Utility Business & Customer Services 300 S. Adams Street, A-36 Tallahassee, FL 32301

850-891-4YOU (4968)

March 28, 2006

Trina Vielhauer
Chief, Bureau of Air Regulation
Florida Department of Environmental Protection
2600 Blair Stone Road, M.S. 5000
Tallahassee, Florida 32399

Certified Mail No.: 70041160000059423907

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MAK 3 () 2006

BUREAU OF AIR REGULATION

Re:

Request to Perform Supplemental Air Testing Combustion Turbine Unit Nos. HC3 (EU-031) and HC4 (EU-032) Arvah B. Hopkins Electric Generating Station Air Construction Permit No. 0730003-005-AC

Dear Ms. Vielhauer:

It was a pleasure speaking with you on March 15, 2006, regarding oxides of nitrogen (NOx) levels associated with operation of the Arvah B. Hopkins Electric Generating Station Combustion Turbine Unit Nos. HC3 (EU-031) and HC4 (EU-032). In accordance with our telephone conversation, the City of Tallahassee (City) is requesting authorization to perform additional testing for purposes of improving the performance of the above referenced turbines.

As you are aware, the City has been working closely with Deltak, the manufacturer of the Selective Catalytic Reduction (SCR) system, through General Electric, to fine tune the SCR system in an effort to further reduce the levels of NOx emitted.

General Electric has recently submitted a proposal to the City to perform this additional testing (see attached). The testing will result in the addition of four ammonia injection curves to the SCR control system, and add the turbine operation status signals from the turbine control panel. Upon completion, the SCR should be able to choose between the four curves based on such operating factors as the fuel type and whether the Sprint water injection system has been activated.

The on-site testing is scheduled to take place over a period of approximately two weeks. During this two week period, levels of NOx above applicable permitted limits may be experienced for short durations of time. The City will take all reasonable precautions to minimize the duration of this supplemental air testing and associated elevated NOx levels. The City will notify the Florida Department of Environmental Protection (Department) at least seven days in advance of the start of the proposed testing.

An additional two weeks of in-house programming must be completed prior to initiation of the field testing work being proposed. The City has recently released General Electric to begin the in-house programming work. Upon receipt of the Department's concurrence, the City will authorize General Electric to being the proposed field testing work.









Thank you again for your assistance with this matter. Please do not hesitate to contact me at (850) 891-8851, if you have any questions or would like additional information regarding this proposal.

Sincerely,

John K. Powell, P.E.

Attachment

cc: Jeff Koerner, FDEP
Greg DeAngelo, FDEP
Sandra Veazey, FDEP
Rick Bradburn, FDEP
Rob McGarrah, COT
Triveni Singh, COT
Phil Bucci, COT
Karl Bauer, COT
Cyrinda DeMontmollin, COT
Jennette Curtis, COT

GE Energy

RECEIVED CITY OF TALLAHASSEE GE)

Sandra Nickerson

Sr. Project Manager Project Execution C6 MAR 24 AM II: 21

ELECTRIC UNLITTES ()
GAS UTILITIES ()
WATER DOUBLIES ()

GE Energy
Aero Energy
18415 Jacintoport Btvd.
Houston, TX 77015
Tel. 281-864-2712 DC 8*326-2712
Fax 281-864-2116
E:mail:Sandra.nickerson @ge.com

March 22, 2006

Subject: Work Scope for Re-tuning SCR

Dear Mr. McGarrah:

Work Scope

The following details the proposal for improvement for the Hopkins Generating Station Units HC-3 and HC-4.

Deltak proposes to provide additional ammonia injection curves to the SCR control, and add the turbine operation status signals from the turbine control panel. The SCR control system will choose between the various curves based on turbine operating conditions. The ammonia injection at each point on the curve would be programmed based on turbine power level. Ramp rate tuning will take place after the curves are established. This would insure that ammonia injection closely followed the curves and the PID control only "trimmed" the injection level, resulting in faster response to operating changes.

The additional points on the curves will improve SCR response based on turbine operation on gas fuel, liquid fuel with and without enhanced sprint.

Schedule

The in-house reprogramming work can be complete in 2 weeks from notice to proceed.

The fieldwork is based on duration of two weeks from the start of site testing/plotting. We will need two weeks notice before the start of testing to coordinate the site work.

Qualifications:

Because these curves have not been implemented on this type of turbine with this operating design the final impact of these changes cannot be predicted with absolute certainty. But on past projects with a different turbine this method of correction has improved the range of control.

This SCR adjustment also represents a significant departure from Addendum #4 Information date August 20, 2003 and operation below 50% load is not part of the Contract guarantees.

The schedule is based on the site providing all the turbine operations and all other required items to operate at a steady state for all curves plot points within the two-week period from start to finish on both units. Emissions can be expected to exceed permit levels for short durations during the testing and implementation.

Regards,

GE PACKAGED POWER, INC

Sandra J. Nickerson, P.E.

Sr. Project Manager

Cc: Stephanie Barth Mark Hunt Michael Phillips

Attach: NOTICE TO PROPOSERS, Addendum No.4