

City of Gainesville

*City Hall
200 East University Avenue
Gainesville, Florida 32601*



Meeting Agenda

March 07, 2005

6:00 PM

City Commission Special Meeting

City Hall Auditorium

City Commission

***Mayor Pegeen Hanrahan (At Large)
Mayor-Commissioner Pro Tem Tony Domenech (District 3)
Commissioner Warren Nielsen (At Large)
Commissioner Rick Bryant (At Large)
Commissioner Chuck Chestnut (District 1)
Commissioner Ed Braddy (District 2)
Commissioner Craig Lowe (District 4)***

Persons with disabilities who require assistance to participate in this meeting are requested to notify the Equal Opportunity Department at 334-5051 or call the TDD phone line at 334-2069 at least two business days in advance.

ADOPTION OF THE AGENDA

AGENDA STATEMENT

"Citizens are encouraged to participate in City of Gainesville meetings. In general, speakers will be limited to 3 (three) minutes per agenda item. Additional time may be granted by the Mayor or by the City Commission as directed. The City of Gainesville encourages civility in public discourse and requests that speakers limit their comments to specific motions and direct their comments to the Chair. Citizens are encouraged to provide comments in writing to the Clerk of the Commission before meetings and/or during meetings for inclusion into the public record. Citizens may also provide input to individual commissioners via office visits, phone calls, letters and e-Mail, that will become public record. (In some instances, i.e., Quasi-Judicial Hearings, these particular contacts may be prohibited. Persons with disabilities who require assistance to participate in this meeting are requested to notify the Equal Department at 334-5051 or call the TDD phone line at 334-2069 at least two business days in advance.)"

ROLL CALL

GENERAL MANAGER FOR UTILITIES

040841 Long Term Energy Supply Plan (B)

Explanation: Staff is proposing a plan for Gainesville's long term energy supply needs which includes: a) the most aggressive energy conservation goal of any electric utility in Florida; b) voluntary and substantial reductions of regulated air emissions; c) significant funding to promote the local reduction of greenhouse gases; d) additional local jobs; and e) affordable and reliable electrical supplies for our community. This plan is the result of a community process that started in September 2003 and is the result of substantial public involvement.

The proposed renewable energy and conservation goal is the most aggressive of any utility in Florida and compares favorably to other nationally recognized renewable energy and conservation leadership communities. The ability to utilize biomass in a cost-effective manner makes the proposed goal feasible. The proposed "Greenhouse Gas Fund" widens the range of potential carbon reduction projects to include transportation, manufacturing, and agricultural sectors of our local economy.

Expanding our ability to use solid fuels such as coal and petroleum coke is essential for making the plan affordable. Fortunately, technology has improved to allow coal and petroleum coke to be used to generate electricity with substantial reductions of regulated air emissions, even with up to twice the solid fuel capacity.

Alachua County has good air quality, and the City's coal-fired generation facilities at Deerhaven are not adversely affecting our community's health or quality of life. Nonetheless, the proposed plan voluntarily includes additional emission controls for existing facilities, taking advantage of fuel and other cost

savings to allow additional emission controls to be affordable at this time.

Studies performed to date indicate that additional capacity in the form of a 220 net megawatt (MW) circulating fluidized bed (CFB) unit could be a good fit with Gainesville's needs. CFB is a proven, clean technology that would allow for the cost-effective use of biomass and excellent fuel mix flexibility. If the final plan were to include a unit of this size, studies indicate that substantial net reductions in air emissions would be obtained. These include a 60% net reduction in sulfur dioxide emissions, a 63% net reduction of NOx emissions, a 70% net reduction of mercury emissions, a net reduction of fine particulates (PM2.5), and a net reduction of total particulates (PM10) in excess of 700 tons per year when reduced emissions from open burning of waste wood are taken into account.

Staff intends to follow a process for the acquisition of new generation capacity that is similar to the process that investor owned utilities in Florida are required to use. The elements of the proposed plan recommended above will be used to develop a conceptual design based on detailed engineering analysis of technologies, fuel mix, and unit capacities. Staff will then solicit competitive proposals from the open market to determine whether other independent market entities can propose a plan that will better meet the functional requirements of the conceptual design, either more cost-effectively or otherwise.

Once approval of the proposed plan's conceptual elements is obtained, staff will issue RFP's for engineering and technical consultants. Staff's recommendations and proposed budget for developing the conceptual design will be presented to the Commission for approval before proceeding.

Fiscal Note: The total estimated cost of the proposed project is \$540,000,000 including capitalized interest and escalation during construction. Under base case assumptions, compared to the lowest cost alternative plan that does not include solid fuel, the proposed plan has the potential of a net savings to the community of \$454,000,000 (npv) with 16% lower electricity prices. Revenues from the excess capacity expected to be available for a few years following construction are not included in these estimates.

RECOMMENDATION

The City Commission approve the following five inter-related elements of a long term plan to meet Gainesville's future electrical supply in order to allow staff to develop conceptual designs, as follows: 1) Meet an additional 10% of Gainesville's electrical energy requirements from renewable energy and conservation by 2012 over and above the 5% achieved to date; 2) Institute the proposed Greenhouse Gas Fund to support local projects to reduce carbon dioxide, including a technical advisory committee reporting to the City Commission; 3) Modify existing facilities at the Deerhaven plant site to minimize the emission of SO2, NOx, and Particulates and to meet the Maximum Available Control Technology (MACT) standards for mercury; 4) Add air quality monitoring to better establish baseline ambient air quality

conditions related to power generation; 5) Add base load generation capacity designed to: i. Meet Best Available Control Technology (BACT) for regulated pollutants and MACT standards for mercury; ii. Utilize a mix of relatively abundant solid fuels including coal, petroleum coke, and the equivalent of at least 30 MW of biomass in order to meet the goal in item 1 above; iii. Produce electricity at a cost expected to be competitive in the retail and wholesale market; iv. Result in a net improvement of ambient air quality in combination with item 3 above; v. Maintain adequate capacity reserve margins; vi. Minimize the effects on surface and ground water supplies.

Legislative History

1/10/05 City Commission Approved as Recommended (6 - 0 - 1 Absent)
1/31/05 City Commission Continued

ADJOURNMENT