposed project would include requirements for fire protection services that are available from existing services.

The City of Long Beach provides fire and emergency services within its boundaries as a municipal service. Fire and emergency services are coordinated by the Long Beach Fire Department (Fire Department). The Fire Department has 24 stations within the city limits, with the closest to AES Alamitos Generating Station located at 6340 Atherton Street. Response time for an emergency at the facility would be very short, within one mile of the Generating Station.

The Fire Department is well equipped and trained for responding to and dealing with fires, paramedic rescues, and certain limited types of hazardous materials incidents. In the event that an incident exceeds the scope of the Fire Department's capabilities, Long Beach typically contacts the Los Angeles County Hazardous

Materials unit for emergency assistance. Backup is also provided by surrounding municipalities on the basis of reciprocal agreements.

The Fire Department serves a vital role in information transfer from one emergency response unit to others (e.g., fire, police, California Highway Patrol (CHP), private emergency service or equipment providers, etc.), both prior to and after an accidental release. Emergency response plans and evacuation routes are coordinated by the Fire Department, with development and review of such plans and routes supported by all of the public services involved.

Involvement of Fire Department personnel during a significant hazardous materials incident is typically kept to a minimum, unless abatement of the hazards can be accomplished without harmful exposure to fire personnel. Specialized emergency response functions would be made by properly equipped and trained private contractors and/or public agencies such as county or state hazardous materials units. As stated above, Long Beach requests assistance from the Los Angeles County Fire Department Hazardous Materials Unit for emergency response during hazardous materials incidents beyond the Fire Department's control. Since acquisition and maintenance of emergency equipment for hazardous materials would require considerable financial and administrative resources, the Fire Department is not expected or required to change its policy of contracting out additional control and cleanup services. Indeed, if given timely notification, many agencies with responsibilities associated with hazardous materials can respond, provide assistance, enforce laws, and provide funding.

The role of police departments in relationship to the proposed project is focused on response to emergency situations. The Long Beach Police Department (Police Department) is responsible for perimeter and entry control at the scene of a hazardous materials accident. The Police Department also shares responsibility with the Fire Department for security within the perimeter. In the event of a major hazardous materials incident (or any other major emergency), it is primarily the responsibility of the Police Department to implement evacuation procedures should they be necessary.

The Police Department has a designated person that works closely with the Fire Department, especially on hazardous materials incidents. Backup support, if it should prove necessary, would be supplied by the police departments of surrounding municipalities and the Los Angeles County Sheriff's Department.

Since aqueous ammonia is already transported to the Generating Station on a monthly basis (approximately 10 trips per month at peak capacity), the impacts associated with this project are those that may occur due to the incremental increase in the quantity supplied to the site. The installation of the proposed storage tanks would require approximately 24 additional truck trips per month at peak capacity. Please refer to Section VIII., "Hazards and Hazardous Materials" for a more complete discussion of the potential risks associated with aqueous ammonia

transport and storage. However, a worst-case scenario (one storage tank or tanker truck leaking all aqueous ammonia at one time) would require the same level of emergency response as the current spill response plan created during the installation of SCR on Units 5 and 6 (SCAQMD, 1993b). Therefore, the proposed project would not result in significant impacts to police and fire services.

- c) Construction activities at the Generating Station would not involve the relocation of individuals, impact housing or change the distribution of the population. No significant increase in the number of permanent workers is expected as part of the proposed project. Thus, the proposed project would not alter existing, or require additional schools.
- d,e) There would be no increase in the number of AES employees due to implementation of the proposed project. Therefore, this project would not affect the demand for additional parks, maintenance of public facilities, nor would it create an increase in demand for additional public facilities.

Conclusions: Less than significant impacts on public services are expected due to the proposed project and therefore such impacts will not be analyzed in the draft EIR.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
XV. RECREATION.			
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Checklist Response Explanation: This section explains each answer checked above, and discusses potentially significant effects and project requirements or measures to substantially reduce or eliminate them.

- a) The proposed project would not increase the demand for neighborhood or regional parks, or other recreational facilities in the area since the project is not expected to increase the local population. The proposed project would be implemented within

the existing Generating Station and thus would not adversely affect existing recreational opportunities.

- b) The proposed project would not include new recreational facilities or require expansion of existing recreational facilities since no increase in local population is expected.

Conclusions: No significant impacts on recreation are expected from the proposed project and therefore such impacts will not be analyzed in the draft EIR.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
XVI. SOLID/HAZARDOUS WASTE. Would the project:			
a) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Comply with federal, state, and local statutes and regulations related to solid and hazardous waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Checklist Response Explanation: This section explains each answer checked above, and discusses potentially significant effects and project requirements or measures to substantially reduce or eliminate them.

- a) Construction activities, such as demolition, may generate a short-term increase in additional solid waste generated at the site. In addition, for SCR to reduce NO_x to molecular nitrogen, the reduction reaction must occur in the presence of a catalyst. This catalyst must be replaced approximately every three years. The spent catalyst would be recycled by the manufacturer, Mitsubishi Heavy Industries America (MHIA). Therefore, the proposed project would not significantly contribute solid waste to a landfill.
- b) The Generating Station currently complies, and the proposed project would continue to comply, with federal, state, and local regulations related to solid and hazardous wastes. No hazardous wastes would result from the normal operation of the SCR unit. However, at the end of the catalyst's useful life (three years), the catalyst modules themselves are considered hazardous waste due to the metal content of the ceramic substrate. After exhaustion of the catalyst, the modules would be disposed according to federal, state and local regulations, offsite and in an appropriate disposal facility by the catalyst manufacturer, MHIA.

Conclusions: Potential impacts on solid and hazardous waste from SCR catalyst disposal are expected to be less than significant and therefore such impacts will not be analyzed in the draft EIR.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
XVII. TRANSPORTATION/TRAFFIC. Would the project:			
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access or access to nearby uses?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Result in inadequate parking capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g. bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Checklist Response Explanation: This section explains each answer checked above, and discusses potentially significant effects and project requirements or measures to substantially reduce or eliminate them.

- a,b) The proposed project, during the construction phase (approximately four months), would temporarily increase the traffic in the area associated with construction workers, construction equipment, and the delivery of construction materials. Major arteries would be used to transport materials and construction workers to the site. The 24-hour traffic count for Studebaker Road, the major access road to the facility, is 39,220 (Armstrong, 2000). The maximum number of trips during peak construction, approximately 13 weeks, would be 140 trips. The remaining construction period would have an average construction flow of 67 trips, with a maximum of 107. The temporary increase of construction traffic along Studebaker Road represents a 0.4 percent increase, significantly below the SCAQMD's significance criteria of an increase of the volume to capacity ratio of two percent or more. The additional aqueous ammonia deliveries (24 per month) during operation would also be a less than two percent increase of trips to Studebaker Road. Therefore, this issue will not be evaluated in the draft EIR.
- c) The proposed project is not within the vicinity of a public or private airport and would not alter the existing air traffic patterns.
- d,g) The proposed project would be constructed and implemented within an existing Generating Station that utilizes aqueous ammonia and SCR technology. The proposed project would not substantially increase hazards due to a design feature or incompatible use nor conflict with adopted policies, plans or programs supporting alternative transportation.
- e,f) The proposed project would be constructed and implemented within an existing Generating Station and would not alter the existing emergency access nor result in inadequate parking capacity.

Conclusions: The impacts on traffic during the construction and operation phases of the proposed project would be less than significant and therefore such impacts will not be analyzed in the draft EIR.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
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XVIII. MANDATORY FINDINGS OF SIGNIFICANCE.

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|---|--------------------------|--------------------------|-------------------------------------|
| <p>a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict</p> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|-------------------------------------|

the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

- b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)
- c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?

Checklist Response Explanation: This section explains each answer checked above, and discusses potentially significant effects and project requirements or measures to substantially reduce or eliminate them.

- a) The proposed project would not be expected to reduce or eliminate any plant or animal species or destroy prehistoric records of the past. The site is part of an existing power generation plant that has been previously graded, and this project would not extend into environmentally sensitive areas.
- b) The addition of four SCR units and three aqueous ammonia storage tanks to the existing Generating Station requires an updated site-specific cumulative assessment. The cumulative impacts associated with the proposed project include Air Quality, Hazards and Hazardous Materials. These potential cumulative impacts will be analyzed in the draft EIR.

The proposed project would provide significant beneficial cumulative impacts to the regional air quality via the substantial reduction of NO_x emissions from the Alamos Generating Station to comply with Regulation XX. Some ammonia emissions would occur as part of the NO_x control process, however these emissions would be strictly regulated by SCAQMD-based limitations that restrict "ammonia slip" levels. Emissions from construction would be short term and negligible and would not contribute regionally to a degradation in air quality. Potential cumulative air quality impacts associated with increased deliveries of aqueous ammonia will be evaluated in the draft EIR.

The potential cumulative hazard impacts associated with release incidents during transportation and storage of aqueous ammonia will be evaluated in the draft EIR.

- c) The potential adverse effects on human beings, either directly or indirectly, from the transport, storage and/or use of aqueous ammonia associated with the proposed project will be analyzed in the draft EIR.

REFERENCES:

- Armstrong, Mark (Traffic and Transportation Department, City of Long Beach). 2000. Personal correspondence with K. Bartsch (URS Corp.). October 19.
- Benchley, D.L., and G.F. Athey. 1981. Assessment of Research and Development (R&D) Needs in Ammonia Safety and Environmental Control. Pacific Northwest Laboratories, Richland, WA. September.
- Bihn, Caroline (Planning Department, City of Long Beach). 2000. Personal correspondence with K. Bartsch (URS Corp.). June 30 and September 14.
- Cal-ISO. 2000. Frequently Asked Questions- The California ISO. <http://www.caiso.com/aboutus/infokit/FAQ.html>.
- City of Long Beach. 1975a. Noise Element, Long Beach General Plan, City of Long Beach, Planning Department. March 25.
- City of Long Beach. 1975b. Long Beach General Plan Program, Public Safety Element. Long Beach City Planning Department. May.
- City of Long Beach. 1980. Local Coastal Program. City of Long Beach, certified July 22, 1980.
- City of Long Beach. 1988. City of Long Beach General Plan, Seismic Safety Element. Department of Planning and Building. October.
- City of Long Beach. 1992. Land Use Element of the Long Beach General. City of Long Beach Department of Planning and Building, revised and reprinted September 1992.
- City of Long Beach. 1999. Ordinance No. C-7625: An Ordinance of the City Council of the City of Long Beach Amending Ordinance No. C-7528 Relating to the Southeast Area Development and Improvement Plan (SEADIP) PD-1). June.
- Eschenroeder, A., C. Petitio, S. Wolff, and A. Lloyd. 1988. A Preliminary Screening Study of Potential Health Risks of Selective Catalytic Reduction Systems Applied to Gas Turbine Cogeneration Plants. Alanova, Inc., Lincoln, Massachusetts. August.
- Kleinfelder, Inc. 2000. *Report of Geotechnical Engineering Study, AES Alamitos Generation Plant, Catalytic Converter Installation, Units 3 and 4*. July 17.
- Ortega, Lisa (Public Works, City of Long Beach). 2000. Personal correspondence to K. Bartsch (URS Corp.). October 19, 2000.
- SCAQMD. 1993a. *Final Subsequent Environmental Impact Report: Aqueous Ammonia Storage Tank Installation at the Alamitos Generating Station, SCH 88032315, South Coast Air Quality Management District*. March.

SCAQMD. 1993b. *Final Supplemental Environmental Impact Report: SCR System for Alamos Generating Station Unit*, SCH 88032315, South Coast Air Quality Management District. September.

SCAQMD. 1998. *Final Environmental Impact Report for: California Steel, Inc.- Construction and Operation of the No. 2 Continuous Galvanizing Line (CGL)*, SCH 98011062, South Coast Air Quality Management District. May.

Spracklen, Robert W. (Structural Engineer, S.B. Barnes Associates) 2000. Transmittal Letter to Mitsubishi Heavy Industries America, Inc.: Proposed Ammonia Tank Installation at AES Alamos, 690 N. Studebaker Road, Long Beach California.