



Legislation Text

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Kelly Repowering Project Approval (B)

On November 30, 1998 staff gave the Commission a presentation on a proposal to upgrade Kelly #8 from its current configuration as a conventional gas/oil fired boiler and steam turbine generating unit to a modern high efficiency low emissions gas fired combined cycle generating plant by repowering Kelly #8 with a combustion turbine and a heat recovery steam generator. At that meeting the Commission authorized GEAC to conduct a series of community meetings to discuss the energy related aspects of the proposed project and make a report to the Commission. Contingent on GEAC's report to the commission being supportive of the project, staff is requesting project approval at this time.

With approval of item three (3) recommended, staff will be able to execute a contract with an engineering firm to complete project design and engineering work. The selection of the engineering firm was accomplished by using the list of qualified firms from the Deerhaven Combustion Turbine #3 (DHCT3) Project and inviting those firms to submit Qualifications and Technical Proposals. Four responded and were ranked for this project. A listing of the ranked firms is attached.

Approval of item four (4) recommended above will allow staff to negotiate with General Electric (GE) and execute a contract for the purchase of the 7EA combustion turbine. This turbine has been chosen because it provides the best thermodynamic fit for the repowering and we have three years of operation and maintenance with a similar machine (DHCT3). The combustion turbine has the longest lead time of any item required for this project. Production capacity is very limited to build these machines and the demand for combustion turbines is growing rapidly. This makes it imperative that staff be able to finalize this order with GE to assure our place in GE's production line.

Staff anticipates bringing other contracts for major components and construction as they are developed through our normal purchasing procedures. Staff is negotiating a scope of work and a contract with Dover, Kohl and Partners to conduct the public design charrette for architectural treatment and integration of the site with other Depot Avenue re-development initiatives. The charrette is tentatively scheduled for late February. Staff anticipates presenting the results of the charrette to the commission in April.

With the approval of the project, staff will initiate activities to acquire the various permits required for construction and operation of this project. Staff plans to take the project to the City's First Step meeting in January to begin the development review process. The results of the design charrette mentioned above will be incorporated into the site plan development that will occur in the April through June time frame. Staff plans to apply for site plan approval in July. We expect the final site plan will be presented to the City Commission for approval in October 1999.

Staff will also initiate with the Florida Department of Environmental Protection (FDEP) the air and water permitting required for the project. By the end of January 1999, staff should file for an amendment to the Title IV (acid rain) Operating Permit for the Kelly plant. This permit has a twenty-four month (24) lead-time and must be filed as soon as possible to allow operation of the plant at our projected completion date of January 2001.

During February, staff will initiate air source construction permitting activities and plan to file applications with FDEP no later than May 1999. During this same time frame we will initiate the process and file to amend the Title V Air Operating Permit for the plant. Later in the summer we will file for a minor modification to the National Pollutant Discharge Elimination System (NPDES) permit. Staff expects approval of these permits in the fall of 1999.

In summary, with commission approval of the project, staff anticipates completing all design and specification work, bidding of the project, and permitting during the next eleven months with construction beginning in January 2000 and a projected start-up date of January 2001. The City Commission, 1) Hear a report from the City of Gainesville Energy Advisory Committee (GEAC) on the results of the two community meetings held to discuss the energy related aspects of the proposed Kelly Repowering Project; 2) Approve the proposed Kelly Repowering Project consisting of the conversion of John R. Kelly Unit #8 (Kelly #8) from its current configuration to a 110MW Combined Cycle unit; 3) (a.) Approve the final ranking of the qualified engineering firms in the given order of preference for the provision of professional services associated with the design, purchase, and installation of equipment for the repowering of Kelly #8, (b.) authorize the General Manager or his designee to initiate contract negotiations in accordance with the Consultant's Competitive Negotiations Act (CCNA), and (c.) authorize the General Manager or his designee, upon successful negotiations, to execute a professional services contract not to exceed \$2,500,000, subject to approval of the City Attorney as to form and legality; 4) Authorize the General Manager or his designee to negotiate and execute a contract with General Electric, as the specified source, to purchase a MS7001EA combustion electric generating turbine with controls, appropriate spare parts and auxiliary equipment for an amount not to exceed \$17,250,000, subject to approval of the City Attorney as to form and legality; 5) Authorize the General Manager or his designee, with the advice of our Financial Advisor, to devise and implement a financial plan to fund this project in the most prudent manner; and 6) Authorize the General Manager or his designee to negotiate and execute a contract with the urban planning firm of Dover, Kohl & Partners, as the specified source, to conduct a design charrette in conjunction with the Kelly Repowering Project for an amount not to exceed \$150,000, subject to approval of the City Attorney as to form and legality.

Staff has determined through the Integrated Resource Planning process that repowering Kelly #8 into a combined cycle unit in 2006 is the least cost alternative to meeting our projected customer load growth. Staff is proposing accelerating the project completion date from 2006 to 2001.

The present value cost of accelerating the project is \$8.2M. Staff estimates the present value of native load fuel cost savings to be \$9.2M with an additional \$5.9M in net revenue from off system sales. These benefits of \$15.1M meet our internal rate of return criteria of 14% on the additional \$8.2M investment. The total budget for this project is \$41.2M.

The best method for financing the project will be discussed with our Financial Advisor with an objective of maximizing our flexibility for power sales, maximizing the use of tax-exempt (least cost) financing while minimizing future constraints from tax-exempt financing private use restrictions. We anticipate, pending discussions with our Financial Advisor, using a mix of tax-exempt financing (possibly tax-exempt commercial paper), system equity, and taxable financing. To the extent that those financing mechanisms require City Commission approval, we will return for such approval.

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