



SOUTH FEATHER WATER & POWER AGENCY

TO: Board of Directors

FROM: Kathy Petersen, Power Division Manager

DATE: May 31, 2006

**RE: Contract for 2007 Part 12D Inspections and PFMA Analyses Reports
June 27, 2006 Board of Directors Meeting**

The Federal Energy Regulatory Commission requires that all licensees hire an independent consultant every five years to conduct an evaluation of the safety of any dams that are classified as high hazard potential dams, or which store more than 2,000 acre-feet. This is known as the Part 12 Dam Safety Inspection, and our facilities are due for inspection again in 2007. In 2002 FERC also added a requirement that a Potential Failure Modes Analysis (PFMA) be done for these dams. We conducted the PFMA sessions for Sly Creek and Lost Creek dams in 2002; now the analysis is due for Little Grass Valley, Ponderosa, and Miners Ranch dams.

We are once again proposing to use Richard Harlan, a civil and geotechnical engineer with several decades of experience with the South Feather Power Project, to provide this service to the Agency. His proposal is attached for your information. His estimated budget for this project is \$158,000, which I included in our 2007 budget request to PG&E. The proposed contract (also attached) has been reviewed and approved by Mr. Glaze.

The recommended form of action is:

"I move approval of the contract with Richard Harlan to conduct the 2007 Part 12 Dam Safety Inspections and Potential Failure Modes Analyses and to prepare the reports for submittal to the Federal Energy Regulatory Commission."

March 17, 2006
Project No. 105-4

Kathryn M. Petersen, Power Division Manager
South Feather Water and Power Agency
2310 Oro-Quincy Hwy
Oroville, CA 95966

Subject: Budget for 2007 FERC Part 12 D Dam Safety Inspections and Reports, Potential Failure Modes Analysis Sessions and Reports, and Assistance with Updating Supporting Technical Information Documents South Fork Feather River Hydroelectric Project – FERC Project No. 2088

Dear Ms. Petersen:

This letter present a Budget for carrying out the following Tasks related to the FERC Dam Safety Program that will be required in 2007:

- ◆ Assistance to SFW&P Staff in preparing Supporting Technical information Documents on Little Grass Valley, Sly Creek, Lost Creek, Ponderosa and Miners Ranch Dams. This task will include:
 - Preparation of a detailed outline with all of the existing documents and excerpts in their proper FERC STID format, and indications of where additional information is to be provided/inserted by SFW&P Staff,
 - Updated geology and seismicity section to be provided by Richard D. Harlan, CEG, Consulting Geologist – This subtask includes a field geological reconnaissance for each of the dams during the STID preparation (before the PFMA sessions)
 - Review of the draft prepared by Staff, and production of the electronic version on CD (number of copies as needed).
- ◆ Conduct of PFMA Sessions and Preparation of PFMA reports (10 copies each) on Little Grass Valley, Ponderosa and Miners Ranch Dams (Sessions to be held in Oroville or Forbestown)
- ◆ Conduct of Part 12 D Dam Safety Inspections and preparation of the Part 12 D Reports (10 copies each) for all 5 dams. (Field inspections will immediately follow the PFMA Sessions). This task will include an assessment of the new Probable Maximum Flood studies relative to overtopping safety of the dams.
- ◆ The PFMA and Part 12 D Inspection teams will include; a Facilitator to be selected by SFW&P; an inspector from FERC; SFW&P staff as needed; Richard C. Harlan, PE,

Independent Consultant; Richard D. Harlan, CEG, Consulting Geologist; Paul D. Terrill, (Bechtel Field Engineer during Construction of the Project),.

As previously discussed, the PFMA sessions and field inspections would be held at two different times, Ponderosa and Miners Ranch in February-March and the remainder in June-July.

The budget estimates for the STID assistance, PFMA sessions and Reports, and Part 12 D Dam Safety Inspections and Reports are presented in the following table.

BUDGET FOR FERC PFMA AND PART 12 D SESSIONS AND REPORTS - 2007

DAM	STID ASSISTANCE TO SFW&P STAFF	PFMA SESSIONS (and Pt. 12 D Fld. Insp.)	PFMA REPORTS	5-Year Dam Safety Inspection Reports	TOTALS
Miners Ranch	\$8,700.00	\$8,000.00	\$9,800.00	\$10,300.00	\$36,800.00
Ponderosa	\$8,700.00	\$8,000.00	\$9,800.00	\$10,300.00	\$36,800.00
Lost Creek	\$8,200.00	\$1,500.00*	NA	\$12,600.00	\$22,300.00
Sly Creek	\$8,200.00	\$1,500.00*	NA	\$11,800.00	\$21,500.00
Little Grass Valley	\$8,200.00	\$12,000.00	\$10,000.00	\$10,400.00	\$40,600.00
TOTALS	\$42,000.00	\$31,000.00	\$29,600.00	\$55,400.00	\$158,000.00

* For Field Inspection for Part 12 D report

In addition, I recommend that you budget \$20,000.00 total for facilitation of the three PFMAs.

Sincerely,



Richard C. Harlan

AGREEMENT FOR
2007 FERC Part 12D Inspection Program and Potential Failure Modes Analyses

THIS AGREEMENT is made and entered into this 27th day of June, 2006, by and between South Feather Water and Power Agency (SFWPA), and *Richard C. Harlan*, Consulting Civil and Geotechnical Engineer (CONSULTANT).

WITNESSETH:

SFWPA desires to retain the services of CONSULTANT for *completion of Potential Failure Modes Analyses (PFMA) for Little Grass Valley, Ponderosa and Miners Ranch dams, and for Part 12D Inspections and Reports for these dams in addition to Sly Creek and Lost Creek dams, in compliance with Federal Energy Regulatory Commission requirements.*

CONSULTANT desires to perform the services requested by SFWPA on the terms and conditions set forth below.

NOW, THEREFORE, the parties agree as follows.

1. Description of Work: CONSULTANT shall perform the work described in CONSULTANT's January 16, 2006 and March 17, 2006 letters attached hereto as Exhibits "A" and "B," respectively.

This Agreement, and the work performed hereunder, shall be subject to, and in accordance with, the General Conditions attached as Exhibit "C" hereto.

CONSULTANT shall provide all labor, equipment, material, supplies, and services required or necessary to properly, competently and completely perform the work or render the services under this Agreement. CONSULTANT shall determine the method, details and means of doing the work or rendering the services.

2. Compensation: Contract price is \$158,000.

3. Term and Time for Completion: This Agreement shall become effective on the date first above written and will continue in effect until the services provided herein have been completed. CONSULTANT shall complete the work December 31, 2007.

4. Payment for Services: SFWPA will make progress payments, based upon percentage of completion, according to the following schedule. Monthly invoices will be dated and mailed on completion of the task or about the 30th of each month. Payments will be due net 45 days from the date of invoice:

- \$16,000 when the *Miners Ranch and Ponderosa PFMA sessions and Field Inspections have been completed.*
- \$42,000 when the *Supporting Technical Information Documents have been prepared by SFWPA and reviewed by CONSULTANT.*
- \$15,000 when the *Little Grass Valley PFMA session and Field Inspections of Little Grass Valley, Sly Creek and Lost Creek have been completed.*

d. **Professional Liability.** CONSULTANT shall maintain professional liability insurance in the amount of \$1,000,000.

e. **Certificate of Insurance.** Promptly upon execution of this Agreement and prior to commencement of any work, CONSULTANT shall provide SFWPA with certificates of insurance evidencing that all insurance and/or endorsements required by this Agreement have been obtained and are in full force and effect. Approval of the insurance by SFWPA shall not relieve or decrease any liability of CONSULTANT. The certificates and policies shall provide that thirty (30) days written notice of any material change, reduction in coverage or cancellation of the insurance policies will be provided to SFWPA. In addition, in the event any change is made in the insurance carrier, policies or nature of coverage required under this Agreement, CONSULTANT shall notify SFWPA prior to making such changes.

7. **Indemnification and Hold Harmless.** CONSULTANT shall protect, indemnify, and hold harmless SFWPA, its Directors, officers, and employees, from any and all claims, fines, demands, costs, expenses, liability, losses, penalties, causes of action, awards, suits, or judgments for damages of any nature whatsoever (hereinafter collectively referred to as "Claims") arising out of in whole or in part by the negligent acts, errors, or omissions of CONSULTANT, its employees, agents or consultants, or the agent, employee, or consultant of any one of them in the performance of their duties or in their operations under this Agreement, but not including the sole or active negligence or the willful misconduct of SFWPA, or of any third party.

Neither termination of the Agreement nor completion of the acts to be performed under this Agreement shall release CONSULTANT from its obligations to indemnify as to any Claims so long as the event upon which such Claim is predicated shall have occurred prior to the effective date of any such termination or completion and arose out of or was in any way connected with performance or operations under this Agreement by CONSULTANT, its employees, agents or consultants, or the employee, agent or consultant of any one of them.

Submission of insurance certificates or other proof of compliance with the insurance requirements in the Agreement does not relieve CONSULTANT from liability under this indemnification and hold harmless clause. The obligation of this indemnity clause shall apply whether or not such insurance policies shall have been determined to be applicable to any of such damages or claims for damages.

8. **Warranties:** CONSULTANT warrants all services performed under this Agreement to be performed with the degree of skill and care that is required by current, good and sound professional procedures and practices, and in conformance with generally accepted professional standards prevailing at the time the Services are performed so as to ensure that the Services performed are correct and appropriate for the purposes contemplated in this Agreement.

9. **Exhibits Incorporated.** Exhibits "A," "B" and "C" attached to this Agreement are incorporated by reference as though fully set forth herein.

10. **Miscellaneous:** This Agreement constitutes the entire agreement of the parties hereto and shall be binding on their successors and assigns. However, CONSULTANT will not assign this Agreement without the written consent of SFWPA. No modification of this Agreement shall be binding unless in writing signed by both parties. A waiver of any term, or any breach, of this Agreement shall not be deemed a waiver of any other term or breach. If any provision of this

EXHIBIT A



Richard C. Harlan

Consulting Civil and Geotechnical Engineer

Project No. 105-4

Date: January 16, 2006
To: Kathy Petersen
Cc: Rick Harlan
From: Richard C. Harlan
RE: Planning Schedule for 2007 PFMA sessions and Part 12 D Inspections

Winter/Spring Sessions and Inspections – Miners Ranch and Ponderosa.

Travel to Oroville on evening before sessions. Do early in year. March?

1st day: Field review of Miners Ranch (Include Bidwell Saddle Dam)– Ponderosa in morning. Lunch at session location (Forbestown?). Afternoon data review of Miners Ranch.

2nd day: Complete data review of Miners Ranch if necessary. Include available information on Bidwell Canyon Saddle dam if possible. Complete PFMA session on Miners Ranch. Begin (complete?) Data Review on Ponderosa.

3rd Day: Complete PFMA session on Ponderosa. Facilitator travels home. If completed early, conduct Part 12 field inspection of Ponderosa and Forbestown penstock and powerhouse.

4th Day: Complete Pt 12 Complete Field Inspection of Ponderosa and Forbestown penstock and powerhouse if necessary. Conduct field inspections of Miners Ranch and Kelly Ridge penstock and powerhouse.

Summer Sessions and Inspections: Lost Creek, Woodleaf penstock and powerhouse, Sly Creek dam and powerhouse, Little Grass Valley

Travel to Oroville evening before inspections

1st day: Field Review of LGV. Begin/Complete data review on LGV.

2nd day: Complete data review and conduct PFMA session on LGV. Facilitator returns home.

3rd day: Pt 12 Field Inspections of LGV, Sly Creek dam and powerhouse.

4th day Pt 12 Inspections of Lost Creek, Woodleaf Penstock and Powerhouse. – Travel home

Richard C. Harlan

Sessions). This task will include an assessment of the new Probable Maximum Flood studies relative to overtopping safety of the dams.

- ◆ The PFMA and Part 12 D Inspection teams will include: a Facilitator to be selected by SFW&P; an inspector from FERC; SFW&P staff as needed; Richard C. Harlan, PE, Independent Consultant; Richard D. Harlan, CEG, Consulting Geologist; and Paul D. Terrill, (Bechtel Field Engineer during Construction of the Project),.

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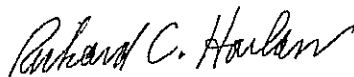
BUDGET FOR FERC PFMA AND PART 12 D SESSIONS AND REPORTS - 2007

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* For Field Inspection for Part 12 D report

In addition, I recommend that you budget \$20,000.00 total for facilitation of the three PFMA's.

Sincerely,



Richard C. Harlan

from the work, without invalidating the contract or bonds. Changes shall not be binding upon either SFWPA or the CONSULTANT unless made in writing in accordance with this section.

- b. Changes shall originate with SFWPA who will transmit to the CONSULTANT a written request for a proposal covering the requested change, setting forth the work in detail. Upon receipt of such request, the CONSULTANT shall promptly submit in writing to SFWPA a proposal offering to perform such change, a request for any required extension of time caused by such change, and an itemized statement of the cost or credit for the proposed change. Failure of the CONSULTANT to include a request for extension of time in the proposal shall constitute conclusive evidence that such extra work or revisions will entail no delay and that no extension of time will be required.
 - c. If the CONSULTANT's proposal is accepted and authorized by SFWPA, a written Change Order will be issued by SFWPA stating that the extra work or change authorized, and granting any required adjustments of contract price and of time of completion.
 - d. SFWPA may order the CONSULTANT, by a written Change Order, to perform extra work or to make changes on a cost-plus basis. Such Change Order shall specify the estimated amount of the payment to be made and the time extension to be allowed for such work or changes. The CONSULTANT shall perform such work and shall furnish the District with itemized bills only for the actual cost of labor, materials, equipment use, transportation, tools, necessary incidentals, and insurance, plus a charge not exceeding 15 percent (15%) of the actual cost of the foregoing items to cover all other expenses and profit of the CONSULTANT and sub-consultants for such work or changes.
 - e. The performance of extra work or changes pursuant to Change Order shall be in accordance with this Agreement (and any bonds). No extra work shall be performed and no change shall be made unless pursuant to such written Change Order, and no claim for an addition to the contract price shall be valid unless so ordered.
 - f. If CONSULTANT has any claims for extra work, delays, disruption or damages against SFWPA, such claims shall be made in writing, with supporting data, to SFWPA within ten (10) days of the first occurrence or condition giving rise to the claim. Such claims shall be processed by SFWPA as requests for change orders under this General Condition 8. Failure of CONSULTANT to give written notice as provided in this paragraph shall be deemed a waiver of such claim.
6. Dispute Resolution; Venue: To the extent that they are applicable, the provisions of Public Contract Code Section 20104-20104.6 shall govern the resolution of claims under this Agreement. Said provisions, which call for written claims, responses, negotiations, mediation and arbitration, are incorporated by reference as though fully set forth herein. Venue for any arbitration or action to enforce this Agreement shall be in the County of Butte, State of California.
7. Termination: SFWPA may terminate this Agreement at any time and for any reason upon fourteen (14) days advance written notice. In the event of such termination, CONSULTANT is to be compensated for all work performed to the date of termination based upon Article 4 of