Memorandum

Date: September 4, 1998

To: Jananne Sharpless, High Desert Committee Presiding Member (916) 653-1614
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From: California Energy Commission - Richard Buell
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Subject: High Desert Power Project (97-AFC-1) Status Report Number 7

The High Desert Power Project Committee’s July 20, 1998 “Third Revised Scheduling Order” directed parties to file status reports on September 4, 1998. The following is staff’s status report on the High Desert Power Project.

PROJECT SCHEDULE

Although progress is being made on many issues related to the potential certification of the High Desert Power Project, we are very concerned about the apparent setbacks regarding the applicant’s efforts to develop/implement an emission offset strategy for the project. We believe this issue may prevent the project from moving forward after the revised Preliminary Staff Assessment (PSA) is issued. The progress and setbacks are discussed in more detail below under the topic headings.

At this time, we are committed to release the revised PSA on September 24, 1998, as directed in the High Desert Power Project Committee’s July 20, 1998 “Third Revised Scheduling Order”. However, our analysis of air quality, biological resources, cultural resources, transmission system evaluation, and soil and water resources will remain incomplete (see the discussion below). Our preliminary analysis for other aspects of the project will be complete, although the applicant or other parties may take issue with some of the staff’s conclusions and recommendations.

Several power plant cases before the Energy Commission have been suspended or withdrawn due to an applicant’s inability to develop and implement a complete emission offsets strategy. Based on the information we currently have regarding the emission offset strategy for the High Desert Power Project (see air quality below), we do not understand how the applicant plans to obtain approval of the project. In addition, although progress is being made regarding securing water supplies for the project, many water issues remain to be resolved before we could recommend approval of the project (see the water resources below). Consequently, we believe that this is an appropriate time for the Committee and applicant to consider remedies for these problems, including possible suspension of the case pending development of solutions to these deficiencies.
A workshop is scheduled for September 15, 1998 to discuss the California Independent System Operator’s (Cal-ISO) review of Southern California Edison Company’s (Edison) transmission line Interconnection Study, the parties’ September 4, 1998 Status Reports, the project schedule, and status of issue resolution. Our intent is to reach an understanding of the applicant’s strategy for developing and implementing an emission offset strategy, discussion of other technical disciplines that require further resolution and reach agreement between the parties regarding a schedule for completing review of the High Desert Power Project application. Should we fail to reach an understanding of the applicant’s strategy or an agreement on schedule, we will recommend that the Committee schedule a conference, as soon as practicable, to discuss the status of development and implementation of an emission offset strategy for the project, and the schedule.

**AIR QUALITY**

Since our last status report, a number of problems have developed regarding the schedule for conducting the air quality review of the project. Chief among these are uncertainties regarding when the Mojave Desert Air Quality Management District (District) will be able to prepare its revised Preliminary Determination of Compliance (PDOC). The District had indicated at the July 1, 1998 Informational Hearing/Committee Conference that it would need to finalize Emission Reduction Credit (ERC) Banking Certificates prior to issuing a revised PDOC. At that time, the District expected to issue proposed Banking Certificates by August 1, 1998, and final banking Certificates by September 1, 1998. However, the District received a number of comments regarding the ERC banking certificate it issued in July 1998 (i.e., the proposed ERC Banking Certificates for two Hinkley Internal Combustion Engines owned by Pacific Gas and Electric). On August 19, 1998, we received notification from the District indicating it would revise the amount of credits issued for the Hinkley Internal Combustion Engines, and would reissue a proposed Banking Certificate reducing the amount of reductions credited to the source. However, this source is not one for which the applicant has provided a Letter of Intent (LOI) with the owner, although the applicant indicated an interest in obtaining ERCs from this source at the June 30, 1998 workshop.

On August 17, 1998 the District issued a proposed Banking Certificate for the Newberry Springs Engine Retrofits, owned by Southern California Gas Company. The applicant has provided an LOI for this source. Comments on this proposed Banking Certificate are requested by September 25, 1998, and we intend to file comments by the requested date. However, this source alone would not provide sufficient nitrogen oxide (NOx) reductions to offset the project. District staff has informed us that Mitsubishi Cement Corporation is no longer pursuing banking ERCs from its facility. The Mitsubishi ERCs provided the bulk of the NOx ERCs the applicant had identified for the project. Consequently, we are unaware how the applicant intends to provide sufficient NOx ERCs to offset the project’s NOx emissions.
Based on the comments received by the District on the May 18, 1998 PDOC and the applicant’s statements at the June 30, 1998 workshop on PDOC comments, it appears that the applicant may be considering revising its proposed NOx Best Available Control Technology (BACT) emission rate for the project. Reducing BACT will reduce the NOx offset liability for the project. We have not yet received any formal notification from the applicant that it intends to revise its BACT proposal. However, such a BACT modification would not be sufficient to fully offset the project with the NOx ERCs for which the District is currently processing proposed banking certificates.

We also note that on August 6, 1998 the applicant provided additional LOIs for volatile organic compounds (VOC) from sources located in South Coast Air Quality Management District. The applicant has provided LOIs for more reductions than are necessary to fully offset the project’s VOC emissions. At the June 30, 1998 workshop, the applicant indicated that it might provide more LOIs than would be necessary in order to preserve its options for obtaining the most cost effective ERCs. Another possible explanation is that the applicant may be considering interpollutant/interbasin VOC for NOx ERCs to address the short-fall in NOx ERCs. Although we have not yet received any notification from the applicant that it intends to use interpollutant/interbasin offsetting, it is important to note that if such a proposal were made, evaluation of the proposal could add significantly to the time necessary to address air quality issues.

In short, we are not aware of what course the applicant intends to pursue to obtain sufficient NOx ERCs, and therefore, are not confident we can estimate a reasonable schedule for completion of the revised PDOC, the Final DOC, or the staff’s Final Staff Assessment.

In addition to the issues associated with ERCs, we also believe there are other air quality issues that need to be addressed. For example, in the applicant’s June 24, 1998 comments on the PDOC and at the June 30 workshop regarding comments on the PDOC, the applicant indicated it was requesting that the number of cold and warm startups for the project not be limited, in order to provide flexibility to the applicant on how it might bid in the electricity market. The applicant has stated that emissions from these cold and warm startups will be offset on an annual basis. However, we are concerned that unlimited startups could contribute to violations of ambient air quality standards, which are based on hourly levels. Our evaluation of this issue will not be complete by the time the revised PSA is filed on September 24, 1998.

WATER RESOURCES

On August 18, 1998 the Victor Valley Water District (VVWD) Board met and adopted twelve conditions/mitigation measures for the High Desert Power Project. These conditions were submitted to the Energy Commission on August 24, 1998, with the request to review and acknowledge the conditions before considering approval of the project. On September 1, 1998, Mr. John D. Vega, VVWD General Manager, called to inform staff that these conditions/mitigation measures were preliminary and subject to
negotiations with the applicant. Although these conditions help focus our analysis of water resources issues associated with the proposed project, these conditions do not necessarily address whether the project will result in any significant impacts, nor is it evident that the required mitigation is feasible. We will incorporate these measures into proposed conditions of certification where appropriate, but we believe that a number of issues need to be addressed before the Energy Commission staff can recommend project approval. Those issues are as follows:

- Although the VVWD has identified conditions and mitigation measures, VVWD has not agreed to supply water for the project. We remain convinced that the Energy Commission should receive evidence of the VVWD’s willingness to supply water for the project prior to certification. The applicant has not yet formally applied to VVWD for the water. In discussions with Mr. John Vega, VVWD General Manager, it was suggested that the appropriate time for the district to decide on providing water to the project would be after the Presiding Member’s Proposed Decision has been released but prior to the final decision.¹

- The applicant has not applied to the Mojave Water Agency (MWA) for State Water Project (SWP) water for the project. This water supply is necessary to avoid impacts to ground water in the Mojave ground water basin, and is a critical element of the VVWD conditions. Although an application for SWP water must be made annually, the applicant may apply early to MWA to help determine the agency’s willingness to supply the project. Under MWA regulations, however, the applicant must show they have a reliable water supply from another source, in this case groundwater, before the application can be approved. We remain convinced that the Energy Commission should receive evidence of the MWA’s willingness to supply water for the project prior to certification, but this may have to follow action by VVWD.

- VVWD Condition number 9 (see the August 24, 1998 letter from Mr. John D. Vega) identifies that the applicant “shall apply for permission of the Mojave Basin Area Watermaster [MWA] to bank water ... in order to maintain a positive water balance at all times.” We are not aware of any reason why the applicant cannot now request the Watermaster to make a determination on whether water banking will be allowed. VVWD Condition number 10 identifies that project wells will be designed to provide for direct injection so that recharge will occur in the same area as extraction. However, groundwater recharge is not always feasible. VVWD Condition number 11 identifies that the applicant “shall treat all water before injection. Treatment will bring all water for injection into

¹ On August 1998, staff sent a letter to Mr. John D. Vega which recommended that the VVWD use the PMPD as the equivalent CEQA document for the project and base its approval, as appropriate, to provide water on the information in the PMPD.
compliance will all federal, state, and local water quality standards and criteria.” At this time, the applicant has not informed staff of how the SWP water will be treated to accomplish this treatment. Injection will require treatment capacity in excess of that proposed for the power plant even if additional treatment processes are not required. Furthermore, additional pipelines to convey this water between the powerplant, any additional treatment facility and the well field may also be required.

· Discussions with staff of the Regional Water Quality Control Board indicate that injection will require compliance with waste discharge requirements identified by the board and that potential impacts from injection must be addressed in the staff's environmental documents. Since ground water quality in the Mojave ground water basin is better than SWP water even if the water is treated sufficiently to meet appropriate standards and criteria, there is a potential for water quality degradation. Potential impacts on groundwater quality from injection will be addressed in the staff FSA. Since monitoring will be necessary to ensure success for the injection program, staff will also address a injection monitoring program in the FSA.

· Dry or wet dry cooling may be a feasible means of reducing water consumption of the project. We are still evaluating the economic and engineering feasibility of these alternative cooling technologies.

**BIOLOGICAL RESOURCES**

On August 20, 1998 we met, at their request, with U.S. Fish and Wildlife Service (USFWS) and U.S. Bureau of Land Management (BLM) staff to discuss federal agency review of the High Desert Power Project. The applicant was also asked to attend the meeting. Denise Washick, representing USFWS, stated that the federal agencies had determined that a Environmental Impact Statement (EIS) needs to be prepared pursuant to the National Environmental Policy Act (NEPA). The EIS would address all environmental impacts (not just biological impacts) from both the power plant and from the second natural gas pipeline. USFWS would be the lead agency for the EIS. Section 10(a)(1)(B) an incidental take permit, pursuant to the federal Endangered Species Act, must be obtained by the applicant in order to construct the power plant, and Section 7 consultation between BLM and USFWS must be concluded before BLM can grant a lease for the second natural gas pipeline. The federal agencies would develop one Biological Opinion, which would address endangered species issues for both the power plant and second natural gas pipeline. The Biological Opinion would identify the terms and conditions required by the federal agencies for approval of the project with respect to listed species and it would likely be concluded before completion of the EIS and would be incorporated into the EIS and Energy Commission Decision.
At this time, the federal agencies have not developed a schedule for preparing the EIS or the Biological Opinion. At the meeting on August 20, and a subsequent conference call on August 27, staff discussed the possible relationship between the Energy Commission’s California Environmental Quality Act (CEQA) environmental review and the federal agencies environmental review. There are two options for coordinating environmental review: 1) preparation of a joint NEPA/CEQA document, and 2) incorporate portions, as appropriate, of the Energy Commission’s CEQA analysis in the EIS. One advantage of a joint NEPA/CEQA document would be to minimize duplication and increase the likelihood of consistency between the processes. The disadvantage of a joint document is the potential for significant delays in either the federal or state review processes. We have not concluded our discussion with USFWS, nor reached a conclusion on whether to pursue development of a joint environmental document for the project. Key factors staff will consider in reaching a recommendation will be the potential affect on schedule, the possibility of minimizing duplication or inconsistencies, and potential for identifying federal requirements in a timely manner in order to incorporate them in the Energy Commission’s process. Regardless of whether a joint document is prepared, we believe it prudent to develop a recommendation which will outline how the federal and state agencies’ review should proceed for the High Desert Power Project.

The Committee’s July 20, 1998 “Third Revised Scheduling Order” directed staff to inform the Committee of the adequacy of the applicant’s July 8, 1998 submittal to the federal agencies by July 29, 1998. USFWS has not completed its review of the Habitat Conservation Plan (HCP). USFWS will meet with the Department of Fish and Game, Energy Commission staff and the applicant’s consultant in mid September to discuss the information necessary to complete the HCP. Because of the outstanding federal biological resources issues, our revised PSA to be released on September 24, 1998 will not be complete with respect to biological resources.

**CULTURAL RESOURCES**

We have not previously identified any major issues for cultural resources. However, our preliminary review of the second natural gas pipeline has identified significant cultural resources that may be eligible for federal listing and could be affected by construction and operation of the pipeline. These potential impacts may be difficult to mitigate. In addition, because the second natural gas pipeline crosses BLM land, coordination with federal agencies will be required to ensure that federal requirements for mitigation are met (see Biological Resources above). Because of outstanding cultural resources issues, our revised PSA to be released on September 24, 1998 will not be complete with respect to cultural resources.

**TRANSMISSION SYSTEM ENGINEERING**
On July 20, 1998 we received the applicant’s response to the Cal-ISO June 8, 1998 data requests. On August 11, 1998 the Cal-ISO issued additional data requests. We expect Edison to complete its response to these data requests by September 10, 1998. We have schedule a workshop for September 15, 1998 to discuss the results of Edison’s studies and the Cal-ISO’s preliminary findings and conclusions. Based on our discussions with Cal-ISO staff, we do not believe that there are any significant issues to be addressed for transmission system engineering. We believe that transmission system congestion resulting from the High Desert Power Project could be addressed through congestion management and remedial action schemes, without the need for new downstream transmission facilities. However, the Cal-ISO, as yet, has not confirmed this conclusion. In a letter dated September 3, 1998, the Cal-ISO indicated that their approval of the Interconnection Study will be completed by September 24, 1998. Consequently, we do not expect to be able to include the Cal-ISO’s findings and recommendations or our analysis of Edison’s studies in the revised PSA filed September 24, 1998.

**DEPARTMENT OF TOXIC SUBSTANCES CONTROL**

On August 12, 1998, staff conducted a workshop/conference call with the Department of Toxic Substances Control (DTSC), the applicant, California Unions for Reliable Energy (CURE), and other interested parties. DTSC indicated that they had received additional information from the applicant that clarified the proposal. DTSC concluded that the project would qualify for the exemption from obtaining a waste generator permit contained in Health and Safety Code Section 25143.2 (c)(2). Representatives of CURE raised concerns regarding whether the water reclaimed from the cooling tower blowdown would be “useful”, which is a requirement for an exemption. Specifically, CURE was concerned about the temperature of the water being returned to the cooling tower, and whether it would provide cooling for the power plant. The applicant clarified that it is proposing a Forced Circulation Crystallizer, which would include various heat exchangers that would reduce the temperature of the water returned to the cooling tower. The applicant also argued that since the objective of the cooling tower is to provide cooling by evaporation of water, the temperature of the water was not necessarily relevant. DTSC agreed to provide a letter describing their conclusions and the information they relied on to make that conclusion. DTSC also indicated that the project may qualify for other exemptions from the waste generator permit requirements. On August 14, 1998, CURE issued data requests to the applicant requesting clarification of the information presented during the workshop. Our revised PSA will reflect this workshop and will include any conditions of certification necessary to make DTSC’s findings enforceable.

**VISUAL RESOURCES**
Based on the applicant’s June 30 comments on the draft PSA, and other relevant information, staff has concluded that the project will not result in any significant impacts on visual resources. Our revised PSA will reflect this finding.

**FEDERAL AVIATION ADMINISTRATION**

On July 10, 1998 we sent a letter to Mr. Mickeal R. Agaibi, representing the Federal Aviation Administration (FAA), requesting clarification of whether the FAA has discretion to allow the intrusion into the horizontal airspace which it appears would occur if the site elevation provided in the AFC is used, rather than the information provided to the FAA by the applicant. On August 19, 1998 we discussed this issue with Mr. Charles Lieber of the FAA’s Los Angeles office. Mr. Lieber indicated that the FAA was not concerned with the intrusion into the horizontal air space, provided appropriate lighting will be installed. Based on this conversation, we do not believe that there is an issue regarding the project’s compliance with FAA regulations. Our revised PSA filing on September 24, 1998 will identify the apparent conflict with FAA regulations and identify that the FAA does not consider these conflicts relevant, if appropriate lighting is installed.

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