DOCKET 06-AFC-9

October 12, 2007

Dockets Unit
California Energy Commission
1516 Ninth Street, MS 4
Sacramento, CA 95814
RE: Colusa Generating Station (CGS) AFC
CEC Docket No. 06-AFC-9

On behalf of E\&L Westcoast, LLC, (E\&L) a limited liability company and the applicant for the above-referenced Colusa Generating Station, we are pleased to submit three copies of the enclosed document:

- Streambed Alteration Agreement Application for Colusa Generating Station

Please include this document in the AFC record.

URS Corporation


Dale Shileikis
Vice President
Enclosure
Cc: Andy Weich, CPV, with enclosure Jack Caswell, without enclosure

## URS

October 12, 2007

Ms. Rosie Bjornsen<br>Regional Manager, North Central Region<br>California Department of Fish and Game<br>1701 Nimbus Road<br>Rancho Cordova, California 95670<br>Subject: 1603 Streambed Alteration Agreement Application for the Colusa Generating Station Project

Dear Ms. Bjornsen:
The attached Notification of Lake or Streambed Alteration for the Colusa Generating Station (CGS) Project is submitted by URS Corporation on behalf of our client E\&L Westcoast, LLC (E\&L Westcoast). Additional project documentation referenced in the Application is enclosed on two CDs. The referenced documents include:

- Application for Certification (AFC) (November 2006)
- U.S. Fish and Wildlife Service (USFWS) Biological Assessment (BA) (December 2006)
- U.S. Army Corps of Engineers (ACOE) 404 Standard Permit Application (April 5, 2007)
- Jurisdictional Delineation (JD) Report (April 5, 2007)
- Supplemental Information for the JD (May 24, 2007)
- ACOE letter initiating consultation with USFWS and National Marine Fisheries Service (NMFS) (June 13, 2007)
- California Energy Commission (CEC) Preliminary Staff Assessment (PSA) (August 1, 2007)
- NMFS Concurrence Letter (August 2, 2007)
- ACOE letter verifying CGS JD (August 10,2007 )
- Amendment to the AFC - Proposed Modifications to Glenn-Colusa Canal Bridge Design and Comments on the CEC PSA (August 17, 2007)
- Supplement to BA (August 24, 2007)
- Update to the 404 application (August 28, 2007)

E\&L Westcoast proposes to construct and commission a nominal 660-megawatt combined-cycle power plant on 31 acres of a 100 -acre site leased by E\&L Westcoast adjacent to Delevan Road in Colusa County, Califomia (Figure 1). Under a contract executed earlier this year, E\&L Westcoast would then transfer ownership and operation of the power plant to PG\&E after completion of commissioning.

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The project would include a 22.5 -acre power generation facility and stormwater detention basin, a new 8.2 -acre switchyard, a 43-acre construction area (including laydown, parking, and office), a new 1,800-foot-long electrical interconnection to PG\&E's 230 kV Cottonwood to Vaca-Dixon lines adjacent to the site, a new 1,500 -foot-long natural gas pipeline connecting to PG\&E's existing natural gas lines (Line 400 and 401), a new 2,700-foot-long water supply pipeline from the Tehama-Colusa Canal, and a 2,500 -footlong access road extending from the existing road leading to the PG\&E Compressor Station (Figure 2). In addition, a permanent 12 -foot-wide dirt road would be constructed along the pipeline conveying water from the Tehama-Colusa Canal to the power plant. The road would be used for maintenance and access to the water intake at the Tehama-Colusa Canal.

To allow for transportation of some of the heavier equipment components to the site, the following two bridges would be replaced: (1) A bridge on Dirks Road over the Glenn-Colusa Irrigation District (GCID) Canal (Figure 2), and (2) A bridge on McDermott Road over Teresa Creek (Figure 3, View 1). In addition, the eastern side of the Delevan/McDermott intersection would be slightly widened (Figure 3, View 2). After construction is completed, local access roads would be repaved or resurfaced as necessary and appropriate.

The attached Notification of Lake and Streambed Alteration describes the proposed work, impacts to waters of the United States, potential water quality impacts, and mitigation measures for replacement of the Teresa Creek Bridge. Avoidance, minimization, restoration, and compensation measures would be implemented to reduce potential adverse effects to sensitive habitats and listed species.

The California Energy Commission is the lead agency for the CGS Project. Under the CEC licensing process, the applicant prepares an Application for Certification in lieu of an Environmental Impact Report. The AFC is then reviewed by the CEC's staff and the public. The CEC staff publishes a preliminary and a final staff assessment with their findings for the Energy Commissioners' review of the project. Final CEC certification is dependent upon approval by the CEC Commissioners.

Construction of the project is scheduled begin in late February/early March 2008. The Teresa Creek Bridge replacement is scheduled as the first construction event. The bridge must be removed between September 1 and March 31 to avoid impacts to cliff swallows.

Construction of the project is scheduled to occur over a 24 -month period. The project, including offsite infrastructure as well as startup and commissioning, would be completed and would begin commercial operation by the spring of 2010 .

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Please contact Steve Leach at 510.874.3205 or Melissa Newman at 510.874 .1747 if you have any questions regarding this submittal. We are available for a site visit or meetings at your convenience.

Sincerely,
URS CORPORATION


Steve Leach
Senior Project Biologist
Enclosures
cc: Andrew Welch, E\&L Westcoast, with CDFG Notification of Lake or Streambed Alteration Only
Dale Shileikis, URS, with CDFG Notification of Lake or Streambed Alteration Only Michelle Tovar, USFWS, with CDFG Notification of Lake or Streambed Alteration Only Rick York, CEC, with CDFG Notification of Lake or Streambed Alteration Only Misa Ward, CEC, with CDFG Notification of Lake or Streambed Alteration Only Shahera Kelley, EPA, with CDFG Notification of Lake or Streambed Alteration Only John Baker, NMFS, with CDFG Notification of Lake or Streambed Alteration Only

| FOR DEPARTMENT USE ONLY |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Date Recerved | Anrolmi Received | Amount Due | Date Complete | Notification No. |
|  | $\$$ | $\$$ |  |  |

## STATE OF CALIFORNIA <br> DEPARTMENT OF FISH AND GAME NOTIFICATION OF LAKE OR STREAMBED ALTERATION

enclosures. Attach additional pages, if necessary.

1. APPLICANT PROPOSING PROJECT

| Name | E\&L Westcoast, LLC. (Andrew Welch) |  |  |  |
| :--- | :--- | :--- | :--- | :---: |
| Business/Agency |  |  |  |  |
| Street Address | 8403 Colesville, Suite 915 |  |  |  |
| City, State, Zip | Silver Springs, Maryland 20910 | Fax |  |  |
| Telephone | (240) $723-2304$ | (240) 723-2339 |  |  |
| Email |  |  |  |  |

2. CONTACT PERSON (Complete only if different from applicant)

| Name |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :---: | :---: |
| Street Address | 1333 Broadway Avenue, Suite 800 |  |  |  |  |
| City, State, Zip | Oakland, CA 94612 |  |  |  |  |
| Telephone | (510) 874-3205 | Fax | (510) 874-3268 |  |  |
| Email | steve_leach@urscorp.com |  |  |  |  |

3. PROPERTY OWNER (Complete only if different from applicant)

| Name | For a complete list, please see attached CDFG 1603 NLSA Additional Pages, Box 3. |  |  |
| :--- | :--- | :--- | :--- |
| Street Address |  |  |  |
| City, State, Zip |  |  |  |
| Telephone |  |  |  |
| Email |  |  |  |

4. PROJECT NAME AND AGREEMENT TERM

| A. Project Name |  | Teresa Creek Bridge Replacement for the Colusa Generating Station Project |  |  |
| :---: | :---: | :---: | :---: | :---: |
| B. Agreement Term Requested |  | Regular (5 years or less)Long-term (greater than 5 years) |  |  |
| C. Project Term |  | D. Seasonal Work Perio |  | E. Number of Work Days |
| Beginning (year) | Ending (year) | Start Date (month/day) | End Date (month/day) |  |
| 2008 | 2010 |  |  | 760.00 |

## NOTIFICATION OF LAKE OR STREAMBED ALTERATION

## 5. AGREEMENT TYPE

Check the applicable box. If box $B, C, D$, or $E$ is checked, complete the specified attachment.

| A. | $\square$ Standard (Most construction projects, excluding the categories listed below) |  |
| :--- | :--- | :--- |
| B. | $\square$ Gravel/Sand/Rock Extraction (Attachment A) | Mine I.D. Number: |
| C. | $\square$ Timber Harvesting (Attachment B) | THP Number: |
| D. | $\square$ Water Diversion/Extraction/Impoundment (Attachment C) | SWRCB Number: |
| E. | $\square$ Routine Maintenance (Attachment D) |  |
| F. | $\square$ DFG Fisheries Restoration Grant Program (FRGP) | FRGP Contract Number: |
| G. | $\square$ Master |  |
| H. | $\square$ Master Timber Harvesting |  |

## 6. FEES

Please see the current fee schedule to determine the appropriate notification fee. Itemize each project's estimated cost and corresponding fee. Note: The Department may not process this notification until the correct fee has been received.

| A. Project | B. Project Cost | C. Project Fee |  |
| :--- | :---: | ---: | ---: |
| 1 | Teresa Creek Bridge Replacement | $\$ 1,500,000.00$ | $\$ 4,000.00$ |
| 2 |  |  |  |
| 3 |  |  |  |
| 4 |  | D. Base Fee <br> (if applicable) |  |
| 5 |  | E. TOTAL FEE <br> ENCLOSED |  |

## 7. PRIOR NOTIFICATION OR ORDER

A. Has a notification previously been submitted to, or a Lake or Streambed Alteration Agreement previously been issued by, the Department for the project described in this notification?
$\square$ Yes (Provide the information below)
■No

Applicant:
Notification Number:
Date:
B. Is this notification being submitted in response to an order, notice, or other directive ("order") by a court or administrative agency (including the Department)?
$\square$ No $\square$ Yes (Enclose a copy of the order, notice, or other directive. If the directive is not in writing, identify the person who directed the applicant to submit this notification and the agency he or she represents, and describe the circumstances relating to the order.)

## NOTIFICATION OF LAKE OR STREAMBED ALTERATION

## 8. PROJECT LOCATION

A. Address or description of project location.
(Include a map that marks the location of the project with a reference to the nearest city or town, and provide driving directions from a major road or highway)

The proposed Teresa Creek Bridge Replacement, part of the proposed Colusa Generating Station Project, is located approximately 72 miles north of Sacramento, 4 miles west of Interstate 5 (I-5), north of the town of Maxwell (Figure 1, Project Vicinity Map).

Driving Directions: From Sacramento, take I-5 north. Approximately 5 miles north of Maxwell, take the Delevan Road exit and make a left onto Delevan Road. Turn right onto McDermott Road. The existing Teresa Creek Bridge is approximately 0.7 mile from this turn (Figure 2). To continue onto the proposed Colusa Generating Station project site, continue on McDermott Road and make a left onto Dirks Road. Continue on Dirks Road across the Glenn-Colusa Irrigation District Canal Bridge. The proposed power plant site is located approximately 0.75 mile west of the terminus of Dirks Road.


## NOTIFICATION OF LAKE OR STREAMBED ALTERATION

9. PROJECT CATEGORY AND WORK TYPE (Check each box that applies)

| PROJECT CATEGORY | REW <br> CONSTRUCTION | REPAIRMAINTAIN <br> EXISTING STRUCTURE |  |
| :--- | :---: | :---: | :---: |
| Bank stabilization - bioengineering/recontouring | $\square$ | $\square$ | $\square$ |
| Bank stabilization - nip-rap/retaining wall/gabion | $\square$ | $\square$ | $\square$ |
| Boat dock/pier | $\square$ | $\square$ | $\square$ |
| Boat ramp | $\square$ | $\square$ | $\square$ |
| Bridge | $\square$ | $\square$ | $\square$ |
| Channel clearing/vegetation management | $\square$ | $\square$ | $\square$ |
| Culvert | $\square$ | $\square$ | $\square$ |
| Debris basin | $\square$ | $\square$ | $\square$ |
| Dam | $\square$ | $\square$ | $\square$ |
| Diversion structure - weir or pump intake | $\square$ | $\square$ | $\square$ |
| Fitling of wetland, river, stream, or lake | $\square$ | $\square$ | $\square$ |
| Geotechnical survey | $\square$ | $\square$ | $\square$ |
| Habitat erhancement - revegetation/mitigation | $\square$ | $\square$ | $\square$ |
| Levee | $\square$ | $\square$ | $\square$ |
| Low water crossing | $\square$ | $\square$ | $\square$ |
| Road/trail | $\square$ | $\square$ | $\square$ |
| Sediment removal - pond, stream, or marina | $\square$ | $\square$ | $\square$ |
| Storm drain outfall structure | $\square$ | $\square$ | $\square$ |
| Temporary stream crossing | $\square$ | $\square$ | $\square$ |
| Utility crossing : Horizontal Directional Drilling | $\square$ | $\square$ | $\square$ |
|  | $\square$ | $\square$ | $\square$ |
|  | $\square$ | $\square$ | $\square$ |
| Other (specify): | $\square$ | $\square$ | $\square$ |

## 10. PROJECT DESCRIPTION

A. Describe the project in detail. Photographs of the project location and immediate surrounding area should be included.

- Include any structures (e.g., rip-rap, culverts, or channel clearing) that will be placed, built, or completed in or near the stream, river, or lake.
- Specify the type and volume of materials that will be used.
- If water will be diverted or drafted, specify the purpose or use.

Enclose diagrams, drawings, plans, and/or maps that provide all of the following: site specific construction details; the dimensions of each structure and/or extent of each activity in the bed, channel, bank or floodplain; an overview of the entire project area (i.e., "bird's-eye view") showing the location of each structure and/or activity, significant area features, and where the equipment/machinery will enter and exit the project area.

Please see attached CDFG 1603 NLSA Additional Pages, Box 10A.
B. Specify the equipment and machinery that will be used to complete the project.

Please see attached CDFG 1603 NLSA Additional Pages, Box 10B.
C. Will water be present during the proposed work period (specified in box 4.D) in the stream, river, or lake (specified in box 8.B).
$\square$ Yes $\quad \square$ No (Skip to box 11)
D. Will the proposed project require work in the wetted portion $\square$ Yes (Enclose a plan to divert water around work site) of the channel?

## NOTIFICATION OF LAKE OR STREAMBED ALTERATION

## 11. PROJECT IMPACTS

| A. Describe impacts to the bed, channel, and bank of the river, stream, or lake, and the associated riparian habitat. Specify the dimensions of the modifications in length (linear feet) and area (square feet or acres) and the type and volume of material (cubic yards) that will be moved, displaced, or otherwise disturbed, if applicable. |  |  |
| :---: | :---: | :---: |
| Please see attached "CDFG 1603 NLSA Additional Pages", Box 11A. |  |  |
|  |  | $\square$ Continued on additional page(s) |
| B. Will the project affect any vegetation? | $\square$ Yes (Complete the tables below) $\square$ No |  |
| Vegetation Type | Temporary Impact | Permanent Impact |
| Please see attached CDFG 1603 NLSA Additional Pages, Box 11B. | Linear feet: $\qquad$ <br> Total area: $\qquad$ | Linear feet: <br> Total area: |
| A) Seasonal Wetland (acres) <br> B) Cultivated Rice Field (acres) | Linear feet: $\qquad$ <br> Total area: $A=0.023 ; B=0.114$ | Linear feet: $\qquad$ <br> Total area: $A=0 ; B=0$ $\qquad$ |


| Tree Species | Number of Trees to be Removed | Trunk Diameter (range) |
| :--- | :--- | :--- |
|  |  |  |
|  |  |  |
|  |  |  |
|  | $\square$ Continued on additional page(s) |  |

C. Are any special status animal or plant species, or habitat that could support such species, known to be present on or near the project site?

VYes (List each species and/or describe the habitat below)
$\square$ NoUnknown Please see attached CDFG 1603 NLSA Additional Pages, Box 11C.

Continued on additional page(s)

## D. Ideritify the source(s) of information that supports a "yes" or "no" answer above in Box 11.C.

Please see attached CDFG 1603 NLSA Additional Pages, Box 11D.
E. Has a biological study been completed for the project site?

## $\square$ Yes (Enclose the biological study) $\square$ No

Note: A biological assessment or study may be required to evaluate potential project impacts on biological resources.
F. Has a hydrological study been completed for the project or project site?
$\square$ Yes (Enclose the hydrological study) $\square$ No
Note: A hydrological study or other information on site hydraulics (e.g., flows, channel characteristics, and/or flood recurrence intervals) may be required to evaluate potential project impacts on hydrology.

## NOTIFICATION OF LAKE OR STREAMBED ALTTERATION

## 12. MEASURES TO PROTECT FISH, WILDIFE, AND PLANT RESOURCES

A. Describe the techniques that will be used to prevent sediment from entering watercourses during and after construction.

Please see attached CDFG 1603 NLSA Additional Pages, Box 12A.
B. Describe project avoidance and/or minimization measures to protect fish, wildlife, and plant resources.

Piease see attached CDFG 1603 NLSA Additional Pages, Box 12B.
$\square$ Continued on additional page(s)
C. Describe any project mitigation and/or compensation measures to protect fish, wildife, and plant resources.

Please see attached CDFG 1603 NLSA Additional Pages, Box 12C.

## (7. Continued on additional page(s)

## 13. PERMITS

List any local, state, and federal permits required for the project and check the corresponding box(es). Enclose a copy of each permit that has been issued.

| A. | Army Corps of Engineers 404 Individual Permit Application | $\square$ Applied | $\square$ Issued |
| :--- | :---: | :---: | :---: |
| B. | 401 Regional Water Quality Control Board Certification | $\square$ Applied | $\square$ Issued |
| C. | $\square$ Applied | $\square$ Issued |  |

D. Unknown whether $\square$ local, $\square$ state, orfederal permit is needed for the project. (Check each box that applies)

## NOTIFICATION OF LAKE OR STREAMBED ALTERATION

## 14. ENVIRONMENTAL REVIEW



## 15. SITE INSPECTION

Check one box only.In the event the Department determines that a site inspection is necessary, I hereby authorize a Department representative to enter the property where the project described in this notification will take place at any reasonable time, and hereby certify that I am authorized to grant the Department such entry.
$\square \mathrm{I}$ request the Department to first contact (insert name) $\qquad$ at (insert telephone number) $\qquad$ (510) 874-3205 Steve Leach to er號 delay the Department's determination as to whether a Lake or Streambed Alteration Agreement is required and/or the Department's issuance of a draft agreement pursuant to this notification.

## 16. DIGITAL FORMAT

Is any of the information included as part of the notification available in digital format (i.e., CD, DVD, etc.)?
$\square$ Yes (Please enclose the information via digital media with the completed notification form)
$\square$ No

## 17. SIGNATURE

I hereby certify that to the best of my knowledge the information in this notification is true and correct and that I am authorized to sign this notification as, or on behalf of, the applicant. I understand that if any information in this notification is found to be untrue or incorrect, the Department may suspend processing this notification or suspend or revoke any draft or final Lake or Streambed Alteration Agreement issued pursuant to this notification. I understand also that if any information in this notification is found to be untrue or incorrect and the project described in this notification has already begun, I and/or the applicant may be subject to civil or criminal prosecution. I understand that this notification applies only to the project(s) described herein and that I and/or the applicant may be subject to civil or criminal prosecution for undertaking any project not described herein unless the Department has been separately notified of that project in accordance with Fish and Game Code section 1602 or 1611.

$$
\text { Stoher 12, } 2007
$$

Signature of Applicant or Applicant's Authorized Representative

Andrew Welch, Competitive Power Ventures, Inc.
Print Name

## CDFG 1603 NLSA Additional Pages

Box 1 and Box 2 - Please see Notification.

## Box 3. Property Owner

| Table 1. Property Owner Information for the Colusa Generating Station Project |  |  |
| :--- | :--- | :--- |
| Parcel Number(s) | Landowner Name | Mailing Address |
| $011-040-024$ <br> $011-140-014$ <br> $011-040-026$ <br> $011-140-004$ | Leo M. and Diane M. <br> Holthouse | 25039 Highway 395 South <br> South Canyon City, OR 97820 |
| $011-140-021$ <br> $011-040-028$ <br> $011-040-029$ | Allan E. and Mary Anne <br> Azevedo | P.O. Box 629 <br> Maxwell, CA 95955 |
| $011-220-001$ | Frances M. Etchepare | P.O. Box 658 <br> Maxwell, CA 95955 |
| $011-040-011$ | William Dirks, Jr. | P.O. Box 9 <br> Maxwell, CA 95955 |
| 011-140-019 | Jack L. Barrett, Jr. | P.O. Box 99 <br> Maxwell, CA 95955 |
| 011-220-003 | Marlene J. Story' | P.O. Box 156 <br> Maxwell, CA 95955 |
| 'Owner of land where the Teresa Creek Bridge temporary bypass would be constructed. |  |  |

Box 4A through 4C- Please see Notification.

## Box 4D. Seasonal Work Period

The existing Teresa Creek Bridge would be removed between September 1 and March 31 to avoid impacts to cliff swallows (Hirundo pyrrhonota). Construction at the site would occur between May 1 and October 1 to avoid impacts to the giant garter snake (Thamnophis gigas). Listed salmonids are not expected to be impacted by the proposed project. In a concurrence letter dated August 2, 2007, NMFS determined that listed salmonids and their designated critical habitat are not present in the Colusa Generating Station project's action area (please see the NMFS concurrence letter on the enclosed CD 1).

Box 4E through Box 9 - Please see Notification.

## Box 10. Project Description

## Box 10A. Describe the project in detail

As part of E\&L Westcoast's proposed Colusa Generating Station Project (described in detail in Box 14G), the Teresa Creek Bridge would need to be replaced to accommodate
heavy equipment delivery to the site. The existing Teresa Creek Bridge, located 0.7 mile north of Delevan Road on McDermott Road (Figure 2), is an older structure with a wood deck.

The new Teresa Creek Bridge would be a prefabricated bridge approximately 75 feet in length with no piers or abutments in waters of the United States (Figure 3, View 1). To accommodate local traffic during construction of the new bridge, a temporary 14 -footwide culvert crossing and detour road would be installed immediately downstream of the existing bridge prior to construction of the new bridge.

The construction of the new Teresa Creek Bridge would be divided into three components, as generally described below. Please note that, if required due to timing constraints, a preassembled span bridge, which could be lifted in place by a mobile truck mounted crane, might be employed as a bypass route, rather than the pipe culverts described below.

1. Temporary bypass. Pipe culverts would be laid in the creek, with sufficient capacity for the passage of creek flow during the allowable construction period for the new bridge. The construction period would occur during the dry season. Temporary impacts to water conveyance in Teresa Creek would be avoided by placement of temporary culverts that are adequately sized to convey the expected flows in Teresa Creek. At this time, the culvert is expected to be 16 feet wide and 11 feet high. This would be confirmed during final design. The applicant would coordinate construction activities with Colusa County and the Glenn-Colusa Irrigation District to determine the anticipated flow rate of discharges into Teresa Creek during the construction period.

The pipe culverts would be laid on gravel placed on the creek bed, and overlain with gravel and backfill to form a roadway embankment placed over the culverts, and a road graded and possibly paved (depending on the average daily traffic count) for the passage of traffic.
2. Bridge Removal. Bridge demolition equipment would be needed to remove the existing structure. The timber superstructure would be removed with a small crane, tractor, and truck. Abutments would be demolished using concrete demolition equipment. The use of sheet piling or cofferdams could be considered during the final design process, to limit intrusion into the creek during bridge demolition. All existing bridge structure and materials would be removed from site and disposed in an approved landfill. It is not known whether the existing bridge abutment is on piles. If there are existing piles, the top 2 feet would be removed in accordance with the Caltrans Standard Specifications.
3. Permanent Structure. The permanent replacement bridge would be constructed after the temporary bridge is installed and operational. The permanent structure would meet all applicable design standards for conveying expected flows to avoid changes in stream depth and flow rates in the project area. Culvert or abutment walls would use wood forms to accommodate cast-in-place construction. Wingwalls at the upstream and
downstream sides of the structure would be constructed to prevent scouring of the creek walls.

After the permanent bridge has been constructed, the temporary bridge and detour road would be removed and all disturbed areas would be returned to pre-project conditions. During construction, adequate flows allowing for fish passage would be maintained at all times. The culverts installed for the temporary bridge would be large enough so as not to restrict peak expected flows. If dewatering of some areas is required during construction, a CDFG-approved biologist would be present during dewatering to ensure that fish are not injured. Fish that may be trapped behind the cofferdam will be netted and removed from the dewatering area. Additionally, a net or some other type of fish screen will be used on the end of the dewatering pump, to prevent any fish from being sucked into the pumping mechanism, providing the biologist with adequate opportunity to remove the fish from the area. All disturbed areas will be revegetated, including disturbed areas adjacent to the active channel. All disturbed areas would be revegetated with native species.
Box 10B. Specify the equipment and machinery that will be used to complete the project.

Pipe culverts would be installed with truck and tractor equipment. Earthmoving equipment (tractor, dozer, and backhoe) would be used to place and remove a temporary embankment that would be in the stream channel above the culvert. Paving machines and rollers would be used if the temperary bypass is paved. It is anticipated that earthmoving equipment (tractor, dozer, and a backhoe) would be used to excavate the necessary soil for construction of the project.

Box 10C. Will water be present during the proposed work period (specified in Box 4 D) in the stream, river, or lake (specified in Box 8. B)?
Yes, it is likely. Construction would occur between May 1 and October 1.

## Box 10D. Will the proposed project require work in the wetted portion of the channel?

Yes. Please See Section 10A above for additional information regarding plans for diversion of water around the work site.

## Box 11. Project Impact Area

Box 11A. Describe impacts to the bed, channel, and bank of the river, stream, or lake, and the associated riparian habitat.
Construction of a temporary bridge and replacement of the existing bridge at Teresa Creek would affect seasonal wetlands and non-wetland waters of the United States.

Teresa Creek is the southernmost tributary of Hunters Creek, which drains into the Sacramento River approximately 60 miles downstream of the project area. The active channel of this stream is a jurisdictional water of the United States. During the replacement of the bridge, a retaining wall would be constructed to prevent erosion of the bank at the outfall of two drainage culverts on the north bank of Teresa Creek,
immediately west of the existing bridge. (The action of the water draining from the culverts has eroded a wide section of bank below the outfall.) The culverts would extend through the wall and the stream bank behind the wall, which has been eroded, would be back-filled. The area where this wall would be constructed is primarily unvegetated but the site is located below the ordinary high water elevation of the stream. This area is a non-wetland water of the United States. The retaining wall, construction, and backfill would result in the permanent fill of approximately 600 square feet ( 0.014 acre) of jurisdictional non-wetland waters of the United States. Construction of the temporary culvert crossing would temporarily fill approximately 0.040 acre of jurisdictional nonwetland waters of the United States.

The channel is bordered on both sides by a narrow band of herbaceous seasonal wetlands, approximately 5 feet wide (Figure 3). Temporary disturbance to some of the seasonal wetland habitat at the Teresa Creek Bridge site would be unavoidable during the bridge replacement. Heavy equipment used to remove the existing bridge and construct the new bridge would require temporary access within the stream channel and the area surrounding the bridge that would disturb existing vegetation. A temporary bridge and detour would be constructed within 100 feet east of the existing bridge. This would require the placement of large culverts in the stream and piling rock and earth around them to form a temporary crossing. Approximately 1,000 square feet ( 0.023 acre) of jurisdictional seasonal wetland vegetation between the existing bridge and the temporary crossing would be disturbed during construction.

Replacement of the Teresa Creek Bridge would result in no permanent loss of seasonal wetland habitat, and could result in a small increase in the size of the stream channel. The new bridge would span the stream, and the abutments would be set back farther from the stream than those of the existing bridge. The existing Teresa Creek Bridge is approximately 31 feet long, while the new bridge would be 38 feet long. The longer bridge would widen the channel by an additional 3 feet.

The temporary road detour east of the existing Teresa Creek Bridge would temporarily impact 0.114 acre of cultivated rice fields north and south of Teresa Creek (Figure 3).

## Box 11B. Will the project impact vegetation?

Yes. Vegetation which would be permanently and/or temporarily impacted by the proposed Teresa Creek Bridge Replacement includes seasonal wetlands, cultivated rice fields, and ruderal/disturbed habitat. Table 2 provides acreages for these impacts.

| Table 2. Impacts to Vegetation |  |  |
| :--- | :--- | :--- |
| Vegetation Type | Temporary Impact <br> (Acres) | Permanent Impact <br> (Total Area) |
| Seasonal Wetland | 0.023 | 0 |
| Cultivated Rice Field | $0.114^{1}$ | 0 |
| Per a previous conversation with the U.S. Army Corps of Engineers, temporary impacts to cultivated rice <br> fields are not considered impacts to jurisdictional waters of the United States. |  |  |

## Seasonal Wetland

A band of seasonal wetland vegetation is located along the margins of the channel of Teresa Creek (Figure 3). This band of seasonal wetland vegetation, approximately 5 feet wide on each side, is a jurisdictional wetland. Seasonal wetlands on the margins of Teresa Creek are dominated by purple vervain (Verbena bonariensis), Bermuda grass (Cynodon dactylon), dallies grass (Paspalum dilatatum), and wild rye (Leymus triticoides). Willow herb (Epilobium brachycarpum), western goldentop (Euthamia occidentalis), knotweed (Polygonum sp.), and tule (Scirpus sp.) are also present.

## Cultivated Rice Field

Cultivated rice fields are located north and south of Teresa Creek. Per a previous conversation with the ACOE, temporary impacts to cultivated rice fields are not considered impacts to jurisdictional waters of the U.S.

## Ruderal/Disturbed

Disturbed areas are lands that have been altered by human actions such that the natural communities no longer exist. Disturbed areas generally consist of ruderal species or are unvegetated. Ruderal/disturbed areas occur along the road shoulders of McDermott Road. Impact to ruderal/disturbed vegetation was not assessed. Ruderal/disturbed habitat along the shoulders of McDermott road would be temporarily disturbed during construction of the new bridge and associated road detour.

Box 11C. Are any special status animal or plant species, or habitat that could support such species, known to be present on or near the site?
Yes. The proposed Teresa Creek Bridge Replacement project may affect several species listed as rare, threatened, or endangered species under the federal and/or state Endangered Species Acts, and/or as species of special concern by the California Department of Fish and Game (CDFG), and/or by the California Native Plant Society (CNPS). The following special-status species potentially occur in the vicinity of the Teresa Creek Bridge site based on the proximity of known occurrences, the historic range of these species, habitat evaluations, and wildlife and plant field surveys conducted in 2001, 2006, and 2007:

- giant garter snake (Thamnophis gigas)
- tri-colored blackbird (Agelaius tricolor)
- pallid bat (Antrozous pallidus)
- townsend's western big-eared bat (Corynorhinus townsendii)
- pale big-eared bat (Corynorhinus townsendii pallescens)
- Swainson's hawk (Buteo swainsoni)
- white-tailed kite (Elanus leucurus)
- golden eagle (Aquila chrysaetos)
- bald eagle (Haliaeetus leucocephalus)
- white-faced ibis (Plegadis chihi)
- cliff swallow (Hirundo pyrrhonota)

The following special-status species have the potential to occur adjacent to the limits of the Teresa Creek Bridge replacement site:
western burrowing owl (Athene cunicularia hypugea)
Listed salmonids species including Central Valley spring Chinook salmon (Oncorhynchus tshawytscha), Central Valley fall/late-fall run Chinook salmon (Oncorhynchus tshawytscha), Sacramento Valley winter run Chinook salmon (Oncorhynchus tshawytscha), Central Valley steelhead (Oncorhynchus mykiss), and green sturgeon (Acipenser medirostris) are not expected to be impacted by the proposed project. In a concurrence letter dated August 2, 2007, NMFS determined that listed salmonids and their designated critical habitat are not present in the Colusa Generating Station project's action area (please see the NMFS concurrence letter on the enclosed CD 1).

For a complete list of special-status species that may be affected by the entire Colusa Generating Station project please refer to Section 8.2, Biological Resources, of the November 2006 Application for Certification (AFC), December 2006 Biological Assessment (BA) and August 2007 Supplement to the BA included on the enclosed CDs.

Box 11D. Identify the source(s) of information that supports a "yes" or "no" answer above in Box 11. C.
Focused surveys and habitat assessments for special-status species and/or sensitive habitat species, and wetland delineations were conducted in the biological study area in 2001, 2006, and 2007. Results of these surveys are summarized in the November 2006 AFC, and the Biological Assessment and subsequent submittals (refer to the enclosed CDs).

Box 11E. Has a biological study been completed for the project site?
Yes. The following biological studies are included on the CDs enclosed with this application:

- AFC for the CEC (November 2006)
- BA for USFWS Section 7 Consultation (December 2006)
- ACOE 404 Standard Individual Permit Application (April 5, 2007)
- Jurisdictional Delineation Report (April 5, 2007)
- Amendment to the AFC (August 17, 2007)
- Supplements to the BA, 404 permit, and JD report

Box 11F. Has a hydrological study been completed for the project or project sites?
Yes. Please refer to Section 8.14, Water Resources, of the November 2006 Application for Certification (enclosed CD 2).

Box 12. Measures to Protect Fish, Wildlife, and Plant Resources Box 12A. Describe the techniques that will be used to prevent sediment from entering watercourses during and after construction.
Water quality is not expected to be adversely affected by the proposed project with implementation of the Best Management Practices (BMPs) described in Section 8.14,

Water Resources, Section 8.2, Biological Resources, and Section 8.9, Agriculture and Soils, from the November 2006 Application for Certification. These BMPs include:

- Proper implementation of BMPs during construction and throughout project operation (e.g., spill prevention and control, preventative maintenance, hazardous materials management), as well as adherence to all applicable codes and permits, will help minimize the potential for contamination of groundwater. No significant impacts to groundwater are anticipated.
- Erosion will be controlled in accordance with an approved Erosion Control Plan as discussed in Section 8.9.2.2, Agriculture and Soils; Construction of the November 2006 Application for Certification. In addition, all construction activities will be performed in accordance with the California National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharge Associated with Construction Activities (SWRCB 1999), requiring the implementation of BMPs to control sediment and other pollutants mobilized from construction activities.
- A Construction Storm Water Pollution Prevention Plan (SWPPP) will be prepared before construction begins. With proper implementation of BMPs, no significant impacts to surface water quality are anticipated as a result of construction activities.
- In general, disturbance to existing grades and vegetation shall be limited to the actual site of the project and necessary access routes. Placement of all roads, staging areas, and other facilities shall avoid and limit disturbance to wetland habitat. Existing ingress or egress points shall be used. Parking of equipment, project access, supply logistics, equipment maintenance, and other projectrelated activities would occur at a designated staging area. Following completion of the work, the contours of the area shall be returned to preconstruction condition or better.
- Additional direct and indirect impacts to sensitive biological resources throughout the project site, including wetlands and jurisdictional waters, would be avoided or minimized by designating these features outside of the construction impact area as environmentally sensitive areas on project plans and in project specifications. Environmentally sensitive area information would be shown on contract plans and discussed in the Special Provisions. Environmentally sensitive area provisions may include, but are not limited to, the use of temporary orange fencing to delineate the proposed limit of work in areas adjacent sensitive resources, or to delineate and exclude sensitive resources from potential construction impacts. Contractor encroachment into environmentally sensitive area would be restricted (including the staging/operation of heavy equipment or casting of excavation materials). Environmentally sensitive area provisions shall be implemented as a first order of work, and remain in place until all construction activities are complete.
- Regional Water Quality Control Board (RWQCB)-approved physical barriers adequate to prevent the flow or discharge of sediment into the active channel of

Teresa Creek shall be constructed and maintained between work areas and streams or wetlands.

- Erosion control and sediment detention devices (e.g., well-anchored sandbag cofferdams, straw bales, or silt fences) shall be incorporated into the project design and implemented at the time of construction. These devices shall be in place during construction activities, and after if necessary, for the purposes of minimizing sediment impact to the wetlands and input to waters of the United States. These devices would be placed at all locations where the likelihood of sediment input exists.
- A supply of erosion control materials would be kept on hand to cover small sites that may become bare and to respond to sediment emergencies.
- Temporary BMPs may include revegetation, slope stabilization, construction of berms and ditches, and sediment barriers such as straw bales or silt fences to prevent sediment discharges from the site.
- Oily or greasy substances originating from the contractor's operations would not be allowed to enter or be placed where they would later enter a live or dry stream, pond, or wetland. Asphalt concrete shall not be allowed to enter a live or dry stream, pond, or wetland.
- Public roadways adjacent to the project site that are used by construction and worker vehicles would be swept at least twice a day.
- Windbreaks would be installed at the windward sides on construction areas prior to soil being disturbed. The windbreaks would remain in place until the soil is stabilized or permanently covered.
- Ground cover would be replaced in disturbed areas as quickly as possible.
- Tire washing and gravel ramps would be employed prior to entering a public roadway to limit accumulated mud and dirt deposited on public roadways.
- All trucks hauling dirt, sand, soil, or other loose materials would be covered and would maintain a minimum of 6 inches of freeboard between the top of the load and the top of the trailer.
- Covers or dust suppressants would be applied to soil storage piles and disturbed areas that remain inactive for more than two weeks and during the rainy season.
- Construction activities would be scheduled to minimize disturbed soil area during the rainy season to the extent practicable.
- Temporary soil stabilization and erosion control measures would be implemented throughout the defined rainy season (October 15 through April 15). BMPs would be implemented prior to the start of the rainy season and be inspected prior to forecasted storm events, during extended rain events and after storm events that cause runoff from the construction site.
- During the rainy season, temporary erosion controls would be implemented at the draining perimeter of the disturbed soils areas, at the toe of slopes, at storm drain inlets and at outfall areas at all times.
- Creeks and canals would be protected to prevent discharge of sediments, debris, and wastes associated with construction activities from entering the watercourses. BMPs could include directing water away from work areas, using covers or platforms to collect debris if working over water, and placing stockpiles away from watercourses.
- Non-stormwater discharges into drainage systems or waterways would be prohibited. Examples of prohibited discharges common to construction activities include:
- Vehicle and equipment wash water, including concrete washout water
- Slurries from concrete cutting, asphalt grinding, and paving operations
- Slurries from concrete or mortar mixing operations
- Runoff from dust control applications of water
- Sanitary and septic wastes
- Chemical leaks and/or spills of any kind including but not limited to petroleum, paints, cure compounds, etc.
- For temporary stream crossings (e.g., at the Teresa Creek Bridge) construction roadways, adjacent work areas, and stream bottom would be stabilized against erosion.

Box 12B. Describe project avoidance and/or minimization measures to protect fish, wildlife, and plant resources.
E\&L Westcoast would avoid or minimize impacts to fish, wildlife, and plant resources by implementing the proposed avoidance, minimization, and compensation measures in the AFC, BA, 404 permit application, and supplemental reports. Please refer to the enclosed CDs for copies of these reports.

Revegetation at Teresa Creek and adjacent areas would be implemented according to U.S. Fish and Wildlife Service (USFWS) guidelines for restoration and/or replacement of giant garter snake habitat (USFWS, 1997). Vegetation disturbed during the bridge replacement would be replanted with appropriate native species, such as California bulrush (Scirpus californicus), cattail (Typha sp.), and water primrose (Ludwigia peploides) in the emergent wetland area. Native erosion control seed mix including creeping wild-rye (Leymus triticoides), meadow barley (Hordeum brachyantherum), tomcat clover (Trifolium willdenovii), annual fescue (Vulpia spp.), blue wildrye (Elymus glaucus), mugwort (Artemisia vulgaris), and California brome (Bromus carinatus) would be applied to upland areas and areas adjacent to streams. An erosion control mat would be laid down if stabilization of the bank is needed.

All temporary fill material would be removed from affected cultivated rice fields north and south of the temporary crossing and the rice fields would be returned to cultivation.

Areas where ruderal/disturbed vegetation must be removed would be revegetated with appropriate native species that fit the vegetative community of the area following construction.

The topography of the sites would be restored once proposed construction activities have been completed. New plantings would be monitored for one year until the banks are adequately revegetated to prevent erosion and sedimentation of these areas and the banks have similar total vegetation cover equal to or greater than adjacent areas. Additional plantings would be implemented if adequate vegetation cover is not attained after one year. A monitoring report of the Teresa Creek site would be submitted to the USFWS one year after restoration is implemented.

## Box 12C. Describe any project mitigation and/or compensation measures to protect fish, wildlife, and plant resources.

Please refer to the AFC, Amendment to the AFC, BA, 404 permit application, and supplemental reports on the enclosed CDs for the mitigation and compensation measures that would be implemented to protect fish, wildlife, and plant resources.

Box 13. Permits - Please see Notification.
Box 14 A-I. Environmental Review - Please see Notification.
Box 14G. If the project described in this notification is part of a larger project or plan, briefly describe that larger project or plan.
E\&L Westcoast proposes to construct and commission a nominal 660-megawatt combined-cycle power plant on 31 acres of a 100 -acre site leased by E\&L Westcoast adjacent to Delevan Road in Colusa County, California. E\&L Westcoast would then transfer ownership and operation of the power plant to PG\&E after completion of commissioning. The power plant will be interconnected to PG\&E's northern California transmission grid and power generated by the facility will be available to serve energy needs throughout California.

The project would include a 22.5 -acre power generation facility and stormwater detention basin, a new 8.2 -acre switchyard, a 43 -acre construction area (including laydown, parking, and office), a new 1,800-foot-long electrical interconnection to PG\&E's 230 kV Cottonwood to Vaca-Dixon lines adjacent to the site, a new 1,500 -foot-long natural gas pipeline connecting to PG\&E's existing natural gas lines (Line 400 and 401), a new 2,700 -foot-long water supply pipeline from the Tehama-Colusa Canal, and a 2,500 -footlong access road extending from the existing road leading to the PG\&E Compressor Station (Figure 2). In addition, a permanent 12 -foot-wide dirt road would be constructed along the pipeline conveying water from the Tehama-Colusa Canal to the power plant. The road would be used for maintenance and access to the water intake at the TehamaColusa Canal.

To allow for transportation of some of the heavier equipment components to the site, the following two bridges would be replaced: (1) a bridge on Dirks Road over the GlennColusa Irrigation District (GCID) Canal (Figure 2), and (2) a bridge on McDermott Road over Teresa Creek (Figure 3). In addition, the eastern side of the Delevan/McDermott intersection would be slightly widened (Figure 4). After construction is completed, local access roads would be repaved or resurfaced as necessary and appropriate.

Construction of the proposed Colusa Generating Station Project is expected to begin in early 2008 and continue for 24 months.

Potential impacts that the proposed project may have on the environment have been evaluated in detail. Please refer to the November 2006 Application for Certification, which is included on CD 2, for more information. The Colusa Generating Station Project will avoid or minimize potential environmental impacts through project siting and design, best management practices, and incorporation of mitigation measures. As a result, the Colusa Generating Station Project will have no significant environmental impacts.

## Box 14H. Has an environmental filling fee (Fish and Game Code section 711.4) been paid?

Yes. Please see Notification.

## Box 15. Site Inspection

Yes. Please see Notification.

## Box 16. Digital Format

Box 16A. Is any of the information included as part of the notification available in digital format (i.e., CD, DVD, etc)?
Yes. The following CDs are enclosed:

## CD 1

- 1603 NLSA Permit Application, Additional Pages, and Figures
- Biological Assessment (December 2006)
- U.S. Army Corps of Engineers 404 Standard Permit Application (April 5, 2007)
- Jurisdictional Delineation Report (April 5, 2007)
- Supplemental Information for the JD (May 24, 2007)
- ACOE letter initiating consultation with USFWS and NMFS (June 13, 2007)
- CEC Preliminary Staff Assessment (August 1, 2007)
- NMFS Concurrence Letter (August 2, 2007)
- ACOE letter verifying CGS JD (August 10, 2007)
- Amendment to the AFC - Proposed Modifications to Glenn-Colusa Canal Bridge Design and Comments on the CEC Preliminary Staff Assessment (August 17, 2007)
- Supplement to Biological Assessment (August 24, 2007)
- Update to the 404 application (August 28, 2007)


## Colusa Generating Station

CDFG 1603 NLSA Additional Pages

## CD 2

- Application for Certification (November 2006)

The enclosed CDs contain PDF files of the above documents. Electronic Word files or hard copies of these documents can also be provided to CDFG upon request.

## Box 17. Signature

Signature of the applicant is provided on the Notification form.

## References

SWRCB (State Water Resources Control Board). 1999. National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction Activity (General Permit) Water Quality Order 99-08-DWQ.

USFWS (U.S. Fish and Wildlife Service). 1997. Programmatic Formal Consultation for U.S. Army Corps of Engineers 404 Permitted Projects with Relatively Small Effects on the Giant Garter Snake within Butte, Colusa, Glenn, Fresno, Merced, Sacramento, San Joaquin, Solano, Stanislaus, Sutter and Yolo Counties, California. November 13, 1997.




