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Mr. Steve Smallwood
Florida Department of
Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Re: Environmental Considerations for the
Hardee Power Station BACT Analysis

Dear Mr. Smallwood:

In early 1987, Seminole Electric Cooperative, Inc. initiated a site selection study to locate, evaluate, and recommend areas which were suitable for the construction and operation of a 660 MW combined cycle electric generating facility now known as the Hardee Power Station. Based on other like facilities, both in Florida and other states, it was projected that the facility would burn natural gas and fuel oil and utilize mechanical draft cooling towers. These two siting criteria and other like facilities indicated that approximately 85 acres of land would be necessary for the construction and operation of the plant.

During the early stages of the site selection process, the Florida Public Service Commission recommended that any proposed combined cycle facility should have the capability to operate using coal gas from an on-site coal gasification facility. From a siting criteria standpoint, this recommendation required any site to be near a rail line for coal deliveries, have sufficient land for the gasification equipment and the disposal of waste products from the gasification process and be capable of providing sufficient water for both the plant and gasification process. These requirements increased the minimum size of the site from 85 to 235 acres. But more importantly, the potential use of coal created siting constraints requiring more remote locations associated with coal facilities.

The siting study ultimately selected the phosphate mining area of Polk and Hardee Counties as the preferred siting area for a combined cycle electric generating facility with the capability

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to use coal gas. From an environmental perspective, the Polk/Hardee area has already been impacted from active and past phosphate mining. However, it also possesses an abundant supply of water, has an in-place industrial transportation infrastructure installed to support the mining industry and a local, skilled work force. The area also has vast areas which are unpopulated.

The Hardee Power Station site is an ideal location to construct and operate the proposed facility. It is remote (in the center of an active mining area with the closest residence nearly two miles away), adjacent to an active rail line, has an abundant water supply and in an area with minimal air emission sources. In addition, the Hardee Power Station site also allows for the unique opportunity to combine a phosphate mine and a power plant's requirement for a condenser cooling water system, to reclaim an 800 acre area adjacent to the power plant to a 600 acre, at grade cooling reservoir. In addition to its prime function as a cooling system, the reservoir will provide a habitat for birds, fish, plants, and other species.

While the Hardee Power Station site affords some unique environmental benefits, it represents some major economic drawbacks. Due to its remote location, a 49 mile long, 18 inch diameter natural gas line will have to be constructed. This pipeline will cost approximately 21 million dollars. Fuel oil will be delivered by truck and its distance from the oil terminals of either Port Manatee or Tampa will add to the facilities fuel cost.

Another important point is that a portion of the generation from the Hardee Power Station will be to replace power from one of Seminole's coal fired generators when one is off line due to scheduled and unscheduled maintenance outages. The nitrogen oxide emission rate from one of these coal units at full load would be 275 parts per million as opposed to 65 ppm from the Hardee Power Station without the use of selective catalytic reduction.

In summary, the Hardee Power Station is an ideal location to construct and operate an electric generating plant that meets the intent of the Power Plant Siting Act to provide abundant, low-cost electrical energy while ensuring that location of electrical power plants will produce minimal adverse effects on human health and the environment. The imposition of the Best Available Control Technology (BACT) that does not take the unique environmental considerations of the Hardee Power Station into

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account is neither beneficial to the environment nor the citizens of Florida.

This information supplements the economic analysis provided in our submittal of July 17, 1990, which addressed such areas as energy penalties, additional operation and maintenance costs, etc. associated with selective catalytic reduction as BACT. Should you have any further questions, please call.

Sincerely,



Jerry L. Williams
Director
Environmental

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cc: Mr. Claire Fancy, DER
Mr. Buck Oven, DER
Mr. Barry Andrews, DER