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Arturo Delgado
California Department of Fish and Game
Colorado River Program
P.O. Box 2160
Blythe, CA 92226

Re: Notification of Emergency Stream Alteration Work - February 17, 2006

Pursuant to the Notification of Emergency Stream Alteration Work submitted to the California Department of Fish and Game on February 17, 2006 and condition 1(b) provided therein, this document outlines a restoration, monitoring, and reporting plan (Restoration Plan) for restoration of a 0.5-acre restoration site on the floodplain of the Colorado River. Due to federal land ownership issues throughout the area, a specific site has not yet been identified. Pacific Gas and Electric Company (PG&E) intends to continue discussions with the US Department of the Interior resource agencies (Bureau of Land Management, Fish and Wildlife Service, and/or Bureau of Reclamation). Implementation of this Restoration Plan, however, will not begin until the Department of Fish and Game (Department) has approved of this plan, in writing.

This Restoration Plan encompasses the restoration of 0.5 acres of riparian vegetation with species native to the lower Colorado River. These species include cottonwood (*Populus fremontii*), Gooding willow (*Salix gooddingii*), honey mesquite (*Prosopis glandulosa*), and screwbean mesquite (*Prosopis pubescens*). A minimum of 63 trees will be planted to achieve the required planting density of 125 trees per acre. Minimum survival is 80% (50 trees) the first year and 100% survival thereafter. Mountain States Wholesale Nursery, a large provider of native trees to the US Bureau of Reclamation for other restoration efforts in the area, may be the source of tree material for this Restoration Plan. The restoration will be monitored for 5 years after planting to assure that minimum growth requirements (Table 1) are met at the end of three years and at the end of five years post-planting. Any replacement trees will be monitored with the same survival and growth requirements for five years after planting.

Table 1. Tree height estimates

SPECIES	HEIGHT	
	<u>3 years</u>	<u>5 years</u>
Cottonwood (<i>Populus fremontii</i>)	4.0 m	4.8 m
Gooding Willow (<i>Salix gooddingii</i>)	2.7 m	3.2 m
Honey Mesquite (<i>Prosopis glandulosa</i>)	2.4 m	3.0 m
Screwbean Mesquite (<i>Prosopis pubescens</i>)	2.7 m	3.3 m

Until a specific site can be secured, species composition (ratios) and layout cannot be adequately determined but will be tailored to site-specific conditions. Once a site is selected, these parameters will be provided to the Department, for review and approval, along with a planting scheme and any other proposed grading or construction activities required for implementing, maintaining, and managing the restoration site.

Pursuant to section 1(b)(vii), an annual restoration and monitoring report will be submitted to the Department by January 1 of every year for 5 years following initial implementation of the Restoration Plan. The report will include percent (%) survival, percent (%) cover, height measurements, and the method(s) used to assess these parameters. The reports will also include an overview of the restoration effort and photographs from designated photography stations.

The Restoration Plan will be implemented no later than December 31, 2007 by a qualified restoration ecologist familiar with the restoration of native plants of the lower Colorado River. Pursuant to section 1(b)(viii), the ecologist will be approved by the Department, in writing.

Costs for implementing the Restoration Plan have been estimated (Table 2), however, may change based on the location selected and other unforeseeable factors.

Table 2. Cost estimate for Restoration Plan implementation

PLANNING AND MANAGEMENT

12,000 Development of draft restoration plan (includes site selection process)

3,500 Development of final restoration plan (based on CDFG comments)

4,500 Project management

\$20,000 Sub-Total

INSTALLATION

16,000 Assume 4 laborers X 40 hours @ \$50/hr

5,000 Plant Materials

3,000 Other Expenses (e.g., irrigation system)

3,000 Management/Reporting

\$27,000 Sub-Total

MAINTENANCE & MONITORING

6,000 Year 1

5,000 Year 2

4,000 Year 3

3,000 Year 4

2,000 Year 5

\$20,000 Sub-Total

\$67,000TOTAL

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Progress on selection of potential mitigation sites will be provided later, subsequent to pending feedback from federal property owners in the area. Once the site has been selected, additional information (planting scheme and any other proposed grading or construction activities required for implementing, maintaining, and managing the restoration site) will be submitted at that time.

If you have any questions, I can be contacted at (559) 263-5073.

Sincerely,

A handwritten signature in blue ink that reads "Julio Estrella for Rob Knutson". The signature is written in a cursive style.

Rob Knutson
PG&E