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September 8, 2011

Ms. Christina Stora
Compliance Project Manager
California Energy Commission
1516 9th Street
Sacramento, CA 95614

DOCKET

97-AFC-2C

DATE Sept 08 2011

RECD. Sept 09 2011

**RE: Grimes Pipeline Project Amendment 97-AFC-02
Comments on Staff Assessment**

Dear Ms. Stora:

On behalf of Calpine Construction Finance Company, L.P. and CPN Pipeline Company, please find comments on the California Energy Commission's (CEC) Staff Assessment, posted for public comment on August 11, 2011.

These comments include requests for clarification of information provided in the Staff Analysis and discussions addressing the applicability of certain proposed modifications to conditions of certification for biological, cultural and paleontological resources.

We would like to meet with you at your convenience to discuss our comments and conditions applicable to the Grimes Pipeline Project.

Please contact me at (925) 557-2238 to set up a meeting date.

Sincerely,

Barbara McBride
Western Regional Director, Environmental Health and Safety

Attachment

**Calpine Construction Finance Company, L.P. and
CPN Pipeline Company
Comments on the California Energy Commission's
Staff Assessment for the Sutter Energy Center Project (97-AFC-2C)
Proposed Modifications to Install the Sutter Grimes Pipeline**

I. INTRODUCTION

Calpine Construction Finance Company and CPN Pipeline, hereinafter "Petitioner," provide the following comments to the Staff Analysis of Proposed Modifications to Install the Sutter Grimes Pipeline and the supplement thereto, hereinafter "Staff Assessment," issued August 11, 2011 and August 16, 2011, respectively. Petitioner is in substantive agreement with the majority of the Staff Assessment's analyses and conditions, but suggests the following few corrections and clarifications.

We note that some of the proposed conditions are new conditions drafted to specifically apply to the construction and operation of the Grimes Pipeline Project, while other conditions are revisions to conditions which apply to the original powerplant. We recommend that conditions applicable to the Grimes Pipeline Project be drafted and numbered with a "GP" to indicate that they apply specifically to this project. We believe that revising existing conditions will create unnecessary confusion regarding whether the revision is intended to apply only to the pipeline or whether it is intended to apply to the existing powerplant, and propose a meeting to review the applicability of the 1999 conditions of certification to Grimes Pipeline Project.

Requested minor modifications to the Staff Assessment's proposed conditions of certification are provided in Section II, and requested clarifications to language in staff analyses are provided in Section III. All recommended changes to language to the Staff Assessment are provided in bold text in the sections below.

Petitioner's proposed set of conditions of certification specific to the Grimes Pipeline Project will be submitted to the California Energy Commission under separate cover.

II. COMMENTS ON CONDITIONS OF CERTIFICATION

A. Biological Resources

BIO-2 Designated Biologist Duties

We propose clarifying that the Designated Biologist or his designee (Biological Monitor) may perform daily activities set forth in this condition including preconstruction monitoring and daily surveys of open excavations and trenches prior to start of work and be present during all work with special attention to excavations, spoil placement, backfilling and silt fence/snake fence installation and removal upon approval by the CPM.

- BIO-2:

BIO- 2 Designated Biologist Duties

The project owner shall assign at least one Designated Biologist to the project. The project owner shall submit the resume of the proposed Designated Biologist(s), with at least three references and contact information, to the Energy Commission Compliance Project Manager (CPM) for approval in consultation with CDFG and USFWS. The Designated Biologist shall remain the contact for the project owner and the CPM.

The CPM-approved Designated Biologist shall perform the following duties:

- 1) advise the project owner's supervising construction or operations engineer on the implementation of the biological resource Conditions of Certification;
- 2) supervise or conduct mitigation, monitoring, and other biological resource compliance efforts, particularly in areas requiring avoidance or containing sensitive biological resources, such as wetlands and special status species;
- 3) direct access and construction activities that occur within 200 feet of giant garter snake habitat. The Designated Biologist shall conduct WEAP training (BIO-4), preconstruction surveys for giant garter snake (BIO-8), survey open excavations and trenches every morning prior to start of work, and be present during all work with special attention to excavations, spoil placement, backfilling, and silt fence/snake fence installation and removal; and
- 4) notify the project and the CPM of any non-compliance with any Condition.

The Designated Biologist may delegate onsite monitoring duties to a Biological Monitor with approval from the CPM as described below.

BIO-2a Biological Monitor Selection of Duties

We believe one approved biologist (either the Designated Biologist or Biological Monitor acting for the Designated Biologist) can perform all the necessary duties described in conditions Bio-2 and Bio-2a. The pipeline is relatively short and accessible from local paved or gravel roads, the Designated Biologist will have direct phone contact with the Compliance Project Manager, and all workers will be trained to contact the Designated Biologist if a snake is found. We therefore believe that it is appropriate that BIO-2a be revised to clarify that the Designated Biologist may be assisted by a Biological Monitor(s) when needed, and make the following suggestion.

- BIO-2a:

BIO- 2a Biological Monitor Selection and Duties

The Designated Biologist shall submit the resume, at least three references, and contact information of the proposed Biological Monitor(s) to the CPM. The resume shall demonstrate, to the satisfaction of the CPM, the appropriate education and experience to accomplish the assigned biological resource tasks. Biological Monitor(s) training by the Designated Biologist shall include familiarity with the conditions of certification, BRMIMP, and WEAP. The Biological Monitor(s) shall may assist the Designated Biologist in conducting surveys and in monitoring of site mobilization activities, construction-related ground disturbance, fencing, grading, boring, trenching and reporting.

Verification: The project owner shall submit the specified information to the CPM for approval of Biological Monitors at least 30 days prior to the start of any site mobilization or construction-related ground disturbance, grading, boring and trenching. The Designated Biologist shall submit a written statement to the CPM confirming that individual Biological Monitor(s) has been trained including the date when training was completed. If additional Biological Monitors are needed during construction the specified information shall be submitted to the CPM and for approval at least 10 days prior to their first day of monitoring activities. The Biological Monitor shall submit in the Monthly Compliance Report to the CPM copies of all written reports and summaries that document biological resources compliance activities.

BIO-4 Worker Environmental Awareness Program

Consistent with practice in construction of previously licensed projects, BIO-4 should provide that Worker Environmental Awareness Program (“WEAP”) training include electronic media. .

- BIO-4 Worker Environmental Awareness Program

The project owner shall develop and implement a Worker Environmental Awareness Program (WEAP) in which each of its own employees, monitors, inspectors, as well as employees of contractors and subcontractors who work on the project site or related facilities (including any access roads, storage areas, transmission lines, water and gas lines) during construction and operation, shall be required to take the WEAP training to become are

informed about biological resource sensitivities associated with the project. (~~see General Conditions of Compliance~~).

The Worker Environmental Awareness Program:

- 1) shall be developed by the Designated Biologist and consist of an on-site or classroom presentation in which supporting written material and electronic media is made available to all participants;
- 2) must discuss the locations and types of sensitive biological resources on the project site and adjacent areas specifically training workers to recognize giant garter snakes, their habitat(s), nature and purpose of protection measures, the need to report all sightings of giant garter snakes, consequences of not complying with permit conditions and measures, and the terms and conditions of any permit applicable to the project. The Designated Biologist must identify giant garter snake habitat areas and indicate to all site personnel that they are Environmentally Sensitive Areas in the WEAP training;
- 3) must present the reasons for protecting these resources;
- 4) must present the meaning of various temporary and permanent habitat protection measures; and
- 5) must identify who to contact if there are further comments and questions about the material discussed in the program.

The specific program ~~shall can~~ be administered by the Designated Biologist a competent individual(s) acceptable to the designated biologist.

Each participant in the on-site Worker Environmental Awareness Program shall sign a statement declaring that the individual understands and shall abide by the guidelines set forth in the program material. Each statement shall also be signed by the person administering the Worker Environmental Awareness Program.

The signed statements for the construction phase shall be kept on file by the project owner and made available for examination by the CPM for a period of at least six (6) months after the start of commercial operation. Signed statements for active operational personnel shall be kept on file by the project owner for the duration of their employment and for six months after their termination.

Verification: At least 30 days prior to the start of any ground-disturbing activities rough grading, the project owner shall provide copies of the draft Worker Environmental Awareness Program and all supporting written materials prepared by the Designated Biologist to the CPM for review and comment, and the name and qualifications of the person(s) administering the program to the CPM for approval. Within 10 days prior to the start of any ground-disturbing activities, a final approved WEAP with agency comments addressed shall be submitted to the CPM.

The project owner shall state in the Monthly Compliance Report the number of persons who have completed the training in the prior month and a running total of all persons who have completed the training to date.

B. Cultural Resources

CUL-15.6 Archaeological Monitoring for the Grimes Pipeline Project

As described in the Amendment, a literature search revealed no prehistoric or historic sites recorded in the project vicinity. Field investigations including surface and a subsurface investigation of an existing exposed earthen drainage showed no archeological deposits or materials.

As described in the Amendment, the majority soil type (Capay silty clay) within the project vicinity is not sensitive for the presence of buried archaeological deposits, owing to its situation on basin deposits, which are not generally favorable locales for human habitation. Additionally, buried soil horizons have not been identified in Capay soil units in the project vicinity.

Our field investigation, as reported in the Amendment, indicates that the probability of the pipeline construction intersecting a buried archaeological feature is small. As reported in the Amendment, the Petitioner's cultural resources expert, ICF International ("ICF"), examined the bottom and sidewalls of a dry, earthen drain that parallels the southern 20 percent of the alignment, including those areas considered sensitive by tribal consultants and that have some buried site potential (Shanghai soil series). This examination showed that the earth drain did not contain archaeological materials or buried soil horizons in the examined sidewalls and ditch bottom. Furthermore, the soil data for the project vicinity indicates that buried soil horizons in the project area are likely to occur (if present) between 0.7 and 1.6 meters below ground surface. Given that no archaeological materials or buried soil horizons were discovered along the bottom and sides of the existing exposed earthen ditch for the entire length that traversed Shanghai series soils to a depth of 1.8 meters, and the maximum excavation depth will be 1.8–2.1 meters below ground surface, the probability of intersecting a buried archaeological seems small. (Amendment, Appendix G, "Cultural Resources Inventory Report" by ICF International 2011b:1-5, 2-1, 2-2, 3-2, 3-3, Table 1.) Indeed, the CEC deems the project "to pose a marginal threat to cultural resources" (McGuirt 2011:2).

Accordingly, we request that Condition 15.6 be modified to allow the Cultural Resources Specialist ("CRS") to be on call during ground disturbing activities. The CRS would be called to the project site if a potential unidentified find is encountered by the construction crew or supervisors who have been trained by the CRS to stop work if a potential archeological find is encountered. The CRS would then implement the Cultural Resources Monitoring and Mitigation Plan.

Also, because the depth of particular soil horizons varies over horizontal distance and tribal cultural resource specialists have remarked that the vicinity of the proposed Grimes Station is sensitive for the presence of Native American resources, monitoring by a Native American Monitor in the vicinity of Grimes Station is prudent and has been recommended by Petitioner. (Amendment, Appendix G, ICF International 2011b:3-2, 2011c:15).

However, we believe there is little benefit in requiring both a tribal monitor and an archaeologist to monitor the Grimes Station pad site and vicinity where Petitioner can

obtain a tribal monitor that meets the CRM qualifications described in condition CUL-15.1, and the Native American monitor can commit to monitoring during ground disturbing activities at the Grimes Station pad and work under the supervision of the CRS.

Based on the foregoing, we request the following modifications to CUL-15.6.

- CUL-15.6:

Prior to the start of project construction, the project owner shall notify the CPM of the date on which ground disturbance will ensue. The project owner shall ensure that the CRS, alternate CRS, or CRMs implement a full-time monitoring program at the proposed Grimes Station and the surrounding area encircled by drainage ditches and the eucalyptus windbreak, full time, all ground disturbance along the pipeline alignment, and at laydown areas, roads, and other ancillary areas, to ensure there are no impacts to undiscovered resources and to ensure that known resources are not impacted in an unanticipated manner. In addition, the CRS, alternate CRS, or CRMs will be on-call in the event that a potential unidentified find is encountered, and will track (as described in CUL-15.1 and CUL-15.2) all ground disturbance along the pipeline alignment, and at laydown areas, roads, and other ancillary areas.

Full-time archaeological monitoring by a tribal CRM at the proposed Grimes Station for this project shall be the archaeological monitoring of ground-disturbing activities in the areas specified in the paragraph immediately above, for as long as the activities are ongoing. If two or more excavations transpire simultaneously more than fifty feet apart at the proposed Grimes Station, the CRS, alternate CRS, or CRMs will add monitoring staff as needed to observe excavation as it happens. Where excavation equipment is actively removing dirt and hauling the excavated material farther than fifty feet from the location of active excavation, full-time archaeological monitoring shall require at least two monitors per excavation area. In this circumstance, one monitor shall observe the location of active excavation and a second monitor shall inspect the dumped material. For excavation areas where the excavated material is dumped no farther than fifty feet from the location of active excavation, one monitor shall both observe the location of active excavation and inspect the dumped material.

The project owner shall obtain the services of one or more Native Americans to monitor all ground disturbance related to project construction. Contact lists of interested Native Americans and guidelines for monitoring shall be obtained from the Native American Heritage Commission. Preference in selecting a monitor shall be given to native Americans with traditional ties to the area where the project is located, but the project owner shall make a reasonable and good faith effort to accommodate equally all groups expressing the desire to monitor. If efforts to obtain the services of at least one qualified Native American monitor, acceptable to all groups that want monitoring, are unsuccessful, the project owner shall immediately inform the CPM. The CPM may either identify potential monitors or allow ground disturbance to proceed without a Native American monitor.

C. Paleontological Resources

The Staff Assessment states that the project is “underlain by alluvial sediments belonging to the Modesto and Riverbank formations,” and notes that these formations have previously yielded Pleistocene-aged discoveries near Yuba City (Weaver 2011:2). Whereas these two Pleistocene-aged, sometimes-fossil-bearing formations may underlie the project, it is very unlikely that project excavation would intersect Pleistocene-aged sediments because the surface geology of the project is mapped as Quaternary stream channel deposits. The explanatory data that accompany this geologic map further characterize these stream channel deposits as Recent in age, which is to say belonging to the Holocene Epoch (ca. 11,000 years ago to present) (Burnett and Jennings 1962; ICF International 2011b:2-1). Holocene aged sediments in the middle of the Central Valley are up to 200 feet thick (ICF International 2011b:2-1; Poland and Evenson 1966:Table 1). Indeed, Holocene-aged deposits can be expected to be thick along the Sacramento River: archaeological investigations along the river between Colusa and Princeton, also mapped as Quaternary stream channel deposits, yielded Holocene-vintage radiocarbon dates at depths of 5 feet below current grade (Westwood 2005:44–45; White 2003:218–219). As such, it is difficult to imagine that the deep sediments of the Sacramento River alluvial plain and basins in the project vicinity contain Pleistocene sediments just 1 foot deeper. Therefore, it is unlikely that construction of the Grimes Pipeline Project will disturb Pleistocene sediments.

In light of the high improbability of encountering Pleistocene geologic formations during project construction, the possibility of intersecting paleontological resources appears remote. Given the low sensitivity of the project area for paleontological resources, we believe conditions for certification PAL-1 (as revised by the Staff Assessment) and PAL-2 are adequate to protect potential paleontological resources in an area that has been determined to have little potential for the occurrence of such resources. Also, because of the unlikely potential for the occurrence of paleontological resources as a result of project construction, we believe a paleontologist monitor during ground disturbance is not needed, and request that PAL-8 be deleted.

- PAL-8:

~~The designated paleontologic resource specialist monitor shall be present at all times to monitor construction related grading, excavation, trenching, and/or augering in areas where remnant river terrace deposits have been found.~~

~~These terrace remnants have been generally correlated with soils of the Conejo-Tisdale group and Pleistocene-age fossil materials may be present.~~

~~Project areas where the terrace deposits may be found include the power plant site, the Sutter Bypass switching station site, portions of the 16-inch natural gas pipeline route, and the electric transmission line route. Using the mile posts and boundary stakes placed by the project owner, the designated paleontologic resource specialist shall monitor the route of the 16-inch natural gas pipeline, between Mile Post (MP) 0.00 to MP 2.07; MP 3.58 to MP 3.70; and MP 4.10 to MP 4.50. For the route of the 4.0-mile electric transmission line, areas to be monitored full-time are MP 0.00 to MP 1.40; and MP 1.80 to MP 2.60.~~

~~Other sections of the linear facility routes may be monitored as deemed necessary by the designated paleontologic resources specialist.~~

~~**Verification:** The project owner shall include in the Monthly Compliance Reports to the CPM, a summary of the daily logs prepared by the designated paleontologic resource specialist.~~

References Cited

- Burnett, J. L., and C. W. Jennings. *Geologic Map of California: Chico Sheet*. 1:250,000 scale. Sacramento, CA: Division of Mines and Geology, Department of Conservation.
- ICF International. 2011a. *Amendment to the Application for Certification for the Sutter Energy Center Project (97-AFC-02)*. Administrative draft. January. Prepared by ICF International, Sacramento, CA. (ICF 00776.10.) Prepared for Calpine Construction Finance Company.
- . 2011b. *Cultural Resources Inventory Report for the Grimes Pipeline Project, Sutter County, California*. January. Prepared by ICF International, Sacramento, CA. (ICF 00776.11.) Prepared for CPN Pipeline Company, Rio Vista, CA. Submitted to California Energy Commission, Sacramento, CA.
- . 2011c. *Grimes Pipeline Project Technical Memorandum to the Sutter Energy Center (97-AFC-02) Cultural Resources Monitoring and Mitigation Plan*. Draft. June. Prepared by ICF International, Sacramento, CA. (00776.10) Prepared for Calpine Construction Finance Company, L.P. and CPN Pipeline Company.
- McGuirt, M. D. 2011. Cultural Resources Staff Analysis for Sutter Energy Center (97-AFC-2C), Request to Amend Final Commission Decision. August 10. Prepared by California Energy Commission, Sacramento, CA.
- Poland, J. F., and R. E. Evenson. 1966. Hydrogeology and Land Subsidence, Great Central Valley, California. In Chapter V of *Geology of Northern California*, edited by E. H. Bailey, pp. 239–248. Bulletin 190. San Francisco, CA: California Division of Mines and Geology.
- Weaver, C. 2011. Paleontological Resources Staff Analysis for Sutter Energy Center (97-AFC-2C), Request to Amend Final Commission Decision. July 14. Prepared by California Energy Commission, Sacramento, CA.
- Westwood, L. D. 2005. *Cultural Resource Investigation for the Colusa Subreach Planning, Volume I of II, Glenn and Colusa Counties, California*. January 14. Reports 52. Prepared by Archaeological Research Program, California State University, Chico. Prepared for The Nature Conservancy, Chico, CA.
- White, G. G. 2003. *Testing and Mitigation at Four Sites on the Level(3) Long Haul Fiber Optic Alignment, Colusa County, California*. May 15. Report 42. Prepared by Archaeological Research Program, California State University, Chico. Prepared for Kiewit Pacific, Concord, CA.

III. PROPOSED CHANGES TO ANALYSES

A. Description of Grimes Station Permanent and Temporary Construction Acreage

The Grimes Station Pad construction area totals 0.8 acres and will be one continuous site. Construction of the Grimes Station will result in disturbance to the ground surface over an area of approximately 0.8 acre, which includes the 0.22 acre gravel pad site for the Grimes Station and approximately 0.58 acre additional construction easement. The Grimes Station pad was reduced to 0.22 acre at the request of the landowner and as described in the letter to the CEC dated May 5, 2011. The Staff Assessment includes varying descriptions of the Grimes Station site construction area and Grimes Station pad; therefore, we suggest the following modifications.

- Biological Resources, p. 3:

Biological Resources Table 2 – Temporary and Permanent Land Disturbance Acreages Required to Construct and Operate the Project

Component	Permanent	Temporary	Habitat Type	Total
Grimes Station	0.5 <u>0.22</u>	0.3 <u>0.58</u>	Row crop	0.8
Gas pipeline system	0.0	27.3	Rice, row crop, non-native grassland	27.3
Meter sites	0.0	0.0	Developed (existing gravel pad)	0.0
Tap site	0.0	0.2	Row crop	0.2
Temporary material and equipment staging	0.0	1.0	Row crop, gravel, rice	1.0
Total	0.5	28.8		29.3

- Cultural Resources, p. 1:

The construction of Grimes Station would primarily result in disturbance to the ground surface over an area of approximately 0.8 acre, which includes the **0.5 0.22** acre site for the station and a **0.3 0.58** acre additional temporary construction easement.

- Paleontology, p. 1 and Soil & Water, p. 1:

A temporary **0.8 0.58** acre laydown area will be constructed next to the raised gravel pad.

B. Cultural Resources

The Staff Assessment states:

The only evidence for the record, of which staff is aware, of the Native American perspective on the appropriate scope of Native American monitoring for the subject project, is a January 21, 2011 email from Mike DeSpain of the Mechoopda Indian Tribe of Chico Rancheria which requests that 'a funded Tribal Monitor be on site during all ground breaking activities.' Although the information in Appendix G on tribal monitoring variously supports the Native American monitoring component of staff's recommended Condition of Certification CUL-15, no discussion of Native American concerns or mention of tribal monitoring was included in the actual Cultural Resources analysis or revised conditions of certification included in the SEC Petition to Amend

(McGuirt 2011:3.)

The Amendment's cultural resources analysis states that the consulted tribes find a particular portion of the project area to "be sensitive for Native American resources. (Amendment, Appendix G, "Cultural Resources Inventory Report," ICF International 2011a:19). Appendix G to the Amendment, describes Native American concerns via summary text and presentation of correspondence from tribes and the Native American Heritage Commission ("NAHC"), and indicates that the tribes and the NAHC are concerned about the timing of consultation and the sensitivity of the project area for cultural resources. Correspondence attached to Appendix G includes two emails from the Mechoopda Indian Tribe (Mike DeSpain), a letter from the NAHC, and detailed notes from the January 20, 2011 consultation meeting, which outline Native American concerns. (Appendix G, ICF International 2011b:3-1, 3-2, Appendix C.) The Amendment did not propose a specific condition for tribal monitoring during construction as Petitioner and ICF International determined that the appropriate vehicle for identifying and describing this important component of compliance monitoring and resource protection was an amendment to the SEC's Cultural Resources Mitigation and Monitoring Plan ("CRMMP"). Accordingly, the amended CRMMP proposed for this project contains the tribal monitoring requirement (Appendix G, ICF International 2011c:15).

Based on the discussion in the Amendment, and the correspondence provided with Appendix G to the Amendment, we suggest the following modification to the Cultural Resources staff analysis.

- Staff Analysis, p. 3:

.... The ~~only~~ evidence ~~for in~~ the record, ~~of which staff is aware~~, of the

Native American perspective on the appropriate scope of Native American monitoring for the subject project, ~~is~~ includes a January 21, 2011 email from Mike DeSpain of the Mechoopda Indian Tribe of Chico Rancheria which requests that "a funded Tribal Monitor be on site during all ground breaking activities." ~~Although t~~The information in Appendix G on tribal monitoring also

~~variously~~ supports the Native American monitoring component of staff's recommended Condition of Certification CUL-15₃, ~~no discussion of Native American concerns or mention of tribal monitoring was included in the actual Cultural Resources analysis or revised conditions of certification included in the SEC Petition to Amend~~

C. Hazardous Material Management

Per 49 CFR Part 192.905, pipelines that are located in a High Consequence Area (HCA) must be part of an Integrity Management Program. The Grimes Pipeline Project (as well as the Sutter Pipeline) is not located in an HCA and therefore will not be part of the Integrity Management Program maintained by CPN Pipeline Company. The discussion in the analysis appears to imply that the Grimes Pipeline requires an integrity management plan. To clarify that Petitioner does not need to incorporate the Grimes Pipeline in an integrity management program, we suggest the following change:

- Staff Analysis, p. 2:

The regulations specify minimum safety standards regarding materials, design, construction, training of construction workers and operators, corrosion control, operations, and maintenance for pipeline facilities and the transportation of natural gas. They also require an integrity management plan governing the operations and maintenance activities for High Consequence Areas, which the Grimes Pipeline Project does not occupy. The operator must establish an emergency plan that minimizes hazards in the event of a pipeline emergency.

Also, the analysis section contains a typographical error, and should read as follows:

- Staff Analysis, p. 1:

The technical scope of this analysis encompasses hazardous materials used during the pipeline construction and natural gas contained within the pipeline once it is operation.