FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

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(Sent by Electronic Mail – Return Receipt Requested)

Mr. Michael Burroughs, Vice President, Power Generation
Gulf Power Company
One Energy Place
Pensacola, Florida 32520-0100

Re: Renewed Title V Air Operation Permit
Proposed Permit No. 0330045-038-AV
Crist Generating Plant

Dear Mr. Burroughs:

One copy of the proposed permit determination for the renewed Title V air operation permit for the Crist Generating Plant is enclosed. This existing facility is located in Escambia County, Florida, north of Pensacola. This letter is only a courtesy to inform you that the draft permit has become a proposed permit.

An electronic version of this determination has been posted on the Division of Air Resource Management's World Wide Web site for the United States Environmental Protection Agency (USEPA) Region 4 office's review. The web site address is (enter proposed permit number to access the files):

http://appprod.dep.state.fl.us/air/emission/apds/default.asp

Pursuant to Section 403.0872(6), Florida Statutes, if no objection to the proposed Title V air operation permit is made by the USEPA within 45 days, the proposed permit will become a final permit no later than 55 days after the date on which the proposed permit was mailed (posted) to USEPA. If USEPA has an objection to the proposed permit, the final permit will not be issued until the permitting authority receives written notice that the objection is resolved or withdrawn.

If you should have any questions, please contact David L. Read, P.E., at 850/717-9075.

Executed in Tallahassee, Florida.

David L. Read, P.E.
2015.02.23
13:29:36 -05'00'

for Jeffery F. Koerner, Program Administrator
Office of Permitting and Compliance
Division of Air Resource Management

JFK/dlr

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Clerk Stamp
FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency clerk, receipt of which is hereby acknowledged.

Lynn Scearce

2015.02.23
13:46:04 -05'00'

Proposed Permit No. 0330045-038-AV

I. PUBLIC NOTICE

The Intent to Issue Air Permit issued to Gulf Power Company for the Crist Generating Plant was clerked on December 18, 2014. The Crist Generating Plant is located in Escambia County, Florida, north of Pensacola. The Public Notice of Intent to Issue Air Permit was published in the Pensacola News Journal on December 23, 2014. The draft Title V air operation permit was available for public inspection at the permitting authority's office in Tallahassee. Proof of publication of the Public Notice of Intent to Issue Air Permit was received on December 29, 2014.

II. PUBLIC COMMENTS

During the 30-day public comment period, comments were received from the Sierra Club (through outside counsel), on behalf of its Florida members, and from the applicant, Gulf Power Company. These comments, and the Department's response to them, are summarized below.

Comments from the Sierra Club

Comments were submitted by the Sierra Club as a 17-page letter dated January 22, 2015, together with an exhibit summarizing dispersion modeling performed by a Sierra Club contractor.
Link to Sierra Comments Link to Sierra Modeling. Two other exhibits were submitted that related to a Title V permit action in Massachusetts. Tom Generating 12-2012 Tom Generating 10-2014

The key comments contained in the letter are condensed, repeated or paraphrased *(in italics)* below and followed by the Department's response.

1. *Sierra Club Comment: The proposed permit must be revised to clarify that the emissions limitations and standards contained therein apply at all times, even during startup, shutdown, and malfunction.*

   Department Response: The draft Title V permit accurately reflects the permit limits and exceptions based on the applicable underlying state and federal rules and previously issued air construction permits. The Department's Rule 62-210.700 (Excess Emissions), F.A.C., is only applicable to emissions standards that result from state-only requirements. Subsection III.A. (Boiler Nos. 1, 2, 3 and 4) specifically states that this state rule cannot vary any requirement of an NSPS, NESHAP or Acid Rain program provision. Note that, once the MATS rule becomes effective, the permittee is required to use clean fuels (e.g., natural gas) during startups and shutdowns, which will further minimize emissions and exceptional periods.

2. *Sierra Club Comment: The proposed permit fails to prevent violations of Florida's prohibition on air pollution (Section 403.161, Florida Statutes) with regard to the plant's sulfur dioxide emissions.*

   Department Response. The focus of the Sierra Club's comment relates to the 1-hour National Air Quality Standard (NAAQS) for sulfur dioxide (SO_2) that was promulgated by EPA in 2010. The draft Title V permit accurately reflects the SO_2 permit limits established in state and federal rules as well as by specific conditions in underlying air construction permits. The Clean Air Act requires the USEPA to establish national ambient air quality standards (NAAQS), such as the new 1-hour SO_2 NAAQS. [1] By itself, a NAAQS does not impose any obligation on individual existing sources. The Clean Air Act also provides that each state determines how best to attain and maintain the NAAQS within their boundaries.[2] Once determined, the measures are incorporated into the State Implementation Plan (SIP), which is approved by the USEPA. The specific measures required to attain and maintain compliance with a NAAQS can be imposed on specific sources via new rules, air construction permits, and/or administrative orders, which are later incorporated into the Title V air operation permit for affected sources.

[1] 42 U.S.C. 7409 - National Primary and Secondary Ambient Air Quality Standards
http://www.gpo.gov/fdsys/pkg/USCODE-2011-title42/pdf/USCODE-2011-title42-chap85-subchapI-partA-sec7409.pdf

[2] 42 U.S.C. 7410 - State Implementation Plans for National Primary and Secondary Ambient Air Quality Standards
http://www.gpo.gov/fdsys/pkg/USCODE-2011-title42/pdf/USCODE-2011-title42-chap85-subchapI-partA-sec7410.pdf

The general provisions of state law cited to in the comments by Sierra Club reflect the Department's general powers and duties and are not meant to enable the Department to impose different SO_2 emission limits in a facility's Title V operating permit. The Title V operating permit program generally does not impose new substantive requirements on a facility but instead is intended to contain all applicable requirements in one document.

The permit contains the applicable allocations related to SO_2 consistent with the Title IV, Acid Rain Program. In addition, the renewal permit requires compliance with the Mercury and Air Toxics Standards (MATS) by April 15, 2016. The MATS will have the further effect of suppressing SO_2 as the facility achieves compliance with the newly applicable hydrogen chloride (HCl) standard. All SIP-applicable requirements have been incorporated into the draft Title V renewal permit. Also with regard to SO_2 emissions, please refer to **Figure 1**, which graphs SO_2 emissions since 2000 from the Crist Plant. Emissions of SO_2 from the Crist facility have decreased markedly since the year 2000. Emissions in 1995 (not shown in the graph) were nearly 100,000 tons and have been reduced by more than 95 percent (%). The reductions were brought about by shifts toward lower-sulfur coal since the 1990s and the installation of a wet scrubber in the 2009-2010 time frame.

With regard to the 1-hour SO_2 NAAQS please refer to **Figure 2**, which is a graph containing the daily maximum hourly ground level SO_2 concentrations measured during the period of January 1, 2008 to September 30, 2014 at the ambient air monitor nearest to the Crist Plant. The SO_2 monitor (AQS monitor ID number 12-033-0004) is approximately 3.1 miles southeast of the plant.

Figure 1. Recent Trends in SO_2 Emissions from the Crist Generating Plant.

Figure 2. Ambient SO_2 Concentration Measurements at the Monitor Nearest to the Crist Plant.

Since the installation of the scrubber at Crist, instances of high SO_2 concentrations at this monitor have been eliminated. One-hour concentrations of SO_2 at this monitor have not exceeded the standard of 75 parts per billion (ppb) since December 14, 2010. The site has been in attainment with the SO_2 NAAQS during the relevant three-year periods (2010-2012, 2011-2013 and 2012-2014). Since December 2010, the highest recorded concentration at the monitor is 68 ppb, on May 6, 2011. This recent history shows that the combination of SO_2 emissions limitations and associated compliance averaging times, control equipment requirements and regulations incorporated into the 2010-2014 Title V permit were sufficient to ensure that the 1-hour SO_2 NAAQS was attained.

3. <u>*Sierra Club Comment:*</u> *The proposed permit must be revised to include adequate reporting requirements for scrubber bypass incidents. … An incident summary in the Plant's quarterly excess emissions report is insufficient; instead, adequate detail as to the duration of the bypass and the actual SO_2 emitted during each incident must be included in the report. This information must also be included on each quarterly SO_2 CEMS report so that the report clearly indicates each and every monitored reading which occurred during Bypass Mode.*

<u>Department Response:</u> Permit Condition **A.58** of the draft Title V permit renewal contains considerable recordkeeping and notification requirements with regard to scrubber bypass incidents:

> <u>Scrubber Bypass Records</u>. For each incident of scrubber bypass operation, the permittee shall record the time the bypass was initiated, the reason for the bypass, the duration of the bypass, the average SO_2 emissions (lb/hour and lb/MMBtu) during the bypass, and the corrective actions taken to return the wet FGD system to service. The permittee shall identify and summarize each incident and duration of scrubber bypass on the quarterly excess emissions report.

The requirements for the scrubber bypass records and reports are very similar to what is being suggested by the commenter. The Department believes that the reporting requirements (frequency and information) in the referenced condition are adequate.

4. Sierra Club Comment: *"The proposed permit must be revised to allow for credible evidence to determine compliance. Crist's proposed permit lacks an affirmative statement that any credible evidence may be used to determine compliance with the permit. It is well-recognized that EPA supports the inclusion of credible evidence language in all Title V permits."*

   Department Response: 40 CFR 51.212, states, "For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in this part, the plan *must not preclude the use*, including the exclusive use, *of any credible evidence* or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed." The draft permit does not preclude the use of any credible evidence to determine compliance or non-compliance with the specific terms and conditions.

Comments from Gulf Power Company

On January 15, 2015 nine minor comments were received by email from the Gulf Power Company. Most of these comments deal with typos, scrivener errors, minor clarifications and corrections to emission unit descriptions. These corrections were made to the permit. There were four more substantial comments that are condensed, repeated or paraphrased *(in italics)* below and followed by the Department's response. Note: RICE refers to reciprocating internal combustion engines.

Section III.A

1. Gulf Power Comment: ***Condition A.70, Subpart UUUUU Requirements*** *– Please clarify the condition by adding that compliance to all MATS standards are based on a 30 day average or quarterly stack testing as outlined in the subpart.*

   Department Response: Part of the referenced condition states that *Compliance with the above emissions limits shall be demonstrated pursuant to one of the available options specified in 40 CFR 63, Subpart UUUUU (see attached Appendix 40 CFR 63, Subpart UUUUU, National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units).* There is no need to change the permit condition to establish compliance methods and averaging time.

2. Gulf Power Comment: ***Condition A.72****, Transmission System Upgrades – Please clarify the condition's duration by adding that monthly transmission upgrade reports shall be required until the MATS extension period ends on April 16, 2016.*

   Department Response: The monthly reports required by this condition are imposed to track the progress of the transmission line upgrades authorized by the Public Service Commission, according to the schedule identified in Specific Condition **A.72.** A reasonable interpretation of this reporting requirement is that it ends following the submission of the last report summarizing the findings of the monthly on-site inspections and the verification that the upgrades are complete, which has a current target completion date of April 15, 2016. No changes to the permit are necessary as a result of this comment.

Section III.D

3. Gulf Power Comment: ***Condition D.4.d****, – Please correct the citation from 40 CFR 60.4205(c) & Table 4 to 40 CFR 60.4205(b), 60.4202(a)(2) and 40 CFR 89.112 and 40 CFR 89.113. Also the draft permit refers to the RICE as a fire pump which is incorrect. It is an emergency generator.*

   Department Response: The corrections will be made to the referenced condition.

4. Gulf Power Comment: ***Condition D.5, CO Limit****, – Please add c. 220 HP John Deere Emergency Generator. Also the RICE has a CO limit of 3.5 g/kw-hr or 2.6 g/hp-hr and the correct citation is 40 CFR 89.112. Also the draft permit refers to the RICE as a fire pump engine. It is an emergency generator.*

   Department Response: The corrections will be made to the referenced condition.

Section IV.

5. As an administrative correction, the Phase II NO_X emissions limits imposed by 40 CFR 76.5 for Group 1 Boilers have been added to the emissions limit tables in Specific Condition **A.2** of the Acid Rain Section. These limits are being added to clarify the applicable emissions limits for calendar years 2018 and 2019, since the multi-state NO_X averaging plan included in this permit only covers calendar years 2015 -2017.

III. CONCLUSION

The permitting authority will issue the proposed permit No. 0330045-038-AV, with the changes noted above to be reviewed by US EPA.