

**CALIFORNIA ENERGY COMMISSION**1516 NINTH STREET  
SACRAMENTO, CA 95814-5512

**STATE OF CALIFORNIA  
ENERGY RESOURCES CONSERVATION  
AND DEVELOPMENT COMMISSION**

<b>DOCKET</b> <b>06-AFC-10C</b>
DATE <u>NOV 20 2008</u>
RECD. <u>DEC 08 2008</u>

**In the Matter of:**

<b>STARWOOD POWER PROJECT</b>	)	<b>Docket No. 06-AFC-10C</b>
	)	
<b>STARWOOD POWER-MIDWAY, LLC</b>	)	<b>Order No. 08-1120-2</b>
	)	<b>ORDER APPROVING PETITION TO</b>
	)	<b>INCREASE STACK HEIGHT, DRILL</b>
	)	<b>WELL, REPOSITION BUILDINGS AND</b>
	)	<b>ADD EVAPORATION POND</b>

On April 22, 2008, Starwood Power-Midway, LLC, the owner/operator of the Starwood Power Project, submitted a petition requesting to increase the stack height from 50 to 68 feet, allow a well to be drilled onsite, reposition buildings in the site plan, and add a second evaporation pond to retain storm water. The modifications will allow the Project Owner to reduce ground level, and reduce overall, air quality impacts; comply with federal stack sampling requirements; provide an onsite backup water supply; avoid potential construction delays; and improve site safety.

**STAFF RECOMMENDATION**

Energy Commission staff reviewed the petition and finds that it complies with the requirements of Title 20, Section 1769(a) of the California Code of Regulations and recommends approval of the Starwood Power-Midway, LLC, petition to modify the Starwood Power Project and amend related Conditions of Certification.

**ENERGY COMMISSION FINDINGS**

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

- The petition meets all the filing criteria of Title 20, section 1769(a) of the California Code of Regulations concerning post-certification project modifications;
- The modification will not change the findings in the Energy Commission's Final Decision pursuant to Title 20, section 1755;
- The project will remain in compliance with all applicable laws, ordinances, regulations, and standards, subject to the provisions of Public Resources Code section 25525;

- The changes will be beneficial to the public and project owner by reducing overall air quality impacts, avoiding delays that could prevent the project from producing energy for the summer of 2009, protecting California water resources, and improving site safety,
- The change is based on information that was not available to the parties prior to Energy Commission certification. The project owner was not aware that the California Public Utilities Commission would have to approve the use of well water from the adjacent CalPeak Panoche power plant and potential delays that could result. Other changes, such as the stack height increase, were developed in the process of facility design.

### CONCLUSION AND ORDER

The California Energy Commission hereby adopts Staff's recommendations and approves the following changes to the Commission Decision for the Starwood Power Project. New language is shown as **bold and underlined**, and deleted language is shown in ~~strikeout~~.

### CONDITIONS OF CERTIFICATION

**AQ-SC11 The project owner shall not conduct the well drilling construction activities on the same days as other onsite construction activities that use any large off-road equipment (100 hp or larger).**

**Verification: The project owner shall include in the applicable MCR the actual schedule for the well drilling activities to confirm that the well drilling construction was not performed on the same days as other onsite construction activities.**

**SOIL&WATER-5: The project owner shall shut down the reverse osmosis system and cease discharge into the wastewater evaporation pond if: 1) the evaporation pond reaches maximum capacity (to avoid any evaporation pond overflow); or 2) the pond cannot be used due to project use of groundwater or other pond use restrictions established by Waste Discharge Requirements (WDRs) issued by the Central Valley Regional Water Quality Control Board (RWQCB) in accordance with Condition of Certification SOIL & WATER-4. In the event that the project uses groundwater in any amount or volume of the total water volume necessary for plant industrial use, discharge into the evaporation pond shall be prohibited unless and until the project owner (a) submits a new or revised Report of Waste Discharge (ROWD) to the Central Valley RWQCB; (b) receives new or revised WDRs for use of the evaporation pond; and (c) retrofits or reconstructs the evaporation pond to meet any conditions or pond design parameters established in the new or revised WDRs.**

**Verification:** The project owner, in the annual compliance report, shall provide a wastewater-accounting summary that states the amount of wastewater in acre-feet discharged into the evaporation pond and, **as appropriate**, the quantity of residue in pounds or tons removed **from the pond and/or the volume of wastewater** disposed of **offsite** for each year. **In addition,** ~~the~~ project owner shall provide a written description within 30 days of any incident

where the evaporation pond reached maximum capacity, or discharge to the pond was prohibited, and the reverse osmosis system had to be shut down.

In the event that the project uses groundwater in any amount or volume, the project owner will immediately cease all discharges into the evaporation pond and notify the CPM. Prior to reinstating wastewater discharge to the onsite evaporation pond, the project owner shall provide to the CPM documentation that the proposed discharge and pond operation complies with all provisions of Condition of Certification SOIL & WATER-4.

**SOIL&WATER-6:** The project owner shall construct and operate an onsite groundwater well that produces water exclusively from the upper semi-confined aquifer. The project owner shall ensure that the well is properly completed in the semi-confined aquifer in accordance with all applicable state and local water well construction permits and requirements.

Prior to initiation of well construction activities, the project owner shall submit a well construction packet to the County of Fresno containing all documentation, plans, and fees normally required to satisfy the county's well permit program requirements for County review and comment, and submit the same packet to the CPM for review and approval. The project owner shall not construct the well or extract and use any groundwater until the County of Fresno issues written concurrence that the proposed well construction and operation activities comply with all county well requirements and meet the requirements established by the county's water well permit program, and the CPM provides approval to construct the well. The project owner shall provide documentation to the CPM that the well has been properly completed in and producing groundwater exclusively from the semi-confined aquifer. The project owner shall ensure compliance with all county water well standards and requirements for the life of the well and shall provide the CPM with two (2) copies of all monitoring or other reports required for compliance with the County of Fresno water well standards and operation requirements, as well as any changes made to the operation of the well.

**Verification:**

- a. No later than sixty (60) days prior to the start of construction of the onsite water supply well, the project owner shall submit one copy of the water well construction packet to the County of Fresno for review and comment, and two (2) copies of the packet to the CPM for review and approval.
- b. No later than fifteen (15) days prior to the construction of the onsite water supply well, the project owner shall submit two (2) copies of the written concurrence document from the County of Fresno indicating that the proposed well construction activities comply with all county well requirements and meet the requirements established by the county's water well permit program.

- c. Prior to water production from the onsite well for plant operational use, the project owner shall provide to the CPM documentation (in the form of well drilling logs, water quality analyses, and any inspection reports that may be available) that the well is properly completed in and producing groundwater exclusively from the semi-confined aquifer.
- d. During well construction and for the operational life of the well, the project owner shall:
- i) Submit copies to the CPM and the County of Fresno of any proposed well construction or operation changes.
  - ii) Submit copies of any water well monitoring reports required by the County of Fresno well standards to the CPM in the annual compliance report.

**SOIL&WATER-7: The project owner shall ensure that all onsite water well drilling activities are conducted in compliance with applicable Title 23, California Code of Regulations, Chapter 15, Discharges of Hazardous Wastes to Land, (23 CCR, sections 2510 et seq.) requirements.**

**Verification: No later than thirty (30) days after completion of the onsite water supply well, the project owner shall submit documentation to the CPM and the Central Valley Regional Water Quality Control Board (RWQCB) that well drilling activities were conducted in compliance with Title 23, California Code of Regulations, Chapter 15, Discharges of Hazardous Wastes to Land (23 CCR, sections 2510 et seq.) requirements and that any onsite drilling sumps used for project drilling activities were removed in compliance with 23 CCR section 2511(c).**

**SOIL&WATER-8: Upon permanent closure of the facility, the project owner shall ensure that the onsite water supply well is properly plugged and destroyed according to all applicable County of Fresno and state requirements.**

**Verification: No later than sixty (60) days after permanent closure of the facility, the project owner shall provide documentation to the CPM that the water supply well was properly plugged and destroyed according to all applicable County of Fresno and state requirements (including County of Fresno well destruction permit requirements).**

**SOIL&WATER-9:** Prior to use of groundwater from the onsite well, the project owner shall install and maintain metering devices as part of the groundwater supply and distribution system to monitor and record in gallons per day the total volume of water supplied to the project from the onsite well. The metering devices shall be operational for the life of the project. In accordance with Condition of Certification **WATER RESOURCES-1**, the project's annual groundwater use shall not exceed 136 acre-feet per year without prior approval by the CPM. The project owner shall include in the project's annual water use summary required by **WATER RESOURCES-1** the

monthly range and monthly average of daily groundwater use in gallons per day, and total volume of groundwater used by the project on a monthly and annual basis in acre-feet.

**Verification:** **At least sixty (60) days prior to use of onsite well water for commercial operation, the project owner shall submit to the CPM evidence that metering devices have been installed and are operational on the groundwater supply and distribution system. The project owner shall also provide documentation in the annual compliance report of the continued operation of the groundwater metering devices, including documentation of any servicing, testing, or calibration of the metering devices necessary to maintain operation.**

**In addition, as part of the annual water use summary required by WATER RESOURCES-1, the project owner shall provide to the CPM the monthly range and monthly average of daily groundwater use in gallons per day, as well as the total volume of groundwater used by the project on a monthly and annual basis in acre-feet.**

**WASTE-5:** The project owner shall prepare a Construction Waste Management Plan and an Operation Waste Management Plan for all wastes generated during construction and operation of the facility, respectively, and shall submit both plans to the CPM for review and approval. The plans shall contain, at a minimum, the following:

A description of all waste streams, including projections of frequency, amounts generated and hazard classification; and

Methods of managing each waste, including temporary onsite storage, 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.

**In addition, the Operation Waste Management Plan shall include a separate section detailing how wastewaters proposed for discharge into the onsite evaporation pond will be managed and disposed of in the event that discharge to the pond is prohibited or otherwise interrupted. The Operation Waste Management Plan shall be revised as necessary to reflect any changes to plant operations and/or waste management procedures. A copy of the approved Operation Waste Management Plan shall be made available for inspection at the project site.**

**Verification:** No less than 30 days prior to the start of the site mobilization, the project owner shall submit the Construction Waste Management Plan to the CPM for approval. The project owner shall submit any required revisions within 20 days of notification by the CPM.

**No less than 30 days prior to the start of project operation, the project owner shall submit the Operation Waste Management Plan to the CPM for approval. The project owner shall submit any required revisions within 20 days of notification by the CPM and as necessary to reflect changes in plant operations and/or waste management procedures. The project**

**owner shall maintain an up-to-date copy of the approved Operation Waste Management Plan at the project site for use by staff and for inspection by appropriate federal, state, or local waste management personnel.**

In the Annual Compliance Reports, the project owner shall document the actual waste management methods used during the year and provide a comparison of the actual methods used to those management methods proposed in the original Operation Waste Management Plan.

**WATER RESOURCES-1:** Water used for project operation for process, sanitary and landscape irrigation purposes shall be groundwater from the upper semi-confined aquifer obtained from the ~~adjacent CalPeak~~ **onsite** water well and/or Baker Farms irrigation water filter backwash (backwash water). Water use shall not exceed the annual water-use limit of 136 acre-feet without prior approval by the CPM. The project owner shall monitor and record the total water used on a monthly basis. If the amount of water to be used will exceed 136 acre-feet per year during any annual reporting period, the project owner shall provide a written request and explanation for the anticipated water-use increase to the CPM sixty (60) days prior to the date when the water-use limit is expected to be exceeded. If the project owner can demonstrate that the requested increase is necessary and is not caused by wasteful practices or malfunctions in the water processing systems, the CPM shall approve an up to one-year increase in the water-use limit for the period requested.

**Verification:** The project owner, in the annual compliance report, shall provide a water-accounting summary that states the source and quantity of water used on a monthly basis in units of gallons and on an annual basis in units of acre-feet.

**IT IS SO ORDERED.**

Date: November 20, 2008

STATE OF CALIFORNIA  
ENERGY RESOURCES CONSERVATION  
AND DEVELOPMENT COMMISSION

  
\_\_\_\_\_  
JACKALYNE PFANNENSTIEL  
Chairman