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SCOPE OF SERVICES FOR AN INDEPENDENT REVIEW CONSULTATION ON OPTIONS FOR MEETING THE LONG TERM ELECTRICAL SUPPLY NEEDS OF THE PROPOSED LONG TERM ELECTRICAL SUPPLY PLAN

FOR THE GAINESVILLE COMMUNITY

BACKGROUND

Gainesville Regional Utilities (GRU) is a municipal electric, natural gas, water, wastewater and telecommunications utility owned and operated by the City of Gainesville Florida. GRU provides retail utility services to both incorporated and unincorporated areas of the Gainesville Urban Area, as well as retail gas services to the adjacent City of Alachua. GRU provides wholesale electric power to a contiguous portion of the Gainesville urban area as well as to the City of Alachua. Table 1 below summarizes the number of electrical customers and electrical sales to the major customer groups served by GRU. The electrical system is self generating with a portfolio of steam, combustion turbine, and combined cycle units using coal, natural gas, oil, and nuclear fuels. Details concerning GRU's customer base, electric generating facilities, fuel supplies, and long range plans may be found on www.GRU.com, under "future power needs". Of particular relevance to this Scope of Services are the documents to be found under "future power needs index of articles" on this web site entitled:

- 1. Alternatives for Meeting Gainesville's Electrical Requirements Through 2022:
- Planning Study of the Effects of Gainesville's Long Term Electrical Energy Supply Plans on Ambient Air Quality and Greenhouse gas Emissions;
- Staff Response to Long Term Electrical Supply Plan Questions, Issues, and Recommendations;
- 4. Gainesville Regional Utilities 2005 Ten Year Site Plan Filed with the Florida Public Service Commission.

<u>Table 1</u> <u>GRU Electric System Sales and Customers¹</u>

Forecasts of load and energy and the planned retirement schedule of older generating units have lead staff to conclude the need for additional baseload

electrical capacity by 2011. GRU staff, working with a number of environmental and engineering consultants, and after considerable public input from workshops and meetings, has developed an integrated resource plan to meet Gainesville's needs through 2023. The staff's planning objective was to minimize long term revenue requirements while balancing the use of: demand side management, renewable energy and fossil fuels with community interests in environmental protection, affordability, local control and concern over climate change. The proposed plan includes the following inter-related elements:

- 1. Meeting an additional 10% of electrical demand through energy conservation and renewable energy;
- 2. A Greenhouse Gas fund to promote local reductions of greenhouse gases;
- 3. Additional ambient air quality monitoring;
- 4. Retrofitting GRU's existing coal fired power plant with additional emission controls:
- Additional solid fuel generation capacity able to use a wide range of fuels, including biomass, coal, and petroleum coke, while reducing overall levels of regulated emissions.

Staff based its economic and environmental studies on a nominal 220 net MW circulating fluidized bed plant design, able to utilize up to 20% generating up to 30 MW of capacity from forest waste products, and able to utilize up to 50% petroleum coke. Staff is open to using a higher percentage of biomass, but is concerned about the sustainability of supply and fuel cost impacts of committing to a greater use of biomass at this time. Staff has requested authorization to develop a conceptual design for this facility as a 'self build" option. If authorized, staff intends to solicit proposals from the power market for evaluation against this "self build" option.

Customer Type	<u>Customers</u>	Energy (MW/Yr)	% Energy
Retail Residential	78,219	972.024	40 70/
Non-Residential		872,934	43.7%
	9,388	942,039	47.2%
Street & Outdoor Lighting		<u>25,177</u>	1.2%
Total Retail	<u>87,607</u>	<u>1,840,150</u>	<u>92.1%</u>
<u>Firm Wholesale</u>			
<u>Alachua</u>		<u>95,894</u>	4.8%
<u>Clay (SEC)</u>		61,239	3.1%
<u>Total Wholesale</u>		157,133	7.9%
Total System		1,997,283	100.0%

^{1.} Fiscal Year 2005 Projections with Actual-to-Date through March

Gainesville's economy is dominated by service sector employment in the educational and medical industries, with associated retail support services. As a result, the community has a substantial portion of low income households. Table 2 below summarizes some of Gainesville's socio-economic characteristics.

<u>Table 2</u> Economic/Demographic Characteristics¹

<u>Parameter</u> Housing	Alachua County	State of Florida
Owner Occupied Units Renter Occupied Units	<u>54.9%</u> <u>45.1%</u>	70.1% 29.9%
Economics Median Household Income Families Below Poverty Level Individuals Below Poverty Level	\$31,426 12.2% 22.8%	\$38,819 9.0% 12.5%

1. Source: U.S. Census 2000

Forecasts of electrical load and energy, the planned retirement schedule for older generating units, and integrated resource planning studies indicate the need additional base load electrical generation capacity by 2011. To date, planning studies have been based on balancing on the following fundamental planning objectives and assumptions:

- 1. Meet Gainesville's needs as forecasted through 2023.
- Minimize long term electrical revenue requirements.
- Assure reliable and adequate supplies with a minimum of a 15% capacity reserve margin.
- 4. With the exception of information and low-income assistance programs, demand side management and energy efficiency programs should meet the rate impact measure test with a benefit to cost ratio of at least 1.0.
- Reduce emissions of regulated air pollutants.
- 7. Minimize the consumption of potable water.
- Reduce the carbon intensity of electrical production through a combination of generation efficiency improvements, the use of renewable sources of energy, and carbon offsets.
- 9. Nuclear capacity would not be available in the planning horizon
- 10. Municipal solid waste combustion would not be acceptable to the community.
- 11. Initially it was assumed that the Deerhaven power plant site would be available for additional generation capacity that would be either: 1) solely Page 3 of 10

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owned by GRU or 2) a facility jointly owned with other utilities. In early 2004 the City Commission voted to no longer pursue a jointly owned unit

at the Deerhaven plant site.

12. Initially it was assumed that one option for obtaining additional generation capacity was to participate in a facility jointly owned with other utilities located at some distance from the GRU service territory. In early 2004 the City Commission voted to no longer pursue ownership of facilities at a site other than Deerhaven.

- 13. Evaluate commercially available technologies for producing electricity, including technologies based on fossil fuel as well as renewable energy.
- 14. Evaluate commercially available technologies for demand side management and consumer energy efficiency.
- 15. The most abundant, affordable, and benign supplies of renewable energy in the north central Florida region are forest waste products (biomass) and thermal solar water heating.
- 16. Any recommended plan had to be robust under a wide range of fuel price and load growth scenarios.

The long term plan developed under these assumptions is summarized in Appendix A.

THE DESIRE FOR AN INDEPENDENT REVIEW CONSULTATION

The proposed long term energy plan represents a major financial commitment by the community, and has generated a number of concerns and questions from members of the local community. These concerns and questions address a wide range of topics that may be summarized as:

- 1. The potential for demand side management and energy conservation efficiency to offset the size of the proposed increment of new generation included in the proposed plan;
- 2. The potential for greater uses of renewable energy than the commitments included in the proposed plan;
- 3. More comprehensive consideration of environmental externalities;
- 4. Concerns that continued and increased use of coal is detrimental to human health in Alachua County:
- 5. The potential for actual Carbon Dioxide gas reductions in lieu of the greenhouse gas intensity reductions included in the proposed plan;
- 6. Desire to incrementalize investment to hedge financial risk-
- 6. Exhibit 1 lists some of the questions; and comments received in more detail.

OBJECTIVES FOR AN INDEPENDENT REVIEW

Before authorizing staff to proceed with a conceptual design for additional solid fuel capacity, the Gainesville City Commission wishes to receive an independent review of the staff proposed long term energy plan. The purpose of the review is twofold, as follows.

- 1. Review the models, tools, range of alternatives and data used to develop the proposed long term electrical energy plan against commonly recognized prudent utility practices; and
- Affordability.
- 2. Identify environmental, health, economic development or other benefits that might be obtained by modifying or relaxing the criteria used to develop the long term electrical energy plan range, leading to alternative methods to better meet the future electrical needs of the community.

QUALIFIED REVIEWERS

Qualified reviewers:

OBJECTIVES FOR AN INDEPENDENT CONSULTATION

- Must have professional qualifications in electrical power production, utility planning or regulation;
- Must not have fiduciary personal or professional interest in any technology or a specific set of technologies or services that might create a bias affecting the credibility of an independent review
- 3. May include individuals, a corporation, or a consortium of individuals assembled for the purposes of conducting the independent review;
- Must not be related to City of Gainesville staff, elected officials, or members of citizen advisory committees; and

Must not have provided services or received payment as part of the development of the proposed long term electrical supply plan. The Gainesville City Commission wishes to receive an independent consultation to be sure that the widest range of alternatives and options possible has been considered before selecting a long term energy plan. The purpose of the consultation is twofold, as follows.

1. Identify environmental, health, local economic development or other benefits that might be obtained by modifying the planning objectives or relaxing the economic criteria used to develop the long term electrical energy plan, which would lead to additional options to better meet the future electrical needs of the community; and

PROJECT SCHEDULE AND DELIVERABLES

The selected reviewers shall prepare a written consensus report summarizing their review and the conclusions reached, together with supporting documentation. Individual reviewers must constrain their contribution to the areas in which they have demonstrated expertise or professional qualifications.

2. Review the models, tools, range of alternatives and data used against commonly recognized prudent utility practices.

Exhibit 1 contains a list of documents and materials to be considered as part of the consultation, which will be provided prior to the consultant's notice to proceed. (Note: a draft of Exhibit 1 is attached- sometimes referred to as "the box" of background materials)

A written draft of the independent review shall be completed within a period of 120 calendar days from the issuance of a notice to proceed from the City of Gainesville. The draft will be provided to GRU staff for their review and comment on matters of fact. GRU's comments on the draft report will be provided in writing within 30 calendar days of receiving the draft report. The reviewers will then prepare their final report in consideration of these comments and submit it to in writing the City Commission within 30 calendar days of receiving GRU's written comments.

QUALIFIED CONSULTANTS

Qualified consultants:

- Must have qualifications in electrical power production, electric systems planning or related industry regulation, environmental regulation, demand side management, energy efficiency planning, or specialized knowledge and experience related to emerging trends in fuel price and availability, as well as state and federal legislative and regulatory trends related to the environment and energy policy.
- 2. Must not have financial, personal or professional interest in any technology or set of services that might create a bias affecting the credibility of an independent consultation
- May include individuals, a corporation, or a consortium of individuals or a consortium of business entities assembled for the purposes of conducting the independent consultation;
- Must not be City of Gainesville staff, elected officials, members of City of Gainesville's citizen advisory committees or their related family members;

5 Must not have provided services or received payment as part of the development of the proposed long term electrical supply plan and must not currently be under contract to the City of Gainesville.

PROJECT SCHEDULE AND DELIVERABLES

The selected consultants shall prepare a written consensus report summarizing their analysis and the conclusions reached, together with supporting documentation. A written draft of the report shall be completed within a period of 120 calendar days from the issuance of a notice to proceed from the City of Gainesville. The draft will be provided to utility staff for their review and comment on matters of fact. Staff's comments on the draft report will be provided to the consultants in writing within 30 calendar days of receiving the draft report. The consultants will then prepare their final report in consideration of these comments and submit it in written and electronic format to the City Commission within 30 calendar days of receiving GRU's written comments.

SUBMITTAL REQUIREMENTS

The minimum contents of a submittal for any candidate to be considered for selection under this Request for Proposals are:

- 1. A resume of professional qualifications.
- 2. A listing of previous projects that would indicate the candidates' suitability for this Scope of Services, together with references for individuals familiar with the candidate's performance related to these projects.
- 3. A listing of Provide a cost estimate including all related fees and expenses required for the candidate(s) to provide the proposed services.
- 4. A proposed methodology for conducting the independent review; consultation;
- 5. The time available for performing the independent review consultation in the time allotted for the project schedule.

SELECTION

The City Commission may select up to <u>four reviewersfive participants</u>, a <u>single</u> consortium or consulting group, or any combination thereof.

SUNSHINE LAW COMPLIANCE

Any discussions or deliberations, whether formal or casual, of two or more reviewers consultants performing this Independent Reviewindependent consultation on matters upon which foreseeable action will be taken by the City Commission are subject to Florida's Government in the Sunshine Law (the "Sunshine Law"). The required reasonable notice will enable the media and the general public to attend all discussions by the reviewers consultants. The Public has the right to attend but public participation is discretionary under the Sunshine Law in this set of circumstances.

ACCESS TO STAFF RESOURCES

The <u>reviewers_consultants</u>, acting jointly, may interview GRU staff and request additional data or analyses from GRU. GRU will provide a liaison to the <u>reviewers_consultants</u> to facilitate responding to these requests.

PAYMENT

Terms of payment related to hourly fees, expenses, and supporting staff for Reviewers will be contained in individual agreements with each reviewer, consultant and/or consortium. Payment will be made upon submittal of monthly invoices to the designated purchasing agent.

Payment will be made pursuant to a contractual agreement to be entered into with the Consultant upon submittal of monthly invoices to Accounts Payable.

APPENDIX A

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forest waste products, and able to utilize up to 50% petroleum coke. Cooling water would be supplied with reclaimed water from the utilities wastewater system. Staff is open to using a higher percentage of biomass, but is concerned about the sustainability of supply and fuel cost impacts of committing to a greater use of biomass at this time. Staff has requested authorization to develop a conceptual design for this facility as a 'self build" option. If authorized, staff intends to solicit proposals from the power market for evaluation against this "self build" option.

Exhibit 1

Documentation that has been provided to the City Commission will be made available to the consultants. The following list is an example of the type of documents that will be provided. All documents will be sorted and indexed.

- 1. Letters, e-mails and handouts that were presented to the City Commission. Examples:
 - May 25, 2005 e-mail from Commissioner Craig Lowe re: Points of inquiry for independent review of Gainesville energy policy (points presented to the Commission on May 12, 2005).
 - Letter to the Commission from Commissioner Jack Donovan presented June 14, 2005.
 - David Harlos handout from February 9, 2004 City Commission Meeting
 - December 22, 2004 letter from Bill and Rae Marie Gilbert
 - February 8, 2004 e-mail from Ceasar Gomez
- 2. Presentations from, staff, consultants, outside agencies and citizens. Examples:
 - Preliminary Integrated Resource Plan to Meet Gainesville's <u>Electrical Needs Through 2022</u> (Gainesville Regional Utilities, December 15, 2003).
 - <u>New Air Quality Regulations</u> (Gainesville Regional Utilities, April 25, 2005).
 - Conservation and Climate Change (Dian Deevey, April 19, 2004)
 - A Review of Cost-Benefit Tests for Energy Conservation, <u>Efficiency</u>, and <u>Demand-side Management</u> (Paul M. Sotkiewicz, Director of Energy Studies, Public Utility Research Center, University of Florida, April 19, 2004).
- Reports and studies from staff, consultants, outside agencies and citizens. Examples:
 - Alternatives For Meeting Gainesville's Electrical Requirements Through 2022 (Gainesville Regional Utilities, December 2003).
 - Gainesville Regional Utilities Air Quality Impact Study (Black & Veatch, February 2004).
 - <u>Technical Review of Gainesville Regional Utilities Integrated</u>
 <u>Resource Plan</u> (Alachua County Environmental Protection
 Department, November 15, 2004).
- 4. City Commission Meeting Minutes related to Gainesville's Future Energy Needs.