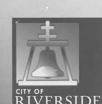
APPENDIX C

COMMENT LETTER ON THE NOP/IS AND RESPONSES TO THE COMMENTS



Public Utilities Department Administration

April 24, 2007

Via Facsimile and E-Mail (909) 396-3324 Mr. Michael Krause SCAQMD Planning/CEQA 21865 Copley Drive Diamond Bar, CA 91765

Re: Riverside Comments on IS/PEA re Proposed Amended Rule 1309.1

Dear Mr. Krause:

The City of Riverside ("Riverside") respectfully submits the following comments on the South Coast Air Quality Management District's ("SCAQMD") Notice of Preparation and Initial Study ("IS/PEA") regarding Proposed Amended Rule 1309.1 – Priority Reserve.

Riverside strongly supports the SCAQMD's goal of improving air quality in Southern California. In fact, Riverside has been a leader in renewable energy, photovoltaic (solar) power installations and conservation, and energy efficiency efforts. In fact, Riverside has more photovoltaic ("PV") energy per customer than any other electric utility in California. These PV projects have been constructed at city facilities, public swimming pools at local parks, a senior center, low-income housing, and a local mass transit station. Riverside has also constructed local office space and become a job importer, thereby reducing long commutes and the related mobile source PM generation.

Riverside appreciates the understanding of the SCAQMD staff in listening to Riverside's unique generation needs, and appreciates this opportunity to provide comments to the IS/PEA.

I. BACKGROUND ON RIVERSIDE RELIABILITY ISSUES

Riverside's population growth and significantly increased electricity usage in our area have outpaced the development of electric supply infrastructure to meet that demand. Last summer, Riverside's "peak" load (or highest hourly integrated peak) reached 586 megawatts (MW), a 6.5% increase from the prior summer. Riverside has spent over \$36 million in conservation efforts such as Energy Star programs, lighting and air conditioning change outs, and new construction, but even with substantial successful and sustainable conservation efforts, Riverside's load growth and its associated demands require additional resource development to reliably serve the City's more than 290,000 citizens in one of the fastest growing regions in the United States.

Riverside Public Utilities is Committed to the Highest Quality Water and Electric Services at the Lowest Possible Rates to Benefit the Community 3901 Orange Street • Riverside, CA 92501 • 951.826.5781 • fax 951.826.2450 • www.riversidepublicutilities.com 1-1

1-2

RIVERSIDE

PUBLIC UTILITIES

Riverside Comments Page 2 Riverside also has a short-term transmission shortage, which should be corrected by 2012, when the City anticipates completing construction of a second point of interconnection to the state grid. Riverside is currently served through one point of "interconnection" with the statewide, grid-at the Southern California Edison Company's ("SCE") Vista Substation in Grand Terrace. The maximum capacity available to the City at Vista is 560 MW, and that capacity cannot be increased since the substation is built out on the current site. Riverside's load already surpasses 560 MW during peak hours, meaning that Riverside relies upon internal generation to avoid rolling blackouts. 1 - 2In the interim, Riverside wishes to construct two 48 MW "peaker" units, designed to run less than 1200 hours per year, known as Riverside Energy Resource Center ("RERC") (Con't) Units 3 and 4. Relatively small power plants of 100 to 200 MW in generating capacity provide significant benefits to the local community, and they have been shown to have air quality and health impacts that are well below acceptable, statutorily-mandated thresholds. The combined generating capacity of the planned RERC Units 3 and 4 will be just below 100 MW, or 96 MW total. In addition, unlike "base load" units designed to run in all hours, RERC Units 3 and 4 will be "peaker" units designed to run less than 1200 hours per year. Comments on the NOI/IS Riverside is generally in agreement with SCAQMD's decision to analyze potential adverse environmental impacts associated with amending Rule 1309.1 in a Draft Program Environmental Assessment, Riverside offers the following comments to assist SCAQMD in the preparation of the DPEA: 1 - 3Definition of EGF. Riverside requests clarification and a commitment from SCAQMD that Riverside will be able to access the Priority Reserve to procure emission reduction credits ("ERC") for its proposed electrical generating facility ("EGF"). RERC 3 and 4 are 96 MW "peaking" generating facilities, which will typically be used by Riverside for internal distribution only, but which may be operated to supply power to the state-wide grid in the event of a reliability threat. The proposed Rule 1309.1 that is attached to the NOP/IS provides the following definition of an EGF: "(4) Electrical Generating Facility (EGF) Is a facility that generates electricity for its own use and is less than 10 1-4 Megawatts (MW); or is a peaker unit less than 50 MW and proposed to be operated less than 3000 hours per year; or is a facility less than 50 MW that generates not less than 30% of its electricity to pump water to maintain the integrity of the surface elevation of a municipality or significant portion thereof; or is a thermal power plant facility that generates 50 MW or greater of electricity for distribution in the state grid system (net generator)" [Rule 1309.1(b)(4)(A); emph. added] The proposed Rule 1309.1 that is attached to the April 2007 Preliminary Draft Staff Report provides the following definition of an EGF:

"(4) Electrical Generating Facility (EGF)

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Riverside Comments Page 3 Is a facility that generates electricity for its own use and is less than 10 (A) Megawatts (MW); or is a facility less than 50 MW that generates not less than 30% of its 1-4electricity to pump water to maintain the integrity of the surface elevation of a municipality or significant portion thereof; or is a thermal power plant facility that (Con't) generates 50 MW or greater of electricity for distribution in the state grid system [Rule 1309.1(b)(4)(A), emph. added.] (net generator) . . . SCAOMD staff has consistently represented that they intend, with the proposed rule change, to allow Riverside to access the priority reserve for its proposed 96 MW peaker units. Specifically, in the comment section of the Preliminary Draft Staff Report, SCAQMD indicates the following: "Comment: Does "net generator" in the definition of an EGF also include municipalities that provide power to their own customers thereby displacing demand from the state grid? Response: Yes. It has always been staff's intent that municipalities be included in the definition of EGF, and the proposed rule language has been amended to clarify this." 1-5Accordingly, Riverside requests that the proposed rule amendment either retain the definition of peaker unit, as described above, or be revised as follows: "(4) Electrical Generating Facility (EGF) Is a facility that generates electricity for its own use and is less than 10 (A) Megawatts (MW); or is a facility less than 50 MW that generates not less than 30% of its electricity to pump water to maintain the integrity of the surface elevation of a municipality or significant portion thereof; or is a thermal power plant facility (which may include more than one generating unit) that generates 50 MW or greater of electricity for distribution in the state grid system or within a municipally owned distribution system (net generator) " [Rule 1309.1(b)(4)(A), proposed language bolded] B. **Mitigation Fees** While Riverside does not agree that SCAQMD's proposed tiered mitigation fee structure itself would promote environmental justice in the Inland Empire, we do recognize the 1-6benefit of reinvesting mitigation fees in the region most impacted by air pollution. The area classified by SCAQMD as Zone 3 contains Riverside and is a receptor of pollutants, not only from local emission sources, but also from thousands of emission sources in the upwind regions of the South Coast Air Basin. SCAQMD should reinvest mitigation fees in heavily impacted areas like Riverside in order that the residents of Riverside are equitably treated. Riverside policy-makers have made local control of mitigation fees a goal, Specifically, on April 4, 2007, the Riverside Board of Public Utilities adopted, as a policy, that any 1 - 7required mitigation fees required by the AQMD be collected and administered by the City of Riverside for local renewable energy projects that would reduce the emission of particulate matter. Further, Riverside, through its Public Utility ("RPU"), has significant experience in the construction of renewable energy projects such as photovoltaic, etc. RPU has evaluated several significant projects that would expand available alternative

Riverside Comments Page 4 1-7 energy resources and reduce emissions in the City of Riverside. RPU has the resources and expertise to initiate these viable projects with minimal delay. Riverside requests that SCAQMD commit to investing all mitigation fees paid by Riverside for the construction of RERC Units 3 and 4 for the construction of pollution reduction projects in Riverside. Also, Riverside requests that SCAQMD commit to having 1-8 Riverside, through RPU, administer and construct those projects. Specifically, Riverside would be required to set aside the mitigation fees in a separate city-administered account and only use those funds to construct pollution reduction projects within Riverside and as approved by SCAQMD. Riverside requests that this proposal be included in the SCAQMD mitigation program, as described in Section 2-8 through 2-15 of the IS/PEA. Clarification of the Description of the RERC 3 and 4. C Table 1-3 of the NOP/IS incorrectly indicates that the project capacity of the Riverside Energy Resource Center as 100 MW. This number needs to be corrected to 96 MW. 1-9 III. Conclusion Riverside appreciates the attention that the SCAQMD staff gave to its concerns at recent public meetings and the opportunity provided to submit written comments. In general, Riverside's concerns are unique to its operations. Riverside applauds the SCAQMD for aggressively tackling the very important issue of air quality in our region, but it strongly urges the District to balance its legitimate air quality concerns against other equally important societal needs, such as the reliable provision of electricity to our growing region. Riverside looks forward to working with the SCAQMD and its staff to achieve our mutual goals.

Sincerely

David Wright Public Utilities General Manager

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COMMENT LETTER NO. 1 CITY OF RIVERSIDE

David Wright

April 24, 2007

Response 1-1

The SCAQMD appreciates the support by the City of Riverside in achieving the air quality goals for southern California and its leadership relative to the need for increased renewable and alternative energy sources. The latest version of Rule 1309.1 includes a requirement to demonstrate why renewable or alternative energy is not a viable option in lieu of natural gas and includes an incentive if a renewable energy component is included in the operation. Further, SCAQMD is recommending to the Governing Board that one-third of the mitigation fees collected be invested in renewable energy resource planning analysis for the next ten years to identify options to maximize renewable energy production in the Basin.

Response 1-2

The SCAQMD understands the need for additional electric supply, particularly in fast growing regions such as the City of Riverside, and the importance of the location of the energy source from which the local area will be serviced. According to the latest version of proposed Rule 1309.1, the City of Riverside's 96 MW facility would qualify to access the Priority Reserve (see Table 2-3).

Response 1-3

Please refer to Response 1-2 with regard to the EGF in Riverside qualifying to access the Priority Reserve in accordance with the latest version of PAR 1309.1.

Response 1-4

The definition of an EGF in PAR 1309.1 has been modified since the version released with the NOP/IS, but is being modified again to further clarify the types of facilities that meet the definition of ERF.

Response 1-5

As noted by the commentator, the SCAQMD's intent has always been to include municipal EGFs as eligible facilities to access the Priority Reserve. In addition, with regards to the CEQA analysis, the Riverside project has been included in the Draft PEA as an eligible facility. SCAQMD rule development staff will consider the proposed language provided.

Response 1-6

In an effort to mitigate any potential localized air quality impacts from the construction and operation of the proposed affected facilities, the SCAQMD is recommending that the mitigation fees collected to be invested in emission reductions programs and projects in and around the communities most impacted by the proposed eligible facility accessing the Priority Reserve. Such a recommendation will be included in the Resolution which gets adopted by the Governing Board along with the PAR 1309.1. Any emission reduction programs and projects will ultimately also benefit downwind areas as less pollution would be transported downwind.

Response 1-7

The specific procedure in administering the collection and distribution of the mitigation fees has not yet been established but it is anticipated the process will be similar to previous administration of large funds and settlement agreements. The process typically involves an advisory group, a structured bidding method and award system that requires transparent accountability. The fees collected will not be administered by another agency as that will add another layer of potential bureaucratic oversight and costs that would reduce the amount of funds available for emission reduction projects. However, in the future, the City of Riverside could apply for funds from the mitigation fee account to finance local emission reduction projects operated by the city.

Response 1-8

Please refer to Response 1-6 with regards to the distribution of the mitigation fees collected.

Response 1-9

The MW capacity of the Riverside project has been modified as requested. See Table 2-3 in Chapter 2 of the Draft PEA. Providing reliable electricity to our growing region is also important to the SCAQMD as it will reduce the likelihood or need to run old high-polluting standby diesel fired generator, which avoids an increase in criteria pollutant and toxic emissions. Further, a dependable supply of electricity will reduce the number of blackouts that affect the operation of homes, schools and business, as well as hospitals and sensitive receptors which can potentially endanger public health.



COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY

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STEPHEN R. MAGUIN Chief Engineer and General Manager

April 24, 2007

Mr. Michael Krause South Coast Air Quality Management Districts 21865 Copley Drive Diamond Bar, CA 91765-4182

Dear Mike:

Revised 4/25/2007

NOP Draft Program Environmental Assessment <u>Proposed Amended Rule 1309.1</u> <u>Document Date March 23, 2007</u>

The Los Angeles County Sanitation Districts (LACSD) thank you for the opportunity to comment on the Notice of Preparation of the Draft Program Environmental Assessment for proposed amended Rule 1309.1. Our comments are relatively brief.	
On Page 1-14 in Chapter 1- Project Description, first full paragraph, delete the fifth sentence in its entirety. Most wastewater solids in California are not treated with lime. Lime treatment is largely an East coast phenomenon, where soils are acidic, and limed biosolids are good neutralizing agents. Lime might be added on the West coast to enhance dewaterability, but it concurrently can cause the release of ammonia, a potentially significant source of odors.	2-1
In the second sentence of the second complete paragraph on the same page, insert "waste" immediately before "water treatment."	2-2
In the third complete paragraph on the same page, the first sentence might better read, "Biosolids are the nutrient-rich organic materials resulting from the treatment of domestic, commercial and industrial wastewater."	2-3
In the last paragraph on the same page, first sentence, change "no" to "only a few" before "permit applications."	2-4
On Page 1-20, at the very top of the page, the "definition" of biosolids is very good if you change "sewage sludge" to "wastewater."	2-5
LACSD also reviewed the attached version of the PAR 1309.1 (that we notice is different from the version that was workshopped on April 19, 2007). As stated at the workshop, there	2-6
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A Recycled Paper

Mr. Krause

-2-

April 24, 2007

needs to be a definition of "renewable energy" in proposed amended Rule 1309.1. A review of the words "renewable energy" on several websites yields a myriad of definitions and many alternatives that could be considered. The District seems to be focusing on very low or zero emission alternatives such as solar and fuel cells and so needs to clarify if this is your intent. The wastewater agencies very much like the concept of anaerobic digestion as pointed out at the bottom of Page 2-13 (Chapter 2-Environmental Checklist) and would also like to add biosolids energy production projects to the list as they deal with a permanent and completely renewable fuel supply.

Thank you for this opportunity to comment.

Very truly yours,

Stephen R. Maguin

Unigory M. adam-

Gregory M. Adams Assistant Departmental Engineer Air Quality Engineering Technical Services Department

GMA:ch

cc: Laki Tisopulos Mohsen Nazemi Shams Hasan 2-6 (Con't)

COMMENT LETTER NO. 2 COUNTY SANITIATION DISTRICTS OF LOS ANGELES COUNTY

Gregory M. Adams April 25, 2007

Response 2-1

Your suggested edit has been incorporated in the appropriate section of Chapter 2 the Draft PEA.

Response 2-2

Your suggested edit has been incorporated in the appropriate section of Chapter 2 the Draft PEA.

Response 2-3

Your suggested edit has been incorporated in the appropriate section of Chapter 2 the Draft PEA.

Response 2-4

Your suggested edit has been incorporated in the appropriate section of Chapter 2 the Draft PEA.

Response 2-5

Your suggested edit has been incorporated in the appropriate section of Chapter 2 the Draft PEA.

Response 2-6

PAR 1309.1 has been modified so that the version released with the NOP/IS is different than the version released during the public workshop. Since the suggestion made at the public workshop, SCAQMD staff is working on preparing a definition of "renewable" to be included in the latest version of PAR 1309.1. Further, anaerobic digestion has been included as a type of emission reduction project that could get funded with the mitigation fees collected. Your suggested edit has been incorporated in the appropriate section of Chapter 4 the Draft PEA



Thomas J. McCabe, Jr. Managing Director. Environment, Health & Safety

April 24, 2007

Mr. Shams Hasan Planning, Rule Development and Area Sources South Coast Air Quality Management District 21865 Copley Drive Diamond Bar, CA 91765-4182

Mr. Michael Krause Planning, Rule Development and Area Sources South Coast Air Quality Management District 21865 Copley Drive Diamond Bar, CA 91765-4182

Re: Edison Mission Energy – Comments on PAR 1309.1 and its related CEQA Analysis

Dear Messrs. Hasan and Krause:

Edison Mission Energy ("EME") submits the following comments on Proposed Amended Rule 1309.1 – Priority Reserve ("PAR 1309.1") that was the subject of discussion at the District's April 19, 2007 Public Workshop and CEQA Scoping Meeting.

1. New generation capacity is needed to meet increasing electricity demand -

- Electricity demand on July 24th, 2006 was 4,800 MW higher statewide than 2005's all-time high.
- According to the California Independent System Operator ("CAISO"), that peak demand was 38% higher than the peak demand during the 2001 power crisis. In fact, generation capacity increases since then have only been about 23%.
- Also according to CAISO, a minimum of about 9,000 MW must be located within the Los Angeles local reliability area to assure system stability.
- The California Energy Commission ("CEC") says that many of the plants currently meeting that requirement are 40 to 60 years old and are at high risk of retirement.

18101 Von Karman Avenue Suite 1700 Irvine, CA 92012 1046 Tel: 949 798 6508 Cell: 949 574 3455 Fax: 949 225 2762 Imceabe@tdisoumission.com EME – Comments on PAR 1309.1 and its related CEQA Analysis April 24, 2007 Page 2

 The need for new generation should be met by the most efficient new electric generating facilities ("EGFs") that also emit lower greenhouse gases, but the most efficient plants are larger and need access to the Priority Reserve for ERCs.

 There are simply not enough ERCs to allow new generation to be built without the Priority Reserve. EME needs about 500 lb/day of PM10 ERCs for each of its projects being permitted. A recent broker newsletter showed only 3 lb/day being offered.

3. The alternative to new generating capacity being sited in the Basin is operation of higher emission standby generators during periods of peak demand or interruption, or the addition of numerous less efficient small generators that would be below the threshold where ERCs would be required.

4. A balanced electric power supply necessarily includes base, intermediate and peak load generating resources. Much of electric power demand in California occurs for relatively few hours per year. Such demand is served most economically for customers by peaking generation. SCE has indicated that the primary new generation need in Southern California is for flexible, fast-start peakers, stating in their RFO "SCE prefers highly flexible (multiple daily starts, quick ramp rates etc.), lower capacity factor peaking resources."

5. Although hourly PM10 emissions from a new gas turbine peaker are higher per MWh than those from a new combined cycle generator, due to the greater efficiency of the latter, new combined cycle units cannot be used to meet all future generation needs because of the impact on customer electricity costs. Combined cycle units have greater capital cost than peakers, have much longer start times (hours vs 10 minutes), and therefore, greater community impacts. The need for peaking generation will become ever more acute as more and more renewable electricity supplies are added to the regions generation mix, since the intermittent nature of renewable electricity requires quick start backup supplies to maintain reliable service.

6. The addition of part (c)(5)(B) of PAR 1309.1, requiring a demonstration "that renewable or alternative energy in lieu of natural gas fired EGF is not a viable option for the site" is vague and subjective, and should be clarified or deleted. Not only is It not clear what measure of viability is intended, but also what is meant by "alternative energy". For example, an 11 acre site might be technically capable of supporting a 5-7 MW solar photovoltaic array instead of a 500 MW natural gas-fired EGF, but the price of the solar option would not be economically

3-3 3-4 3-5

3-2

EME – Comments on PAR 1309.1 and its related CEQA Analysis April 24, 2007 Page 3

viable and would not make a material contribution to meeting the region's electricity needs. Intervenors in the CEC's EGF permitting process are always free to make a demonstration that renewable energy is a better alternative for any site. There is no need for SCAQMD to do the same. Except for very large sites in wind resource areas or remote desert areas within the South Coast Air Basin, neither wind nor solar generation is a realistic option, and the required demonstration is at best an exercise of stating the obvious and at worst a foray into land use planning that is better addressed by agencies with jurisdiction.

7. The Priority Reserve mitigation fees adopted in September 2006 already result in an offset package that adds 8% or more to the total construction cost of an EGF, which ultimately raises electricity prices to consumers by that amount.

- When considering even higher mitigation fees, the District should take into account the fact that electricity consumers will bear those even higher costs.
- We ask that any zone boundary definitions be based on objective technical or scientific criteria.

We appreciate this opportunity to comment on the proposed amended rule and are committed to working with Staff to address the concerns addressed above.

Sincerely Thomas J. McCabe, Jr.

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(Con't)

COMMENT LETTER NO. 3 EDISON MISSION ENERGY

Thomas J.McCabe, Jr. April 24, 2007

Response 3-1

SCAQMD has identified similar concerns regarding electrical power supply in the latest CEC forecast document referenced in the Draft PEA. Some of the information contained in these comments have been added to the appropriate section in Chapter 2 of the Draft PEA because it demonstrates the need for future electricity generating capacity in the district.

Response 3-2

One of the objectives of PAR 1309.1 is to increase the likelihood an eligible facility will comply with Rule 1303 offset requirements necessary for an air quality permit. However, new facilities will also be subject to BACT requirements ensuring the facilities are the cleanest possible. Further, with regard to available ERCs in the open market, Table 2-7 in the Draft PEA provides the number of current active ERCs (as of April 2007) held by companies, emission credit brokers, organization or individuals. The number of credits available in the open market are much less than the number of credits needed for EGFs and other eligible facilities in the future to comply with Rule 1303 offset requirements (see Table 4-2 in the Draft PEA).

Response 3-3

As noted in Chapter 2 of the Draft PEA, one objective of PAR 1309.1 is to reduce the likelihood of blackouts and/or the need to run old high-polluting diesel fired emergency standby generators, which avoids an increase in criteria pollutant and toxic emissions (see the toxics discussion in Chapter 4 regarding emissions from diesel fired emergency generators during the rolling blackouts in 2000-2001).

Response 3-4

While SCAQMD agrees there is a sense of urgency in adding power generation capacity in California particularly to capture the short-term peak power demand, there is also an important need to plan long-term strategies which may include more efficient combined cycle units and non-peaker facilities. Combined cycle units are known to produce a low cost source of power. It can be argued that this is true regardless of the capital cost and start-ups. As an air quality agency, the emissions from these sources are the critical characteristic that needs to be considered. The economic decisions will need to be made by the power companies and government entities with siting authority.

Response 3-5

Please refer to Response 3-4 with regard to peakers units versus combined cycle units.

Response 3-6

The latest version of PAR 1309.1 will include a definition of renewable and alternative energy to eliminate the vagueness and subjectivity asserted by the commentator. The SCAQMD disagrees with the opinion expressed in this comment that the renewable energy provision is an "exercise in stating the obvious," because in some situations, such as those mentioned in the comment, renewable energy sources are viable. The SCAQMD also disagrees with the opinion that the renewable energy provision is a "foray into land use planning." This provision could be compared to other SCAQMD rules and discretionary permit conditions to reduce air quality impacts. Failure to comply with these requirements means a project could not be approved. Such situations are not considered to be land use planning by the SCAQMD, instead they are actions to establish and enforce air quality rules and regulations.

Response 3-7

Impacts on business and consumers from high mitigation fees will be analyzed in the Socioeconomic Report for PAR 1309.1. The mitigation fees do serve a purpose in funding emission reduction programs with the intention to reduce the pollutant being emitted by the eligible facility. In addition, the mitigation fees will be invested in programs in and around the community most impacted by the eligible facility to reduce the localized air quality impacts.

The SCAQMD disagrees with the implication of the commentator that the zone boundaries are not based on objective technical or scientific criteria. As explained in both the Staff Report and the Draft PEA, the PM2.5 zones were based on average PM2.5 concentration observed for years 2003 through 2005 and correspond to health-based exposure levels. The environmental justice area (EJA) is defined as the area of grid cells where at least ten percent of the population is living in poverty (based on year 2000 Federal census data); and either 1) the cancer risk is greater than one-in-one thousand (as determined by the SCAQMD

MATES II study); or 2) the PM10 exposure is greater than 46 μ g/m3 (as determined by the SCAQMD monitoring data).

FuelCell Energy

William A. Karambelas Vice President of Business Development, Western Region

April 24, 2007

Mr. Michael Krause c/o Planning/CEQA South Coast Air Quality Management District 21865 Copley Drive Diamond Bar, CA 91765 mkrause@aqmd.gov

Dear Mr. Krause:

Fuel Cell Energy (FCE) is pleased to offer these comments on the Notice of Preparation of a Draft Program Environmental Assessment (PEA) for the Proposed Amended Rule 1309.1 – Priority Reserve (PAR 1309.1). FCE agrees with the initial determination that PAR 1309.1 has the potential to generate significant adverse environmental impacts (p. 1-3) requiring completion of a PEA. Based on the work evident in the Initial Study, FCE is confident that the Draft PEA will thoroughly document these potential impacts and will identify effective measures to mitigate these impacts should the proposed rule amendments be implemented.

FCE is encouraged that the Initial Study includes fuel cells on the list of projects designed to reduce emissions that may be considered for funding using mitigation fees collected from use of the Priority Reserve (p. 2-14). The purpose of these comments is to provide information on the molten carbonate fuel cell commercialized by FCE (the Direct Fuel Cell), a technology that offers significant advantages in cost and efficiency compared to the phosphoric acid fuel cell referenced in the Initial Study. More information about FCE and its products is available at www.fce.com.

The Direct Fuel Cell (DFC) is a high temperature fuel cell that uses waste heat and steam to produce hydrogen from methane fuel within the fuel cell stack (i.e., internal reforming). The high temperature operation permits the use of commonly available materials (i.e., does not require platinum catalysts), operates at greater efficiency, and produces useful heat for cogeneration or combined-cycle applications. Additionally, the DFC operates at atmospheric pressure, allowing for unattended operation and remote dispatch. Currently, DFCs operate at 47% LHV efficiency in simple configurations and have achieved up to 80% efficiency in combined heat and power applications. DFCs have practically zero air emissions and have been certified as "ultra-clean" by the California Air Resources Board. In addition to using pipeline natural gas, DFCs can also operate on renewable methane fuels, such as the gas produced by anaerobic digesters.

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DFCs have been installed at a number of wastewater treatment plants in California, including the LA County Department of Sanitation facility in Palmdale and at the City of Santa Barbara treatment plant. Other projects will soon be operating in Riverside, Tulare, San Ramon/Dublin and at the City of Los Angeles Terminal Island facility. Additionally, digester gas produced from brewery waste is used to power a DFC at the Sierra Nevada Brewery in Chico, CA.

DFCs are produced in 300 kW, 1.2 MW, and 2.4 MW modules that can be operated independently in distributed generation applications or aggregated into multi-megawatt systems for delivery to the grid. Larger, grid-connected systems have economies-of-scale benefits as well as offer the opportunity for combined cycle operation using waste heat recovery to improve electrical efficiency.

DFCs produced by Fuel Cell Energy have generated over 150 million kWhs in more than 50 locations worldwide. FCE's installed base and projects under construction total over 25 MW, with 11 MW located in California. FCE's manufacturing capabilities are growing rapidly and the company was recently selected to supply 68 MW of new fuel cells in the Connecticut Project 100 solicitation administered by the Connecticut Clean Energy Fund. The projects selected for Connecticut Project 100 are in the process of executing long term contracts with Connecticut utilities to fulfill their renewable portfolio standard obligations. In Connecticut, as well as in five other states, the ultra-clean emissions profile of fuel cells is recognized by including them among the technologies eligible for the renewable portfolio standard. What is significant about the Connecticut program is the size of the selected projects: two of the projects are 19.6 MW, one is 13.7 MW, and a fourth is 7.9 MW. These are projects designed to compete with utility-scale combustion technologies.

FCE believes that an opportunity exists in California where acute power needs and air quality concerns have resulted in the present situation where it is necessary to access the Priority Reserve in order to site combustion technologies. To the extent that FCE's Direct Fuel Cells are installed in Southern California, the need for polluting generation sources and corresponding withdrawals from the Priority Reserve would be reduced. As such, DFCs are poised to make a substantial contribution towards both improving the reliability of the electrical grid in Southern California and reducing air pollution in the LA Basin, either as a primary power source or as an effective mitigation measure. Additionally, if FCE were able to achieve a significant backlog of orders in California such as it now has in Connecticut, it would make it economic for FCE to locate manufacturing facilities in California, providing high quality employment and significant economic benefits to the state.

4-3 (Con't) Thank you for the opportunity to provide these initial comments. FCE is aware that the SCAQMD has a difficult task in balancing the needs of air quality and electrical reliability. We believe that fuels cells can be a key element in helping to solve both of these problems and we look forward to working with the SCAQMD on this important issue. As you move forward with the Draft PEA, please do not hesitate to contact me if you need any more information on the properties and potential contribution of Direct Fuel Cells.

Sincerely,

MA

William A. Karambelas Vice President of Business Development, Western Region Fuel Cell Energy, Inc. 27068 La Paz Road #470 Aliso Viejo, CA 92656 (949) 305-4595 (949) 305-4720 (fax) wkarambelas@fce.com 4-3 (Con't)

COMMENT LETTER NO. 4 FUELCELL ENERGY

William A. Karambelas April 24, 2007

Response 4-1

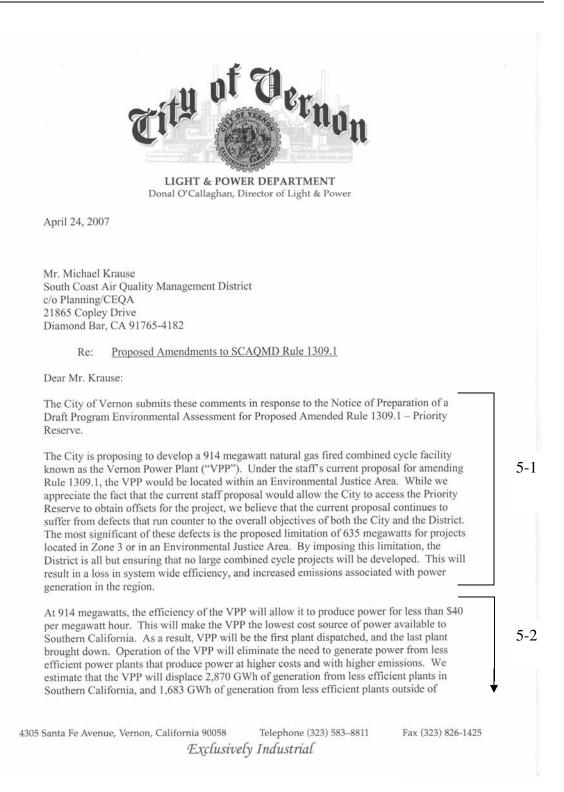
To fulfill the purpose and intent of CEQA, the SCAQMD has prepared this Program Environmental Assessment to address the potential direct and indirect environmental impacts associated with the proposed amendments to Rule 1309.1 and re-adoption of Rule 1315 as required by CEQA. In addition, the Draft PEA evaluates feasible methods to reduce or avoid significant adverse environmental impacts of these projects.

Response 4-2

Fuel cells are expected to be an important technology in reducing emissions from both mobile and stationary sources. There was not an intent to leave out different types of fuel cell technology in the listing of projects to be funded with the mitigation fees collected. Your suggestion has been incorporated in the appropriate section of Chapter 4 in the Draft PEA.

Response 4-3

SCAQMD appreciates the detailed information on your fuel cell technology and looks forward to working with your company in the future.



Mr. Michael Krause April 24, 2007 Page 2

Southern California that import power into the region. By displacing less efficient power plants, the VPP will allow the demand for power to be met with lower emissions. We estimate that annual emission reductions as a result of the VPP include 58 tons of PM2.5, which is what the agency seems to be most concerned about in connection with the current proposal to provide electric generating facilities access to the Priority Reserve.

Cutting the output of the VPP by one-third, while at the same time increasing the price of offsets from the Priority Reserve by 100% jeopardizes the economic viability of the project to the extent that it is unlikely to go forward. The result will be that the power demands of the region may not be met, and certainly will not be met at the most efficient and lowest emitting levels. We, therefore, are recommending to the District rulemaking staff that the proposed limitation on the size of projects be eliminated from the staff proposal. In light of the City's recommendation that the provision limiting the size of certain projects be eliminated from the staff proposal, we urge the CEQA staff to assume in its analysis that all of the identified projects, including the Vernon Power Plant, will be developed at their proposed output. This will ensure that the CEQA analysis will be broad enough to cover the proposed amendments should the limitation on size be eliminated from the final rulemaking.

The City appreciates the opportunity to comment on the proposed scope of the CEQA analysis, and we look forward to continuing to work with the staff on the development of this rule. Please call me at (323) 583-8811 if you have any questions.

Sincerely,

Donal O'Callaghan Director of Light and Power

cc: Michael Carroll, Latham & Watkins LLP VPP 12.0160 5-3

COMMENT LETTER NO. 5 CITY OF VERNON

Donal O'Callaghan April 24, 2007

Response 5-1

Review of other EGF projects indicate that there are four combined cycle projects with MW rating less than 635, indicating that this assertion is not accurate in all situations. While the SCAQMD understands there are economic breaking points in deciding the size of a project along with fiscal return on the investment, SCAQMD is also concerned about high levels of emissions in the Basin, particularly in an area already heavily impacted by industry and pollution. Regardless, the latest version of PAR 1309.1 allows EGFs generating power at 635 MW or greater to access the Priority Reserve as long as they comply with more stringent toxic and criteria pollutant requirements and pay a higher mitigation fee (see Table 2-7 for the specific proposed zone restrictions).

Response 5-2

Combined cycle units are low cost sources of power generation, however, they have longer and more polluting start-ups than peaker units and the capital costs on combined cycle units are higher. The commentator does not mention whether the consumer price provided includes the latter. In addition, the commentator provides future emission reductions from more efficient combined cycle units but does not consider the future renewable or alternative energy producers which will produce none or minimal emissions. In any event, the SCAQMD must balance the needs of electricity generation with protecting public health, especially to those residents in heavily polluted areas. Part of this balance includes provisions and restrictions in PAR 1309.1 that allows EGFs access to the Priority Reserve.

Response 5-3

The Draft PEA does consider the City of Vernon power plant as an eligible facility to access the Priority Reserve and includes the projected 943 MW level as listed by the California Energy Commission¹.

¹ California Energy Commission (<u>http://www.energy.ca.gov/sitingcases/all_projects.html</u>)

SCAQMD Proposed Amended Rule 1309.1-Priority Reserve AES Highgrove Power plant

Prepared by Roxanne Williams Intervenor in the AES Highgrove Power plant Project

General Comments

• Per The Notice of Preparation of a Draft Program Environmental Assessment from the Proposed amended Rule 1309.1(Priority Reserve), stated that "1)"the potential adverse air quality impact from the proposed amendment could exceed significance if the mitigation fees collected to fund emission reduction projects are unable to produce emission reduction in an amount equal to the amount of credits used by newly eligible projects", 2) "the potential shortfall of emission reductions is expected to exceed the SCAQMD's PM10, SOx and CO daily operational significance thresholds" (South Coast Air Quality Management District, Notice of Preparation of a Draft Program

Coast Air Quality Management District, Notice of Preparation of a Draft Program Environmental Assessment, "Proposed Amended Rule 1309.1 Priority Reserve", 2007.

 The SCAQMD PAR 1309.1 "has the potential to generate significant adverse environmental impacts" (South Coast Air Quality Management District, Notice of Preparation of a Draft Program Environmental Assessment, "Proposed Amended Rule 1309.1 Priority Reserve", 2007, page 1-3)

Environmental Checklist

III Air Quality

b) and)c Violate any air quality standard or contribute to an existing or projected air quality violation?

The projected air quality emissions from the AES Highgrove power plant would violate air quality standards, and would result in a cumulatively net increase in pollutants, for which the region is in non-attainment. Based upon Chapter 2 Environmental Check list's Table 2-1 "Air Quality Significance Thresholds" (page 2-9), and the AES Application for Certification (Air Quality-8.1), the following air emissions exceeds the standards:

- PM_{10} levels at 5888 Mission Blvd. Station, Riverside (2002-2004 annual 24 hour arithmetic mean $\mu g/m^3$), were 58.5, 56.9, and 55.5, respectively, all which exceeded the federal standard of 50 $\mu g/m^3$. The AES Highgrove project would be located proximal to this station, in SCAQMD's zone 3.
- $PM_{2.5}$ levels at 5888 Mission Blvd. Station, Riverside (2002-2004 3-year average arithmetic mean $\mu g/m^3$), were 28, 27, and 24, respectively, all exceeding the

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federal standard of 15 μ g/m³. The AES Highgrove project would be located proximal to this station, in SCAQMD's zone 3.

- Table 8.1-13 (page 8.1-25) of the AES' Application for Certification, stated that the Total Project Construction Emissions (maximum combined emissions in lb/day) for NOx would be 210.5, whereas the maximum construction and operation limit of 100 lb/day (construction) and 55 lb/day (operation) would be exceeded by the Air Quality Significance Threshold "Mass Daily Thresholds" (SCAQMD Table 2-1 from PAR 1309.1).
- Table 8.1-19R (page AQ-4) of the AES Application for Certification, stated that the project facility emissions of the turbines and cooling towers for NOx, VOC, CO, and PM₁₀ (total project lb/day) would be 575.3, 116, 703, and 293.8, respectively, which would exceed Air Quality Significance Thresholds.
- Table 8.1-21 (page 8.1-33) from the AES Application for Certification, stated that the Background Air Concentrations for the Highgrove Facility 2002-2004 (24 hour $\mu g/m^3$) for SO₂, PM₁₀, and PM_{2.5} were averaged to be 25.3, 144, and 91.2, respectively, violating air emissions standards.
- Table 8.1-24 (page 8.1-39) from the AES Application for Certification 24 hour maximum modeled impacts from demolition/construction and the ambient air quality (total predicted conc. $\mu g/m^3$) for PM₁₀ and PM_{2.5} would be 286 and 137, respectively, exceeding the federal standard of ($\mu g/m^3$) 150 and 65.
- Table 8.1-26 (page 8.1-41) from the AES Application for Certification-normal operation impacts analysis maximum modeled impacts compared to the ambient air quality standards-(total impact $\mu g/m^3$) for 24-hour PM10 would be 168.4, exceeding the 50 and 150 state and federal standard, respectively.

d) Expose sensitive receptors to substantial pollutant concentrations

The AES Power plant is incompatible with the new Colton Joint Unified School District (C.J.U.S.D) high school #3, would violate the California Department of Education's codes, and expose sensitive receptors (students) for the following reasons:

- Hazardous Air Emissions and Facilities within A Quarter Mile
 - Fine Particulate Matter (PM2.5)
 - o Carbon Monoxide (CO)
 - o Nitrogen Oxides (NOx)
 - Volatile Organic Compound (VOC)
- Land Use:
 - o Proximity to Pressurized Gas, Gasoline, or Sewer Pipeline
 - o Proximity to High-Voltage Power Transmission Lines
 - o Presence of Toxic and Hazardous Substances
 - o Other Health Hazards
 - Proximity to High-Pressure Water Pipelines, Reservoirs, Water Storage Tanks
 - o Observing California Environmental Quality Act (CEQA) Requirements

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6-2 (Con't)

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· Hazardous Air Emissions and Facilities within A Quarter Mile

-The CDE requires an evaluation of emissions from all facilities within a 0.25 miles radius of a proposed school site to determine the potential endangerment to public health of the students and staff (Education Code 17213(c). (See *Education Code* Section 17213(b) and *Public Resources Code* Section 21151.8(a)(2))

- The LEA (local educational agency) shall consult with the administering agency and the local air pollution control district or air quality management district to identify facilities within a quarter mile of the proposed site that might reasonably be anticipated to emit hazardous air emissions or handle hazardous materials, substances, or wastes and shall provide written notification of those findings.
- 2. The LEA shall make the finding either that no such facilities were identified or that they do exist but that the health risks do not or will not constitute an actual or potential endangerment of public health at the site or that corrective measures will be taken that will result in emissions mitigation to levels that will not constitute endangerment. In the final instance the LEA should make an additional finding that emissions will have been mitigated before occupancy of the school.
- 3. These written findings, as adopted by the LEA governing board, must be submitted to the Department as a part of the site approval package. Often this information is included in the Phase I site assessment and in the adopted California Environmental Quality Act (CEQA) document. (See *CCR*, *Title 5*, Section 14011(i))

• Fine Particulate Matter (PM2.5

-PM10 and PM2.5 stand for particulate matter, less than 10 microns and 2.5 microns, respectively. These particles are made of dust, soot, and various chemicals arising from sources such as power plants, factories, and cars. Recent evidence from the Department of Environmental Quality, the Environmental Protection Agency, and the New England Journal of Medicine found that long-term exposure to fine particulates in polluted air increased a risk of cardiovascular disease among older women. These fine particles linger in the air for days or weeks, and then can enter the lungs, causing inflammation there and in blood vessels. This is a suspected heart attack trigger. Unfortunately, the South Coast Air Basin, in which the Inland Empire is contained, is designated as non-attainment area for both federal and state PM10 and PM2.5 standards.

Carbon Monoxide (CO)-

-The power plant will emit 256,585 pounds of CO per year.

• Nitrogen Dioxide (NOx)

- The power plant will emit 209,978 pounds of NOx per year.

Volatile Organic Compound (VOC)

-The power plant will emit 42, 356 pounds of VOC per year.

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Land Use

-Conflict of actual distance of the proposed school from the proposed power plant. Actual distance of "property line" to "property line" is less than 100 feet.

-A proposed high school across Taylor Street from the AES power plant raises the potential for land use incompatibility issues.

-The California Department of Education (CDE) has established standards under Title 5, Article 2 California Regulations that pertain to new or proposed schools that are within 1,500 feet of above-ground water storage, fuel storage tanks, or underground pipelines that can pose a safety hazard, and 100 feet from 50-133 kV lines triggering a requirement for risk assessment and consideration of mitigation measures. CDE concerns include traffic, toxic substances, powerline location, hazardous pipeline (gas pipeline) locations, hazardous material deliveries, and air quality/public health issues.

Proximity to Pressurized Gas, Gasoline, or Sewer Pipeline

- Education Code Section 17213 prohibits the acquisition of a school site by a school district if the site "contains one or more pipelines, situated underground or aboveground, which carries hazardous substances, acutely hazardous materials, or hazardous wastes, unless the pipeline is a natural gas line which is used only to supply natural gas to that school or neighborhood." Public Resources Code Section 21151.8 uses the same language with reference to approval of environmental impact reports or negative declarations. (See CCR, Title 5, Section 14010(h))
- The 7 mile natural gas line violates: CDE guidelines (CCR Title 5, 14010(h)) that a school site shall not be located within 1,500 feet of the easement of an aboveground or underground pipeline that can pose a safety hazard."

Proximity to High-Voltage Power Transmission Lines

 The CDE requires the following limits for locating any of a part of a school site property line near the edge of easements for high-voltage power transmission lines: 100 feet for 50 to 133 kV transmission lines. The exact location route, easement, the EMF exposure, and audible noise should be stated. Each site will be evaluated according to its own potential hazards by the Department consultant (See CCR, Title5, Section 14010(c)).

Presence of Toxic and Hazardous Substances

-Storage of aqueous and/or anhydrous ammonia requires a development of risk management plans and modeling of potential release under the CCR, Title 19, Chapter 45-California Accidental Release Prevention (CalARP) Program. In addition, transport of ammonia, sulfuric acid, sodium hydroxide, sodium hypochlorite, and cyclohexamine 6-7

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Created by Roxanne Williams 6-10 could pose risks to students' health; hours and routes that children will use while traveling to/from school, and transport routes of the chemicals should be stated. (Con't) -On a daily basis, AES will haul wastewater by truck (11-19 per day) to the SARI brine line, according to CEC staff estimates. Although AES has attenuated this truck figure to about 7/day, this still represents movement of toxic substances adjacent to a school, and along the same street of travel, Taylor St. -The presence of potentially toxic or hazardous substances on or in the vicinity of a prospective school site is another concern relating to the safety of students, staff, and the 6.11 public. Persons responsible for site evaluation should give special consideration to the following hazards: 1. Proximity of the site to current or former dump areas, chemical plants, oil fields, refineries, fuel storage facilities, nuclear generating plants, abandoned farms and dairies, and agricultural areas where pesticides and fertilizer have been heavily used 2. Naturally occurring hazardous materials, such as asbestos, oil, and gas (See CCR, Title 5, Section 14011(j).) Other Health Hazards (See Education Code Section 17213(a) and Public Resources Code Section 21151.8(a)(1); see also CCR, Title 5, Section 14011(h)) -AES Highgrove Power plant (HP) is a Resource Conservation and Recovery Act (RCRA) contaminated site based on a 1994 Stipulation Order placed upon Southern 6.12 California Edison (SCE). This allows the States Department of Toxic Substances Control (DTSC) and the local Certified Unified Program Agency (CUPA) RCRA authority over the site for monitoring and mandating remediation for contaminants. Contaminants arise from the old SCE'S lined retention basins which contain chemical contaminants from boiler water and cooling tower blow-down. In addition, the DTSC is in the process of an RCRA investigation at the fuel tank farm, the power generation facilities, and Cage Park. There is a DTSC Corrective Action for the site for solid waste management and the retention basins at the project site. 1. Metals were detected in soil matrix, trichloroethylene (TCE), and methyl tertiary butyl ether (MTBE) in soil vapor samples. 2. Some liquid and volatile organic compounds (VOC) were found in soil vapor, which triggered a groundwater investigation. An investigation is being done to determine whether there was release of contaminants (metals) into the soil. -The LEA shall include in an environmental impact report or a negative declaration the 6-13 information needed to determine that the proposed site is not any of the following type: 5

- The site of a current or former hazardous waste disposal site or a solid waste disposal site unless, if the site was a former solid waste disposal site, the LEA governing board concludes that the wastes have been removed.
- 2. A hazardous substance release site identified by the DTSC
- The site of one or more pipelines, situated underground or aboveground, which carry hazardous substances, materials, or wastes, unless the pipeline is used only to supply natural gas to that school or neighborhood

-These written determinations, as adopted by the LEA governing board, must be submitted to the Department as a part of the site approval package. Often this information is included in the Phase I site assessment and in the adopted CEQA document.

-Other factors to consider are as follows:

• If the proposed land has been designated a border zone property by the Department of Toxic Substances Control (DTSC), then a school may not be located on the site without a specific variance in writing by DTSC. Contact DTSC, Site Mitigation, (916) 255-3745. See *Health and Safety Code* Section 25220.

Proximity to Railroads

When evaluating a site near railroad tracks, a study should be conducted to answer the following questions (See *CCR*, *Title 5*, Section 14010(d)):

- 1. The proposed high school site represents a distance of less than 1,500 feet from a railroad track. If the proposed site is within 1,500 feet of a railroad track easement, a safety study shall be done by a competent professional trained in assessing cargo manifests, frequency, speed, and schedule of railroad traffic, grade, curves, type and condition of track, need for sound or safety barriers, need for pedestrian and vehicle safeguards at railroad crossing, presence of high pressure gas lines near the tracks that could rupture in the event of a derailment, preparation of an evacuation plan. In addition to the analysis, possible and reasonable mitigation measures must be identified.
- 2. Studies for AES power plant, evaluating train derailment, have not been done for best/worse case scenarios, in spite of the recent Burlington Northern Railroad derailment at the Main St./railroad line in 2006. According to the U.S. Department of Education and the Press Enterprise, San Bernadino County has more reported hazardous-materials spills (620), leaks, and other incidents from trains than any other county in the nation from 1993 through 2004. In addition, what would be the best/worst case scenario for a train derailment onto the AES Power plant and the adjoining tank #13 ammonia storage facility, or the #15 gas compressors? (see site plan general arrangement figure 2.2-1 rev. 1) What would be the case for the newly proposed natural gas line route, which approximates the power plant, Riverside Canal, and the train tracks?

(Con't)

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- 3. While most railroads have detailed instructions for handling hazardous materials, no setback distance between railroad tracks and schools is defined in law. However, the *California Code of Regulations, Title 5*, Section 14010(d), established the following regulations pertaining to proximity to railroads:
 - a. The National Transportation Safety Board has called for a uniform standard separation of at least 100 feet between hazardous materials storage and production facilities and mainline railroad tracks. Hazardous materials authorities have evacuated homes within a radius of 1,500 feet to 2,500 feet of railroad accidents when toxic gas and explosives were involved.

Proximity to High-Pressure Water Pipelines, Reservoirs, Water Storage Tanks

-The toxic waste disposal via truck to SARI line violates CDE:

- The proposed high school may fall within a distance of 1,500 feet from the proposed natural gas line, whose route begins on the northwest side of the AES power plant. In addition, the Riverside Canal is still being considered for nonpotable water for the power plant, and its pressure, proximity, and impact on the high school should be considered as well.
- 2. Large, buried pipelines are commonly used for delivery of water. Designs of such pipelines include a wide margin of safety for the operating water pressures within the pipe, but a severe earthquake, damage by an adjacent construction activity, or highly corrosive conditions surrounding soils can contribute to leakage or even failure of the pipe. A sudden rupturing of a high-pressure pipeline can result in the release of a large volume of water at the point of failure and fragments of concrete pipe being hurled throughout the immediate area. Subsequent flooding of the immediate area and along the path of drainage to lower ground levels might occur.
- 3. To ensure the protection of students, faculty, and school property if the proposed school site is within 1,500 feet of the easement of an aboveground or underground pipeline that can pose a safety hazard, the school district should obtain the following information from the pipeline owner or operator:
 - The pipeline alignment, size, type of pipe, depth of cover
 - Operating water pressures in pipelines near the proposed school site
 - Estimated volume of water that might be released from the pipeline should a rupture occur on the site
 - Owner's assessment of the structural condition of the pipeline (Periodic reassessment would be appropriate as long as both the pipeline and the school remain operational.)
 - School districts should determine form topographic maps and in consultation with appropriate local officials the general direction that water released from the pipeline would drain. If site selection must involve



6-15 (Con't)

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Created by Roxanne Williams such pipelines, districts should seek to (1) avoid or minimize students use of ground surfaces above or in close proximity to the buried pipeline; (2) locate facilities safely or provide safeguards to preclude flooding in the event of a pipeline failure; and (3) prepare and implement emergency response plans for the safety of students and faculty in the event of pipeline failure and flooding. **VIII Hazards and Hazardous Materials** a) Create a significant hazard to the public of the environment through the routine transport, use, disposal of hazardous materials (See above, section III Air Quality) c) Emit hazardous emissions, or handle hazardous or acutely hazardous materials, substances, or waste within on-quarter mile of an existing or proposed school (See above, section III Air Quality) 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 (See above, section III Air Quality) IX Hydrology and Water Quality a) Violate any water quality standards or waste discharge requirements The existing project would use a substantial amount of potable water. AES is proposing to provide the Highgrove's needed cooling water from two on-site potable wells that have the potential to affect wells adjacent to the project that are owned by the Riverside Highlands Water Company (RHWC). State Law and policy (State Constitution Article X, section 2; State Water Resources Control Board, Resolution 75-58) states the use of fresh water for power plant cooling will not be approved unless alternate sources or cooling technologies are deemed economically unsound or environmentally infeasible. AES should still continue to evaluate the efficacy of Riverside Canal water as a non-potable source, instead. 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

• AES is planning to use at least 2 of 4 wells that are located on the present Highgrove Generating Station (old existing power plant). Unfortunately, these wells are directly adjacent to the Riverside Highland Water Company domestic 6-16

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(Con't)

drinking well #7 (located on Main St. and Taylor St.). The proximity of all these wells may pose a risk to the aquifer, if these wells are connected. The California Energy Commission, in the AES Application for Certification under the Data Request section (#47-52) stated that the use of fresh water from two onsite wells for cooling and other plant processes could mobilize nitrates, "further degrading 6-19 groundwater supplies.' (Con't) Furthermore, the Riverside groundwater basin, which underlies the project region is over-drawn, according to the California Energy Commission's AES Application for Certification Data Request, p.19. The effects of the applicant's use of water, 358 acre-feet per year (afy), in reference to the impact on the groundwater basin, aquifer transmissivity, and the drawdown affect have not been studied. X Land Use and Planning 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 · The construction of the AES Highgrove Power plant would violate Grand Terrace's General Plan based on the following: 6-20 Air Quality Policy 1-The current General Plan states that "the City shall promote the growth of 'clean' industry which does not increase air pollution". As demonstrated in the preceding violations of CDE LORS, the power plant would violate clean industry policies. Proposed Policy 5.4.2-The proposed General Plan states that "the City b. shall require that all new businesses that produce, use, transportation, storage, treatment, or disposal of hazardous materials and wastes are located away from sensitive land uses such as residences, schools, and hospitals. The new power plant would violate the hazardous wastes clause. Noise levels during construction. The start up phase of the project will c. involve construction 24 hours, 7 days a week. Although AES says that the majority of construction will be scheduled between 7 a.m. and 7 p.m., welding, piping, erection activities, electrical conduits and circuits, and maintenance on construction equipment will take place past 7 p.m. Demolition, clearing, excavation, concrete pouring, steel erection, mechanical, and cleanup) will average 55 decibels (dBA). A comparable sound to 55 dBA is the horn of a train, which is 96 dBA. That's noisy. XII Noise 6-21 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 9

b) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project

(see X Land Use and Planning above)

• Construction of the AES Highgrove Power plant and the Colton Joint Unified School District's new high school #3 would occur concurrently. The cumulative effect of noise and air emissions of these two large projects has not been studied.

XVII Transportation/Traffic

- 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
- The cumulative traffic affects of the AES Highgrove Power plant and the Colton Joint Unified School District's high school #3 during construction and operation have not been sufficiently studied

6-21 (Con't)

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COMMENT LETTER NO. 6 INTERVENOR IN AES HIGHGROVE POWER PLANT

Roxanne Williams April 25, 2007

Response 6-1

The commentator is an intervenor in the AES Highgrove Power Plant Project. An intervenor is a member of the public, individuals, or groups, who formally participate in a power plant licensing or siting case by becoming a party to the proceedings of that case. The comments provided by this intervenor are primarily specific comments on the environmental document prepare by the lead agency. In the case of the AES Highgrove Power Plant project the lead agency is the California Energy Commission (CEC). Since the SCAQMD is not the lead agency for the AES Highgrove project, the SCAQMD is not in a position to respond to the specific comments on the environmental analysis or modify information or conclusions in that document because it was prepared and is approved by an agency other than the SCAQMD. The SCAQMD can only indicate whether or not the comments submitted by the intervenor accurately represent the information in the CEQA document prepared by the CEC.

The comment is accurate that the made the Initial Study (IS) concluded that the proposed project could result in potential significant adverse impacts if the emission reduction projects funded by the mitigation fees do not reduce emissions equal to the amount of pollutant credits withdrawn from the Priority Reserve. This impact was further analyzed in the Draft Program Environmental Assessment (PEA), reached the same conclusion.

Response 6-2

The intervenor states that the AES Highgrove project would violate are quality standards because it will result in a cumulatively net increase in nonattainment pollutants.

- The CEQA document prepared by the CEC includes existing setting information on background PM10 levels from the monitoring station located nearest to the AES Highgrove project. The PM10 information in this comment is consistent with the data presented in the CEQA document.
- The CEQA document prepared by the CEC includes existing setting information on background PM2.5 levels from the monitoring station

located nearest to the AES Highgrove project. The PM2.5 information in this comment is consistent with the data presented in the CEQA document.

- The intervenor accurately states the construction NOx emissions for the AES Highgrove project listed in Table 8.1-13 in the CEQA document prepared by the CEC. It is also correct that this level exceeds the significance threshold in Table 2-1 of the IS. Information on indirect construction emissions impacts can also be found in Chapter 5 and Appendix D of this PEA.
- The maximum annual, daily, and hourly emissions for the AES Highgrove project during normal operation are shown in Table 8.1-19 of the CEQA document. According to Table 8.1-19, CO emissions are 239,874 pounds per year, NOx emissions are 183,518 pounds per year, and VOC emissions are 40,794 pounds per year. It should be noted that SCAQMD rules 1303 and 2005 contain emission offset requirements for all emissions from a new, modified, or relocated facility greater than one pound per day.
- The background concentrations cited by the intervenor are the average monitored 24 hour concentrations listed in Table 8.1-21 of the CEQA document for the AES Highgrove project. The intervenor incorrectly characterizes these background concentrations as violating air emission standards." The background concentrations do, however, exceed the state 24-hour ambient air quality standards (AAQSs) for PM10 and SO2 and the federal 24-hour AAQS for PM2.5.
- This comment correctly cites the information in Table 8.1-24 of the AES Highgrove CEQA document.
- This comment correctly cites the information in Table 8.1-26 of the AES Highgrove CEQA document.

Response 6-3

The intervenor states in this comment that the AES Highgrove project would violate the California Department of Education (CDE) codes and expose sensitive students to hazardous air pollutants from facilities within one-quarter mile. Section 8.1.6.3 in the CEQA document includes the results of a health risk analysis (HRA) on receptors at the school 1,100 feet south of the proposed AES Highgrove project. The HRA analysis concluded that cancer and non-cancer health risks to students from the project would be substantially less than the SCAQMD's cancer and non-cancer significance thresholds.

The intervenor states in this comment that the AES Highgrove project would violate the CDE codes because the proximity to pressured pipelines. Section 8.12.6 addressed the issue of the natural gas pipeline, which will run within approximately 1,500 feet of the proposed high school. The analysis specifically addressed the risk of pipeline rupture due to various forms of failures and then

evaluated the probability of such occurrence and the potential affect on the school. The study used conservative assumptions based on older pipelines and therefore its results predict a greater probability of pipeline failure than would be expected from a new pipeline constructed to today's stringent pipeline standards. Even with the conservative assumptions, the analysis concluded that due to the relatively small diameter and location of the pipeline will not expose students or school employees to significant hazards associated with operation of the natural gas pipeline (see also Appendix 8.12B of the AES Highgrove CEQA document).

The intervenor states in this comment that the AES Highgrove project would violate the CDE codes because the proximity to high-voltage power transmission lines. Section 5.5.2.1 of the CEQA document for the AES Highgrove project states that the operator is not required to reconductor any lines in the immediate vicinity of the plant in order to deliver power from the new facility to the electrical grid. Therefore, the ability of the lines to carry additional current will not be increased above existing levels. Since the project is not increasing system voltage or capacity of any transmission lines in the vicinity of the project, the EMF generated by any of these existing lines will be no higher than the existing design levels which can currently exist without the addition of the Highgrove Project.

Response 6-4

With regard to the analysis of hazardous air pollutants, see Response 6-3. The comment also states that the local educational agency (LEA) should consult with the administering agency. Since the CEC is the administering agency of the AES Highgrove project, this comment should be directed to that agency.

Response 6-5

The SCAQMD is currently developing the 2007 Air Quality Management Plan (AQMP) to address achieving PM2.5 and ozone standards and remove our jurisdiction from non-attainment status. In order to do that, the AQMP proposes a number of control measures that, if implemented, will enable the attainment of the PM2.5 standards. These control measures involve regulation of both mobile and stationary sources. The public health effects are well known and until attainment is reached the public will continue to be affected by these adverse conditions.

Response 6-6

The maximum annual, daily, and hourly emissions for the AES Highgrove project during normal operation are shown in Table 8.1-19 of the CEQA document. According to Table 8.1-19, CO emissions are 239,874 pounds per year, NOx

emissions are 183,518 pounds per year, and VOC emissions are 40,794 pounds per year. It should be noted that SCAQMD rules 1303 and 2005 contain emission offset requirements for all emissions from a new, modified, or relocated facility greater than one pound per day.

Response 6-7

Please refer to Response 6-3 regarding land use and planning decisions on the AES Highgrove Power Plant project. In addition, Section 8.12.4 states that hazardous materials will not be stored or used in the gas supply line, water supply line, or electric transmission line corridors during operations.

Response 6-8

Please refer to Response 6-3 regarding compliance with CDE codes and requirements related to pipelines.

Response 6-9

Please refer to Response 6-3 regarding compliance with CDE codes and requirements related to high-voltage power transmission lines.

Response 6-10

Section 8.12.4.2 states that the AES Highgrove project facility will store the 19percent aqueous ammonia solution in a single stationary aboveground storage tank (AST). The capacity of the tank will be approximately 16,000 gallons, but will be limited by regulation to storing a maximum amount of 13,600 gallons (85 percent capacity). The tank will be surrounded by a secondary containment structure capable of holding the full contents of the tank, approximately 1,100 square feet (22 feet by 50 feet). Further, Consequences Analysis presented in Subsection 8.12.5 of the CEQA document, Offsite Migration Modeling, showed that a release of a 19 percent solution of aqueous ammonia under a worst-case scenario will not cause significant offsite impacts to public health or safety.

With regard to sulfuric acid, the AES Highgrove CEQA document states that it is an extremely hazardous substance, is a very corrosive chemical that can cause severe harm to humans if ingested, inhaled, or contacted. However, sulfuric acid has a very low vapor pressure and will not readily volatilize upon release. Therefore, the potential for harm to humans offsite is minimal. Sulfuric acid is identified as a regulated substance under the CalARP program, but only if it is concentrated with greater than 100 pounds of sulfur trioxide, if it meets the definition of oleum, or if it is stored in a container with flammable hydrocarbons. The sulfuric acid that will be used at the AES Highgrove Project facility does not contain more than 100 pounds of sulfur trioxide or meet the definition of oleum. In addition, it will not be stored in a container with flammable hydrocarbons. Therefore, sulfuric acid is not subject to the RMP requirements under CalARP.

Table 8.12-3 of the AES Highgrove CEQA document states that the remaining materials are also considered to be hazardous, but they pose less threat to humans than aqueous ammonia and sulfuric acid. Some materials (citric acid and sodium nitrate) will be used at the site only during initial commissioning and during periodic maintenance (once every 3 to 5 years). Therefore, the potential for environmental or health effects will exist only during those rare occasions when the materials are onsite.

Response 6-11

The CEQA document for the AES Highgrove project states that the SARI system was constructed to limit the discharge of saline wastewater into the Santa Ana In the project area, the "San Bernardino Municipal Water District River. Ordinance No. 73-SARI" provides regulations for the use of the SARI system. Based on the plant's location, the Highgrove Project must obtain from the City of San Bernardino Municipal Water Department an Indirect Industrial User Permit, including a laboratory analysis of a sample from the proposed discharge and a Liquid Wastehauler permit application to discharge waste at the truck disposal Ordinance No. 73-SARI requires that pretreatment systems reduce station. pollutants to levels specified by federal and local limitations. Wastewater discharges must be in accordance with the general pretreatment regulations as stated in Section 403.2 of Title 40 of the Federal Code of Regulations. In addition, the ordinance specifies local discharge limits consistent with the operational requirements of the SARI system's NPDES permit with the Santa Ana RWQCB.

Response 6-12

According to the CEQA document for the AES Highgrove facility, the comment is correct that the site is a RCRA site and that DTSC is responsible for the onsite Corrective Action. Specifically, §3008(h) of RCRA provides authority for issuance of administrative orders to require corrective action when there is, or has been, a release of hazardous constituents from a facility operating under an ISD. The process requires facilities that operated hazardous waste management units to identify, investigate, and remediate solid waste management units (SWMUs) and other areas of concern identified as having potentially released hazardous substances to the environment (see Subsection 8.13.10 of the AES Highgrove CEQA document).

Response 6-13

The comment states requirements for the LEA. The SCAQMD is not the LEA for the AES Highgrove project; therefore, this comment should be directed to the appropriate LEA.

Response 6-14

The lead agency for any school project should contact the DTSC with regard to the type of border zone property. This comment, however, has no relevance to PAR 1309.1 and the re-adoption of Rule 1315.

Response 6-15

Similar to Response 6-14, the information of a proposed school siting in proximity to a nearby existing railroad track has no bearing on PAR 1309.1 and PRR 1315 and should be referred to the appropriate school district. Comments regarding the impacts from the siting, constructing and operating the proposed AES project relative to any existing rail activity should be directed to the lead agency for the AES Highgrove project, i.e., CEC.

Response 6-16

With regard to the proximity of the local school to the natural gas pipeline, please refer to Responses 6-3.

Response 6-17

Please refer to Response 6-10 with regard to evaluating hazard impacts from the siting, constructing and operating the proposed AES Highgrove power plant. With regard to hazardous emissions, please refer to Response 6-3. With regard to the fact that the AES Highgrove power plant will be located on a RCRA site, please refer to Response 6-12.

Response 6-18

Hydrology and water quality is another environmental impact area required to be analyzed in the CEQA document prepared when evaluating impacts from siting, constructing and operating the AES Highgrove Power Plant. Hydrology and water quality associated with the siting of a new facility would be analyzed and mitigated as necessary pursuant to CEQA by the appropriate lead agency. As noted in Response 6-2, the Draft PEA identified indirect impacts from siting, constructing and operating eligible facilities in Chapter 5 using the information available.

Response 6-19

According to the CEQA document for the AES Highgrove Power Plant, the Project Site is not currently within the service territory of a water purveyor. The Riverside Highland Water Company serves the City of Grand Terrace and has wells adjacent to the Project Site. The Project Site was most likely never annexed into the service territory because the existing wells were used to serve both process and domestic needs of the plant. However, Riverside Highland Water Company has indicated that it will annex the site in order to provide potable water to serve the proposed facility. This indicates that the local water purveyor can supply the increased water demand, therefore, water demand impacts would not be considered significant.

Response 6-20

According to the CEQA document for the AES Highgrove facility, the Project Site and surrounding parcels within the City of Grand Terrace are currently zoned M2-Industrial or RM-Restricted Manufacturing based on the zoning map for the City of Grand Terrace (Figure 8.4-3). The City Planning Commission has provided a letter confirming that power generation facilities are a permitted use within the M2 Industrial Zone (refer to Appendix 8.4A of the CEQA document for the AES Highgrove facility).

With regard to noise, it is unclear what is meant by the statement that, "Demolition, clearing... will average 55 decibels (dBA). A comparable sound to 55 dBA is the horn of a train, which is 96 dBA." In any event, the CEQA document for the AES Highgrove project states that Chapter 8.108, Noise, of the Grand Terrace City Code restricts the hours of construction as follows: "The operation or use between the hours of ten p.m. and seven a.m. of any pile driver, steam shovel, pneumatic hammers, derrick, steam or electric hoist, power driven saw, fork lifts, milling equipment, other tools or apparatus the use of which is attended by loud and excessive noise, or the movement of tractors, tractor trucks, or large trucks on property adjacent to residences is prohibited." The Highgrove Project will comply with this requirement by restricting such noisy construction activity at the project site to the hours of 7 a.m. to 10 p.m.

Response 6-21

With regard to potential noise impacts from the AES Highgrove facility, refer to Response 6-20. With regard to the statement that cumulative traffic impacts were

not adequately analyzed, as a single purpose agency with jurisdiction over air quality, the SCAQMD is not in a position to evaluate this comment.



7251 Amigo Street, Suite 120 Las Vegas, NV 89119

April 24, 2007

Mr. Michael Krause South Coast Air Quality Management District c/o Planning/CEQA 21865 Copley Drive Diamond Bar, CA 91765-4182

Re: Proposed Amendments to SCAQMD Rule 1309.1

Dear Mr. Krause:

Reliant Energy (Reliant) submits these comments in response to the Notice of Preparation of a Draft Program Environmental Assessment for Proposed Amended Rule 1309.1 – Priority Reserve.

Reliant owns and operates the Etiwanda Generating Station in Rancho Cucamonga, which would be located in Zone 3 of the staff's current proposal for amending Rule 1309.1. On April 13, 2007 Reliant submitted to the California Energy Commission an Application for Certification for a new combined cycle generating facility at the Etiwanda site. This facility will have an annual average output of 656 megawatts (MW) and a maximum rated output of 690 MW. The proposed inservice date of the facility is July, 2010. The objective of this new facility is to provide efficient, baseload electric energy at a key reliability location in the transmission grid to meet growing energy demand while minimizing incremental environmental impacts. Due to the scarcity of emission credits in the market, Reliant expects to acquire credits from the Priority Reserve in order to develop the facility.

We have participated in the development of the proposed amendments to Rule 1309.1, and are pleased the staff is proposing to allow facilities in Zone 3 access to the Priority Reserve. However, the current staff proposal contains a provision that we strongly feel the staff should reconsider. The current proposal requires that facilities in Zone 3 and Environmental Justice Areas be no more than 635 MW to be eligible to draw Priority Reserve credits.

Combined cycle gas turbine facilities are the most efficient form of gas-fired baseload electric generation. Gas turbine and steam turbine manufacturers offer a limited product line of these components with individual megawatt capabilities. When assembled to form a combined cycle facility, the result is a power plant with a "boilerplate" rating for a

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defined set of environmental and operating conditions. The megawatt output of the facility will vary with ambient conditions such as air temperature, humidity and site elevation. Many combined cycle facilities employ duct burner technology, which enables the facility to efficiently increase its output during peak demand periods. The megawatt rating of any facility must be expressed in terms of a set of corresponding environmental and operating conditions. It must also be recognized that the selection of gas turbines and facility location are often driven by solicitations from the local Electric Service Providers seeking specified amounts of capacity in certain areas by a certain timeframe. The commercial availability, cost and efficiency of the various components are often major factors affecting the design, and hence the megawatt rating, of any given facility proposed in response to the competitive solicitations.

Reliant recommends that the District rulemaking staff consider not specifying a facility megawatt limit in the rule. We believe that the CEQA and District permit review processes that these projects undergo are more than adequate to protect public health and the environment. Furthermore, the megawatt rating does not necessarily equate to environmental quality. Technology is continually being developed which has higher megawatt output levels with lower emissions. A megawatt limitation will seriously hinder or prohibit the development of the needed capacity or promote a migration to strictly smaller peaking facilities.

In light of Reliant's recommendation that the provision limiting the size of certain projects be eliminated from the staff proposal, we urge the CEQA staff to assume in its analysis that all of the identified projects, including the new Reliant facility, will be developed at their proposed output. This will ensure that the CEQA analysis will be broad enough to cover the proposed amendments should the limitation on size be eliminated from the final rulemaking.

Reliant Energy appreciates the opportunity to comment on the proposed rule. We will continue to work with the staff on the development of this rule which is vital to supporting the development of energy resources for the area while achieving State and local air quality objectives. Please call me at (702) 407-4884 if you have any questions.

Sincerely

Robert W. Lawhn Director – Environmental Compliance

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(Con't)

COMMENT LETTER NO. 7 RELIANT ENERGY

Robert W. Lawhn April 24, 2007

Response 7-1

SCAQMD is aware of the Reliant Energy project in Etiwanda and has included the project as potentially eligible to access the Priority Reserve at its projected MW capacity (see Table 2-3 in the Draft PEA).

Response 7-2

The latest version of PAR 1309.1 allows EGFs generating power at 635 MW or greater to access the Priority Reserve as long as they comply with more stringent toxic and criteria pollutant requirements and pay a higher mitigation fee (see Table 2-7 for the specific proposed zone restrictions).

Response 7-3

Combined cycle units are low cost sources of power generation, however, they have longer and more polluting start-ups than peaker units and the capital costs on combined cycle units are higher. As an air quality agency, the emissions from these sources are the critical characteristic that needs to be considered. The economic decisions will need to be made by the power companies and government entities with siting authority. In any event, the SCAQMD must balance the needs of electricity generation with protecting public health, especially to those residents in heavily polluted areas. Part of this balance includes provisions and restrictions in PAR 1309.1 that allows EGFs access to the Priority Reserve.

Response 7-4

The Draft PEA does consider the Reliant Energy power plant as an eligible facility to access the Priority Reserve and includes the projected 656 MW level as listed by the California Energy Commission².

² California Energy Commission (<u>http://www.energy.ca.gov/sitingcases/all_projects.html</u>)