



ANTONIO R. VILLARAIGOSA  
Mayor

Commission  
H. DAVID NAHAI, *President*  
EDITH RAMIREZ, *Vice President*  
MARY D. NICHOLS  
NICK PATSAOURAS  
FORESCEE HOGAN-ROWLES  
BARBARA E. MOSCHOS, *Secretary*

RONALD F. DEATON, *General Manager*

**REQUEST FOR PROPOSAL (RFP)**

**FOR**

**Intermountain Power Project (IPP)  
Greenhouse Gas (GHG) Reduction Feasibility Study**

**Letter of Announcement**

Los Angeles Department of Water and Power, acting as Project Manager on behalf of Intermountain Power Agency (IPA) and Southern California Public Power Authority (SCPPA), is issuing the IPP GHG Reduction Feasibility Study RFP to evaluate technology to reduce GHG emissions from the Coal-Fired Generating Units 1 and 2 at IPP near Lynndyl, Utah.

All written proposals shall be submitted electronically by July 20, 2007 and hard copies of the proposal by July 23, 2007 as outlined in the RFP. The electronic copies will be e-mailed to [Saifuddin.mogri@ladwp.com](mailto:Saifuddin.mogri@ladwp.com) and the hard copies will be mailed to:

Mr. Saifuddin K. Mogri  
Contract Administrator, IPP GHG RFP  
Los Angeles Department of Water and Power  
111 North Hope Street, JFB Room 1263  
Los Angeles, CA 90012

A pre-proposal conference call will be held on July 10, 2007 at 8:30 a.m. Pacific Daylight Time. All questions to be discussed in the pre-proposal conference call must be submitted by electronic mail to Saifuddin Mogri by July 2, 2007 at the e-mail address highlighted above.

IPA/SCPPA and the Project Manager reserve the right to withdraw the RFP without cause for any reason or to not award a contract because of unforeseen circumstances.

Aram Benyamin  
IPP Operating Agent

**Water and Power Conservation ... a way of life**

111 North Hope Street, Los Angeles, California 90012-2607 Mailing address: Box 51111, Los Angeles 90051-5700  
Telephone: (213) 367-4211 Cable address: DEWAPOLA



**CONSULTING AGREEMENT  
NO. 534  
BETWEEN  
INTERMOUNTAIN POWER AGENCY/  
SOUTHERN CALIFORNIA PUBLIC POWER AUTHORITY  
AND  
BIDDER NAME  
for  
Intermountain Power Project  
Green House Gas (GHG) Reduction Feasibility Study  
Contractors' Proposal Evaluation Service Work Scope**

This Consulting Agreement (this "Agreement") is made and entered into by and between the Intermountain Power Agency ("IPA")/Southern California Public Power Authority ("SCPPA") and Bidder Name (the "Consultant"). The joint SCPPA and IPA GHG Subcommittee (Subcommittee) will oversee the work. The Subcommittee is comprised of selected members from both SCPPA and its members and IPA and its members. The Department of Water and Power of the City of Los Angeles ("LADWP") is the Project Manager and Operating Agent for the Intermountain Power Project (IPP) located in the State of Utah. LADWP is hereinafter referred to as the "Project Manager", and shall act as Contract Administrator on behalf of IPA and SCPPA in the administration of this Agreement.

**PURPOSE:** Evaluate ways to reduce and/or capture CO<sub>2</sub> emissions from the Intermountain Power Project coal fired Units 1 and 2 to meet the energy policies and objectives of the Southern California Purchasers and their governing Boards. The ultimate goal, if achievable, is to reduce the CO<sub>2</sub> emissions from Units 1 and 2 in order to meet the California Energy Commission's (CEC) Greenhouse Gas Emission Performance Standard as specified in Title 20, Division 2, Chapter 11 of the California Code of Regulations. Note: The CEC regulations are scheduled to be adopted by June 30, 2007. Additional information is available at: <http://www.energy.ca.gov/ghgstandards/>. In addition, the purpose of this RFP is to identify renewable resource projects that would be candidates for the IPP site and to provide an initial feasibility review of each proposed project.

- I. **QUALITY OF WORK.** Consultant shall perform consulting work in a responsible, professional, and competent manner, reflecting its level of experience and expertise through professional knowledge, judgment and skill.
- II. **INDEPENDENT CONSULTANT.** The Consultant is acting as an independent contractor and not as an agent or employee of IPA or SCPPA. The Consultant

shall not represent or otherwise hold itself or any of its representatives, officers, partners, employees, or agents to be an agent or employee of the IPA or SCPPA.

- III. COMPENSATION. The contract will be based on a fixed price (including expenses). Twenty percent of the fixed price contract will be paid after each meeting between the Consultant and the Project Manager. IPA will pay within 30 days upon receipt of invoices identifying the tasks completed based on a schedule of fees submitted by the successful bidder in response to the RFP. Forty percent of the contract will be paid upon approval of the final report by Project Manager. Final payment will be conditioned upon the successful bidder fully complying with the provisions of the bidder's proposal.
- IV. DELIVERABLES. Consultant will conduct the studies identified in Attachment A under the heading "Green House Gas (GHG) Reduction Feasibility Study." Consultant will provide written progress reports in electronic format only prior to progress meetings to be held at locations to be determined in the cities of Salt Lake City, Utah, Las Vegas, Nevada and Los Angeles, California. The Consultant will provide an electronic copy and three hard copies of the draft final report. The Project Manager will have 30 days to review and suggest changes to the draft final report. After the report is approved by the Project Manager, the Consultant will submit the final study report in electronic format together with three (3) hard copies of the final study report. The final report will include, but not be limited to, study and system assumptions, study results, computer plots, drawings, and other graphic illustrations, conclusions and recommendations (collectively, the "Study Report") within 15 days after receiving approval by the Operating Agent. An initial meeting post-award of the RFP may be held at the power plant in Utah if deemed necessary.
- V. TERMINATION. The Project Manager may terminate the Agreement with a 30-day written notice to the Consultant. In the event the Agreement is terminated by Project Manager, Project Manager shall pay termination charges based on the schedule of payments provided under Compensation and the percentage of work completed since the last meeting, which determination will be subject to audit, at the discretion of the Project Manager prior to payment. The Consultant shall take all reasonable steps to minimize termination charges upon written notification from Project Manager.
- VI. INSURANCE REQUIREMENTS. The Consultant shall meet the insurance requirements set forth in the document entitled "INSURANCE REQUIREMENTS", attached hereto and incorporated as Attachment B. The Consultant shall provide evidence of such prior to the execution of this Agreement to:

Mr. Avery Neaman, Risk Manager  
Los Angeles Department of Water and Power  
111 North Hope Street, Room 465  
Los Angeles, California 90012-2607

- VII. INCURRING COSTS. IPA/SCPPA and the Project Manager shall not be liable for any costs incurred by a consultant/proposer in preparing any information in connection with this RFP process or in any manner in responding to this RFP. Any such costs shall remain the sole responsibility of the responding party or parties. IPA/SCPPA and the Project Manager reserve the right to withdraw the RFP without cause for any reason or to not award a contract because of unforeseen circumstances.
- VIII. DISPOSITION OF PROPOSALS. All proposals submitted in response to this RFP shall become the property of IPA/SCPPA. Also, the proposal must identify all copyrighted material, trade secrets or other proprietary information that the bidder may contend may be exempt from disclosure under the Public Records Act. In the event such an exemption is claimed, the bidder is requested to state in the proposal that the proposer will defend any action which seeks disclosure.
- IX. OWNERSHIP AND CONFIDENTIALITY. All information and documents including, but not limited to, memoranda and deliverables, prepared or caused to be prepared under this Agreement by Consultant, shall become the property of SCPPA/IPA. Such information, or derivative information, and documents shall be used by Consultant only for work done directly for SCPPA/IPA, and shall not be used in Consultant's general course of business. All information and documents provided by SCPPA/IPA and generated during the course of the bid evaluation, including the deliverables and all other work product, shall be held in strictest confidence by Consultant and its employees, officers, directors, and agents, and will be returned to SCPPA/IPA upon completion of the work including drawings, data, reports and other information pertaining to this study. This information shall not be shared with any other individual or company.
- X. REPRESENTATIVES AND NOTICES. Any notice, demand or request directed to Project Manager shall be delivered to:

Mr. Saif Mogri  
Contract Administrator  
Los Angeles Department of Water and Power  
111 North Hope Street, Room 1263  
Los Angeles, California 90012-2607

Any notice, demand or request directed to the Consultant shall be delivered to:

Input successful bidders contact information.

Such correspondence shall be in writing except if agreed by both the Consultant and Project Manager to exchange technical information relevant to the Work Proposal by electronic mail. Any change of address or contact person by either party shall be given in writing.

- XI. ASSIGNMENT. Neither party shall assign this Agreement or any of the rights and duties hereunder, either in whole or in part, without the prior written consent of the other.
- XII. AMENDMENT. This Agreement may be amended only by written agreement of the parties to this Agreement.
- XIII. ATTORNEY'S FEES. The parties agree that in any action to enforce the terms of this Agreement that each party shall be responsible for its attorney's fees and legal costs.
- XIV. APPLICABLE LAW. This Agreement shall be enforced and interpreted under the laws of the State of Utah. The parties agree that it is their intention that this Agreement and its interpretation, performance under it and all suits or special proceedings that may ensue from its breach or alleged breach shall be construed in accordance with and under the laws of the State of Utah. Furthermore, in any action or proceeding that may be brought arising out of, in connection with, or by reason of this Agreement, the laws of State of Utah shall apply and shall govern to the exclusion of the law of any other forum or jurisdiction in which any action or special proceeding may be instituted.

IN WITNESS WHEREOF, the Consultant and IPA hereto have caused this Agreement to be executed in duplicate by their duly authorized representative on the day and year written below.

CONSULTANT

By: \_\_\_\_\_ Date: \_\_\_\_\_

Print name:

Title:

Approved on behalf of IPA:

By: \_\_\_\_\_ Date: \_\_\_\_\_

Aram Benyamin  
Operating Agent

This Agreement has been reviewed and recommended for execution:

Contract Administrator:

By: \_\_\_\_\_ Date: \_\_\_\_\_

Saifuddin K. Mogri  
Operating Agent Staff

APPROVED AS TO FORM:

By: \_\_\_\_\_ Date: \_\_\_\_\_

Ronald L. Rencher  
Attorney for Operating Agent

## ATTACHMENT A

### GREENHOUSE GAS (GHG) REDUCTION FEASIBILITY STUDY

#### **STUDY GOALS**

Recent laws have been adopted in California aimed at reducing CO<sub>2</sub> emissions and reducing the amount of greenhouse gases. The purchasers participating in the 1,900 MW Intermountain Power Project (IPP) (further described below under Background) want to identify technology that can be implemented at the site to reduce CO<sub>2</sub> emissions in order to meet the California Energy Commission (CEC) Greenhouse Gas Emission Performance Standard as specified in Title 20, Division 2, Chapter 11 of the California Code of Regulations. The bills that form the bases for action are contained in Senate Bill 1368 (SB1368) and Assembly Bill 32 (AB32). Note: The CEC regulations are scheduled to be adopted by June 30, 2007. Additional information is available at: <http://www.energy.ca.gov/ghgstandards/>. In addition, the goal of this RFP is to identify the feasibility of installing renewable resources at the IPP site.

#### **STUDY REPORT**

The study work is to be conducted at a pre-feasibility level. The deliverables from the study work should be in sufficient detail that the proposed concept or technology directed at reducing CO<sub>2</sub> emissions at IPP can be easily understood and that a high level scope of work, budget and schedule are to be provided to indicate what would be needed to implement each proposed concept or technology. The deliverables shall also include an estimate of any capital costs, operating and maintenance costs and identification of any reductions to existing costs. As an example, (for an alternative fuel) an estimate of the alternative fuel cost as well as identification of the reduction in the number of tons of annual coal consumption shall be provided. The cost analysis shall also address any changes in the expected energy output of the units as a result of the technology or concept. At the time of contracting for this work, basic assumptions will be provided to the selected consultant such as a 20-year period for determining feasibility, interest rates, inflation rates and so forth. It is contemplated that the deliverable for each concept or technology studied will be contained in a final report, with sections for each topic generally limited to ten pages each.

The final report shall address the following list of items, as appropriate, for each concept or technology.

- Preliminary schedule for implementation
- Preliminary design and/or a scope of work
- Preliminary capital cost estimate and cash flow
- Estimated operating costs for the next ten years
- Estimate the change to the heat rate and energy output of Units 1 and 2 if modified

- Estimate of the amount of CO<sub>2</sub> reduction that could be achieved in percent and tons/MWh of generation
- Detailed discussion for each concept or technology as to its ability to meet the California Energy Commission GHG Emission Performance Standard
- Potential impacts to IPP Units 1 and 2 with respect to applicable environmental regulatory requirements (e.g. New Source Review)
- Estimate of the change in water consumption for the two units

In the conclusion section a comparison table shall provide for comparing the various concepts and technologies. The consultant will also evaluate separately the feasibility of installing a renewable resource, e.g. solar energy, wind energy, etc. at the IPP site.

### **MINIMUM REPORT TOPICS**

The Subcommittee has identified the following technologies and concepts that shall be included in the Study. Variations on these same themes are encouraged; however please incorporate those into additional tasks in the responding proposal.

**TASK 1: *Improve Efficiencies.*** Reduce CO<sub>2</sub> by improving efficiencies. Consultant will evaluate existing operations of Units 1 and 2, including quality of coal, and recommend methods to maintain or improve the plant output with a reduction in GHG emissions.

**TASK 2: *Alternative Fuels.*** Analyze the reduction in GHG emissions by reducing coal usage and using either biomass or natural gas including natural gas for igniters. Any other fuels being proposed should be added as an additional task.

**TASK 3: *Developing Technologies (commercially viable in the next 5 to 10 years).*** Please provide a discussion of pros and cons of using oxy-combustion, amine scrubbers and chilled ammonia technology. Please provide sufficient information that these technologies can be assessed as to whether additional study is warranted. Add any other developing technologies as additional task(s).

**TASK 4: *CO<sub>2</sub> Capture and Sequestration.*** Evaluate the feasibility of post-combustion CO<sub>2</sub> capture and sequestration. The study will evaluate the CO<sub>2</sub> capture from Units 1 and 2, transportation and sequestration for the following and additional viable locations:

- Salt Domes near IPP
- Enhanced Oil Recovery in the State of Utah
- Saline Aquifers
- Identify on-going research projects, such as, Big Sky or the Southwest Regional Sequestration Partnership (which might be willing to accept the CO<sub>2</sub> for Sequestration) and the costs related to it



- Please include a discussion of any risks or liabilities that may have to be legislated for CO<sub>2</sub> injection into the earth. The discussion should identify liabilities that a utility might incur due to CO<sub>2</sub>

**TASK 5: *Carbon Trading.*** For this task develop a white paper addressing concepts for carbon trading including pros and cons of this approach and how it might be used to meet the CEC performance goals.

**TASK 6: *Renewable Resource.*** The consultant will develop a white paper for this task identifying the feasibility of installing various renewable resources at the IPP site. These may include but not be limited to wind, solar, etc.

## PROPOSALS

This Request for Proposal (RFP) is being provided to six consultants and should your firm elect to not propose, please notify Mr. Saif Mogri at (213) 367-0447 within five days so that another proposer can be selected. Proposals are due July 20, 2007 by electronic delivery to [saifuddin.mogri@ladwp.com](mailto:saifuddin.mogri@ladwp.com). Please provide three (3) hard copies of your proposal by no later than July 23, 2007. A conference call will be held on July 10, 2007 at 8:30 AM PST to address consultant questions regarding the RFP. All clarification requests regarding the RFP, to be discussed on the July 10, 2007 conference call, must be emailed to Mr. Saif Mogri by July 2, 2007.

It should be emphasized that the subcommittee is interested in a thorough review of available options by the winning proposer and that creativity in this regard will be weighted heavily in the selection process. It is requested that a schedule and budget for the study work be included in the proposal with a fixed-fee for the six tasks above and a separate fixed-fee for all additional tasks. Allowances in evaluating the proposed fees during the selection process will be given to those with a larger number of options to be studied.

***Project Management.*** Please include in your proposed budget three meetings with the client for status reports and to discuss issues related to the topics. A draft report will be required prior to each meeting, which will be circulated among the Subcommittee for initial comments. It is anticipated that there will be active involvement between the consultant and the client to help guide the study. A fourth meeting if necessary may be held at the power plant in Utah post award of RFP to review and understand the layout of the power plant.

***Other.*** Please limit your response to no more than one (1) page per concept or technology to be studied in your proposal with an additional limit of eight (8) pages for a discussion of your firm, the proposed team, qualifications and resumes. Please provide an organization chart for your team along with three (3) references for related work that your proposed project manager has managed or has participated in.

**Ranking Criteria.** The proposals received from this RFP will be evaluated based on the following criteria:

- Thoroughness of addressing concepts to be reviewed (30%)
- Bidder's experience with pulverized coal generation and operations (5%)
- Bidder's experience with emission controls (5%)
- Bidder's experience with concepts and technology proposed for study (15%)
- Qualifications of the personnel to be assigned to this work (15%)
- Feasibility study schedule (5%)
- Cost of the feasibility study (25%)

## BACKGROUND

**IPP Summary.** The Intermountain Power Project (IPP) is a coal-fired generating station located near Delta, Utah at an elevation of 4,670 feet above mean sea level. Full operation began in 1987. The Project consists of two 950-MW pulverized coal (PC) sub-critical steam generation units, with a substantial portion of the generation going to six municipal utilities in southern California. Coal is delivered largely by rail from Utah mines and from the Powder River Basin. Further details regarding Units 1 and 2 will be provided to the successful contractor/consultant.

**Coal Description.** Presently, the coal delivered for Units 1 and 2 is primarily from the State of Utah. Units 1 and 2 have successfully burned significant quantities of coal from Western Colorado, southwest Wyoming, and the Powder River Basin.

The following is the coal burned data for Units 1 and 2 in the fiscal year 2005-06.

### QUALITY

	Coal (as-fired)	
Heating Value	(Btu/lb)	11,590
Sulfur	(%)	0.58
Ash	(%)	10.26
Moisture	(%)	9.5

**Water Requirements.** The study work will need to establish any changes to the amount of annual water usage, in acre-feet. Water usage by the two units is currently in the range of 23,000 to 24,000 acre-feet per year.

## **ATTACHMENT B**

### **INSURANCE REQUIREMENTS**

#### ***Insurance***

##### **GENERAL REQUIREMENTS**

Prior to the start of work, but not later than 30 days after the date of award of contract, the Consultant shall furnish the Project Manager evidence of coverage from insurers acceptable to the Project Manager and in a form acceptable to the Risk Management Section and the Office of the City Attorney. Such insurance shall be maintained by the Consultant at the Consultant's sole cost and expense.

The Project Manager shall not, by reason of its inclusion under these policies, incur liability to the insurance carrier for payment of premium for these policies.

Any insurance carried by the Project Manager and the Intermountain Power Agency which may be applicable shall be deemed to be excess insurance and the Consultant's insurance is primary for all purposes despite any conflicting provision in the Consultant's policies to the contrary but only to the extent of Consultant's negligence.

The Consultant must ensure that the Project Manager is named as a person to whom advance notice of any cancellation of the insurance policies must be provided. Such notice shall be delivered no later than 30 days prior to any cancellation by registered mail to The Office of the City Attorney, Water and Power Division, Post Office Box 51111, GOB Room 340, Los Angeles, California 90051-5700.

Should any portion of the required insurance be on a "Claims Made" policy, the Consultant shall, at the policy expiration date following completion of work, provide evidence that the "Claims Made" policy has been renewed or replaced with the same limits, terms and conditions of the expiring policy, or that an extended discovery period has been purchased on the expiring policy at least for the contract under which the work was performed.

Failure to maintain and provide acceptable evidence of the required insurance for the required period of coverage shall constitute a breach of contract, upon which the Project Manager may immediately terminate or suspend the agreement.

Consultant shall be responsible for all sub-Consultants' compliance with the insurance requirements.

All insurance policies will be in United States of America dollars.

## SPECIFIC COVERAGES REQUIRED

### Commercial Automobile Liability

The Consultant shall provide Commercial Automobile Liability insurance which shall include coverage's for liability arising out of the use of owned, non-owned, and hired vehicles for performance of the work as required to be licensed under the California or any other applicable state vehicle code. The Commercial Automobile Liability insurance shall have not less than \$300,000.00 combined single limit per occurrence and shall apply to all operations of the Consultant.

The Commercial Automobile Liability policy shall name the Intermountain Power Agency, the Intermountain Power Service Corporation, the City of Los Angeles, the Board of Water and Power Commissioners of the City of Los Angeles, the Operating Agent, and their officers, and employees while acting within the scope of their employment, as additional insured with the Consultant, and shall insure against liability for death, bodily injury, or property damage resulting from the performance of this Agreement.

### Commercial General Liability

The Consultant shall provide Commercial General Liability insurance with Blanket Contractual Liability, Independent Contractors, Broad Form Property Damage, Premises and Operations, Products and Completed Operations, and Personal Injury coverage's included. Such insurance shall provide coverage for total limits actually arranged by the Consultant, but not less than \$1,000,000.00 combined single limit per occurrence. Should the policy have an aggregate limit, such aggregate limits should not be less than double the Combined Single Limit and be specific for this contract. Umbrella or Excess Liability coverage's may be used to supplement primary coverage's to meet the required limits. Evidence of such coverage shall be on the Project Manager's additional insured endorsement form or on an endorsement to the policy acceptable to the Risk Management Section and provide for the following:

- 1) Include the Intermountain Power Agency, the Intermountain Power Service Corporation, the Project Manager, the City of Los Angeles, the Board of Water and Power Commissioners of the City of Los Angeles, and their officers, agents, and employees as additional insured with the Named Insured for the activities and operations under the contract.
- 2) Severability-of-Interest or Cross-Liability Clause such as: "The policy to which this endorsement is attached shall apply separately to each insured against whom a claim is made or suit is brought, except with respect to the limits of the company's liability."
- 3) A description of the coverage's included under the policy.

Workers' Compensation/Employer's Liability Insurance

The Consultant shall provide Workers' Compensation insurance covering all of the Consultant's employees in accordance with the laws of California. The limit for Employer's Liability coverage shall be not less than \$500,000.00 each occurrence.

Professional Liability

The Consultant shall provide Professional Liability insurance covering liability arising from errors and omissions made during the executing of this contract for the total limits actually arranged by the Consultant, but not less than \$1,000,000 per occurrence. The coverage shall include Contractual Liability, and proof thereof shall be on the Department of Water and Power Special Endorsement Form.

Indemnification

The Consultant undertakes and agrees to indemnify and hold harmless the Intermountain Power Agency, the Intermountain Power Service Corporation, the City of Los Angeles, the Project Manager, the Board of Water and Power Commissioners of the City of Los Angeles, and all of their officers and employees, and, at the option of the Project Manager, defend the Project Manager, and any and all of their Boards, officers, agents, representatives, employees, assigns and successors-in-interest from and against any and all suits and causes of action, claims, charges, damages, demands, judgments, civil fines and penalties, or losses of any kind or nature whatsoever, for death, bodily injury or personal injury to any person, including Consultant's employees, or damage or destruction to any property of either party hereto, or third persons in any manner arising by reason and only to the extent of the negligent acts, errors, omissions or willful misconduct incident to the performance of this contract on the part of the Consultant, or the Consultant's officers, employees, or sub-Consultants of any tier, except for the active negligence or willful misconduct of the Project Manager, its Board, officers, agents, representatives or employees.