



January 21, 2014

Syed Arif
Florida Department of
Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Via Email Notification
syed.arif@dep.state.fl.us

Jeff Koerner
Florida Department of
Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Via Email Notification
jeff.koerner@dep.state.fl.us

**Re: Tampa Electric Company (TEC)
Polk Power Station Unit 1
Sulfuric Acid Plant Gearbox Compressor Project – Request Permit Determination
AIRS #1050233, E.U. #001
Permit # 1050233 – 36 - AV**

Dear Mr. Arif and Mr. Koerner:

We recently spoke on the phone about a project that TEC would like to complete on Polk Power Station's Sulfuric Acid Plant Gearbox Compressor serving as a Unit 1 (EU-001) emission control device. The sulfuric acid plant (EU - 004) compressor runs at or near 100% output to keep the sulfuric acid plant (SAP) pressure profile within design limits. This type of operation is not optimal. Polk Power Station plans to re - engineer the gear box of the compressor to optimize flow control. This will improve control stability for the compressor so it can better accommodate minor process disturbances and fuel variations. Tampa Electric previously received a permit to perform this re - engineering in AC permit 1050233 - 021 - AC, but did not perform the project.

Additionally, as explained on the phone there is a possibility that the flow to the acid plant could increase. An increase in flow would result in fewer emissions from the EU – 001 stack. This decrease in emissions would occur because the sulfuric acid plant is the pollution control device for sulfur and sulfuric acid mist emissions.

TEC is seeking an applicability determination from FDEP to confirm our assessment indicating that a minor construction permit is appropriate.

If you have any questions, please call me at (813) 228-4740.

Sincerely,

(No Electronic Signature Available)

Lyndsey Figler
Engineer I
EHS – Air Programs
Tampa Electric Company

EHS\iy\m\RATA\2014\LMF 166 Sulfuric Acid Plant Gearbox
Compressor Project – Request Permit Determination

**TAMPA ELECTRIC COMPANY
P.O. BOX 111 TAMPA, FLORIDA 33601-0111**

(813) 228-4111