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STATE OF CALIFORNIA

**Energy Resources Conservation
and Development Commission**

In the Matter of:

Complaint Against Ormat Nevada, Inc.
Brought By California Unions for
Reliable Energy

Docket No. 11-CAI-02

**COMMENTS OF CALIFORNIA UNIONS FOR RELIABLE ENERGY ON
[PROPOSED] ORDER DENYING PETITION FOR RECONSIDERATION OF
ADOPTION OF
COMMISSION DECISION AND ORDER NO. 11-1130-4**

February 10, 2012

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Pursuant to the February 3, 2012 Amended Notice of Hearing on Petition for Reconsideration and Opportunity to Comment, California Unions for Reliable Energy submits the following comments on the Proposed Order Denying Petition for Reconsideration of Adoption of Commission Order No. 121-1130-4 (Proposed Order).

I. Introduction

The Proposed Order is legally incorrect for two reasons. First, the Proposed Order concludes that the Commission's determination that it lacks jurisdiction over North Brawley and East Brawley is supported by the record. Second, the Proposed Order concludes that section 2003 of the Commission's regulations requires the Commission to consider actual fuel constraints in determining the generating capacity of a geothermal power plant. Both conclusions are contrary to the Warren-Alquist Act. The Proposed Order repeats the legal errors made by the Commission in Decision and Order No. 121-1130-4 and should not be adopted.

II. The Commission Has Jurisdiction Over North Brawley and East Brawley as a Matter of Law

The Commission has no powers beyond those conferred on it by the Legislature.¹ Through section 25500, the Legislature directed the Commission to license "facilities," defined by the Act as thermal power plants with a generating capacity of 50 megawatts or more.² In relevant part, section 25500 states that the Commission

shall have the exclusive power to certify all sites and related facilities . . . [and] . . . the issuance of a certificate by the

¹ *Victor Valley Transit Authority v. Workers' Compensation Appeal Board* (2000) 83 Cal.App.4th 1068, 1072.

² See Pub. Resources Code §§ 25110, 25120.

*commission shall be in lieu of any permit . . . required by any . . . local agency . . . for such use of the site and related facilities.*³

The Proposed Order concludes that the Commission lacks jurisdiction because Ormat testified that it installed only five of six generating units at the North Brawley site and that it will install only three of six generating units at the East Brawley site.⁴ This conclusion violates the Warren-Alquist Act.

Where a project proponent applied for a permit from a local agency to construct and operate a “facility,” the Commission does not have discretion to find that it lacks jurisdiction.⁵ This is because the Legislature directed the Commission to issue all such authorizations in the state.⁶ Indeed, in such cases the Warren-Alquist Act mandates that the Commission assume jurisdiction to prevent a local jurisdiction from issuing invalid permits.⁷ The Commission’s conclusion that a project proponent’s testimony may vitiate its mandatory, exclusive jurisdiction is unsupported by the Act, the Commission’s regulations, or the Commission’s prior practice.⁸

³ Pub. Resources Code § 25500 (emphasis added).

⁴ Proposed Order, pp. 2-3.

⁵ See *Victor Valley Transit Authority*, 83 Cal.App.4th at 1072-74; cf. Pub. Resources Code §§ 25110, 25120; see also *First Industrial Loan Company of California v. Daugherty* 26 Cal.2d 545, 559 (“A ministerial officer may not, however, under the guise of a rule or regulation vary or enlarge the terms of a legislative enactment or compel that to be done which lies without the scope of the statute and which cannot be said to be reasonably necessary or appropriate to subserving or promoting the interests and purposes of the statute” (citations omitted).)

⁶ Pub. Resources Code § 25500.

⁷ See Comments of California Unions for Reliable Energy in Response to Notice of Hearing on Petition for Reconsideration of Commission Decision and Order No. 11-1130-4, January 19, 2012, pp. 2-4; see also Application for Small Power Plant Exemption, Project to Add 16 Emergency Backup Generators to the Santa Clara SC-1 Data Center, Santa Clara California, excerpts attached as Exhibit 1; see also *id.* at Appendix D, Bay Area Air Quality Management District Authority to Construct for Permit Application No. 17020, Plant No. 18801, excerpts attached hereto as Exhibit 2.

⁸ See Proposed Order, p. 3.

The Proposed Order concedes that the North Brawley *permit* and East Brawley *permit application* are each for six generating units.⁹ Undisputed record evidence shows that six generating units have a generating capacity of more than 50 megawatts.¹⁰ As such, the North Brawley permit and the East Brawley permit application are, each, for “facilities” as defined by the Act. Under section 25500, the Commission has exclusive certification jurisdiction no matter what the project developer actually builds or says it will actually build.

III. The Commission’s Interpretation of Regulation 2003 Is Invalid Because it Inconsistent with its Words

The Commission is required to apply section 2003 of its regulations to calculate a plant’s generating capacity.¹¹ This much is undisputed. This analysis is performed so that the Commission can determine whether it has jurisdiction over a power plant.¹² The Proposed Order concludes that *for geothermal facilities*, section 2003 of the Commission’s regulations requires the Commission to consider the actual fuel constraints at the power plant site to determine whether it has jurisdiction.¹³ The Commission’s interpretation is clearly in error. Section 2003 applies to all thermal powerplants; not just geothermal facilities. The subsection governing maximum gross rating has two parts: one that applies to combustion turbines and another that applies to steam turbines. The methods for determining the maximum gross rating in both cases are analogous:

⁹ See Proposed Order, pp. 2, 4.

¹⁰ 9/26/11 RT p. 60-23-61:16, 104:3-105:10, RT 120:-20-121:3; see Exh. 203, Ormat, “North Brawley Geothermal Power Plant Net and Gross Power Calculations;” see *id.* at “East Brawley Geothermal Power Plant Net and Gross Power Calculations.”

¹¹ Cal. Code Regs., tit. 20, §§ 2001, 2003.

¹² See Cal. Code Regs., tit. 20, § 2001.

¹³ See Proposed Order, p. 3.

The maximum gross rating of a combustion turbine generator shall be the output, in MW, of the turbine generator at average operating site conditions, ***with the proposed fuel type, and*** at those ***water or steam injection flow rates, which yield the highest generating capacity on a continuous basis***;¹⁴

The maximum gross rating of a steam turbine generator shall be the output, in MW, of the turbine generator ***at those steam conditions and at those extraction and induction conditions which yield the highest generating capacity on a continuous basis***.¹⁵

The Proposed Order erroneously equates the phrase “steam conditions . . . at those extraction and induction conditions” with the proposed fuel source.¹⁶ The phrase refers to the introduction of steam – which is not the fuel source – into the turbine generator. For both types of turbines, generating capacity depends on the maximum, continuous physical capacity of the ***turbine generator***.

Contrary to the Proposed Order, the Commission’s jurisdiction clearly does not depend on fuel quality or fuel supply. In contrast to the calculation of the capacity of a combustion turbine, nowhere in the calculation of the generating capacity of a steam generator do the regulations even mention fuel. Does the Commission lose jurisdiction over a 100 MW natural gas-fired combined cycle plant because the gas utility sizes under-sizes the natural gas delivery pipeline to only supply enough gas for 49 MW? No. The ***generating capacity*** of that plant remains unchanged. Geothermal plants are no different. The ***generating capacity*** of the plant’s generating equipment is not affected by the fuel quality or the quantity of fuel supply. Those factors may affect a plant’s actual generating

¹⁴ Cal. Code Regs., tit. 20 § 2003 subd. (b)(2) (emphasis added).

¹⁵ Cal. Code Regs., tit. 20 § 2003 subd. (b)(1) (emphasis added).

¹⁶ See Proposed Decision, p.3.

capacity at a given point in time. But Section 2003 is unconcerned with that hypothetical. Whether the Commission has jurisdiction, depends solely on the physical capacity of a plant's turbine generator. The Proposed Order's transparently strained interpretation of the Commission's regulations conflicts with the words and the obvious meaning of those words.

IV. Conclusion

The Commission should reject the Proposed Order and grant CURE's Petition for Reconsideration because Decision and Order No. 121-1130-4 violates the Warren-Alquist Act and the Commission's regulations.

Dated: February 10, 2012

Respectfully submitted,

/s/

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EXHIBIT 1

**Project to Add 16 Emergency Backup
Generators to the Santa Clara
SC-1 Data Center
Santa Clara, California**

**Application for
Small Power Plant Exemption**

Submitted to the
California Energy Commission

Submitted by
Xeres Ventures LLC

November 2011

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- F Letter from Arlene L. Ichien & Melissa Jones to Mr. W. Tate Cantrell, Jr. (Apr. 21, 2008)
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1.0 Introduction

Xeres Ventures LLC (“Xeres” or the “Applicant”), a subsidiary of DuPont Fabros Technology, Inc. (“DuPont Fabros”), a leading owner, developer, operator, and manager of wholesale data centers, is seeking a Small Power Plant Exemption (SPPE) for the installation of 16 emergency standby diesel fuel-powered generators that are part of the second phase of the existing Santa Clara SC-1 Data Center, in the city of Santa Clara. The cumulative nameplate capacity of the existing 16 backup generators associated with Phase 1 is 36 megawatts (“MW”). The addition of the 16 additional engines associated with Phase 2 will have a total cumulative nameplate capacity in excess of 50 MWs.

On that basis, the California Energy Commission (“Commission”) asserted permitting jurisdiction over Phase 2 of the project in a letter dated April 21, 2008. One of the conditions of the Bay Area Air Quality Management District (“BAAQMD”) issued Authority to Construct for the Data Center backup generators (Permit Application No. 17020, Plant No. 18801) is that a Permit to Operate for backup generators 17-32 shall not be issued until either a small power plant exemption or certification is granted by the California Energy Commission or it has otherwise been determined that the backup generators are not subject to the provisions of Chapter 6 of Division 15 of the California Public Resources Code (Power Facility and Site Certification). Based on the facts detailed in this application, Xeres seeks a SPPE.¹

Under non-emergency conditions, the Data Center’s electric load will be served by Silicon Valley Power, the local public utility. The electric load is drawn primarily by the computer servers and associated equipment operating in the Data Center together with the cooling equipment and other support systems. The backup generators, each with a nameplate capacity of 2.25 megawatts (MW), will provide only emergency backup electric power. In addition, they will also run for testing and maintenance but only for short periods and otherwise will not operate unless there is a power failure that prevents Silicon Valley Power from supplying the electric service. The backup generators will not sell power to Silicon Valley Power or any other party. As designed, the backup generators’ maximum output will be limited to the maximum load of the Data Center, which is 49.1 MW.

The Data Center was designed in two phases, with 16 backup generators installed in each phase. The two phases are co-located within a single building, but are completely separate from one another from an operational perspective. Construction of Phase 1 of the Data Center (including installation of 16 backup generators) is complete as well as the building in which both Phase 1 and Phase 2 will be located. Pursuant to permits and approvals granted by the City of Santa Clara and BAAQMD, Phase 1 of the Data Center began commercial operation in September 2011. Virtually all of the Phase 2 build out will be constructed within the existing building shell. As a result, save construction of a temporary construction driveway, no further ground disturbance will occur on the site for the construction of Phase 2.

¹ The Applicant has had several discussions with Commission staff with regard to this jurisdictional determination. The Applicant continues to disagree with the Commission’s assertion of jurisdiction and reserves all of its rights with respect to jurisdiction over the backup generators.

This SPPE application has been prepared in accordance with Commission's Power Plant Site Certification Regulations. It provides:

- A detailed description of the backup generators, including the need for the backup generators, the type of fuel to be used, the method of construction, and discussion of the use of the gross energy output;
- A location map identifying the location of the Data Center and the backup generators, with accompanying description;
- Photographic representations adequately depicting the visual appearance of the site of the Data Center and backup generators and the immediate surroundings;
- A discussion of the permitting history of the Data Center and the backup generators, and Xeres Ventures LLC's reservation of rights with respect to jurisdiction;
- A description of the efficiency and environmental benefits of the backup generators and the Data Center;
- A discussion of environmental impacts and mitigation or avoidance measures, including a summary of the Initial Study conducted by the City of Santa Clara and a separate discussion of greenhouse gas impacts.
- An alternatives analysis;
- A description of the backup generators' compatibility with the most recent Integrated Energy Policy Report (IEPR); and
- A list of governmental agencies whose standards, ordinances, or laws are applicable to the backup generators.

The environmental baseline for the Santa Clara SC-1 Data Center site, or conditions at the time of this application, consist of an existing 312,000 square foot Data Center building with 16 backup generators, underground diesel fuel tanks, a completed mechanical room and service yard, parking lot, and landscaping installed. An electrical substation, switch gear and underground utility lines serving the Data Center also are in place.

2.0 Description of Backup Generators and Other Phase 2 Equipment

2.1 Introduction

Xcres proposes to install 16 backup generators at the Santa Clara SC-1 Data Center in an industrial area in the City of Santa Clara in Santa Clara County, California. These 16 backup generators are in addition to the 16 backup generators that are already installed at the Data Center. The Backup Generators will be run only for short periods for testing and maintenance and otherwise will not operate unless there is a power failure. Xcres has constructed and is currently operating Phase 1 of the facility and seeks authorization to complete the build out of Phase 2 of the facility.

2.2 Description of the Data Center

2.2.1 Overview

The Data Center is an approximately 312,000 square foot building on a 16.1-acre site located on the north side of Reed Street, west of De La Cruz Boulevard, in the city of Santa Clara. (See Appendix A at Figures 1-3.) The parcels are 535-555 Reed Street and 500-520 Mathew Street; the Assessor's Parcel Numbers are 230-03-075 and 230-03-080. The site was formerly developed with structures associated with a lumber mill and is within a fully developed area in Santa Clara. (See Appendix A at 1, Photos 1-4.)

The Data Center will house computer servers and supporting equipment for private clients, as well as associated office uses, in an environmentally controlled structure. The Data Center is two stories and approximately 48 feet in height. Construction is complete on the foundation and exterior of the structure, a substation and switchgear, and Phase 1 improvements in the southern half of the building. A detailed site plan is included as Appendix J.

The backup generators will be housed in a 51,550 square foot penthouse enclosure on the second floor of the Data Center and are air cooled. The second floor will also contain 14,087 square feet of offices. The first floor will house mechanical equipment and computer servers.

The Data Center has been designed in two phases. (See Appendix A at Figure 4.) The entire structure including all onsite civil improvements, central office, loading, and control/security areas, as well as sixteen backup generators have been constructed during Phase 1. Phase 2 will include the outfitting of all the remaining critical infrastructure, walls and partitions, raised floor and the remaining sixteen backup generators. An 80,000 square foot area in the northeast corner of the site will remain vacant (e.g., not covered by buildings or pavement). Development of this area, if any, would be subject to subsequent environmental review and permitting.

Construction of Phase 1 began in August 2008. Due to credit difficulties during the 2008-2010 financial crisis, construction of Phase 1 was suspended in November 2008. It was resumed May 2010 and construction work is now complete. No further excavation or other substantial ground disturbances will be required, and no additional structures will need to be erected under Phase 2. Commercial operation of Phase 1 began in September 2011. Construction of Phase 2 could begin as soon as late 2012 upon receiving appropriate regulatory approvals, and is expected to last approximately 10 months.

2.2.2 Need for the Backup Generators

The Data Center derives commercial value from its ability to provide its customers with mission critical space to support their servers, including space conditioning and a steady stream of high-quality power supply. Interruptions of power could lead to server damage or corruption of the data and software stored on the servers. To ensure a reliable supply of high quality power, the servers will be connected to 32 uninterruptible power supply (UPS) systems that store energy and provide near-instantaneous protection from input power interruptions. In the event of a power interruption, the UPS systems will require a power generation source to continue supplying steady power to the servers and other equipment. Thus, the Data Center's commercial viability depends on the backup generators.

The backup generators will provide back-up power to the Data Center when equipment failure or other conditions result in a disturbance or other interruption to the utility supply. The problem may be limited to a momentary disruption or may develop into a full loss of regular power supply. As soon as a problem is detected, the system will bring the backup generators online.

2.2.3 Electric Infrastructure Improvements

The backup generators will provide power for the Data Center only in the event of a power failure. No transmission or other grid interconnection facilities will be required for operation of the backup generators because their output will only supply the internal load of the Data Center, except for no longer than 30 second periods during the closed transition parallel transfer from the Silicon Valley Power grid to the backup generators, or vice versa.

Under normal operation, the serving electric municipal utility, Silicon Valley Power, will provide electrical power for the Data Center. As part of Phase 1 of the Data Center, an electrical primary substation and associated electrical equipment were constructed on the northeast portion of the site to provide for the electric demand of the Data Center. (See Appendix A at Figure 4.) Silicon Valley Power has routed new 60kV loop feeders into and through the station along Mathew Street.

The 3-bay substation (three 30/40/50m VA 60kV-24.9kV step-down transformers) has an all-weather surface underlain by crushed granite. A concrete masonry unit screen wall, 15 feet in height surrounds the substation (refer to Photo 2). Distribution of electrical power from the substation will be through three underground duct banks to supply the indoor distribution switchgear at 24.9kV.

2.5.2.1.7 Prevention of Significant Deterioration Requirements

BAAQMD's Prevention of Significant Deterioration (PSD) regulations require any new "major facility" to demonstrate that its emissions will not interfere with attainment and maintenance of the national ambient air quality standard for SO₂ or NO₂, or cause an exceedance of a PSD increment. Because the Data Center is not considered a "major facility", BAAQMD determined that the PSD requirements do not apply. (See Appendix I at 14.)

2.5.2.1.8 Health Risk Assessment for Toxic Air Contaminants

BAAQMD reviewed emissions of toxic air contaminants (TAC) emitted from the backup generators during discretionary operation because emergency operation is exempt from TAC review. BAAQMD found that best available control technology for toxics (TBACT) had been applied to the backup generators because the Generators would not emit diesel particulates at a rate greater than 0.15 g/bhp-hr. Because TBACT was satisfied, BAAQMD found that the increase in cancer risk of 1.2 in a million for the nearest residential receptor and 9.9 in a million for the offsite worker was acceptable. (See Appendix I at 14-15.)

2.5.2.2 Issuance of Authority to Construct

BAAQMD issued Authority to Construct (ATC) for Permit Application No. 17020, Plant No. 18801 on July 15, 2010. (See Appendix D.) The ATC covers the backup generators in both phases of the project.

2.5.3 California Energy Commission

In a letter dated April 21, 2008, the Commission asserted permitting jurisdiction over the backup generators. (See Appendix F.) Xeres disagrees with the Commission's assertion of jurisdiction because the Data Center will never sell power on the electrical grid, is not a "power plant" under the Warren-Alquist Act, and because the maximum output of the backup generators for both project phases is 49.1 MW, which is less than the Commission's 50 MW jurisdictional threshold.

Representatives of Xeres met and corresponded with Commission staff on numerous occasions regarding this jurisdictional determination. In August 2008, Xeres and Commission Staff reached an agreement that allowed construction of Phase 1 of the Data Center to begin. Xeres and Staff agreed that the Commission would not assert jurisdiction over the Phase 1 backup generators as long as the BAAQMD Authority to Construct for the Phase 2 backup generators contained the following language:

A Permit to Operate shall not be issued for, and permittee shall not operate, Source S-__ [ICE 17-32] for any reason whatsoever until the California Energy Commission (CEC) has granted a small power plant exemption relating to the DuPont Fabros Data Center per Section 25541 of the California Public Resources Code, approved an application for certification relating to the DuPont Fabros Data Center per Chapter 6 of Division 15 of the California Public Resources Code, or it has otherwise been determined that Sources S-__ through S-__ [ICE 1-32] are not subject to the provisions of Chapter 6 of Division 15 of the California Public Resources Code.

BAAQMD issued the Authority to Construct for Permit Application No. 17020, Plant No. 18801 for the Data Center and the backup generators on July 15, 2010. (See Appendix D.) The language required by the Commission was included as Condition 13 of Authority to Construct.

In filing this application, Xeres reserves all of its rights with respect to jurisdiction over the backup generators. Nothing in this application shall be construed to be a release, waiver, or limitation of any rights or remedies that Xeres may have under any laws, regulations, or common law.

EXHIBIT 2

Appendix D

**BAAQMD Authority to Construct for Permit
Application No. 17020, Plant No. 18801
(July 15, 2010)**



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT
SINCE 1955

July 15, 2010

Xeres Ventures LLC
1212 New York Ave, Suite 900
Washington, DC 20005

Attention: Hossein Fatch

Authority to Construct for Permit Application No. 17020, Plant No. 18801

**Required
Action**

Your Authority to Construct is enclosed. This Authority to Construct is not a Permit to Operate. **To receive your Permit to Operate you must:**

1. Complete the Start-up Notification portion of the Authority to Construct.
2. Send the Start-up Notification to the assigned Permit Engineer via e-mail, fax or mail at **least seven days** prior to operating your equipment.

Note: Operation of equipment without sending the Start-up Notification to the District may result in enforcement action.

**Authorization
of Limited Use**

The Authority to Construct authorizes operation during the start-up period from the date of initial operation indicated in your Start-up Notification until the Permit to Operate is issued, up to a maximum of 90 days. All conditions (specific or implied) included in this Authority to Construct will be in effect during the start-up period.

**Contact
Information**

If you have any questions, please contact your assigned Permit Engineer:

Tamiko D Endow, Air Quality Engineer II

Tel: (415) 749-4939 Fax: (415) 749-4949 Email: tendow@baaqmd.gov

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Plant Name: Xeres Ventures LLC

Sources 1 thru 32 Diesel-Fired Emergency Engine Generators

Condition No. 24670

Plant No. 18801

Application No. 17020

Xeres Ventures LLC, P#18801

Permit Application #17020

Permit Conditions for Sources

S-1 through S-32, Emergency Diesel-fired Internal Combustion Engine Generators, Model Year 2010 Detroit Diesel MTU

16V4000G83, 3353 bhp, each;

Each abated by a Selective Catalytic Reduction System (A-1 through A-32)

1. The owner/operator shall operate each engine only for the following purposes:
 - a. To mitigate emergency conditions,
 - b. For emission testing to demonstrate compliance with a District, State or Federal emission limit,
 - c. For initial startup testing/commissioning, or
 - d. For reliability-related activities (maintenance and other testing, but excluding initial startup testing/commissioning and emission testing).Operating while mitigating emergency conditions or while emission testing to show compliance with District, State or Federal emission limits is not limited.
[Basis: Stationary Diesel Engine ATCM 17 Cal. Code of Regs. ("CCR") Section 93115.6(a)(3)(A)(1)(c) (2010)]
2. The owner/operator shall ensure that each engine is operated for no more than 50 hours for reliability-related activities in any consecutive 12-month period.
[Basis: District Regulation 9, Rule 8, Section 330; Stationary Diesel Engine ATCM 17 CCR Section 93115.6(a)(3)(A)(1)(c)]
3. The owner/operator shall further limit the hours of reliability-related operation of each engine so that the combined reliability-related operation for all 32 engines does not exceed 700 hours in any consecutive 12-month period and that the combined operating hours are limited to the following times:
 - a. From 12am up to 8am: 300 hours
 - b. From 8am to up to 4pm: 200 hours
 - c. From 4pm to up to 12am: 200 hours[Basis: Cumulative Increase; District Regulation 2, Rule 5]
4. The owner/operator shall ensure that no more than 16 engines are operated at one time for initial startup testing/commissioning purposes. The owner/operator shall also ensure that combined operation for initial startup testing/commissioning does not exceed 800 hours for each set of 16 engines (S-1 through S-16 and S-17 through S-32), unless a different limit is approved by the APCO.
[Basis: Stationary Diesel Engine ATCM 17 CCR Section 93115.6(a)(3)(C)(3)]



Plant Name: Xeres Ventures LLC

Sources 1 thru 32 Diesel-Fired Emergency Engine Generators

Condition No. 24670

Plant No. 18801

Application No. 17020

5. The owner/operator shall ensure that only one engine is operated at a time for emission testing and for reliability-related activities and shall ensure that the Load Bank is used for start-ups of these activities if they will last longer than 30 minutes and require a load of 50% or more.

[Basis: State AAQS 17 CCR Section 70200]

6. The owner/operator shall operate each engine only when a non-resettable totalizing meter (with a minimum display capability of 9,999 hours) that measures and records the hours of operation for the engine is installed, operated and properly maintained.

[Basis: District Regulation 2, Rule 5; District Regulation 9, Rule 8, Section 530; Stationary Diesel Engine ATCM 17 CCR Section 93115.10(e)(1); 40 Code of Fed. Regs. ("CFR") Section 60.4209 (2010)]

7. The owner/operator shall ensure that the emissions of nitrogen oxides (NOx) from each engine is abated through a properly operated and properly maintained Selective Catalytic Reduction (SCR) System whenever fuel is combusted at each source and the SCR catalyst bed has reached minimum operating temperature.

[Basis: Cumulative Increase; District Regulation 2, Rule 1, Section 403; State AAQS 17 CCR Section 70200]

8. When abatement of an engine by the SCR System is required by Part 7 above, the owner/operator shall ensure that the SCR System reduces NOx emissions (calculated as NO₂) from the engine to no more than 46 ppmv, on a dry basis, corrected to 15% oxygen, as determined through Source Test Method ST-13 or alternate source test method approved by the District's Source Test Section.

[Basis: Cumulative Increase; District Regulation 2, Rule 1, Section 403; State AAQS 17 CCR Section 70200]

9. The owner/operator shall ensure that only CARB diesel fuel with a sulfur content not exceeding 0.0015% by weight (15 ppmw) and aromatic hydrocarbon content not exceeding 10% by volume is used at S-1 through S-32

[Basis: Stationary Diesel Engine ATCM 17 CCR Section 93115.5(b)(1)]

10. The owner/operator shall operate and maintain the engine-generators, S-1 through S-32, and associated SCR systems in accordance with the manufacturers' written instructions.

[Basis: 40 CFR Section 60.4211]



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11. Notwithstanding Part 1, for the purpose of limiting the potential to emit of this facility, the owner/operator shall ensure that the emissions from emergency and all other use of the engines does not result in NOx emissions exceeding 93.5 tons per year. Compliance with this limit shall be tracked by ensuring that total combined operation of all engines at this facility does not exceed 8,000 hours in any consecutive 12-month period, including operation under emergency conditions and all other conditions. If the total operating hours for all of the engines at this site exceeds 8,000 hours in any consecutive 12-month period, the owner/operator must either submit a demonstration that the facility has not exceeded the major source thresholds or submit an application for a Major Facility Review Permit, in accordance with Regulation 2, Rule 6 and comply with the application requirements of 40 CFR Part 52.

[Basis: Regulation 2, Rule 6; 40 CFR Part 52]

12. Records: The owner/operator shall maintain the following records in a District-approved log:

- a. For operation of the engines: The date, source number, operation start and end times, whether the load bank was used, the load or load range, a description of the operation as listed in (i) through (v) below, and the name of the operator entering the log entry:
 - i. emergency operation - and the nature of each emergency condition;
 - ii. required emission testing - and citation of the applicable District, State or Federal regulation;
 - iii. initial start-up/commissioning;
 - iv. reliability-related activities; or
 - v. other operation - and a description of why operation was necessary.
- b. Fuel usage for each engine and fuel purchase records, showing sulfur content.
- c. Maintenance records for the engines and SCR systems, including records of catalyst changes.
- d. At the end of the month, the hours operation in a(i) through a(v) above shall be totaled for each engine and summed with the previous 11 months of data to calculate the most recent 12-month sum.
- e. At the end of the month, the hours of operation for reliability-related activities (a(iv) above) for all engines at the facility shall be totaled for each of the time periods described in Part 3 and summed with the previous 11 months of data to calculate the most recent 12-month sums.
- f. The hours of operation for initial start-up/commissioning (a(iii) above) shall be totaled for



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S-1 through S-16 and S-17 through S-32.

- g. The total hours of operation for emergency (a(i) above) and all other purposes shall be totaled for all engines at the end of the month and summed with the previous 11 months of data to calculate the most recent 12-month sum.
- h. The fuel usage in b above shall be totaled at the end of each month for the previous 12-month period. Log entries shall be retained on-site, either at a central location or at the engine location, for at least 60 months from the date of entry and be made immediately available to the District staff upon request.

[Basis: Cumulative Increase; District Regulation 2, Rule 5; District Regulation 2, Rule 6; District Regulation 9, Rule 8; Stationary Diesel Engine ATCM 17 CCR Section 93115.10(g); 40 CFR Part 52; 40 CFR Section 60.4209]

- 13. A Permit to Operate shall not be issued for, and the owner/operator shall not operate, Source S-17 through S-32 for any reason whatsoever until the California Energy Commission (CEC) has granted a small power plant exemption relating to the DuPont Fabros Data Center per Section 25541 of the California Public Resources Code, approved an application for certification relating to the DuPont Fabros Data Center per Chapter 6 of Division 15 of the California Public Resources Code, or it has otherwise been determined that Sources S-1 through S-32 are not subject to the provisions of Chapter 6 of Division 15 of the California Public Resources Code.

[Basis: District Regulation 2, Rule 1, Section 403]

- 14. The owner/operator shall conduct a District-approved start-up source test on each engine to demonstrate compliance with the NOx limit in Part 8 of this condition, no later than 120 days from initial start-up. The owner/operator shall conduct additional District-approved source tests to demonstrate compliance with the NOx limit in Part 8 of this condition no later than 60 days after each catalyst change. The owner/operator shall submit the source test results to the District's Source Test staff no later than 30 days after the source test has been performed.

[Basis: Cumulative Increase; District Regulation 2, Rule 1, Section 403; State AAQS 17 CCR Section 70200]

- 15. For the source test performed on the first engine, the owner/operator shall determine the time at which the SCR System becomes operational for an engine operated at 50% load, without use of the Load Bank to preheat the SCR System catalyst, and shall measure the abated NOx emissions at 50% load. The owner/operator shall submit the test results to the District's Source Test and



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Engineering staff no later than 30 days after the source test has been performed. If operation of the engine at 50% load, without the Load Bank to preheat the SCR System catalyst, requires longer than 1 hour to reach the minimum exhaust temperature necessary for operation of the SCR System, the owner/operator shall submit revised NO₂ modeling to demonstrate that the actual time necessary to reach the minimum catalyst temperature will not change the project's compliance with the state 1-hour NO₂ standard.

[Basis: District Regulation 2, Rule 1, Section 403; State AAQS 17 CCR Section 70200]

16. The owner/operator shall obtain approval of all source test procedures from the District's Source Test Section prior to conducting any tests. The owner/operator shall comply with all applicable testing requirements as specified in Volume V of the District's Manual of Procedures. The owner/operator shall notify the District's Source Test Section, in writing, of the source test protocols at least 14 days prior to testing and of the projected test dates at least 7 days prior to testing.

[Basis: District Regulation 2, Rule 1, Section 403]

End of Conditions

DECLARATION OF SERVICE

In the Matter of Complaint Against Ormat Nevada, Inc. Brought By
California Unions for Reliable Energy

Docket No. 11-CAI-02

I, David Weber, declare that on February 10, 2012, I served and filed copies of the attached **COMMENTS OF CALIFORNIA UNIONS FOR RELIABLE ENERGY ON [PROPOSED] ORDER DENYING PETITION FOR RECONSIDERATION OF ADOPTION OF COMMISSION DECISION AND ORDER NO. 11-1130-4** dated February 10, 2012. The original document, filed with the Docket Office, is accompanied by a copy of the most recent Proof of Service list, located on the web page for this project at:

<http://www.energy.ca.gov/proceedings/11-cai-02/index.html>.

The document has been sent to the other parties in this proceeding (as shown on the Proof of Service list) and to the Commission's Docket Unit or Chief Counsel, as appropriate, in the following manner:

(Check all that Apply)

For service to all other parties:

- Served electronically to all e-mail addresses on the Proof of Service list;
- √ Served by delivering on this date, either personally, or for mailing with the U.S. Postal Service with firstclass postage thereon fully prepaid, to the name and address of the person served, for mailing that same day in the ordinary course of business; that the envelope was sealed and placed for collection and mailing on that date to those addresses **NOT** marked "email service preferred."

AND

For filing with the Docket Unit at the Energy Commission:

- √ by sending an electronic copy via e-mail to the address below;

OR

by depositing an original and 12 paper copies in the mail with the U.S. Postal Service with first class postage thereon fully prepaid, as follows:

CALIFORNIA ENERGY COMMISSION – DOCKET UNIT

Attn: Docket No. 11-CAI-02
1516 Ninth Street, MS-4
Sacramento, CA 95814-5512
docket@energy.state.ca.us

OR, if filing a Petition for Reconsideration of Decision or Order pursuant to Title 20, § 1720:

Served by delivering on this date one electronic copy by e-mail, and an original paper copy to the Chief Counsel at the following address, either personally, or for mailing with the U.S. Postal Service with first class postage thereon fully prepaid:

California Energy Commission
Michael J. Levy, Chief Counsel
1516 Ninth Street MS-14
Sacramento, CA 95814
mlevy@energy.state.ca.us

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct, that I am employed in the county where this mailing occurred, and that I am over the age of 18 years and not a party to the proceeding.

/s/
David Weber



BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT
COMMISSION OF THE STATE OF CALIFORNIA
1516 NINTH STREET, SACRAMENTO, CA 95814
1-800-822-6228 – WWW.ENERGY.CA.GOV

**IN THE MATTER OF COMPLAINT AGAINST
ORMAT NEVADA, INC. BROUGHT BY
CALIFORNIA UNIONS FOR RELIABLE ENERGY**

**Docket No. 11-CAI-02
(Revised 9/12/11)**

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