

EXHIBIT 23

ORANGE GROVE ENERGY'S SUPPLEMENTAL REPLY TESTIMONY OF RICHARD JONES AND JOSEPH STENGER ON SOIL AND WATER RESOURCES

Q1 *Mr. Jones, please state your name, address, position and qualifications.*

A1 Richard Jones  
Project Manager, Orange Grove Project  
J-Power USA Development Co., LTD  
821 Good Hope Dr.  
Castle Rock, CO 80108

<b>DOCKET</b>	
08-AFC-4	
DATE	_____
RECD.	DEC 01 2008

Formal Education:

BS in Marine Engineering from California Maritime Academy

Relevant Experience:

I have 22 years experience in the electric power generation field, including operations, maintenance, plant management, senior management, development and design. I have played key roles in the design, construction and operation of nine facilities with water purity requirements at least as stringent as those called for at the Orange Grove facility. Four of those facilities were new-build LM6000 PC-based facilities, totaling 14 units. In addition to college courses in water treatment system conceptual design and operation, over the years I have participated in many vendor-sponsored water treatment seminars.

Q2 *Mr. Stenger, please state your name, address, position and qualifications.*

A2 Joseph Stenger  
Project Director  
TRC Companies, Inc  
2666 Rodman Dr.  
Los Osos, CA 93402

Formal Education:

BS in Geology (Earth Sciences) from University of California at Santa Cruz

Relevant Experience:

I have 23 years of experience in environmental engineering, regulatory compliance and permitting in California. I am a California-licensed Professional Geologist, a California Registered Environmental Assessor, and a Nevada Certified Environmental Manager. My 23 years as an environmental professional includes extensive experience in environmental and regulatory compliance auditing,

environmental risk assessment, waste management, hazardous materials, permitting, and remediation for a wide variety of infrastructure and industrial projects, including more than 10 years of experience with power plants and related infrastructure.

*Q3 Please describe the purpose of your testimony.*

A3 The purpose of our testimony is to respond to the testimony on Soil and Water Resources of Mr. McPhee dated November 23, 2008.

*Q4 In response to Mr. McPhee's comment number 2, what is your understanding of the current use of the terms "recycled" and "reclaimed" water as those terms would be applied to the water proposed for use by the Orange Grove Project for cooling?*

A4 "Recycled Water" is the more appropriate terminology for the tertiary-treated wastewater to be used by the Orange Grove Project. "Recycled Water" is defined in California Water Code Section 13050(n) as "water which, as a result of treatment of waste, is suitable for a direct beneficial use or a controlled use that would not otherwise occur and is therefore considered a valuable resource." The tertiary treated wastewater from FPU that is intended for use in the Orange Grove Project design fits this definition. The use and management of "Recycled Water" are regulated pursuant to certain sections of the California Porter-Cologne Water Quality Control Act (Water Code Section 13000 et seq.), Water Recycling Act of 1991 (Water Code Section 13575 et seq.), and California Safe Drinking Water Act (Health and Safety Code 116270 et seq.).

The term "Reclaimed Water" appears in some state laws and regulations, but none that are relevant to the Orange Grove Project. My understanding is that "Reclaimed Water" is an obsolete term and its continued appearance in some State requirements may be a relic of the past when this term was more common.

In a non-technical, non-regulatory sense, some State regulations and state-published guidance documents appear to use the terms "Recycled Water" and "Reclaimed Water" interchangeably, but from a regulatory perspective, "Recycled Water" is the more appropriate terminology for this project.

*Q5 Can the project receive recycled water by truck instead of by purple pipe?*

A5 Yes. Neither the "California Health Laws Related to Recycled Water" handbook published by the California Department of Health Services nor the laws and regulations excerpted therein contain any prohibition to trucking of recycled water. Furthermore, there is no requirement for recycled water to arrive at a site via pipeline.

*Q6 Mr. McPhee expresses a concern about using recycled water in item number 3. How will the project ensure that high quality water will be used in the turbine for control of oxides of nitrogen?*

A6 The project design and the Application for Certification both allow for the project to operate using only recycled water at times when potable water is not available due to drought conditions. Specifically, Page 6.5-14 of the AFC states that “[t]he option agreement for fresh water will include a provision for FPUD to replace fresh water delivery to the project with reclaim [a.k.a. recycled] water delivery, if needed...” Neither fresh water nor recycled water is suitable for direct, untreated injection into the turbines; direct use of either of these water sources would rapidly ruin a turbine.

Water from either of these sources will be treated onsite using a mixed bed demineralizer which reduces the total dissolved solids and provides for the very high purity required for injection into the turbine. As well, water delivered from the demineralized water storage tank to the turbines will pass through what is known as a polisher, essentially a small demineralizer, in order to further purify the water. Should the water treatment system malfunction, a real-time monitoring system will alert the plant operator if the treated water is slightly out of spec, and trip a turbine should the water become significantly out of spec. Finally, water stored in the demineralized water storage tank and water being delivered to an operating turbine will be tested frequently for compliance with specifications and as verification of the proper operation of the on-line monitoring system. Such water treatment system and protective measures are in standard use throughout the power generation industry.

Use of recycled water will likely require more frequent off-site regeneration of the demineralizers, but otherwise plant operation will be the same whether operating on potable water or recycled water.

*Q7 Was a pipeline connecting to the Rainbow Water District System originally proposed as a part of this project?*

A7 Yes.

*Q8 Why is a pipeline no longer under consideration?*

A8 As described in Sections 5.3 and 5.8 of the Application for Certification for the project, transportation of water to the site via pipeline was extensively pursued and determined not feasible at this time because of land access issues described in Section 5.3.3 of the Application for Certification. Furthermore, as described in Table 5.3-2 and Section 5.8 of the Application for Certification, the potential source of water supply via pipeline, Rainbow Municipal Water District, has policies that prohibit the issuance of will-serve letters or any guarantee to any user for delivery of water for an extended period of time. The CEC requires such guarantee. For these reasons, a pipeline is not feasible at this time. Furthermore, the use of recycled water, as proposed, is consistent with State legislation. In passing the Water Recycling Act of 1991, the legislature found and declared that “the utilization of recycled water by local communities for domestic, agricultural, industrial, recreational and fish and wildlife purposes will contribute to the peace, health, safety and welfare of the people of the State” (Water Code Section 13510).

*Q9 In regards to Mr. McPhee's point number 4, Is it important to secure adequate water for the life of the project?*

A9 Yes. A demonstrated water source for the life of the project is required to meet California Energy Commission application adequacy requirements and, additionally, a reliable long-term water source is fundamental to basic project feasibility in that the project is too large of a capital commitment to undertake without reasonable assurance of a long-term water supply.

*Q10 In regards to Mr. McPhee's point number 5, is Title 22 water disinfected?*

A10 Yes. The water will be tertiary treated and disinfected. Covenant No. 4 in the Recycled Water Agreement with FPU, provided in Appendix 6.5-G.1 of the Application for Certification, will require FPU to provide water that meets all tertiary treated recycled water standards as defined in California Code of Regulations Title 22, which includes disinfection to at least the specifications identified in Title 22 Section 60301.230. These Title 22 regulations were established by the California Department of Health Services specifically to assure that recycled water is safe from the standpoint of public health for the allowed uses (see Water Code Sections 13520 and 13521). Tertiary treated recycled water is typically odorless, or sometimes has a minor residual chlorine odor from the treatment process. As declared in Water Code Section 13522(b), the use of recycled water in accordance with Title 22 recycled water standards "does not cause, constitute, or contribute to, any form of contamination," unless the department or the Regional Water Quality Control Board determines otherwise. Water Code Section 13529(f) declares that "the use of recycled water has been proven safe." A spill of tertiary treated recycled water has been determined by the State to be of such a low environmental and health threat that, even if spilled directly in Waters of the State, spills need not even be reported under State law unless they are 50,000 gallons or more (Water Code Section 13529.2). Fifty-thousand gallons is the equivalent of approximately eight truckloads using the water truck capacity included in the design for the Orange Grove Project.

*Q11 What other types of projects use recycled water?*

A11 California Code of Regulations Title 22 allows tertiary treated recycled water to be used for irrigation of food crops, including crops where the recycled water comes into contact with the edible portion of the crop, and many other irrigation uses including parks and playgrounds, school yards, residential landscaping, golf courses and any other irrigation not otherwise prohibited. Title 22 also allows tertiary treated recycled water to be used in recreational impoundments where there are no limitations on body contact water recreational activities. This means the State has determined that tertiary treated recycled water is safe to swim in. Tertiary treated recycled water is allowed to be used in commercial or industrial air conditioning and cooling towers, and in toilets, structural firefighting water supply, decorative fountains, commercial laundries, car washes, and a wide variety of other uses, including uses where there is direct contact with humans and

wildlife. As stated in the response to question Q10, above, the State has determined that tertiary treated recycled water is safe for these uses.

*Q12 In response to Mr. McPhee's comment number 6, is the project failing to build a pipeline simply for economic reasons?*

A12 No. The only reasons that a pipeline is not feasible at this time are those stated in the responses to questions Q8 and Q9, above, as described in more detail in Sections 5.3 and 5.8 of the Application for Certification. Pipeline cost and payment did not play a role in the determination that a pipeline is not feasible at this time.

*Q13 Mr. Jones, where your testimony includes facts, are those facts true and correct to the best of your knowledge?*

A13 Yes.

*Q14 Mr. Stenger, where your testimony includes facts, are those facts true and correct to the best of your knowledge?*

A14 Yes.

*Q15 Mr. Jones, where your testimony include opinions, are those opinions based upon your best professional judgment?*

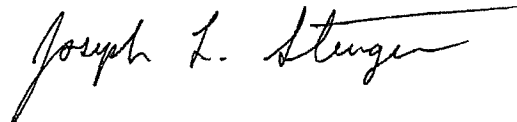
A15 Yes.

*Q16 Mr. Stenger where your testimony include opinions, are those opinions based upon your best professional judgment?*

A16 Yes.

Richard Jones

Joseph Stenger



\_\_\_\_\_  
Dated: \_\_\_\_\_

\_\_\_\_\_  
Dated: December 1, 2008

Executed At: \_\_\_\_\_

Executed at Sacramento, CA



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

**APPLICATION FOR CERTIFICATION  
ORANGE GROVE POWER  
PLANT PROJECT**

**DOCKET No. 08-AFC -4  
PROOF OF SERVICE  
Revised 10/27/08**

**INSTRUCTIONS: All parties shall either (1) send an original signed document plus 12 copies or (2) mail one original signed copy AND e-mail the document to the address for the Docket as shown below, AND (3) all parties shall also send a printed or electronic copy of the document, which includes a proof of service declaration to each of the individuals on the proof of service list shown below:**

CALIFORNIA ENERGY COMMISSION  
Attn: Docket No. 08-AFC-4  
1516 Ninth Street, MS-15  
Sacramento, CA 95814-5512  
[docket@energy.state.ca.us](mailto:docket@energy.state.ca.us)

**APPLICANT**

Stephen Thome  
J-Power USA Development  
1900 East Golf Road, Suite 1030  
Schaumburg, IL 60173  
[sthome@jpowerusa.com](mailto:sthome@jpowerusa.com)

Mike Dubois  
J-Power USA Development  
1900 East Golf Road, Suite 1030  
Schaumburg, IL 60173  
[mdubois@jpowerusa.com](mailto:mdubois@jpowerusa.com)

**APPLICANT CONSULTANT**

Joe Stenger, PG. REA  
TRC  
2666 Rodman Drive  
Los Osos CA 93402  
[jstenger@trcsolutions.com](mailto:jstenger@trcsolutions.com)

**COUNSEL FOR APPLICANT**

\*Jane Luckhardt  
Downey Brand, LLP  
621 Capitol Mall, 18<sup>th</sup> Floor  
Sacramento, CA 95814  
[jluckhardt@downeybrand.com](mailto:jluckhardt@downeybrand.com)

Wayne Song  
Morgan, Lewis & Bockius LLP  
300 S Grand Avenue, 22<sup>nd</sup> Floor  
Los Angeles, CA 90071  
[wsong@morganlewis.com](mailto:wsong@morganlewis.com)

**INTERESTED AGENCIES**

California ISO  
P.O. Box 639014  
Folsom, CA 95763-9014  
[e-recipient@caiso.com](mailto:e-recipient@caiso.com)

Steve Taylor  
San Diego Gas & Electric  
8306 Century Park Court  
San Diego, CA 92123  
[srtaylor@semprautilities.com](mailto:srtaylor@semprautilities.com)

**ENERGY COMMISSION**

JAMES D. BOYD  
Commissioner and Presiding Member  
[jboyd@energy.state.ca.us](mailto:jboyd@energy.state.ca.us)

**INTERVENORS**

Anthony J. Arand  
219 Rancho Bonito  
Fallbrook, CA 92028  
[tony@envirepel.com](mailto:tony@envirepel.com)

ARTHUR ROSENFELD  
Commissioner and Associate Member  
[pflint@energy.state.ca.us](mailto:pflint@energy.state.ca.us)

Alliance for a Cleaner Tomorrow (ACT)  
c/o Arthur S. Moreau, Klinedinst, PC  
501 West Broadway, Suite 600  
San Diego, CA 92101  
[amoreau@klinedinstlaw.com](mailto:amoreau@klinedinstlaw.com)

Kenneth Celli  
Hearing Officer  
[kcelli@energy.state.ca.us](mailto:kcelli@energy.state.ca.us)

Archie D. McPhee  
40482 Gavilan Mountain Road  
Fallbrook, CA 92028  
[archied1@earthlink.net](mailto:archied1@earthlink.net)

Felicia Miller  
Project Manager  
[fmiller@energy.state.ca.us](mailto:fmiller@energy.state.ca.us)

Jared Babula  
Staff Counsel  
[jbabula@energy.state.ca.us](mailto:jbabula@energy.state.ca.us)

Public Adviser's Office  
[publicadviser@energy.state.ca.us](mailto:publicadviser@energy.state.ca.us)

**DECLARATION OF SERVICE**

I, April Albright declare that on December 02, 2008 I deposited copies of the attached Orange Grove (08-AFC-4) Prehearing Conference – Exhibit 23 in the United States mail at Sacramento, CA, with first-class postage thereon fully prepaid and addressed to those identified on the Proof of Service list above.

**OR**

Transmission via electronic mail was consistent with the requirements of California Code of Regulations, title 20, sections 1209, 1209.5, and 1210. All electronic copies were sent to all those identified on the Proof of Service list above.

I declare under penalty of perjury that the foregoing is true and correct.

**Original Signature in docket**  
**April Albright**

Attachments