

SOW FOR XX & XX CHP

1. General Intention and Requirements

Purpose To prepare an Environmental Assessment (EA) of the proposed action to ensure U.S. Department XX compliance with the regulations set forth by the Council on Environmental Quality implementing the provisions of the National Environmental Policy Act (NEPA), Title 40 CFR Parts 1500 – 1508; and XX Regulations, Environmental Effects of XX Actions, Title 38 CFR, Part 26 (51 FR 37182, October 20, 1986). The contractor responsible for preparing the EA (“Contractor”) should direct particular attention to the environmental assessment definition “. . . a concise public document . . . that serves to: briefly provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact” (NEPA Part 1508.9).

Brief Project Scope The EA shall evaluate potential direct, indirect, and cumulative impacts on environmental and land use resources of constructing a Combined Heat and Power system at the XX facility (ie) identified by the XX from results of this contract. This Environmental Assessment (EA) is not to be confused with a Phase I Environmental Assessment or any assessment requiring environmental media sampling and analysis.

2. TASKS

The Contractor shall use the XX Environmental Assessment Summary sheet (Attachment A) as a guide to summarize the environmental analysis of the proposed action. In the complete report, the Contractor shall incorporate a discussion of the various alternatives to this action, including the no-action alternative. (Attachment B) contains a sample table of contents for the complete report deliverable.

The Contractor shall prepare both a draft report (for XX review) and a final version of the EA. The report shall present the information required above and be written in layman’s language with limited technical terminology. The report should not contain statistical or scientific terminology without providing related explanatory information. The report must include a glossary of terms or explanations.

Environmental Description The Contractor shall provide a written description of each affected environmental attribute that includes but is not limited to:

- a. Description of the existing condition;
- b. Analysis of any identified environmental impacts;
- c. Detailed description of measures required to mitigate adverse environmental impacts to an acceptable level, if possible; and
- d. Statement concluding what unavoidable adverse impacts would remain after mitigation.

Sources Contacted The Contractor shall provide a list, including address and contact information, of all Federal, state and local agencies and of all individuals contacted during this analysis and those who have expressed interest in this action. The Contractor shall submit this list along with the draft report specified below.

The Contractor shall maintain a list of “interested parties” identified while developing the assessment. Interested parties are agencies (e.g., State Historic Preservation Office) or individuals who have been consulted or expressed interest in the action XX is proposing.

- a. The Contractor shall incorporate XX-identified revisions to the draft report into the final report. The schedule shall be as follows:
- b. XX reviews are projected to take one to two weeks to complete.
- c. The final submission shall include electronic files in the format(s) originally created. Contractor shall also provide a PDF file of the final EA.
- d. The Contractor shall mail two copies of the final report per XX direction to each of the interested parties from the Sources Contacted List.

Develop RFP

Contractor shall develop a request for proposal (RFP) for the design and installation of the Combined Heat and Power (CHP) system and modifications of electricity and steam distribution systems at the Energy Centers at the XX and XX to adapt the new CHP.

The RFP will include the following technical information and requirements:

1. Performance Requirements
2. Description of Existing Facilities
3. XX Construction Specifications
4. O&M Requirements
5. Regulatory and Environmental Requirements
6. Terms and Conditions
7. Technical Proposal Format
8. Cost Proposal Format

Contractor shall assist the XX for Public Hearings, interconnection agreements, evaluation for the proposals, etc. Contractor shall also assist the XX in responding to queries after issuance of the RFP.

Proposed scope for Task 3- Preparation of Technical Portion of RFP:

1. Preparation of technical portion of Request for Proposal (RFP) to be issued to up to five qualified energy center developers

At a minimum, contractor will address the following issues and create the following sections within the technical portion of the RFP documents. The RFP will be created and delivered to XX in Word format.

- Description of Scope, Existing Conditions, & Energy Center Requirements
 - Purpose Of Specifications
 - Existing Conditions
 - Scope Of Work
 - Process Description
 - Design Review
 - Shop Drawings
 - Software Submittals
 - As-Built Drawings
 - Description of Equipment Functions
 - Cogeneration and Thermal Energy Production
 - Electrical Generators
 - Load Control and Dispatch System
 - Metering, Switchgear And Protective Relaying
 - Steam Generators
 - Steam Generation Auxiliary Systems
 - Products And Materials
 - General
 - Engine/Generators
 - Combustion Turbine/Generators
 - Steam Turbine/Generators
 - Steam Boilers
 - Heat Recovery Steam Generators
 - Electrical Metering, Switchgear And Protective Relaying
 - Control And Load Dispatch System
 - Fuel Oil System
 - Evaporative Cooling Towers
 - Two Stage Steam Fired Absorption Water Chillers
 - Software
 - Graphics Software
 - Documentation

- General Provisions
 - Familiarity With Site
 - Development Design Requirements
 - Construction Requirements
 - Utility Interconnections
 - Compatibility With XX Mission
 - Environmental Compliance
 - XX Facility Access Requirements
 - Title and Ownership of Improvements
 - Operation of Energy Center
 - Staffing
 - Maintenance And Repair
 - Insurance

- Commercial Uses Permitted
 - Compatibility With XX Operations And Local Laws, Codes, Regulations, And Standards
 - Workmanship
- Instructions To Developers
- Proposed Energy Center Development Plan
 - Energy Center Development Plan
 - Overall Development, Design & Construction
 - Site Adaptation
 - Site Amenities
 - Construction Of Development
 - Conceptual Drawings
 - Phasing Of Development
 - Project Timeline
 - Terms And Conditions

2. Contractor must produce a schematic site plan for each facility that will demonstrate in general terms the anticipated locations of equipment. In many cases these site plans will be adaptations of drawings provided by XX.

3. Invited developers will, in many cases require and request the same data that Contractor requested at the start of initial Task Order. Contractor proposes that a site data package be assembled ready for reproduction which will encapsulate that data and thereby reduce the workload of XX personnel at each site. This will also ensure that each developer uses similar data.

4. Attendance at one pre-response meeting with developers, anticipated to be in XX or at either of the two XX Centers listed above. Contractor will staff that pre-response meeting with a principal of the company (President or Vice President) plus one licensed Professional Engineer who was actively engaged in the preparation of the technical, financial and environmental portions of initial Task Order.

5. Contractor will budget 40 hours of engineering time (plus 8 hours of admin time to format responses) for answering technical questions submitted via email by each of the five potential developers as they prepare their responses. Answers will be provided back to the requesting developer by email within a reasonable timeframe, with copies to designated XX staff.

Due date for preparation of RFP documentation is understood to be XXXXXX.

EXCLUSIONS

1. Excluded from scope is the actual issuance of the RFP document. Contractor proposes to provide electronic copies where practical and paper where necessary to XX staff who will need to send it to invited developers.
2. XX may wish to meet with local officials in each location regarding environmental impact, zoning, traffic, noise etc as a courtesy prior to holding public meetings. Contractor has not budgeted time for those meetings.
3. Contractor anticipates that only one RFP document will be issued with common sections leading to site-specific sections.
4. Evaluation of proposals received is not included in Task.

Proposed scope for Task 4 - Review of CHP Proposals

- a. Technical evaluation (please list the technical areas that will be evaluated)

Contractor will create a check matrix and “fill in the blanks”, indicating the types of systems the Developer is proposing in the following areas:

- i. Cogeneration and Thermal Energy Production
- ii. Power Generators
- iii. Control and Load Dispatch System (Control System)
- iv. Metering, Switchgear and Protective Relaying
- v. Steam Generators
- vi. Steam Instrumentation
- vii. Steam Generation Control Systems
- viii. Steam Generation Auxiliary Systems
- ix. Chilled Water Systems
- x. Chiller Auxiliary Systems

If relevant data cannot be found quickly then a question mark will be entered to indicate that the information was not easily found.

- b. Technical evaluation proposed rankings (i.e. 1-10, or meets XX requirements or does not meet XX requirements, etc.)
- c. Technical compliance for all areas (i.e. missing or incomplete information, etc.)

Contractor Will Provide A Cost Evaluation based on the technical requirements as follows:

- a.. Cost/Value evaluation (relating to the XX's overall project requirements)

We will use rules of thumb metrics such as RS Means construction data on the overall plant to determine the value proposition of each plant. Other sources of information may be used such as comparable plants that have been built.

b.. Cost/Value evaluation proposed rankings (i.e. 1-10, or meets XX requirements or does not meet XX requirements, etc.)

Once the metrics are done for each plant they will be ranked. The ranking may be given as a range of values given the necessarily short time allotted.

c.. Cost/Value compliance for all areas (i.e. missing or incomplete information, etc.) Please list hourly labor category and hourly rates broken out for technical and cost evaluation as a not to exceed number. Also, please list hourly rates for any additional work that may occur on Task 4 as a result of possible scope of work modifications.

Task Deliverables

1A – Contractor shall conduct EA studies at the proposed sites

1B – Contractor shall develop the request for proposal (RFP) that identifies the project requirements and specifications, the required proposal format and a description of the proposal evaluation criteria.

1C – Contractor shall provide technical evaluations for each proposal of the CHP system. Technical Evaluations for each proposal should identify strengths and weaknesses, feasibility of the project, cost realism. The Technical Evaluation shall include Clarifications for each offer and provide a list of missing elements or clarifications required.

1D – Contractor shall provide required documents (scripts of public hearings, applications for the interconnection agreements, applications for the changes of environmental permits, etc) for the implementations of CHP system.

1E – Contractor shall provide technical design review comments for the design submittal from the CHP system design-build contractor. Technical Review comments shall include environmental assessment reviews as well as review of mechanical, electrical, controls portion of the CHP systems. XX is expecting 2 design submittals (60% and Final) for the CHP systems.

The reports and documents will be submitted to XX electronically via email. The XX will have ten workdays to review and comment on the draft reports. Contractor shall incorporate the XX comments into the deliverable and resubmit a final version within five workdays of the receipt of comments which will be considered accepted upon delivery.

Task Delivery Schedule:

The schedules shall be as follows:

SUBMISSION	DELIVERY	FORMAT
<u>1.A -1</u> Pre-final EA study report for XX review	3 weeks after issue of notice to proceed (NTP)	E-mailed electronic file Two mailed hardcopies
<u>1.A -2</u> Final EA study report	2 weeks after issue of XX review comments	E-mailed electronic file Two mailed hardcopies
<u>1.B -1</u> Pre-final RFP for XX review	5 weeks after issue of notice to proceed (NTP)	E-mailed electronic file Two mailed hardcopies
<u>1.B -2</u> Final RFP for XX	2 weeks after issue of XX review comments	E-mailed electronic file Two mailed hardcopies
<u>1.C -1</u> Technical Evaluation report	1 week after proposals forwarded to contractor	E-mailed electronic file Two mailed hardcopies
<u>1.D -1</u> Supporting documents	TBD	TBD
<u>1.E -1</u> Design review comments (60% and Final)	2 week after design submittal forwarded to contractor	E-mailed electronic file Two mailed hardcopies

Notice to Proceed. Upon receipt of the executed option Notice to Proceed, XX will transmit all available information (e.g., previous environmental assessments, geotechnical studies, historic data, topographic and property surveys) to assist the Contractor in evaluating the environmental impact of the proposed action on and adjacent to the designated property.