

Siting, Transmission and Environmental Protection Energy Systems Planning

RFQ-15-702 Pre-Bidders' Conference

March 14, 2016

Background

- California is currently on target to reduce GHG emissions to 1990 levels by 2020
- ...and to meet the state's 33 percent renewable energy mandate by 2020

Background

- Governor's Executive Order B-30-15 (April 2015) establishes a new statewide target to reduce greenhouse gas emissions (GHG) to 40 percent below 1990 levels by 2030, and momentum toward reducing GHG emissions to 80 percent below 1990 levels by 2050
- Senate Bill 350 (De León), signed into law on October 7, 2015, requires that 50 percent of the state's retail electricity sales come from renewable energy resources

RFQ Purpose

- Investments in the state's renewable energy infrastructure and electric transmission system will be an important part of meeting these new goals
- This RFQ is seeking a highly qualified contractor team to support the Energy Commission's Siting, Transmission and Environmental Protection Energy Systems Planning to meet these goals

Examples of Program Activities that may be supported by contract tasks

- Desert Renewable Energy Conservation Plan (DRECP) and Related Activities
- Renewable Energy Transmission Initiatives (RETI)
- Solar Development on Least-Conflict Lands in the San Joaquin Valley
- Landscape-Scale Planning
- Etc.

Available Funding

- There is a maximum of \$4,687,000 available to fund the three-year contract resulting from this RFQ
- This is an hourly rate plus cost reimbursement contract with a ceiling on the total contract amount

Key Activities and Dates

Activities	Action Date
RFQ release	Friday, March 4, 2016
Pre-Bid Conference	Monday, March 14, 2016
Written Question Submittal Deadline by 5:00 p.m.	Wednesday, March 16, 2016
Distribute Questions / Answers and Addenda (if any)	Monday, March 21, 2016
Deadline to submit SOQ by 5:00 p.m.	Monday, April 11, 2016
SOQ Discussions with Firms	Friday, April 16, 2016
Notice of Selection	Thursday, April 21, 2016
Cost Negotiations	Friday, April 22, 2016
Notice of Proposed Award	Wednesday, May 11, 2016
Energy Commission Business Meeting	Wednesday, June 8, 2016
Contract Start Date	Friday, June 24, 2016
Contract End Date	Friday, March 29, 2019

Written Questions...

Due March 16 at 5 pm and must be directed to:

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California Energy Commission

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Tasks

- Prime contractor management functions
- Environmental, engineering, scientific, economic, and public health and safety technical support services to prepare and complete studies, reports, and analysis to guide and inform the responsible development of energy infrastructure to serve California
- Analysis, monitoring and oversight functions for a wide variety of existing and new initiatives as well as providing support to implement DRECP Phase 1 and to complete DRECP Phase 2

Task 1 – Contract Management and Administration Duties

- Attend a “kick-off” meeting with the CAM, the Contracts Officer, and a representative of the Accounting Office in Sacramento, CA
- Attend and participate in other Energy Commission team meetings as requested and arranged by the CAM
- Supply cost estimates for potential work tasks to Energy Commission technical staff

Task 1 – Contract Management and Administration Duties (cont'd)

- Supply information for work authorization development
- Prepare and execute agreements with subcontractors that convey all provisions contained in the Agreement and specific work authorizations between the Energy Commission and the Contractor

Task 1 – Contract Management and Administration Duties (cont'd)

- Enforce subcontract provisions, and in the event of failure of the subcontractor to perform satisfactorily, recommend actions to resolve the problem
- Require subcontractors to provide invoices which correctly identify personnel, rates, actual hours, and direct expenses charged to each task of each work authorization and which provide adequate documentation to justify expenses, including electronic copies of completed deliverables

Task 1 – Contract Management and Administration Duties (cont'd)

- Maintain electronic record of invoices and invoice documentation, including completed deliverables
- Provide monthly progress reports by the tenth of each month to the CAM on the Contractor's and subcontractors' progress for work assignments, including a summary of contract expenditures to date

Task 1 – Contract Management and Administration Duties (cont'd)

- Submit monthly invoices by the tenth of each month to the Energy Commission Accounting Office with a copy to the CAM
- Pay subcontractors for satisfactory products within five working days after payment is received from the Energy Commission
- Develop and maintain a secure website to share contract-related information with Energy Commission staff and to track the status of all work authorizations

Task 2 – Document Production

- Produce graphics to support Energy Commission documents and analysis, including Geographic Information Systems (GIS) maps, and photographic and artistic renderings
- Write, edit and synthesize technical documents based on technical information from one or more sources to ensure the technical accuracy, correct grammar, unified style and clarity of Energy Commission documents

Task 2 – Document Production (cont'd)

- Ensure that the written products of staff and the Contractor's technical specialists clearly convey their intended message to the public and all stakeholders
- Format and prepare electronic documents for high quality printing and/or binding. Print and/or bind documents in high-quality formats

Task 3 – Interpreting and Translation

- Translate documents and/or interpret verbal comments between English and Arabic, Armenian, Cantonese, Cambodian, Farsi, Hmong, Korean, Mandarin, Punjabi, Russian, Spanish, Tagalog, Vietnamese and other languages as required
- Interpreting services will be required at onsite and offsite meetings, workshops and hearings

Task 4 — Outreach, Communication, Technical Support, and Facilitation Services

- The activities and tasks included in this contract rely on a strong scientific, environmental, economic, and analytical approach coupled with an open process that encourages and facilitates widespread participation by all levels of government, stakeholders, interest groups, and the public

Task 4 — Outreach, etc. (cont'd)

- To be successful it is critical that the decision making process is open and transparent, and encourages participation by: local, state and federal agencies; stakeholders; Native American tribes; environmental groups; recreation organizations; utilities; academia; developers; and the public
- The Contractor shall...

Task 4 — Outreach, etc. (cont'd)

- Provide extensive outreach and communication efforts over a wide spectrum of interested groups, stakeholders, all levels of local, state, and federal governments, businesses, the public, utilities, environmental groups, developers, etc.
- Establish contacts with stakeholders, local agencies, and the public

Task 4 — Outreach, etc. (cont'd)

- Provide assistance and technical support to California counties and other local, state, and federal agencies requesting assistance in their review and analysis of electric generation infrastructure and energy infrastructure
- Provide facilitation services at public meetings/workshops/stakeholder work groups and to “broker” highly contested issues

Task 4 — Outreach, etc. (cont'd)

- Develop materials, fact sheets, pamphlets, and brochures to help explain and educate
- Develop outreach materials and information for energy facility planning activities such as RETI 2.0, DRECP, San Joaquin Valley energy facility planning, and other energy systems planning topics that may be included on informational websites and/or webpages

Task 4 — Outreach, etc. (cont'd)

- Provide technical support for websites and/or webpages of, or supported by, the Energy Commission pertaining to energy facility planning activities such as RETI 2.0, DRECP, San Joaquin Valley energy facility planning, and other energy systems planning activities
- Provide outreach, assistance, and technical support to Native American tribes
- Provide assistance and technical support to stakeholder work groups/technical groups

Task 5 – Environmental, Conservation, and Land Use Planning for Energy Infrastructure and Implementation

To support the Energy Commission's environmental, conservation, and land use planning efforts to guide energy infrastructure development, the Contractor shall:

- Provide monitoring, scientific expertise, and implementation support
- Develop monitoring protocols and implementation tools

Task 5 – Environmental, Conservation, and Land Use Planning... (cont'd)

- Prepare feasibility studies including environmental, public health and safety, engineering, and cost and economic analysis, of potential conservation and development areas within California
- Provide project management services and duties
- Prepare and complete HCP-type/NCCP-type studies, analysis, and reports as required for incidental take permits under the Federal and State Endangered Species Acts

Task 5 – Environmental, Conservation, and Land Use Planning... (cont'd)

- Prepare and complete EIR/EIS
- Prepare and complete scientific, economic, public health and safety, environmental, and conservation studies and analysis including analysis and effects of climate change and GHG reductions
- Maintain Data Basin planning, analysis, data, mapping, and monitoring tools for the public, stakeholders, and governmental agencies to use and expand these tools to other geographic areas

Task 5 – Environmental, Conservation, and Land Use Planning... (cont'd)

- Prepare and complete EIR/EIS
- Prepare and complete scientific, economic, public health and safety, environmental, and conservation studies and analysis including analysis and effects of climate change and GHG reductions
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Task 5 – Environmental, Conservation, and Land Use Planning... (cont'd)

- Maintain Data Basin Climate Console, the Renewable Energy Generation Scenario Builder, crucial habitat assessment tools and other associated tools
- Prepare and complete transmission corridor studies and analysis.
- Provide assistance and expertise to improve transmission planning processes, transmission routing, transmission corridor designation, and transmission permitting/licensing

Task 5 – Environmental, Conservation, and Land Use Planning... (cont'd)

- Assist in the development and revisions to the Best Management Practices Manual and provide expertise and support of stakeholder workgroups/technical teams.

Task 6 – Energy Facility and Energy Infrastructure Planning, Studies, Analysis and Reports

Supporting environmental, conservation, engineering, economic, and land use planning efforts through technical activities such as data collection and analysis, developing and maintaining data bases, economic and engineering studies and analysis, public health and safety studies, risk assessments, transmission corridor analysis, and transmission interconnection studies

Task 6 – Energy Facility and Energy Infrastructure Planning... (cont'd)

The Contractor shall:

- Develop data bases, collect data and information, and track all types of electricity generation facilities, electric transmission lines, and energy projects in California including those out-of-state (eleven western states interconnectivity) and out-of-country (Mexico and Canada) projects that affect the electric and energy systems in California

Task 6 – Energy Facility and Energy Infrastructure Planning... (cont'd)

- Prepare and complete environmental feasibility analyses of potential transmission projects and the projects' various alternatives. The scope of these analyses may cover any area in California and may include projects and alternatives that are in other states and other countries due to potential impacts and effects on the electric generation system and electric transmission system in California and the U.S. western grid.

Task 6 – Energy Facility and Energy Infrastructure Planning... (cont'd)

- Prepare and complete studies/analysis, and provide technical assistance to support policy reports and short-term and long-term energy planning activities and transmission technical reports required by the California Energy Commission

Task 6 – Energy Facility and Energy Infrastructure Planning... (cont'd)

- Prepare and complete electric transmission feasibility and electric transmission interconnection studies and reports, power flow analysis, and system impact studies. These studies will be coordinated with the CAISO and the CPUC, if necessary. This work could also be done in support of studies/reports/planning efforts undertaken by the CAISO and the CPUC

Task 6 – Energy Facility and Energy Infrastructure Planning... (cont'd)

- Prepare and complete transmission corridor studies and analysis
- Provide assistance to California counties and other local, state, and federal agencies requesting assistance in their review and analysis of electric generation infrastructure and energy infrastructure

Task 6 – Energy Facility and Energy Infrastructure Planning... (cont'd)

- Provide assistance and expertise to improve transmission planning processes, transmission routing, transmission corridor designation, and transmission permitting/licensing.
- Assist with the Federal Section 106 Native American Tribes consultation process and the State of California consultation process

Task 6 – Energy Facility and Energy Infrastructure Planning... (cont'd)

- Provide project management services and duties.
- Prepare and complete scientific, economic, public health and safety, environmental, and conservation studies and analysis including analysis and effects of climate change and GHG reductions.

Task 6 – Energy Facility and Energy Infrastructure Planning... (cont'd)

- Provide technical assistance for studying the implications of the development of specific bulk transmission projects, both planned and conceptual, for the integration of new renewable resources, the need for local capacity in transmission-constrained areas, energy storage and the ability to import energy from and rely upon generation capacity in neighboring western states and countries

Task 6 – Energy Facility and Energy Infrastructure Planning... (cont'd)

- Provide technical assistance for evaluating the need for transmission system upgrades to meet environmental policy goals and ensure reliable service under different scenarios regarding future load-growth, impacts of demand-side programs (energy efficiency, demand response), energy storage, renewable and fossil generation resource development, and new grid management techniques for managing variable energy resources

Task 6 – Energy Facility and Energy Infrastructure Planning... (cont'd)

- Identify, assess, and make recommendations regarding the feasibility of improvements in modeling techniques and data acquisition related to electricity system integration including. This can include modifications to existing modeling techniques (e.g. – production cost models) or the applicability of new modeling techniques (e.g. – power flow studies).

Task 6 – Energy Facility and Energy Infrastructure Planning... (cont'd)

- Collaborate with Energy Commission staff to define policy relevant scenarios and assist translating the general concepts of the new scenarios/cases into simulation models and risk analysis datasets.
- Provide technical assistance and prepare nuclear power feasibility, safety, repowering, reliability, decommissioning, and existing site(s) reuse studies, reports, analysis, and recommendations.

Task 6 – Energy Facility and Energy Infrastructure Planning... (cont'd)

- Provide technical assistance and analysis for a wide variety of energy related policy issues and infrastructure such as, but not limited to: drought-related impacts; risks of inundation of low lands under climate change; tidal energy; off-shore wind energy; flooding and mudslide risks associated with weather patterns; energy facility vulnerability assessment; avian impacts from energy facilities; drought-related risks; land subsidence; fire risk; proposed or existing natural gas or liquefied natural gas lines and terminals; desalination projects and proposals; and other energy-related issues.

Task 6 – Energy Facility and Energy Infrastructure Planning... (cont'd)

- Provide technical assistance to advance current capabilities in performing landscape-scale environmental analysis for selecting electric generation and transmission geographic locations that have the potential to lower risk of project permit failure and reduce delays for project development

Task 6 – Energy Facility and Energy Infrastructure Planning... (cont'd)

- Evaluate available geo-spatial models for landscape-scale environmental analysis that are transparent and user-friendly
- Identify and evaluate the relevance of landscape-scale environmental information sources covering California and Western Electricity Coordinating Council (WECC) regions for geo-spatial modeling applications

Task 6 – Energy Facility and Energy Infrastructure Planning... (cont'd)

- Provide technical assistance on methodologies to convert the multiple environmental data layers into a valuation metric that reflects energy infrastructure project permitting challenges and environmental mitigation risks for geo-spatial modeling applications. This work may incorporate both California and WECC energy infrastructure project feasibility studies that staff is preparing for the Integrated Energy Policy Report (IEPR), CPUC proceedings, public owned utility procurement decisions and CAISO transmission evaluations.

Task 7 – Train Staff, Commissioners and Advisors, Agencies and Stakeholders

Training will cover environmental, conservation management, engineering, economics, and public health and safety topics; compliance monitoring skills necessary to perform site visits; data gathering and analysis; use of computer models; and other technical skills needed to review and analyze energy projects, transmission lines, transmission corridors, and DRECP-related conservation and mitigation requirements.