

CALIFORNIA ENERGY COMMISSION1516 NINTH STREET
SACRAMENTO, CA 95814-5512

December 30, 2002

Mr. Robert Looper
Caithness Blythe II, LLC
565 5th Avenue, 29th Floor
New York, NY 10017-2478

Dear Mr. Looper:

RE: BLYTHE ENERGY PROJECT PHASE II - SECOND ROUND DATA REQUESTS

Pursuant to Title 20, California Code of Regulations, section 1716, the California Energy Commission requests the information specified in the enclosed Data Requests. The information requested is necessary to: 1) more fully understand the project, 2) assess whether the facility will be constructed and operated in compliance with applicable regulations, 3) assess whether the project will result in significant environmental impacts, 4) assess whether the facilities will be constructed and operated in a safe, efficient and reliable manner, and 5) assess potential mitigation measures.

We are requesting a second round of data requests to obtain answers to new questions resulting from the first set of data responses, and to resolve questions not fully answered in the first series of data responses. Staff has also identified the lack of a complete project description pertaining to the project's electrical interconnection with the existing transmission system. Therefore, we are requesting an AFC supplement describing the electrical interconnection configuration selected and the mitigation measures proposed by Caithness (see data request 179 and Attachment A). Depending on the completeness of the AFC supplement, a third round of data requests may be necessary.

Because of incomplete responses to the first round of data requests and an electrical interconnection configuration that has not been finalized, the review of the AFC is currently several months behind schedule. We are concerned that the schedule continues to be delayed. By January 30, 2003, please provide us with a schedule that includes, at a minimum, the following:

- Completed System Impact Study for all interconnection configurations for which you are seeking a license that have been approved by SCE, IID, and Western;
- Selection of the mitigation measures for all criteria violations;
- AFC Supplemental (see data request 179).

These Data Requests are being made in the area of: Air Quality (#103 - 110); Biology (#111 - 126); Cultural Resources (#127 - 139); Land Use (#140 - 141); Soil and Water Resources (#142 - 178); Transmission System Engineering (#179); Visual (#180 - 186), and Worker Safety (#187).

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Written responses to the enclosed Data Requests are due to the Energy Commission staff on or before January 30, 2003, or at such later date as may be mutually agreed upon.

If you are unable to provide the information requested, need additional time, or object to providing the requested information, please send a written notice to the Committee and me within 10 days of receipt of this notice. The notification must contain the reasons for the inability to provide the information or the grounds for any objections (see Title 20, California Code of Regulations, section 1716 (f)).

If you have any questions regarding the enclosed Data Request, please call me at (916) 654-4206.

Sincerely,

BILL PFANNER
Energy Facility Siting Project Manager

Enclosure

cc: Docket (02-AFC-1)
Proof of Service List

**BLYTHE ENERGY PROJECT PHASE II
(02-AFC-01)
DATA REQUESTS**

Technical Area: Air Quality

Author: Brewster Birdsall

BACKGROUND

The AFC specifies that the proposed Best Available Control Technology (BACT) levels from the combustion turbines will be 2.5 parts per million (ppmvd) of NO_x on a one-hour basis and under 8.4 ppmvd of CO on a three-hour average (AFC Table 7.7-20). This was the Air Quality District's requirement for the Blythe I project; however, current EPA recommendations have established more stringent standards. The U.S. EPA recently identified a federal Lowest Achievable Emission Rate (LAER) for this type of equipment to be 2 ppmvd for both NO_x and CO on a 1-hour average. U.S. EPA contends on other cases that these levels are achieved in practice. Because the BEP II equipment is required to implement BACT for NO_x, which would be the levels achieved in practice [MDAQMD Rule 1301(K)(1)(a)], the proposed NO_x levels should match the levels specified by the U.S. EPA.

DATA REQUEST

103. Please identify proposed BACT levels from the gas turbines that match the levels specified by the U.S. EPA, or provide an analysis that demonstrates such limitations are not achievable. As necessary, please update the emission calculations and dispersion modeling analyses that would be affected.

BACKGROUND

The applicant proposes an ammonia slip emission level of 10 ppm (AFC p. 2-28). This is the standard used for the Blythe I project. However, ammonia under certain conditions is a precursor to PM₁₀. Guidance on emission levels from the Power Plant Guidance Document published by the Air Resources Board in 1999 recommends an ammonia limit of 5 ppm at 15% O₂. Staff agrees with the Air Resources Board recommendation. Other licensing cases currently before the commission are specifying ammonia slip limits of 5 ppm. Examples of projects proposing to achieve 5 ppm are Russell City (01-AFC-7) and Magnolia (01-AFC-6).

DATA REQUEST

104. Please identify why this project, as opposed to other proposed and certified projects, cannot meet an ammonia slip level of 5 ppm at 15% O₂. In this discussion, please identify measures, including increasing catalyst surface area, that might allow the project to meet the guideline level for ammonia, and identify the associated costs of such measures.

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BACKGROUND

The AFC specifies that BACT will be installed on the emergency fire pump (AFC p. 7.7-12). The diesel fire pump emissions are shown to be 4.61 pounds NOx per hour in Table 7.7-14 and Appendix 7.7-A and 7.45 pounds NOx per hour in Table 7.7-10 and on the MDAQMD form of Appendix 7.7-O. The BACT levels are not summarized in Table 7.7-20.

DATA REQUEST

105. Please identify the emission levels presumed to achieve BACT for the diesel fire pump engine, identify the control technologies that would be used to achieve BACT, and verify that the emission rates are consistently presented in the AFC.

BACKGROUND

In Response to Data Request 8 and in AFC pp. 7.13-25 to 27, the applicant indicated that the Water Conservation Offset Program (WCOP) would reduce fugitive dust emissions below the existing conditions by optimizing the surface conditions on the affected lands. The applicability of MDAQMD rules to the WCOP activity remains unclear.

DATA REQUEST

106. Please elaborate on the applicability of MDAQMD rules for fugitive dust control as they relate to the WCOP. For example, either describe whether an ongoing monitoring plan is necessary for the WCOP to demonstrate compliance with the 100 microgram per cubic meter upwind-downwind limit in MDAQMD Rule 403(c) or provide a citation or reference that demonstrates the MDAQMD rules do not apply.

BACKGROUND

In Response to Data Request 8, the applicant indicated that the Water Conservation Offset Program (WCOP) would reduce fugitive dust emissions below the existing conditions by optimizing the surface conditions on the affected lands. The AFC (p. 7.13-27) describes the measures that would be implemented on the WCOP lands to minimize wind erosion of soil. The strategies include providing residual "crop stubble" or "clod plowing" the non-irrigated fields. Because some of the fallow lands of the BEP II WCOP would be actively managed for dust control, staff needs to substantiate the assertion made in Response to Data Request 8 that fallowing would maintain wind erosion at levels similar to or lower than existing levels.

DATA REQUEST

107. Please demonstrate that fugitive dust emissions from maintenance of WCOP lands would not exceed the asserted baseline conditions of 25 pounds PM10 per acre annually (AFC p. 7.13-25). For example, staff anticipates that clod plowing parcels containing a higher percentage of silt and sand material may result in a higher-emissions scenario, as it would be less likely to clod than clay materials.

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Please also summarize and consider any other agricultural/non-agricultural uses that could be allowed on the WCOP lands. With this information, staff will substantiate that year-to-year maintenance of WCOP lands indeed generates less dust emissions than baseline activity on irrigated lands.

BACKGROUND

In Response to Data Request 2, the applicant indicated that ongoing meetings with the National Park Service (NPS) were in process to fully evaluate the impacts to the Joshua Tree National Park (NP). In their September 24, 2002 letter, NPS declared that the applicant's screening analysis for deposition and visibility had "fatal flaws" and that a refined analysis with 3 to 5 years of meteorology should be used to determine the extent of impacts to Joshua Tree NP. The cumulative contribution from other sources in the region (especially Blythe I) was not investigated in Response to Data Request 2. The progress of the applicant's response to the NPS letter is unknown.

DATA REQUESTS

108. Please provide an update of progress in response to the NPS September 24, 2002 letter. The status of the applicant's modeling versus the NPS's modeling should be reviewed, and any plans to conduct further modeling should be identified. A schedule for resolution should be proposed because the potential for this issue to delay the MDAQMD determination of compliance with New Source Review requirements needs to be assessed.
109. Please either include Blythe I in a cumulative analysis for deposition and visibility, using for example, merged stacks in the CALPUFF screening model, or provide documentation from the Federal Land Manager that the impacts from BEP II would not trigger any need for a cumulative analysis.

BACKGROUND

In Response to Data Request 5, the applicant indicated that a more detailed description of Emission Reduction Credits (ERC) used to offset BEP II would be forthcoming. Although the MDAQMD indicated in their October 30, 2002 letter that the package is substantially complete, at the time of writing this request, the information has not yet been provided to the Energy Commission staff.

DATA REQUEST

110. Please provide the detailed ERC strategy as promised in Data Response 5. Reiterating Data Request 5, the strategy should provide the ERC certification number and owner, a quantification of the emissions reduced, the source of reductions, and method of reduction.

**BLYTHE ENERGY PROJECT PHASE II
(02-AFC-01)
DATA REQUESTS**

Technical Area: Biological Resources
Author: Natasha Nelson
Technical Senior: Jim Brownell

BACKGROUND

In the first round of data responses, the applicant stated they were still negotiating with the City of Blythe before finalizing project features such as fire protection, roads and landscaping (see Responses to Data Requests 10,11, and 14). The applicant must identify all impacts expected for their project prior to staff completing their analysis.

DATA REQUESTS

111. Provide a copy of the final agreement between the City of Blythe and Riverside County and the applicant for funding of project-specific impacts related to fire safety. The agreement shall specify all infrastructure improvements needed. If the infrastructure improvements would require additional habitat disturbance, the amount should be estimated and submitted to staff.
112. Provide a copy of the final construction drawing for the Riverside Avenue secondary access road (as approved by the City of Blythe or Riverside County) and the easement width for this public right-of-way. The drawing shall indicate how sheet drainage from the areas north of the road will be routed to the proposed 42- inch drain pipe at the intersection of Riverside Avenue and Buck Boulevard. If the drainage structures would require additional habitat disturbance, the amount should be estimated and submitted to staff.
113. If the items requested above cannot be provided in a timely manner, then provide a schedule for providing all the final drawings and agreements made between the City of Blythe, Riverside County, and the applicant.

BACKGROUND

The applicant stated in Response to Data Request 10 that construction access will be via a gated access road at the northeastern corner of the BEP II site, accessed from Riverside Avenue. The AFC indicates that there are 4,310 truck deliveries projected during the 12 to 18 month construction period, and during the peak construction, there would be 660 daily trips by workers to and from the site (Section 7.4). While Hobsonway and Buck Boulevard have Interstate frontage, industrial facilities (BEP I), and agricultural fields along their shoulders, Riverside Avenue has potential desert tortoise habitat along its entire northern shoulder. One of the harms often identified for desert tortoises is construction traffic, however the applicant has not given an analysis of the potential impact of construction traffic on desert tortoise for this project.

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DATA REQUEST

114. Provide an analysis of how the heavy use of the gated access road from Riverside Avenue could potentially impact desert tortoises. If an impact is identified, then propose actions that could reduce the impacts.

BACKGROUND

In the first round of data responses, the applicant stated they were still negotiating with the City of Blythe on the landscaping plan. If the adoption the City of Blythe-approved landscaping plan were conditioned upon installation of non-native landscaping plants, then the landscaping would be in violation of the amended Biological Opinion for the BEP I Amendment 1B which requires only native species be used in landscaping.

DATA REQUESTS

115. Provide an analysis of how the approved Landscaping Plan is in compliance with the Biological Opinion (as amended) issued by the U.S. Fish and Wildlife Service.
116. Provide a copy of the final agreement(s) between the City of Blythe and the applicant for Landscaping Plan. The agreement shall specify all improvements needed; including a list of species proposed for planting.

BACKGROUND

In several locations in the AFC, the Applicant refers to a new BN-BS transmission line being built by Imperial Irrigation District (pages 2-1 and 8-5). Staff has reviewed the administrative draft EIS/EIR for this proposed line and its alternatives. However, the applicant has indicated in their response to Data Request 16 that the BN-BS transmission line is no longer being considered. Western Area Power Administration indicated to staff that two other lines in the area are being considered for upgrades (the Devers-Palo Verde line and the Buck Boulevard-Devers line) in the Blythe area. Staff assumes such construction will require documentation on the level of impact to biological resources. Staff would like to review any printed material related to transmission line installation which interconnects Blythe to another substation or transmission line for their analysis of cumulative impacts to biological resources.

DATA REQUESTS

117. Provide a copy of environmental documents or biological resources permits for any Imperial Irrigation District transmission line upgrades with an interconnection in Blythe. These documents should indicate the level of impact to biological resources and how these impacts would be mitigated.
118. Provide an analysis of the potential for cumulative impacts to biological resources which may result from the construction of an Imperial Irrigation District's transmission line with an interconnection in Blythe.

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BACKGROUND

Western Area Power Administration submitted materials initiating consultation with the U.S. Fish and Wildlife Service (USFWS) for the installation of a power plant on the BEP I Amendment 1B area on July 3, 2002. Western shared with staff the letters they subsequently received from USFWS (dated August 6 and October 17, 2002) which requested additional information regarding project impacts. Western said they are awaiting the applicant's response. The applicant in their response to data request 15 states "... information is being provided to the USFWS. " (page BIO-5), but no dates were given.

DATA REQUESTS

119. Provide an update on the status of the federal consultation process and include copies of all correspondence.
120. Provide a timeline for submittal of responses to any outstanding USFWS data requests.

BACKGROUND

Based on Table 7.7-40 of the AFC, when ambient and project impact levels are combined during the commissioning period, there could be a significant change in local levels of nitrogen and therefore nitrogen deposition. The applicant included a calculation of nitrogen deposition during commissioning activities in Data Response 25. When the equations provided are used to calculate background conditions, the local area is expected to receive nitrogen deposition of 77.7 kg/ha-yr. This level of nitrogen deposition is far beyond what many vegetative communities are known to respond to (see analysis presented in Data Response 25), and is over four times levels previous reviewed by Energy Commission staff (see Los Esteros Critical Energy Facility or Inland Empire Energy Center). There were several aspects of this calculation which were unclear to staff, and assumptions made by the analyst were undisclosed. Staff has additional data requests to clarify if the calculation is correct and is appropriately conservative.

DATA REQUESTS

121. Provide the source (citation) of the settling velocity used in the calculation of nitrogen deposition and a copy of the page where it is located. Describe if the source is a conservative estimate of settling velocity and what assumptions it makes about atmospheric conditions. For comparison purposes, provide the Maximum NO₂ Annual Impact during operations of BEP II alone, the combined operational impact of BEP I and II, and the nitrogen deposition impact from ambient conditions in the same table format used in Data Response 25.
122. Provide details on whether the nitrogen is settling in solid or particle form in the Data Response 25 calculation. Describe if the deposition calculated in Data Response 25 represents a maximum deposition that could exist anywhere off-site, or if there are limitations to the distance each chemical could disperse.

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Include any assumptions on whether the chemical is a solid or a particle and its reactivity to other chemicals in the air.

123. Describe how the calculation accounts for ammonia, which is emitted as ammonia slip from the stacks as a result of SCR processes (if used during commissioning). If ammonia slip from SCR is a source of nitrogen, available for deposition, then include a table of deposition calculations similar to the one provided for NO₂. For comparison purposes, please provide the nitrogen deposition during operations resulting from ammonia slip from SCR.
124. Describe how the model accounts for the ammonia reacting with sulfur oxides in the ambient air and from the power plant. Disclose if the power plant could create deposition in the form of ammonium sulfate and calculate how much it could amount to for both commissioning and operations. For clarity, describe in general terms how the inclusion of reactive chemicals in the ambient air as part of the calculations would change the amount of nitrogen deposition calculated.
125. Provide details on which of the forms of nitrogen deposition from the power plant remain as dry particles on soil and leaves, and which are water soluble. If a reference source was used, please provide the citation(s).
126. Provide a best estimate of the background nitrogen deposition (both wet and dry) in the region (within 50 miles), and include the sources used to make that estimate.

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DATA REQUESTS**

Technical Area: Cultural Resources

Author: Gary Reinoehl

BACKGROUND

The data response to data request 28 states that CA-RIV-6725H is currently being evaluated for potential historical significance. The cultural resources section of the AFC (7.1.2.1, p. 7.1-13 and 7.1.2.3, p.7.1-15) states that CA-RIV-6725H does not qualify as eligible for nomination to the National Register and will be destroyed during grading and construction.

DATA REQUEST

127. Please provide an explanation for this inconsistency, give the present status of CA-RIV-6725H, and present the data that resulted in this conclusion.

BACKGROUND

The AFC states on page 7.1-2 that testing and significance evaluation of CA-RIV-6370H is ongoing. A great deal of information on the history of the site (from aerial photographs) was provided. Little information was provided that describes the testing, analysis, and evaluation of CA-RIV-6370H.

DATA REQUESTS

128. Please provide a summary of the testing that has been done on CA-RIV-6370H including the number of trenches and units, the length and depth of each trench, the number of artifacts recovered, the analysis that is being performed, and the preliminary results provided in the *Preliminary Draft Archaeological Testing and Evaluation Report for the Blythe Energy Project, Riverside County, California*.
129. Please indicate any additional monitoring or other cultural resource activities that have taken place at CA-RIV-6370H, the reports that will be generated, and a timetable for the completion of those reports.
130. Please provide a timetable for the completion of the final testing and evaluation report.

BACKGROUND

The AFC on page 7.1-14 states that a Memorandum of Agreement (MOA) is being prepared to address the treatment of CA-RIV-6370H. In the preamble, it states that the MOA applies to Western's permitting of the expansion of the Blythe I Power Plant site (Amendment 1-A and 1-B). The implementing regulations of Section 106 of the National Historic Preservation Act, 36 CFR 800, requires that, "The agency official shall determine whether the proposed Federal action is an undertaking as defined in Sec. 800.16(y) and, if so, whether it is a type of activity that has the potential to cause effects on historic properties."

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131. Please indicate whether the MOA was finalized and the date it was finalized.

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132. Please explain how the MOA on the expansion applies to a separate federal action that Western Area Power Administration would take to approve the connection to the Buck Boulevard Substation for the Blythe Energy Project Phase II.

BACKGROUND

The response to data request 30 lists a number of survey reports. Some of these reports were provided to the Energy Commission as part of the Blythe Energy Project and some were provided as part of the AFC for Blythe Energy Project II.

DATA REQUEST

133. Please provide a copy of the report titled “Additional Cultural Resource Testing to Assess Effects of Fence Placement on Site CA-RIV-6370H and Additional Data Collection at CA-RIV-6725H for the Blythe Energy Project.” If this report contains information considered confidential under the Commission’s regulations, please provide the reports under confidential cover.

BACKGROUND

In the response to data requests 30 and 31, Blythe Energy Project II states that they will undertake and provide a survey of the affected area if the City of Blythe requires Riverside Avenue to be paved to a 40 foot width and any areas where landscaping is required within the boundaries of CA-RIV-6370H. The response to data request 11 indicates that the City of Blythe Planning Review Commission will make a decision within 30 days regarding the surfacing of Riverside Avenue along the northern boundary of the Blythe Energy Project II. The AFC contains statements on page 7.1-24, -25, and 26 stating that no significant cultural resources were identified.

DATA REQUESTS

134. Please explain the conclusion that no significant resources were identified when CA-RIV-6370H is within the project area and is being treated as an historical resource in accordance with the conclusions of the *Preliminary Draft Archaeological Testing and Evaluation Report for the Blythe Energy Project, Riverside County, California*.
135. Please provide specific mitigation measures that would be implemented if the City of Blythe determines that landscaping, grading, widening of Riverside Avenue, or other required ground disturbing activities would be required within CA-RIV-6370H.

BACKGROUND

The Phase I Environmental Site Assessment indicates that on May 25, 2001 “grab soil samples were taken and analyzed at four locations in the dumpsite.” The sampling did not define the horizontal and vertical limits of the lead contamination identified at one sample location.

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136. Please provide a map delineating the locations where the “grab soil samples” were taken, noting the sample identification numbers on the map.
137. Please indicate if any artifacts were recovered in the “grab soil samples” and the disposition of any artifacts that were recovered in the samples.
138. Please indicate the depth of the artifact deposits for each sample location and changes in strata that were noted during the sampling.
139. Please indicate if additional sampling to identify toxic materials would be conducted within the boundaries of CA-RIV-6370H, the quantity of samples, the location, the depth, and proposed mitigation measures for the impacts to the site.

**BLYTHE ENERGY PROJECT PHASE II
(02-AFC-01)
DATA REQUEST**

Technical Area: Land Use
Author: Ken Peterson

BACKGROUND

According to City staff, project structures with a height between 76 and 105 feet require a conditional use permit, and project structures over 105 feet require a conditional use permit in conjunction with either a major or minor variance. Pursuant to the Warren Alquist Act, Commission certification of this project would be in lieu of City approvals (e.g. variances or use permits). The Commission typically requests local jurisdictions to submit the findings they would have made if they had the authority to issue a permit. The Applicant intends to submit to the City a site plan review application, which the City will act on in an advisory capacity to the Commission.

DATA REQUESTS

140. a. Please provide a schedule for submittal and City review of the conditional use permit, height variance, and site plan review applications.
- b. Please submit a City resolution or letter of findings in response to the conditional use permit, height variance, and site plan review applications.

BACKGROUND

In order to assess compliance with the Comprehensive Land Use Plan (CLUP) for the Blythe Project, it is necessary to know the square footage of the plant facilities footprint.

DATA REQUESTS

141. The square footage of the plant facilities' footprint.

**BLYTHE ENERGY PROJECT PHASE II
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DATA REQUESTS**

Technical Area: Soil and Water Resources

Authors: Linda Bond
Joe Crea
Rich Sapudar
Jim Schoonmaker
Ken Schwarz

BACKGROUND

California's current overuse of Colorado River water has become a significant issue for consideration in staff's evaluation of any project intending to use Colorado River water. The California Colorado River Water Use Plan will reduce California's water use through a combination of conservation and intra-state exchanges. The Department of the Interior's Colorado River Interim Surplus Guidelines provide a 15-year period for California to reduce the State's water use from over 5 million acre-feet to its 4.4 million acre-feet annual apportionment of Colorado River water. This reduction in use will be quantified through a Quantification Settlement Agreement among California's Colorado River water users. The plan will result in California reducing its reliance on Colorado River water to its 4.4 million acre-feet apportionment in by 2016.

Any additional use of Colorado River water must be considered with regard to impacts to the State of California and California's Colorado River water rights holders. This issue will be evaluated by CEC staff based on the ability of BEP II to demonstrate the effectiveness of the proposed BEP II Water Conservation Offset Program (WCOP2).

Data Request 50 and 53 (round one) requested a discussion of any necessary changes to the proposed WCOP based on the USBR letter dated June 14, 2002 to Terry O'Brien of the Energy Commission from Robert Johnson of the USBR (AFC Appendix 7.13). The Data Request asked for a revised WCOP that was fully consistent with the USBR criteria contained in the June 14 letter. The Data Request also requested a detailed discussion on how this plan would be implemented, managed, verified, and reported.

A WCOP for BEP II (WCOP2) was attached to the USBR's letter of June 14, 2002 as the "Final Voluntary Water Conservation Offset Program for the Blythe Energy Project, Phase II, Caithness Blythe II, LLC" dated June 3, 2002. This document has not been submitted to the CEC as a project revision or change to the BEP II AFC by the applicant, Caithness.

If this WCOP2 is to be considered as part of the BEP II project, Caithness must formally submit the WCOP2 as a revision to the AFC, and indicate that it replaces the WCOP currently on file submitted as an attachment to the letter from Scott A. Galati representing Caithness Blythe II LLC to Steve Larson of the CEC dated March 11, 2001 (sic) with a subject consisting of "Request for Confidential Designation - Confidential Water Conservation Offset Program Information Blythe Energy Project Phase II, 02-AFC-1".

California's overuse of Colorado River water has reached a critical state over the

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past several years, and any additional use by BEPII must be fully evaluated with regard to cumulative impacts. In order to mitigate for any potentially significant adverse impacts, the project must fully offset its use of Colorado River water. Staff requires further elaboration and detail of the WCOP2 proposed by the applicant to ensure the project will fully mitigate its use of Colorado River Water. The WCOP2 submitted via the USBR letter is deficient with regard to implementation, monitoring, accounting, verification, reporting, and adverse impact mitigation procedures necessary for an actual functional water conservation plan.

DATA REQUESTS

142. Submit a complete WCOP2 that meets the following minimum specifications to satisfy requirements for an effective WCOP identified at this time:
- a. The lands included in the WCOP must have a recent irrigated agricultural crop production use defined as having been used for irrigated agriculture for any 2 of the last 5 years. The WCOP must contain the criteria for selection of the lands to be fallowed, it must specifically identify the lands considered for inclusion in the program, and it must demonstrate that these lands meet the criteria for inclusion in the WCOP.

Typically, such plans, the Palo Verde Test Land Fallowing Program (MWDSC 1995) being a good example of a plan suitable for the Blythe area, contain a requirement for the lands to have a demonstrated recent cropping and irrigation history

The lands included in the program are one of the most critical and important components in a fallowing program for water conservation purposes. Lands that do not meet the 2 out of the last 5 year use requirement must not be included in the WCOP2. Such lands must be excluded since this would result in inadequate conservation that would cause an additional and/or unauthorized use of Colorado River water.

- b. PVID "Water Toll" acres must be used to calculate acreage included in the program, and to verify that the acreage included in the WCOP meets the requirements for recent irrigated agricultural production within any 2 of the last 5 years. The crop production history and PVID water toll data for all acreage included in the program must be included for the most recent 5 year period at the time the acreage is included in the WCOP.
- c. The WCOP must ensure that additional lands would not be put into production by the same landowner participating in the WCOP by fallowing land. When lands are taken out of current production the landowner is generally left with an excess capacity to grow additional crops, i.e., labor, expensive equipment, or other infrastructure that is now idle and available for use. The WCOP should address through the fallowing agreement, that a

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participating landowner not put additional acreage into production, either his own or leased acreage, to utilize any existing excess capacity.

- d. A water conservation figure of 4.2 acre-feet per acre of fallowed land will be used for calculating WCOP fallowing requirements. This figure was revised from the 4.6 acre-feet per acre used in the Metropolitan Water District of Southern California fallowing program conducted in 1992-94 within the PVID, and at this time generally seems reasonable for this region. This value appears to be an average of the amount of water applied to the lands within the PVID, which at this time appears to be sufficient when combined with reasonable criteria for the selection and management of lands to be included in the WCOP.
- e. The WCOP must include a provision excluding lands from participation in the WCOP that are being scheduled for fallowing as part of the agricultural production cycle to ensure actual water conservation. Fallowing of agricultural lands is generally an expected and recurring part of crop production. Should Tier 1 lands be included in a rotational fallowing scheme rather than the permanent fallowing of Tier 3 lands, a provision addressing this issue would be particularly important, and should be included in both the WCOP and in the fallowing agreement with participating landowners.
- f. The WCOP must preclude lands participating in the fallowing program from being developed or put to other uses that may consume water. The WCOP must address the need for fallowing additional lands should activities involving consumptive uses of water occur on lands included in the fallowing program. While this may not be a concern at the time the lands are included in the fallowing program, the expected productive life of the power plant may be as long as 50 years. This is a sufficiently long enough period of time for unexpected growth and water use to occur on WCOP lands.
- g. An agricultural soil conservation plan must be developed and included in the WCOP to ensure that the fallowing program has no adverse impacts on the agricultural capacity of the soil, and that wind, stormwater, or other erosion related adverse impacts do not occur. A soil conservation plan consistent with National Resource Conservation Service guidelines and recommendations specific to the Blythe area and Palo Verde Irrigation District must be included as an integral part of the WCOP. See Soil and Water Data Requests 73 through 80 (round one) for additional information.
- h. A contract and/or agreement with participating landowners must be developed as part of the WCOP to insure that lands included in the WCOP meet required specifications, and that participating landowners meet performance requirements. The contract or agreement with participating landowners is critically important to ensure that the responsibilities of the

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landowner are made clear and that there is sufficient accountability to ensure that the goal of water conservation is actually achieved.

- i. The WCOP must include a monitoring, verification, and reporting component that ensures that the requirements of the WCOP are properly implemented, monitored, verified, and reported. Independent monitoring, verification, and reporting must be included as an integral part of the WCOP implementation.

BACKGROUND

Response to Data Request-56 described factors that can influence water consumption for individual plants; identified other Siemens combined cycle reference sites; and offered estimated water consumption comparisons for the Big Sandy and BEP II plants. Of the indicated reference plants, the Big Sandy project is most similar to BEP II. However, the Big Sandy plant is still in planning phases and is not constructed or operational, however, the Choteau, OK plant should have actual water use data. As such, the response was incomplete in that it did not provide actual water consumption information from a plant that is operational which will enable staff to better understand the potential for impacts under various operating conditions.

DATA REQUESTS

143. Please provide water use data collected from the Choteau plant which is a similar reference plant that is fully operational. The Choteau plant in Choteau, OK should have actual data on water use during various meteorological conditions. It is acknowledged that Choteau and BEP II will have different environmental conditions and operational systems. Please describe how the differences in environmental and operational conditions between the Choteau plant and the planned BEP II plant would result in differences between observed water use data for Choteau and estimated water use data for BEP II.

BACKGROUND

In Data Request-58, staff requested the applicant to clarify the maximum rate of water use for the plant, as well as average rates, in order to evaluate potential significant adverse impacts to water resources that would occur during the life of the project.

The response to Data Request-58 states that water use of 3,017 gpm is not the maximum rate of water use that the BEP II plant would require during the life of the project. BEP II stated the maximum rate of water use for the plant as follows: for any single hottest week, the plant would use water at a maximum rate of 3,344,300 gallons/day (2320 gpm); and for any single (hottest) month, the plant would use water at a maximum rate of 3,230,300 gallons/day (2240 gpm).

The maximum rates identified by BEP II will be used to calculate the worst-case drawdown that would occur for the indicated time period for each rate identified, following a prolonged period of pumping at the average water-use rate identified. For example, to calculate the drawdown that would occur during the single hottest month,

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staff (1) would calculate drawdown that would occur in response to an extended period (~39 years) of water use at the average rate, and (2) would calculate the additional drawdown that would occur if pumping was then increased to the maximum single-month rate of 3,230,300 gallons/day for one month.

The BEP II project drawdown and well interference will be evaluated and conditioned at the rates identified by BEP II. Accordingly, BEP II will be limited to these rates for the life of the project.

DATA REQUESTS

144. Please verify that BEP II is applying for certification for use of a total maximum limit of 3,344,300 gallons/day (2320 gpm) of groundwater for any single week and a total maximum limit of 3,230,300 gallons/day (2240 gpm) of groundwater for any single month, for the life of the project.
145. If these rates do not represent the maximum rates of groundwater use for the life of the project for which BEP II is applying, please provide adequate information that characterizes the maximum water requirements for the project.
146. In addition, please provide the maximum projected usage rate for a 4-month period that the plant would require during the life of the project.

BACKGROUND

The response to Data Request-59 described that the BEP II evaporation pond will consist of one pond divided into two cells (3.24 acres each) with a maximum depth of 15' (13' usable depth for storage, and 2' for freeboard). BEP II differs from BEP I in that the BEP II pond requires solids to be removed at 7-10 year intervals, while BEP I was designed for the life of the project. The response provides the assumptions for the pond sizing calculations according to 7 steps. Follow-up data requests and questions are presented below for the calculation steps.

DATA REQUESTS

147. Step 1 (Assumptions): The pond is designed to handle average brine flow (16.3 gpm), flush volume (1.16 gpm), and to be cleaned of solids every 7-10 years, given a net average evaporation rate of 6-8 ft/year.

Is this net average evaporation rate a measure of potential evaporation (PE) or actual observed evaporation (AE) and does it account for the average annual precipitation rate?

148. Step 4 (Evaporation surge capacity): The evaporation surge capacity calculation indicates the pond has the capacity to take excess cooling tower blowdown design flow of 416 gpm for 6 days.

Is the calculation based on operating the pond at the maximum level year round? If so, does this provide adequate storage capacity in the pond for extreme

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precipitation events? If not, please adjust calculations to adjust for an operational pond stage that can accommodate an extreme precipitation event.

149. Step 6 (Depth required for solids storage): Based on top and bottom pond areas, calculation concludes that 6.6 feet of pond depth is required to store solids over 10 years. However, this calculation is based on the average area of the pond (5.1 acres). Since solid accumulation will occur from the bottom of the pond upwards, using the average pond area (5.1 acres) leads to an over-estimation of available storage volume at lower pond elevations.

Please verify the solids storage depth requirement by developing a stage-area-volume relationship for the pond and using this relationship to calculate depth for solids accumulation.

150. Step 7 (Flow to one cell only): This calculation concludes that the plant can operate on one cell for 1 full year. This calculation assumes that the single cell begins half-full at a depth of 6.5 feet. (Note: This assumption of initial depth of 6.5 ft. seems to be inconsistent with some of the assumptions of the other steps.) For the pond area calculation (Step 3) and the evaporation surge capacity calculation (Step 4), the initial assumption was for an operating depth of 13 feet. Additionally, a revised depth required for solids storage calculation (following comments above for Step 6) will likely be even higher than the initial depth of 6.5 ft used for Step 7.

Please re-evaluate the process used to size of the evaporation pond and consider using consistent assumptions for water depth conditions throughout the 7 steps. Also, to summarize above comments, the design of the evaporation pond should consider precipitation, storage required for extreme precipitation events, the required storage volume for solids, and the stage-area-volume relationship for the intended ponds. The Applicant must utilize consistent assumptions throughout all the computations to ensure that sufficient storage and evaporation capacity are provided so that the plant can operate on a single cell. Provide revised calculations using consistent assumptions.

BACKGROUND

The response to Data Request-60 described discharge conditions to the evaporation ponds and supplied water balance information for operation during summer months.

Input discharge to the ponds was given as 20 gpm (equivalent to 15.24" of input). Does this 20 gpm rate include the Flush Volume of 1.16 gpm that was described in Step 1 of the Response to Data Request-59? Under the observed highest precipitation recorded for the summer months (6.5" total) in the one-pond scenario (11.88"), adding this flush volume (if it is not already accounted for) could lead to a flow volume that exceeds design pond capacity.

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151. Please confirm the accounting (or non accounting) of Flush Volume (consistent with the Response to Data Request-59) for sizing considerations of the evaporation ponds under summer environmental conditions and also considering potential high magnitude precipitation events (as observed). Please confirm that the evaporation ponds are adequately sized under these conditions.

BACKGROUND

The response to Data Request-62 describes that the project wells may be connected to the BEP I wells to provide long-term reliability. During the Data Response Workshop on November 6, 2002 in Blythe, the legal counsel for BEP II requested that staff evaluate impacts with and without well field interconnection and condition the project based on the worst-case scenario.

Unless an interconnected well field is specifically identified in the project description, the staff must assume that the BEP II wells will not be interconnected with the BEP I wells. Accordingly, the BEP II project would be evaluated, conditioned and limited to use of the 2 project-supply wells that have been identified by BEP II and that will be located on the BEP II project site.

DATA REQUESTS

152. Confirm that BEP II is requesting to be certified to interconnect the proposed project wells to the existing BEP I wells.
153. If BEP II is requesting certification with the BEP I and BEP II wells interconnected, provide a description and specification of the interconnection of the BEP II project wells to the existing BEP I wells.

BACKGROUND

The Response to Data Request-63 did not provide the maps or well interference calculations that were requested. The Response to Data Request-63 refers to a Figure 63-1, but this figure was not included in the submittal. The applicant explained at the Data Response Workshop on November 6, 2002 in Blythe that Figure 64-1 replaced Figure 63-1.

DATA REQUESTS

154. Please update Figure 64-1 to display all residential and commercial land uses within 2 miles of the proposed project, specifically all of the wells located at 16275 Hobsonway West, including at the Thermo King shop.
155. Provide the following well interference calculations for the well at the Thermo King shop. (1) Calculate the potential drawdown for the average rate of pumping for a 40-year period. (2) Calculate the additional potential drawdown that would occur at the end of 4 months of pumping at the maximum projected usage rate following 39 years of pumping at the average rate of pumping.

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BACKGROUND

The following questions represent additional required information following the Response to Data Request-65.

DATA REQUESTS

156. Identify the lettered and numbered sites shown on the figure entitled "Overview Map – 846494.1s – Greystone Env. Consultants," which was included in Attachment 65-1 of the response submittal.
157. Provide the map location of the 8 sites that were discussed in detail in the response to Data Request 65; these 8 sites were identified as being "up-gradient from or sufficiently near the BEP sites." Identify these sites on the figure entitled "Overview Map – 846494.1s – Greystone Env. Consultants" (Attachment 65-1).
158. Provide the definition of the criteria "sufficiently near" that was used to identify the sites that were described in more detail in this data response.
159. Show the following areas and sites on the figure entitled "Overview Map – 846494.1s – Greystone Env. Consultants" (Attachment 65-1):
 - the projected cone of depression (area of influence) for long-term project pumping for BEP II;
 - the boundaries of the Blythe Airport Dump Site;
 - the old mobile home site along Hobsonway; and
 - the residences and commercial buildings, including the residence at 16275 Hobsonway, that are within 1 mile of the BEP II project.
160. Show the projected cone of depression (area of influence) for combined long-term project pumping for BEP I and BEP II on the figure entitled "Overview Map – 846494.1s – Greystone Env. Consultants" (Attachment 65-1).

BACKGROUND

The response to Data Request-66 described the process used to design the stormwater retention basin. Assumptions included a percolation rate of 6.3 cfs based on pump tests. A ratio approach was used that compared storage volume to runoff volume.

DATA REQUESTS

161. Please provide a topographic map indicating the contributing watersheds that drain to the retention basin.
162. Please evaluate (or confirm) that the measured percolation rate of 6.3 cfs from pump tests is an accurate measure of infiltration conditions for surface soils and shallow subsurface soils. If the pumping tests are measuring deeper percolation rates, then using values for deeper aquifer conditions to estimate surface runoff may not be appropriate.

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163. Please provide a stage-storage-volume relationship for the retention basin.
164. Please confirm that the retention basin is adequately sized for 100-year storms of varying durations (12-hr, 24-hr, 72-hr). This evaluation can be based on a flood routing analysis using the stage-storage-volume relationship requested above.
165. Staff has been informed that the retention basin would also serve as a sediment basin during earthmoving activities. Please demonstrate that the basin has sufficient capacity to store both stormwater runoff and sediment.

BACKGROUND

The response to Data Request-67 described that the design of the stormwater retention basin included accounting for the aging of the basin and reductions in infiltration/percolation over time.

DATA REQUESTS

166. Similar to the comments above for the Response to Data Request-66, please provide clarification regarding the percolation rates calculated from the pump tests. Are the soil strata at the surface similar to the water bearing strata for which the pump test measures hydraulic conductivity? The geologic cross section (Figure 7.13-5 of the AFC) indicates that there may be clay lenses and cemented deposits between the surface and the water table. What effect will these clay lenses and cemented deposits have on the assumed percolation rate?
167. Please provide monitoring and maintenance protocol related to sediment storage and removal for times when the basin will serve as a sediment basin. Please also indicate how the basin will maintain adequate infiltration/percolation rates.

BACKGROUND

As discussed at the 11/06/02 workshop, the applicant agreed they would provide staff with Attachment #70 and the hydrologic and hydraulic calculations submitted as part of Amendment 1B.

DATA REQUEST

168. Please provide staff with the hydrology and hydraulic data for the Amendment 1B.

BACKGROUND

As discussed in the Response to Data Request-72, the applicant will submit an operational SWPPP for the BEP I site and this plan would serve as an example of the same type of SWPPP to be utilized for the BEP II project.

DATA REQUEST

169. Provide the Operational SWPPP from BEP 1 and indicate that the BEP II SWPPP will be essentially the same. Discuss in detail any changes that will be made to the BEP I SWPPP for use by BEP II, and provide an amended draft plan for review.

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BACKGROUND

Response to Data Request-73 indicates that the requested information is available in Section 7.14 of the BEP II AFC. Section 7.14 describes four (4) soil types that are only indicative of the power plant area. However, soil attributes for lands considered in the WCOP following program are not identified.

DATA REQUEST

170. Please identify and describe detailed soil information (similar to the information provided for the power plant site) for all lands considered for inclusion in following for the WCOP program. Please also include information regarding the potential soil erosion hazard due to wind on these lands.

BACKGROUND

A philosophical discussion on the accuracy or inaccuracy of the RUSLE and Wind Erosion Equation is not an adequate data response since it does not provide the quantitative information necessary for staff to complete the analysis of this issue. Technical resources such as the USDA, Agricultural Research Service, Agricultural Handbook Number 703, 1997 and USDA-NRCS Field Office Technical Guide, Section I-C are nationally recognized and used by field personnel in both the public and private sectors. Staff requires these technical resources to assess ambient versus proposed impacts related to annual average soil loss, stemming from water and wind (mechanical) erosion. Please note that staff is not only concerned about the PM 10 impacts, but also the saltation process that may impact surrounding lands.

DATA REQUESTS

171. Please provide quantitative analyses using the RUSLE and Wind Erosion Equation for the proposed WCOP lands during current ambient conditions and proposed WCOP conditions.
172. Please ensure that the analyses demonstrate how the final products are achieved quantitatively and via discussion on the selection of the C, P (RUSLE) and V (Wind Erosion Equation) factors.

BACKGROUND

In the Response to Data Request-75, the applicant has indicated that a new confidential filing will be submitted to the Energy Commission, as the original filing is considered out of date.

DATA REQUEST

173. Please provide Staff with this map filing.

BACKGROUND

In Data Requests 76 through 80, staff requested detailed information about the specific following and retirement programs affiliated with the WCOP. Staff also questioned the effectiveness of clodding on sandy soils. Staff requested the applicant to coordinate with the Natural Resources Conservation Service (NRCS) to develop a Conservation

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Plan to ensure that the average annual soil loss is less than five (5) tons/acre/year. Staff also requested information regarding the erodibility and other agricultural attributes of specific lands to be fallowed as part of the WCOP. These lands are a component of the BEP II application and, therefore, must be analyzed by Staff. The impacts related to erosion for the fallowing process must be evaluated as part of the WCOP. Therefore, staff is relying on the Conservation Standards set forth by the USDA as they are applicable to that local area. The applicant also cross-references the EIR for the Proposed Palo Verde Irrigation District Land Management, Crop Rotation, and Water Supply Program related to PVID as the basis for the WCOP. This EIR discusses land conservation practices and stresses coordination with the NRCS (formerly SCS) and the Palo Verde Resource Conservation District.

DATA REQUEST

174. Because the NRCS specializes in technical conservation services and the development of conservation plans, staff is requesting the applicant to coordinate with the local NRCS offices (Blythe and/or Indio) and the Palo Verde Resource Conservation District to develop a conservation plan for the fallowing process as part of the WCOP. Provide a conservation plan as a component of the WCOP2 that has been developed in consultation with the NRCS.

Additional Data Requests (not previously submitted in Data Request round 1)

BACKGROUND

The Cumulative Impacts discussions in Sections 7.13 and 7.14 of the AFC provide a vague and non-detailed analysis of the BEP II power plant site. As previously discussed, the WCOP is also part of the BEP II project. The applicant has mentioned an EIR for the Proposed Palo Verde Irrigation District Land Management, Crop Rotation, and Water Supply Program.

DATA REQUEST

175. Please provide a detailed and specific cumulative impacts discussion related to the WCOP that includes the aforementioned PVID project and any other **current** or **future** projects related to water and soil resources. This discussion should consider the following: groundwater supply and the relationship of impacts to local and regional groundwater resources and the Colorado River; soil erosion, and other cumulative hydrologic impacts.

BACKGROUND

Additional information is necessary to further evaluate the alternative water supplies available to the project discussed in AFC Section 7.13.1.6.

DATA REQUESTS

176. Quantify the amount and availability of wastewater produced by the City of Blythe, how this water is accounted for as Colorado River flow, and how it is related to the PVID and/or other Colorado River water right.

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177. Discuss the option of obtaining water directly from the PVID or some other existing California Colorado River water rights holder, and how the accounting as Colorado River water of the quantity of water delivered would be performed under the PVID or other USBR water delivery contract, entitlement and/or allotment.
178. Discuss the TDS or other water quality limitations of water obtained from offsite wells located in the Chuckwalla Valley, and discuss how it was determined that wells in this area do not encounter the USBR accounting surface. Discuss the water quantity and water quality issues of water obtained from irrigation return flows, and discuss how these flows are currently considered and/or accounted for with regard to the Colorado River.

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Technical Area: Transmission Systems Engineering
Author: Al McCuen

BACKGROUND:

Imperial Irrigation District, (IID), Southern California Edison (SCE), and Western Area Power Administration (Western) recently issued a draft Blythe Area Regional Transmission (BART) power flow study dated November 2, 2002. The purpose of the study is to analyze the Blythe area regional transmission system including the feasibility of selected transmission options to support the reliable interconnection of the 520 MW Blythe Energy Project Phase II (BEP II). Studies described in the draft Blythe Area Regional Transmission power flow study included four transmission options (Transmission option 1, 2, 3 and 4) and assorted system upgrades. Subsequently, one line diagrams for additional interconnection options and dispatch options were provided on November 15. For the latter, no power flow analysis has been presented. The following transmission interconnection options and dispatch options were presented in the attached one-line diagrams (dated 11/13/2002 and 11/19/2002):

SC1	Path 42 at 600MW, 900MW of additional generation at IV
SC1--Opt3	added Option 3 and scheduled all output to SCE from BEP2
SC2	Remove Valley-Rainbow Project)
SC3	
SC3a	Option 3 with 230kV Interconnection at Buck
SC3b	Option 3 under N-1 condition with split bus at Buck (separating 1 CT to the Blythe 161KV system, 865MW to Devers)
SC4	
SC4a	Option 4 with 230kV Interconnection at Buck
SC4b	Option 4 under N-1 with split bus at Buck (865MW to Devers)
SC4c	Coachella Valley 500/230kV transformer in service
SC5	Spring Sensitivity Case (SCE is developing this sensitivity case)

Many of these options, scenarios and interconnection configurations are significantly different from the project contained in the AFC filed in July, 2002. For staff to progress any further in its analysis of the project, please submit a supplement to the AFC selecting the interconnection configuration you are seeking to license. Please describe the project interconnection configuration for which you are seeking approval, and select the mitigation measures for all reliability criteria violations. Once the project interconnection configuration and mitigation measures are known, provide an analysis of the environmental setting, environmental effects and public health and safety impacts

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and mitigation measures for the power plant, its switchyard, Buck Boulevard Substation, and modifications thereto, and all new lines emanating from any existing, proposed, or modified bus.

DATA REQUESTS :

179. Please provide an AFC supplement for all transmission interconnection configurations proposed by the applicant (or others such as IID) for which certification by the Commission is sought including, but not limited to, the following:
- a. A power flow analysis per Data Request #91 (first round) evaluating conformance with system reliability criteria and the identification of mitigation measures, one line detailed engineering diagrams of the power plant switchyard, Buck Boulevard 230 kV and 161 kV bus system and connections to transmission lines and substations. Provide a narrative description of existing and proposed facilities, and a plan and profile sketch of those facilities. Provide the rationale for selecting the proposed facilities.
 - b. For the interconnection configuration proposal, provide an analysis of the environmental setting, environmental effects and public health and safety impacts, and mitigation measures for the power plant, its switchyard, the Buck Boulevard Substation and modifications thereto, and all new lines emanating from any existing, proposed, or modified bus. Please note that information provided in the (Draft IID 230 kV Transmission Line Project Environment Impact Statement/Environmental Impact Report (EIS/EIR) should be considered as partly responding to this request. Staff will advise the applicant what additional information is required once the proposed configuration is determined and the Draft IID EIS/EIR has been received.
 - c. For proposed modifications to existing transmission facilities which are downstream of the point where the outlet line joins with the existing interconnected system provide the information in attachment A (see page 31). These facilities may include but not be limited to upgrades to Path 42 (adding a second conductor to several existing lines).

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Technical Area: Visual Resources
Authors: Michael Clayton

BACKGROUND

The AFC (p. 7.5-1) states the Blythe Energy Project (BEP) facilities may be expanded to serve BEP II and include the wastewater treatment systems, fire protection facilities, and site access roads.

DATA REQUESTS

180. Please describe in more detail the nature of the potential expansion of BEP facilities including the visual change that would occur with any such expansion and the extent to which any expansion of BEP would be visible from KOPs 1 through 6.

BACKGROUND

Section 7.5.1.2 of the AFC (p. 7.5-4) states that “a few residences located near the project site and up-slope toward the airport have a high level of viewer exposure to the site.”

DATA REQUESTS

181. Please identify the number and location of the residences that have a high level of viewer exposure to the site.

BACKGROUND

Section 7.5.2.2.3 of the AFC (p.7.5-15) states that “Due to its distance and topographic position, lighting of taller features is not required by Federal Aviation Administration (FAA) guidelines.” However, the same section on page 7.5-16 states, “BEP II will have FAA approved lighting installed at the tops of the HRSG exhaust stacks.”

DATA REQUESTS

182. Please clarify why FAA lighting is being proposed for the HRSGs if it is not required by the FAA.

BACKGROUND

Section 7.5.2.2.3 of the AFC (p.7.5-16) states that “Access lighting for stairways and platforms must be designed, first and foremost, to address safety of the workers who require access, therefore this lighting will not be designed with switch or motion sensors.”

DATA REQUESTS

183. Please explain how the use of light switches and/or motion sensors on stairways and platforms would compromise worker safety.

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BACKGROUND

Section 7.5.2.3 of the AFC (p. 7.5-18) states that there are 31 residences within the viewshed of the plant site but that “None of the residential viewers will experience views of any other industrial facility, so there will be no cumulative visual impact for local residents.”

DATA REQUESTS

184. Please identify the location (either in narrative or map form) of the 31 residences within the viewshed of the plant site.
185. Please clarify how many of the 31 residences would have a view of the existing BEP power plant.
186. For those residential viewers who would have views of both the BEP and BEP II projects, please discuss the cumulative visual impacts that would be experienced.

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Technical Area: Worker Safety/Fire Protection

Author: Alvin Greenberg, Ph.D.

Technical Senior: Rick Tyler

BACKGROUND

The AFC page 2-17 states that BEP II will be connected to the existing BEP fire protection system and water storage tank, and that on-site wells would be capable of restoring the raw water supply at an estimated maximum rate of 6,000 gpm with two wells pumping. Given the controversy over water rights, specific information on the source and amount available of firewater is necessary in order to determine the adequacy of fire-fighting capability.

DATA REQUESTS

187. Please provide a more complete discussion on the availability of water to be used for fire-fighting purposes and how on-site storage tanks will be filled and the volume maintained from groundwater resources. Please also describe the total supply amount of firewater to both BEP I and II, the size of the tank(s) used for storage of firewater, and a specific narrative and schematic description of the fire water system explaining how the two systems will be connected and how they will function, including showing pipes, valves, and pumps at both facilities.

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ATTACHMENT A

**Information Needed for a General-Level Analysis
of New or Modified Transmission Facilities**

Below is the information that Energy Commission Staff will request from applicants for projects that are likely to require or result in one or more new electric transmission or distribution lines beyond the point where the line emanating from a project joins with the interconnected system. The information is needed by Staff to complete at least a cumulative-or alternative impacts-level of analysis of the potential effects that the new project may have on the environment. Staff would use the data to discuss the potential effects of the new line, and inform the Commission and the public about the potential indirect consequences of approving the project. This analysis would also provide information to the California Public Utilities Commission for use in conducting its CEQA review of the application by the transmission owner seeking authority to construct a new line. For transmission lines not regulated by the CPUC, the information would be provided to the transmission owner, such as the Western Area Power Administration municipal utilities or other permitting authority.

Informational needs for new transmission or distribution lines are:

1. The location, rating and physical and electrical description of the line.
2. A basic, layperson's discussion of the preconstruction and construction process for the line, identifying the techniques used, equipment required, vehicles (land and air), personnel required, parking, storage and staging areas needed, season and time needed to complete the line construction. This shall include:
 - Candidate locations (if available) and average acreage needed for towers and poles, tension and pulling stations, or, alternatively, the approximate number of pulling and tension sites.
 - Stringing method (slack or tension)
 - Approximate number of towers per mile.
 - Tower or pole lay-down areas.
 - Need for reel or other storage near the lines.
 - Road, River, lake and transmission or distribution line crossings.
 - Tower or pole construction methods such as erect on tower or pole site, full erection prior to placement, gin pole construction, etc.
 - Clearing of tower or pole sites and approximate foundation size and depth.
 - Method and access (helicopter, cherry picker, climbing tower, etc) to install insulators, sheeves, dampers, and tension and clip in conductor.
 - General methodology for any needed tree trimming and brush clearing.

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3. How access to the line and towers would be accomplished, including identifying any existing or needed access road to pull and tension sites, storage area, towers and staging areas.
4. Recent aerial photographs (less than 5 years old) and topographic maps of the applicable line segments with the transmission towers plotted on the photographs.
5. The location of any existing tower that would need to be modified or replaced, a basic description of the work that would be done to the tower, and a description of the potential impacts of that work.
6. Identification of any sensitive habitats along the route by examining aerial photographs, conducting site visits, searching available databases (such as the Natural Diversity Database) and literature searches, etc.
7. Identity of any agency or other interested party with jurisdiction or permit approval authority over any part of the project.
8. Identification of known cultural resource sites within 1/4 mile of the route based on a California Historic Resource Information System literature search. This information should be provided as a legible map depicting the cultural sites, and must be submitted under confidential cover.
9. If any portion of the new line parallels or crosses an electric line which is more than 45 years old, provide a layperson's description of the age and original purpose of the existing line. This information should include year built, whether modifications/upgrades have been made previously, and any information indicative of the historic significance of the existing transmission line segment to be paralleled or crossed.
10. Legible maps of the route depicting cultural and biological resources (habitat, nesting areas, etc.).
11. Legible maps showing existing land uses and existing zoning within 500 feet of the outside edges of the right of way
12. Identification of any potentially significant impact to the environment that may occur as the result of the new and modified line, technologies that are available to mitigate an impact, and mitigation measures that would reduce the impact to a less than significant level, including the standard environmental mitigation measures and methodology developed generically by the transmission owner, CPUC or other permitting agency for new transmission or distribution projects.
13. Identify location and footprint of any substations or switching stations that will be added or expanded as a result of the new line construction or operation.
14. Description of construction methods, environmental impacts and candidate mitigation measures for any modified or new substation or switching stations.
15. In general, provide facts to support conclusions about the potential for impacts and feasible mitigation, including impact avoidance measures.

California Energy Commission

May 1, 2002