

Russell City Energy Company, LLC

717 Texas Avenue
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Houston, TX 77002

June 29, 2011

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Mary Dyas
Project Manager
Siting, Transmission and Environmental Protection (STEP) Division
California Energy Commission
1516 Ninth Street, MS-2000
Sacramento, CA 95814

REF: Russell City Energy Center, 01-AFC-7C

Dear Ms. Dyas:

On behalf of Russell City Energy Center, LLC ("Project Owner"), I am writing this letter to inform the Commission that the Russell City Center project ("RCEC") will not be constructing at this time a specific project feature certified by the Commission: a sludge return pipeline interconnection between the RCEC and the Hayward Wastewater Treatment Plant.

As you know, the Project Owner filed an Amendment to the RCEC license in November, 2006. This amendment included, among other things, a Recycled Water Facility ("RWF") that is designed to treat secondary effluent from the City of Hayward Water Pollution Control Facility ("WPCF") and produces treated recycled water in accordance with Title 22, Division 4 of the California Code of Regulations for makeup to the cooling tower. One byproduct of the effluent from the WPCF is sludge material that cannot be processed by the RWF. As proposed in Amendment #1, the Project Owner previously intended to collect the sludge in a sludge collection tank and then pump a mixture of sludge and filter backwash flows back to the WPCF via the sludge return line.¹ Upon receipt of the sludge, the City would then thicken the sludge and truck the material to the Altamont Landfill where it would be used as cover material.

After recent engineering evaluation, the Project Owner believes it would be more efficient and economical to treat the sludge within the RWF, rather than return the sludge to the WPCF. Under this approach, the sludge would be recycled to the RWF secondary effluent wetwell. The clarifier sludge would be pumped by the sludge blowdown pumps to a sludge thickener and a frame filter press within the RWF. The filter press will produce a sludge cake with approximately 65-70% moisture and this cake would be trucked to the Altamont Landfill (or other appropriate landfill) for use as cover material. The volume of sludge material to be transported will be equivalent to the volume of sludge that would have been transported by the City if the City received the sludge from the Project Owner.²

¹ Amendment #1 simply stated, "The influent pump station will pump secondary effluent from the existing 48-inch pipeline into the coagulation/flocculation/clarification units. Flow through the remainder of the treatment process will be by gravity. Sludge from the clarifiers will be returned to the WPCF." Amendment #1, p. 2-4. The Amendment also stated: A small amount of sludge from the clarifier at the Title 22 RWF will be sent back to the WPCF for treatment. Table 3.10-1 below identifies the composition of the sludge." Amendment, p. 3-135. "In addition laboratory data for sludge, effluent, and influent samples from the wastewater treatment plant were reviewed. According to staff at the wastewater treatment plant, the sludge data is in compliance with current EPA sludge limits for land application." Amendment, p. 3-191.

² ZLD cake will also be trucked to a landfill.

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The decision by the Project Owner not to build the sludge line at this time is based upon the Project Owner's desire to simplify operation of the RCEC and RWF facility, to reduce the costs and burden on the City of Hayward of receiving, processing and transporting this sludge material and to eliminate the capital costs of building an unnecessary pipeline.

Elimination of the sludge return line would also eliminate the need for a sludge collection tank and sludge transfer pumps within the RWF. In simplest terms, with or without the sludge line, sludge must be extracted from the wastewater delivered to the RCEC RWF facility, thickened and transported to a landfill. The difference in the process described in Amendment #1 and the process described in this letter is that thickening and disposal of the sludge will be performed directly by the Project Owner, without the need to re-convey the sludge to the City of Hayward.

Prior to the start of operation, the Project Owner will submit an Operational Waste Management Plan pursuant to Condition of Certification Waste-2. The plan will contain a description of all waste streams, including the above-described sludge waste stream, and provide projections of frequency, amounts generated and hazard or non-hazard classifications; and Methods of managing each waste, including treatment methods and companies contracted with for treatment services, waste testing methods to assure correct classification, methods of transportation, disposal requirements and sites, and recycling and waste minimization/reduction plans. These plans will ensure the safe handling and disposal of the sludge, which is expected to be a non-hazardous material.

Elimination of the sludge line and direct disposal of the sludge by the Project Owner is commercially and operationally sound and efficient. Further, although there are no significant unmitigated impacts associated with the construction of a sludge line from RWF to the WPCF, the decision not to construct this project feature at this time will actually reduce potential environmental impacts by avoiding construction of this sludge line.

Despite the change in construction plans, the Project Owner is not seeking an amendment of the RCEC license. We do not believe an amendment is necessary because the Project Owner is not seeking to de-certify the sludge line described in RCEC Amendment #1 or modify the decision, including the conditions of certification, in any way. (The sludge line is not referenced in the Commission Decision 07-0926-04.) The decision not to construct the sludge line will not prevent or interfere with the project's ability to comply with the conditions of certification. Indeed, the absence of the sludge line will have no environmental impacts and will, in fact, actually reduce potential environmental impacts. This letter is being sent in the interest of keeping the Commission fully apprised of the activities relating to construction of the RCEC facility.³

In summary, the elimination of the sludge return line (1) will not require a change in any condition of certification, (2) will be in compliance with all applicable LORS, (3) will have a beneficial, rather than any adverse, environmental impact by avoiding the need to construct a pipeline, (4) will not significantly alter the design or operation of the RCEC, because the functions of dewatering and disposing of sludge will be performed in the same manner as previously proposed, albeit by the Project Owner rather than by the City.

³ Calpine similarly notified the Commission by letter dated September 10, 2001, of its decision not to construct a steam pipeline interconnection between the DEC and Dow Chemical Company and discontinued construction of this pipeline without filing the need to file a petition for modification (98-AFC-3).

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If you have any questions, please feel free to contact me at 925-570-0849. As always, thank you for your time and consideration.

Sincerely,

A handwritten signature in black ink, appearing to be 'B. McBride', with a long horizontal flourish extending to the right.

Barbara McBride
Director, Environmental, Health and Safety
Calpine Corporation