

EVALUATION OF ENERGY SUPPLY OPTIONS FOR AUSTIN ENERGY'S LONG TERM ENERGY PLAN

SCOPE OF WORK

1. PURPOSE

The City of Austin Electric Utility, dba Austin Energy (AE), seeks Proposals in response to this Request for Proposal (RFP) from consulting firms qualified and experienced in the areas of evaluating, developing and/or assessing energy supply options for utilities. These analyses are intended to assist AE in evaluating and/or documenting all pertinent aspects of energy supply options and CO2 reduction strategies to be considered for inclusion into Austin Energy's Long Term Energy Plan. The analyses may include but are not limited to: project specific economic analysis, enterprise wide economic implications, revenue requirements, environmental assessment, risk assessments, economic considerations, technology assessments, and/or technical assessments.

2. BACKGROUND

Austin Energy is a municipal electric utility owned and operated by the City of Austin, Texas engaged in the generation, transmission and distribution of electricity to over 380,000 residential, commercial and industrial customers in Travis and Williamson Counties, Texas.

Austin Energy owns and operates a diverse energy supply portfolio consisting of contract supplies for renewable energy along with natural gas, coal and nuclear-fueled generation.

In 2007, the City of Austin established a climate protection plan. This plan calls for 30% of the utility's energy to be derived from renewable energy sources by 2020 which is to include 100 MW of solar generation. Additionally, this plan calls for a cap and a plan for reducing CO2 emissions.

Austin Energy projects the need for additional generation within the next 10 years. In order to ensure appropriate energy availability for its customers, Austin Energy will conduct a deliberative public involvement process. This process may include town hall meetings, workshops, focus groups, surveys, Internet activities, or similar venues and opportunities for input.

Austin Energy intends to provide information to its customers and other community stakeholder participants in order to engage them in a discussion regarding energy supply options and to collect their views on a long term energy plan.

**CITY OF AUSTIN
PURCHASING OFFICE
SCOPE OF WORK (RFP)
SOLICITATION NUMBER: RFPSLC0018**

Austin Energy recently leased land from the State of Texas General Land Office as a potential site for a solar facility. The site is located in Reese County Texas which may be suitable for up to 30 MW of generation. In addition, by virtue of its participation in Units 1 & 2 of the South Texas Project, a nuclear power plant in Matagorda County, Texas, Austin Energy has the option to participate in the proposed addition of Units 3 & 4. Austin Energy's initial evaluation indicated that the project developer had not yet developed the project in sufficient detail for Austin Energy to make a definitive decision.

Additional background information on Austin Energy may be found on the following websites:

General information:

www.Austinenergy.com

Power Plants:

<http://austinenergy.com/About%20Us/Company%20Profile/powerPlants.htm>

Budget Presentation:

http://www.ci.austin.tx.us/budget/08-09/downloads/20080507_may_7_enterprise_doc.pdf

3. **SCOPE OF WORK**

A. **Title of Program**

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LONG TERM ENERGY PLAN**

B. **Objective**

To provide technical and financial evaluations and assessments of the full spectrum of energy supply options on an as needed basis. The required expertise is broken down into four broad categories:

- (a) Traditional Power Generation - which may include any and all aspects of fossil-fired generation resources.
- (b) Renewable Energy and Alternative Power Supply - which may include any and all aspects of generation resources that derive energy from sources other than nuclear or fossil fuels.
- (c) Nuclear Power Generation - which may include any and all aspects of power supplied from the South Texas Project or other nuclear facilities.

CITY OF AUSTIN
PURCHASING OFFICE
SCOPE OF WORK (RFP)
SOLICITATION NUMBER: RFPSLC0018

- (d) System Planning and Financial Analysis- which may include any and all aspects of an integrated resource plan as well as project specific economics.

Proposers may propose on one, some, or all of the above categories.

C. **Implementation**

Contractors will be expected to provide technical evaluations, financial evaluations, and sufficient explanation of details that may be technical or financial. Prior to being issued a release to proceed, contractors may be required to provide project plans, schedules, and resumes of proposed key personnel, for each assessment contemplated.

Assessments may include but are not limited to the following:

- a. Conduct one or more site evaluation studies for central solar generation facilities and/or other generation technologies. The site studies should include all issues appropriate for consideration for such a site and may include an evaluation of: wildlife habitat, electrical transmission capability, natural gas availability, water availability, soil conditions, terrain topography, permit requirements, available work force, archeology, community acceptance, and conflicting land uses. Additionally, this task may include technology and financial assessments regarding the size and configuration of facilities that could be located on particular sites.
- b. Evaluating means and methods for reducing CO2 emissions from existing fossil generating facilities. This could include the assessment of utilizing renewable fuels in existing facilities, developing efficiency improvements to existing facilities, expanding existing facilities, and reconfiguring and reusing existing facilities for new and different uses. Such assessments might address such issues as: capital costs, financial performance, unit performance, permitting requirements, fuel availability, and fuel delivery logistics. Some concepts contemplated are: use of bio-diesel as primary fuel for Decker Unit 2, conversion of either Decker Unit 1 or 2 to a combined cycle plant, a new biomass fueled facility, and/or addition of a second gas turbine /HRSG train to the combined cycle unit 5 at the Sand Hill Energy Center.
- c. Developing and/or evaluating means, methods, and alternatives for reducing Austin Energy's overall CO2 footprint. This may include but is not limited to purchasing offsets and alternative generation dispatch strategies.

CITY OF AUSTIN
PURCHASING OFFICE
SCOPE OF WORK (RFP)
SOLICITATION NUMBER: RFPSLC0018

- d. Evaluating the various technical and financial aspects of new generation facilities which could include traditional generation as well as non-traditional, e.g. the replacement of some generation located at Decker with a new combined cycle unit and a central solar generation facility. Such assessments might address such issues as: capital costs, financial performance, unit performance (heat rate, capacity, etc), operating characteristics, probable dispatch profiles, permitting requirements, fuel availability, fuel delivery logistics, required modifications to existing units, and plant configurations.
- e. Developing reports and presentations on various generation technologies in support of Austin Energy's public participation process. Responding to issues and requests for information arising from Austin Energy's public participation process and assisting with or making public presentations as needed at community meetings, council meetings, and other forums which may be require Contractor activities.
- f. Providing technical and financial expertise support associated with the planned expansion of the South Texas Nuclear Project. This may include but is not limited to evaluating proposals presented by project developers, further evaluation of common facilities valuation, and/or updating the analysis previously performed which considered Austin Energy's participation in the proposed Units 3 & 4.
- g. Evaluating the technical and financial aspects of power purchase agreements, purchase of an equity position in power projects that are under development, purchase of existing generation assets, construction of a new asset, and / or any other options that may be considered.
- h. Providing financial analyses of project specific economics, as well as enterprise wide analysis over a wide range of future economic scenarios and possibilities. The analyses may include but are not limited to unit dispatch modeling, CO2 emission estimates, projection of rate impact, revenue requirements, an assessment of how various generation assets will perform in the ERCOT Nodal market, and an assessment of financial risks / probabilities associated with various options.

It should be noted that detailed engineering designs and specifications that would be required for physical installations will **not** be performed under these contracts.

For each task for which a work release is issued, the consultant shall provide the following as a minimum:

**CITY OF AUSTIN
PURCHASING OFFICE
SCOPE OF WORK (RFP)
SOLICITATION NUMBER: RFPSLC0018**

1. Prior to beginning detailed work on the assigned task, a detailed schedule shall be submitted and approved by Austin Energy.
2. If a report is part of the assigned task, prior to beginning detailed work on the assigned task a detailed report outline and table of contents shall be submitted and approved by Austin Energy. Required reports shall be to a level of detail and in a format that is acceptable to Austin Energy.
3. Reports, presentations and/or other deliverables required as part of an assigned task shall be detailed in the Scope of Work. At a minimum, all deliverables must be submitted in an electronic format that is acceptable to Austin Energy.

4. CONFIDENTIALITY AGREEMENT

Upon nomination of contract award and prior to commencement of the work, Austin Energy will require the selected Proposer(s) to execute a Confidentiality Agreement due to competitive business and technical information that may be provided by Austin Energy to the Proposer(s).

Proposers shall identify areas of possible conflicts of interest in their proposals and identify possible conflict of interest that may arise during the term of the anticipated contract. At a minimum, conflicts of interest to be identified include but are not limited to, all those described in applicable professional guidelines and/or statutes. Conflicts of interest may disqualify a firm or its subcontractor from a particular assessment but not disqualify the firm or subcontractor from other assessments or efforts. If, at any time during the course of the contract, conflicts of interest arise, then Contractor shall notify AE immediately in writing of such conflicts.

5. PROGRESS REPORTS

The Contractor shall submit monthly Progress Reports in a form and format agreed upon by both parties and due no later than the seventh (7th) business day of the month. The report shall summarize work accomplished by Contractor for the previous month and shall include a contract summary outlining the Contractor's to-date spending and remaining balance. The report shall also describe any significant achievements and concerns which have potential effect on schedule or costs to the project, and recommendations for improvement that should be taken in order to bring tasks or project back on track. Reports shall only be generated for months when work (hours billed) was accomplished.

**CITY OF AUSTIN
PURCHASING OFFICE
SCOPE OF WORK (RFP)
SOLICITATION NUMBER: RFPSLC0018**

Reports shall be specific to each assessment. The Reports shall be sufficiently detailed to assure that directions being pursued are in compliance with AE direction. Additional information may be required by AE.