



Legislation Text

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Landfill Gas to Energy Project (B)

Alachua County's Southwest Landfill consistently produces enough landfill gas to generate more than three megawatts of power. However, this renewable energy resource is currently being flared off to the atmosphere in order to meet regulatory requirements.

GRU proposes to install, operate and maintain the equipment necessary to convert this renewable energy resource to electricity. The resulting green energy will be offered to our community through a green-pricing program.

Alachua County has the gas collection network in place to deliver the gas to the existing flare, and with minor modifications, can deliver it to the proposed electrical generation equipment. The County would like to see this gas used in a more environmentally benign manner and gain revenue from their investments in this equipment. Payments for the landfill gas will be based upon payments made in similar projects in Florida.

University of Florida researchers have extensively studied, modeled and modified the Southwest Landfill to operate as a bioreactor, thereby optimizing the production of methane and minimizing the production of corrosive compounds. The work of these researchers has resulted in the ability to optimize gas production in the future and contain/collect landfill gas. This landfill is unique in its ability to capture and maximize the production of landfill gas.

This project will have a useful life of approximately fifteen (15) years. The gas production rate will diminish over time as landfill waste degrades because the landfill is closed. Staff has received input on the design and operation of this project through the GRU Business Development Work Group and from the public through discussions before the Gainesville Energy Advisory Committee.

Florida has few native energy resources available. This project offers a chance to take advantage of a locally abundant renewable energy source and get useful work out of a resource currently being lost to the atmosphere. This project also offers an opportunity to keep within the community some of the money that we spend for fuel. Finally, the green power produced by this project will displace some of the emissions from conventional generation sources. The City Commission hear a presentation from staff on proposed Landfill Gas to Energy Project, approve the Interlocal Agreement with Alachua County, authorize the General Manager for Utilities to negotiate and execute a contract with Florida Power Corporation to move the energy produced from the landfill to the Archer substation where GRU connects to the FPC system, and authorize the General Manager for Utilities to negotiate and execute a contract with an engineering firm to do a detailed engineering study.

The initial capital costs of this project will be \$2,500,000. The on-going operation costs of this project will be approximately \$357,000 in year one and will diminish over time to approximately \$79,000 in year fifteen. The gross revenue from the project will be approximately \$922,000 in year one and will diminish to approximately \$158,000 in year fifteen.

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