

## DOCKETED

<b>Docket Number:</b>	01-AFC-07C
<b>Project Title:</b>	01-AFC-7C Russell City Energy Company
<b>TN #:</b>	212732
<b>Document Title:</b>	Order Approving a Petition to Amend to Implement Recycled Water Demineralization System
<b>Description:</b>	N/A
<b>Filer:</b>	Cody Goldthrite
<b>Organization:</b>	California Energy Commission
<b>Submitter Role:</b>	Commission Staff
<b>Submission Date:</b>	8/10/2016 3:43:56 PM
<b>Docketed Date:</b>	8/10/2016

**STATE OF CALIFORNIA**

**STATE ENERGY RESOURCES  
CONSERVATION AND DEVELOPMENT COMMISSION**

**In the Matter of:**

**RUSSELL CITY ENERGY CENTER**

**Docket No. 01-AFC-07C**

**RUSSELL CITY ENERGY COMPANY,  
LLC**

**ORDER APPROVING A PETITION TO  
AMEND TO IMPLEMENT RECYCLED  
WATER DEMINERALIZATION SYSTEM**

On January 29, 2016, the Russell City Energy Company, LLC submitted a Petition to Amend the Final Decision for the Russell City Energy Center (RCEC). The Russell City Energy Company, LLC has requested California Energy Commission approval to install a new demineralization system, designed to produce demineralized water from the recycled water supply which would be used for steam cycle makeup water and combustion turbine inlet air cooling. Installation of the new demineralization system would include new filtration skids and feed water tanks installed within a new enclosure. The system would include structures that are approximately 10-15 feet tall and would be located within the RCEC site.

The combined-cycle, natural gas-fired, air-cooled, 600-megawatt electricity-generating facility was certified by the Energy Commission in its Decision on September 11, 2002, and began commercial operation on August 8, 2013. The RCEC is located at 3862 Depot Road in the city of Hayward in Alameda County, California.

**STAFF RECOMMENDATION**

Energy Commission staff reviewed the petition and determined that it complies with the requirements of Title 20, California Code of Regulations, section 1769 (a). Staff therefore recommends approval of the Russell City Energy Company's petition to amend the Final Decision for Russell City Energy Center, and also recommends

inclusion of new Condition of Certification **GEO-3** and the deletion of **GEO-1** and **GEO-2**.

## **ENERGY COMMISSION FINDINGS**

Based on staff's analysis, the Energy Commission finds that the proposed modification will not result in any significant impacts to public health and safety, or to the environment. The Energy Commission finds that:

- The proposed modification(s) would not change the findings in the Energy Commission's Final Decision pursuant to Title 20, California Code of Regulations, section 1748;
- There would be no new or additional unmitigated, significant environmental impacts associated with the proposed modification;
- The facility would remain in compliance with all LORS;
- The modification proposed in the petition would not cause an increase or other undue negative consequence on water use;
- The proposed modification would be beneficial to the public, because the facility would be able to continue operating in normal fashion with no significant change, and should, in fact, become a more efficient water user; and
- The proposed modifications are justified because there has been a substantial change in circumstances since the Energy Commission certification, in that the zero liquid discharge system has proven itself to be unsatisfactory, leading to outages.

## **CONCLUSION AND ORDER**

The California Energy Commission hereby adopts staff's recommendations and approves the following changes to the Commission Decision for the Colusa Generating Station. New language is shown as **bold and underlined**, and deleted language is shown in ~~strikethrough~~.

## **CONDITIONS OF CERTIFICATION**

~~**GEO-1** — Prior to the start of construction, the project Owner shall assign to the project an Engineering Geologist(s), certified by the State of California, to carry out the duties required by the 1998 edition of the California Building Code (CBC) Appendix Chapter 33, Section 3309.4. The Certified Engineering Geologist(s) assigned must be approved by the CPM. The functions of the Engineering Geologist can be performed by a responsible Geotechnical Engineer, if that person has the appropriate California license.~~

~~**Verification:** — At least 30 days (or a lesser number of days mutually agreed to by the project Owner and the CBO) prior to the start of construction, the project Owner shall submit to the CPM for approval the name(s), resume(s), and license number(s) of the Certified Engineering Geologist (s) assigned to the project. The submittal should include a statement that CPM approval is needed. The CPM shall notify the project Owner of its findings within 15 days of receipt of the submittal. If the Engineering Geologist(s) is~~

subsequently replaced, the project Owner shall submit for approval the name(s), resume(s) and license number(s) of the newly assigned Engineering Geologist(s) to the CPM. The CPM will notify the project Owner of its findings within 15 days of receipt of the notice of personnel change.

**GEO-2** ~~The assigned Engineering Geologist(s) shall carry out the duties required by the 1998 CBC, Appendix Chapter 33, Section 3309.4 Engineered Grading Requirement, and Section 3318.1 – Final Reports. Those duties are:~~

- ~~1. Prepare the Engineering Geology Report, which shall include a site specific seismic hazards analysis. This report shall accompany the Plans and Specifications when applying to the CBO for the grading permit.~~
- ~~2. Monitor geologic conditions during construction.~~
- ~~3. Prepare the Final Geologic Report.~~

~~Protocol: (1) The Engineering Geology Report required by the 1998 CBC Appendix Chapter 33, Section 3309.3 Grading Designation, shall include an adequate description of the geology of the site, conclusions and recommendations regarding the effect of geologic conditions on the proposed development, and an opinion on the adequacy of the site for the intended use as affected by geologic factors.~~

~~The Final Geologic Report to be completed after completion of grading, as required by the 1998 CBC Appendix Chapter 33, Section 3318.1, shall contain the following: A final description of the geology of the site and any new information disclosed during grading; and the effect of same on recommendations incorporated in the approved grading plan. The Engineering Geologist shall submit a statement that, to the best of his or her knowledge, the work within his/her area of responsibility is in accordance with the approved Engineering Geology Report and applicable provisions of Chapter 33.~~

**Verification:** ~~(1) Within 15 days after submittal of the application(s) for grading permit(s) to the CBO or other, the project Owner shall submit a signed statement to the CPM stating that the Engineering Geology Report has been submitted to the CBO as a supplement to the plans and specifications and that the recommendations contained in the report are incorporated into the plans and specifications. (2) Within 90 days following completion of the final grading, the project Owner shall submit copies of the Final Geologic Report required by the 1998 CBC Appendix Chapter 33, Section 3318 Completion of Work, to the CBO, with a copy of the transmittal letter forwarded to the CPM.~~

**GEO-3 A Soils Engineering Report, as required by Section 1803 of the California Building Code (CBC 2013), or its successor in effect at the**

time construction of the project were to commence, shall include, as appropriate, laboratory test data, associated geotechnical engineering analyses, and a thorough discussion of seismicity; liquefaction; dynamic compaction; compressible soils; corrosive soils; and tsunami. If required in accordance with CBC, the report must also include recommendations for ground improvement and/or foundation systems necessary to mitigate these potential geologic hazards, if present.

Verification: The project owner shall submit the Soils Engineering Report to the delegate chief building official (DCBO). A copy of the Soils Engineering Report and any comments by the CBO are to be provided to the Compliance Project Manager (CPM) at least 30 days prior to commencement of construction.

IT IS SO ORDERED.

### **CERTIFICATION**

The undersigned Secretariat to the Commission does hereby certify that the foregoing is a full, true, and correct copy of an Order duly and regularly adopted at a meeting of the California Energy Commission held on August 10, 2016.

AYE: Weisenmiller, McAllister, Hochschild, Scott

NAY: None

ABSENT: Douglas

ABSTAIN: None

*Original Signed by*

---

Cody Goldthrite  
Secretariat