

**Memorandum****Date:** January 4, 2010**Telephone:** (916) 651-2935

**To:** Chairman Karen Douglas  
Commissioner Jeffrey D. Byron

**From:** California Energy Commission – Matt Trask, Amendment Project Manager  
1516 Ninth Street  
Sacramento, CA 95814-5512

**Subject:** **STAFF'S ERRATA TO THE STAFF ASSESSMENT FOR THE HANFORD ENERGY PARK PEAKER MAJOR AMENDMENT PROJECT (01-EP-07C)**

<b>DOCKET</b>	
<b>01-EP-7C</b>	
<b>DATE</b>	<u>JAN 04 2010</u>
<b>RECD.</b>	<u>JAN 11 2010</u>

Energy Commission staff and GWF Energy, the applicant for the Hanford Energy Park Peaker (HEPP) major amendment proceeding (01-EP-7C), have agreed on several changes and corrections to the Staff Assessment of GWF's Petition to Amend the Commission's decision approving the project. GWF on October 1, 2008, filed a Petition to Amend (PTA) the Energy Commission decision approving the HEPP, seeking to convert the HEPP from a 95 MW peaker project to a 120 MW combined-cycle generating facility by adding two Once-Through Steam Generators, one for each generating unit, and a 25 MW steam turbine, plus adding an air-cooled condenser (ACC) for dry cooling.

Staff released its Staff Assessment of the PTA on October 14, 2009. GWF filed informal comments on the SA on November 6, 2009, and filed a supplement to those comments on December 16, 2009. Most of the issues raised in those comments were resolved through informal discussions between staff and GWF, with staff explaining the rationale behind some conclusions drawn and mitigation required in the SA. However, staff is in agreement with other changes suggested by GWF in its comments, and thereby is submitting the following errata to the Staff Assessment. Deleted text is shown struck-through, and added text is shown underlined:

**Project Description**

- Page 3-3 (Water Supply and Waste Water Treatment)

Water required for domestic uses and fire fighting would also be provided by the City through a new connection from the southern boundary of the project site to the existing 12-inch potable water line that runs along Enterprise Avenue. The quantities of water used would remain nearly the same as under the original design. ~~The quantities of wastewater produced would decrease significantly with the addition of the zero-liquid-discharge (ZLD) system.~~

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**Air Quality**

- Page 4.1-46, Condition of Certification AQ-3

**AQ-3** To the extent this Determination of Compliance serves as an Authority to Construct, said Authority to Construct shall not become effective until the California Energy Commission approves the Petition to Amend the project's existing license. [California Environmental Quality Act and District Rule 2201, ~~Section 5.8.8~~]

**Verification:** The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

- Page 4.1-67, Condition of Certification AQ-90

**AQ-90** To the extent this Determination of Compliance serves as an Authority to Construct, said Authority to Construct shall not become effective until the California Energy Commission approves the Petition to Amend the project's existing license. [California Environmental Quality Act and District Rule 2201, ~~Section 5.8.8~~]

**Verification:** The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

**Soil and Water Resources**

- Page 4.8-7 (Project Water Supply, 3<sup>rd</sup> Paragraph)

Under the existing banking agreement with the Kings County Water District, GWF has banked a surplus of about 9,031 acre-feet of water purchased from the Angiola Water District (GWF, 2008) to mitigate for groundwater pumping at HEPP and Hanford LP. At the 1.76:1 ratio required in the original 2001 Commission Decision, GWF has banked sufficient water to mitigate for use of 5,131 acre-feet of groundwater pumping. ~~However, GWF also has to mitigate for groundwater pumping associated with Hanford LP at a 1:1 ratio. GWF reports The Kings County Water District reported that Hanford LP used s on the order of 1,000 500 afy over the past five years. Water use at Hanford LP is mitigated~~

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~~under a separate agreement. so the majority of the 9,031 acre-feet of surplus banked water will be needed to mitigate for future groundwater use at Hanford LP.~~

- Page 4.8-18 (Operations Impacts and Mitigation – Water Supply, 2<sup>nd</sup> Paragraph)

... In addition, the existing Hanford LP utilizes on the order of ~~4,000~~ 500 afy of groundwater (~~KCWD~~ GWF, 2009). An increase in groundwater pumping at the site of 96 afy represents a 685 percent increase as compared to the “as operated” conditions for HEPP and about a ~~40~~ 20 percent increase in total pumping at the HEPP and Hanford LP site.

- Page 4.8-18 (Operations Impacts and Mitigation – Water Supply, 5<sup>th</sup> Paragraph)

... As of the September Petition to Amend, GWF indicates that they have banked a surplus of 9,031 acre-feet with the Kings County Water District. This surplus banked water is meant to offset future water use at ~~both HEPP and the Hanford LP.~~

- Page 4.8-19 (Operations Impacts and Mitigation – Water Supply, 6<sup>th</sup> Paragraph)

... Assuming water banking to mitigate annual water use at ~~Hanford LP of about 1,000 afy and at GWF Hanford of about 195 afy (111 afy x 1.76)~~, the 9,031 acre-feet surplus with Kings County Water District would mitigate for about ~~46~~ 7.5 years of operation at GWF Hanford ~~and Hanford LP. GWF will need to continue to purchase and bank water to mitigate for groundwater use at GWF Hanford and Hanford LP over the life of the plants.~~

- Page 4.8-20 (Cumulative Impacts, 3<sup>rd</sup> Paragraph)

... ~~The Kings County Water District~~ GWF indicates that the existing Hanford LP pumps on the order of ~~4,000~~ 500 afy, which is mitigated through a separate mitigation agreement the Water Banking Agreement at a ratio of 1:1.

- Page 4.8-25 (Condition of Compliance **Soil & Water-2**)

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**SOIL & WATER-2:** Prior to site mobilization, the project owner shall obtain CPM approval for a site-specific DESCOP that ensures protection of water quality and soil resources of the project site and all linear facilities for both the construction and operation phases of the project. This plan shall address appropriate methods and actions, both temporary and permanent, for the protection of water quality and soil resources, demonstrate no increase in offsite flooding potential, meet local requirements, and identify all monitoring and maintenance activities. To prevent stormwater and soil contamination, chemical and petroleum based palliatives shall not be used for dust control. The plan should include a vault based BMP targeting hydrocarbons and metals for the GWF Hanford stormdrain prior to discharge into the retention basin. Monitoring activities shall include routine measurement of the volume of accumulated sediment in the stormwater retention basin. Maintenance activities must include removal of accumulated sediment from the retention basin when an average depth of 0.5 feet of sediment has accumulated in the retention basin. The plan shall be consistent with the grading and drainage plan as required by Condition of Certification CIVIL-1. The DESCOP shall contain the following elements. All maps shall be presented at a legible scale.

- Page 4.8-27 (Condition of Compliance **Soil & Water-2**, Verification)

**Verification:** No later than 90 days prior to start of site mobilization, the project owner shall submit a copy of the DESCOP to Kings County and the CPM for review and comment. A copy of the comments from Kings County shall be submitted to the CPM no later than 60 days prior to the start of site mobilization for review and approval. The CPM shall consider comments received from Kings County. During construction, the project owner shall provide an analysis in the monthly compliance report on the effectiveness of the drainage-, erosion- and sediment-control measures and the results of monitoring and maintenance activities. Once operational, the project owner shall provide in the annual compliance report information on the results of stormwater BMP monitoring and maintenance activities.

- Page 4.8-28-29 (Condition of Compliance **Soil & Water-4**)

**SOIL & WATER-4:** The GWF Hanford shall not use more than 111 acre feet of groundwater in any one year. GWF Hanford will mitigate all use of groundwater at a ratio of 1.76:1 (banked surface water to pumped groundwater). The Water Banking and Mitigation Agreement with Kings County Water District manages the

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GWF Hanford water banking account. The account has a balance of approximately 9,031 acre-feet. The Water Mitigation Plan shall include:

- ~~1. Purchase agreement of Table A Entitlement State Water Project water from the Angiola Water District and GWF Power Systems. GWF shall purchase 1.76-times the groundwater pumped for each year of operation.~~
- ~~2. Agreement between the Tulare Lake Basin Water District and GWF which grants GWF the right to utilize the District's facilities to deliver and convey surface water from the State Water Project to J.G. Boswell Company.~~
- ~~3. The exchange agreement between J.G. Boswell Company and GWF which allows surface water from the State Water Project owned by GWF to be delivered to J.G. Boswell Company in exchange for surface water from the J.G. Boswell Kings River entitlement.~~
- ~~4. The water banking and mitigation agreement between Kings County Water District and GWF that allows surface water from the J.G. Boswell Company Kings River entitlement to be delivered to KCWD on behalf of GWF.~~

1. The Water Banking and Mitigation Agreement between Kings County Water District and GWF Hanford that has banked surface water to mitigate future groundwater pumping at GWF Hanford; and,
2. The annual water usage by GWF Hanford supplied by the Hanford LP water supply well and any backup water supplied by the City of Hanford. The total annual usage will be mitigated at a ratio of 1.76:1 and the mitigated usage will be deducted from the GWF Hanford water banking account balance. A summary of GWF Hanford water banking account activity along with the remaining account balance will be submitted as part of the Annual Compliance Report to the CPM.

- Page 4.8-29 (Condition of Compliance **Soil & Water-5**)

**SOIL & WATER-5:** The project owner shall monitor the use of groundwater at the site and report total usage to the CPM. Prior to the use of groundwater during operation by the GWF Hanford, the project owner shall install and maintain metering devices as part of the water supply and distribution system to monitor and record in gallons

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per day the total volumes of water supplied to the GWF Hanford from each water source. Those metering devices shall be operational for the life of the project. The project owner shall monitor the amount of surface water banked with the Kings County Water District for GWF Hanford and Hanford LP under the Water Mitigation Agreement.

The project owner shall prepare an annual Water Use Summary, which will include the monthly range and monthly average of daily non-potable water usage in gallons per day, and total water used by the project on a monthly and annual basis in acre-feet. The Water Use Summary shall include the annual surface water banked with the Kings County Water District on behalf of GWF and identify the quantity of water banked to offset water use at GWF Hanford and the Hanford LP. All communications with the Kings County Water District shall reflect the 1.76:1 mitigation ratio for water use at GWF Hanford. ~~Potable water use on-site shall be recorded on a monthly basis.~~ For subsequent years, the annual Water Use Summary shall also include the yearly range and yearly average water use and water banked by the project. The annual summary shall be submitted to the CPM as part of the annual compliance report.

- Page 4.8-31 (Conditions of Compliance **Soil & Water-7, -8, and -9**)

**SOIL & WATER-57:** All straw wattles and straw bales for BMP's will be certified weed free. All seed mixtures will be approved by the CPM before application.

**Verification:** The project owner will provide to the CPM evidence of weed free certification for all straw wattles and bales. The project owner will obtain CPM approval for all seed mixes prior to application.

~~**SOIL & WATER-68:** All seed mixtures will be approved by the CPM before application.~~

~~**SOIL & WATER-79:** To prevent stormwater and soil contamination the Project Owner shall not use chemical and petroleum based palliatives as dust control. Prior to beginning any site mobilization, the project owner shall obtain CPM approval of~~

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~~the Storm Water Pollution Prevention Plan (SWPPP) as required under the  
General Storm Water Construction Activity Permit for the project.~~

~~**Verification:** At least 14 days prior to the start of any site mobilization, the project owner will submit a copy of the SWPPP to the CPM for review and approval. Approval of the plan by the CPM must be received prior to the initiation of any site mobilization activities.~~

### **Transmission Line Safety and Nuisance**

- Page 4.10-1 (Analysis)

This analysis is based, in part, on information provided in the HEPP Small Power Plant Exemption application (GWF Power Systems Company, Inc., 2000), GWF Hanford Amendment (GWF Energy, LLC., 2008), the Staff Assessment for the HEPP, Docket No. 01-EP-71 (CEC, 2001b) and the Energy Commission's Final Decision of April 2001 on the application for the Emergency Peaker for the HEPP Project (CEC 2001a). The purpose of staff's initial analysis was to assess whether the proposed line construction and operational plan adequately incorporated the measures necessary for compliance with health and safety LORS of concern for the 115 ~~70~~-kV lines of the type proposed for the project. The analysis focused on the following issues relating primarily to the physical presence of the line or secondarily to the physical interactions of the line's electric and magnetic fields:

### **Facility Design**

- Page 5.1-14 (Condition of Certification MECH-1)

The responsible mechanical engineer shall stamp and sign all plans, drawings, and calculations for the major piping and plumbing systems, subject to CBO design review and approval, and submit a signed statement to the CBO when the proposed piping and plumbing systems have been designed, fabricated, and installed in accordance with all of the applicable laws, ordinances, regulations and industry standards, which may include, but are not limited to:

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- American National Standards Institute (ANSI) B31.1 (Power Piping Code);
- ANSI B31.2 (Fuel Gas Piping Code);
- ANSI B31.3 (Chemical Plant and Petroleum Refinery Piping Code);
- ANSI B31.8 (Gas Transmission and Distribution Piping Code);
- Title 24, California Code of Regulations, Part 5 (California Plumbing Code);
- Title 24, California Code of Regulations, Part 6 (California Energy Code, for building energy conservation systems and temperature control and ventilation systems);
- Title 24, California Code of Regulations, Part 2 (California Building Code);  
and
- ~~Imperial~~ Kings County codes.

The CBO may deputize inspectors to carry out the functions of the code enforcement agency.

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