

Florida Department of  
Environmental Protection

Memorandum

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TO: ~~Clair Fancy~~

THRU: Al Linero *aa Linero 11/2*

FROM: Teresa Heron *TH*

DATE: November 2, 1998

SUBJECT: DEP File No. 0970043-005 AC (PSD-FL-182B)  
Cane Island Unit 1 - NO<sub>x</sub> Compliance Date Extension

Attached is the public notice package including a draft letter modifying the construction permit for KUA Cane Island Unit 1.

This amendment will extend by one year the date by which Unit 1 must comply with the 15 ppm NO<sub>x</sub> limit. This will allow General Electric time to complete and review tests on similar units in Florida and Ohio and to develop cost-effective options for KUA.

Cane Island Unit 1 is a 40 MW simple cycle aero-derivative General Electric LM6000PA. The high firing temperature and compression ratio makes it difficult to reduce NO<sub>x</sub> emissions to 15 ppm. The fact that it is simple cycle and is an intermittent duty unit makes conventional SCR unavailable and hot SCR expensive. We tried without success to get KUA to officially limit hours of operation to reflect the actual use of the unit, but they cannot agree. This might otherwise have provided justification for a higher value as a peaking unit.

For your information, the 120 MW General Electric combined cycle 7EA unit at Cane Island did meet the 15 ppm limit and typically achieves less than 7 ppm at full load. We will require KUA to present a permanent solution during Certification of Cane Island as part of the construction of Cane Island Unit 3.

I recommend your approval.

AAL/aal

Attachments