

July 22, 1999

4APT-ARB

Howard L. Rhodes, Director
Air Resources Management Division
Florida Department of Environmental Protection
Mail Station 5500
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

SUBJ: EPA's Review of Proposed Title V Permit
Gulf Power Company
Crist Electric Generating Plant
Permit No. 033045-001-AV

Dear Mr. Rhodes:

The purpose of this letter is to provide comments to the Florida Department of Environmental Protection (DEP) on the proposed title V operating permit for Gulf Power Company - Crist Electric Generating Plant, which was posted on DEP's web site on June 8, 1999. Based on the Environmental Protection Agency's (EPA's) review of the proposed permit and the supporting information for this facility, EPA formally objects, under the authority of Section 505(b) of the Clean Air Act (the Act) and 40 C.F.R. § 70.8(c) (see also Florida Regulation 62-213.450), to the issuance of the title V permit for this facility. The basis of EPA's objection is that the permit does not fully meet the periodic monitoring requirements of 40 C.F.R. § 70.6(a)(3)(i), and has inadequate provisions to address various Acid Rain program requirements.

Section 70.8(c) requires EPA to object to the issuance of a proposed permit in writing within 45 days of receipt of the proposed permit (and all necessary supporting information) if EPA determines that the permit is not in compliance with the applicable requirements under the Act or 40 C.F.R. Part 70. Section 70.8(c)(4) and Section 505(c) of the Act further provide that if the State fails to revise and resubmit a proposed permit within 90 days to satisfy the objection, the authority to issue or deny the permit passes to EPA and EPA will act accordingly. Because the objection issues must be fully addressed within the 90 days, we suggest that the revised permit be submitted in advance in order that any outstanding issues may be addressed prior to the expiration of the 90-day period.

Pursuant to 40 C.F.R. § 70.8(c), this letter and its enclosure contain a detailed explanation of the objection issues and the changes necessary to make the permit consistent with the requirements of 40 C.F.R. Part 70. The enclosure also contains general comments applicable to the permit.

If you have any questions or wish to discuss this further, please contact Mr. Gregg Worley, Chief, Operating Source Section at (404) 562-9141. Should your staff need additional information they may contact Ms. Gracy R. Danois, Florida Title V Contact, at (404) 562-9119, or Ms. Angelia Souder-Blackwell, Associate Regional Counsel, at (404) 562-9527.

Sincerely,

/s/

Winston A. Smith
Director
Air, Pesticides & Toxics
Management Division

Enclosure

cc: Mr. Robert G. Moore
Gulf Power Company

Enclosure

**U.S. EPA Region 4 Objection
Proposed Part 70 Operating Permit
Gulf Power Company
Crist Electric Generating Plant
Permit no. 033045-001-AV**

I. EPA Objection Issues

1. Periodic Monitoring: The permit does not require sufficient periodic monitoring to ensure compliance with the applicable particulate matter limit for units 1-3. Condition A.15 of the permit only requires an annual test, which, according to conditions A.21, A.27, A.28, and A.29, may not even be required since this unit's primary fuel is natural gas (see Objection Issue 2). In most cases, this does not constitute adequate periodic monitoring to ensure continuous compliance with the particulate matter. The permit must require the source to conduct more frequent monitoring or a technical demonstration must be included in the statement of basis explaining why the State has chosen not to require any additional PM testing. The demonstration needs to identify the rationale for basing the compliance certification on data from a test performed once a year.

2. Compliance Testing: The permit is not clear about the frequency of testing that the facility needs to follow for particulate matter (PM) and visible emissions (VE). Condition A.15 states that the source must conduct annual testing for PM and VE. However, conditions A.21, A.27, A.28, and A.29 establish that the facility will conduct testing once a year if fuel oil is burned for more than 400 hours, and no testing is required otherwise. The permit needs to be clear about which one of these conditions the facility must follow to demonstrate compliance with the PM and VE limits. The same comment applies to conditions B.17 and B.26, and C.17 and C.26. Additionally, the permit needs to include the regulatory basis for conditions A.15, B.17 and C.17.

Furthermore, EPA is concerned with the interaction of these conditions. The statement of basis indicates that the source will conduct annual testing for particulate matter for units 4-7. Therefore, we do not understand why the testing waivers are included for these units since they seem not to apply.

3. Appropriate Averaging Times: In order for the emissions standard for particulate matter contained in conditions A.7, B.7, and C.7 to be practicably enforceable, the appropriate averaging time must be specified in the permit. An approach that can be used to address this deficiency is to include general language in the permit to indicate that the averaging times for all specified emission standards are tied to or based on the run time of the test method(s) used for determining compliance.

4. Periodic Monitoring: Conditions B.17 and C.17 of the permit require the source to conduct annual testing for particulate matter. The statement of basis for the permit states that this testing frequency "is justified by the low emission rate documented in previous emissions tests while firing coal" and that the "Department has determined that sources with emissions less than half of the effective standard shall test annually."

While EPA has in the past accepted this approach as adequate periodic monitoring for particulate matter, it has done so only for uncontrolled natural gas and fuel oil fired units. The units addressed in conditions B.17 and C.17 use add-on control equipment to comply with the applicable particulate matter standard. In order to provide reasonable assurance of compliance, the results of an annual stack testing will have to be supplemented with additional monitoring. Furthermore, the results of an annual test alone would not constitute an adequate basis for the annual certification of compliance that the facility will have to submit for these units.

The most common approach to addressing periodic monitoring for particulate emission limits on units with add-on controls is to establish either an opacity or a control device parameter indicator range that would provide evidence of proper control device operation. The primary goal of such monitoring is to provide reasonable assurance of compliance, and one way of achieving this goal is to use opacity data or control device operating parameter data from previous successful compliance tests to identify a range of values that has corresponded to compliance in the past. Operating within the range of values identified in this manner would provide assurance that the control device is operating properly and would serve as the basis for an annual compliance certification. Depending upon the margin of compliance during the tests used to establish the opacity or control device indicator range, going outside the range could represent either a period of time when an exceedance of the applicable standard is likely or it could represent a trigger for initiating corrective action to prevent an exceedance of the standard. In order to avoid any confusion regarding the consequences of going outside the indicator range, the permit must clearly state if doing so is evidence that a standard has been exceeded and must specify whether corrective action must be taken when a source operates outside the established indicator range.

5. Periodic Monitoring: Condition C.7 specifies that particulate matter emissions from unit 6 shall not exceed 1,475 tons per year. Based upon the short term limit for this unit [0.1 pound/million British thermal units (BTUs)], heat input capacity (3,704.8 BTU/hour), and 8,760 hours of operation per year, unit 6 could emit 1,622.7 ton/year of particulate matter even if it is continuously meeting the applicable short-term particulate limit. Since this value exceeds the annual emission limit of 1,475 ton/year, the permit must be revised to include conditions

specifying the procedures that Gulf Power will use to demonstrate compliance with the annual particulate emission limit for unit 6.

6. Periodic Monitoring: Condition C.9 specifies that, when burning solid fuel, sulfur dioxide emissions from unit 6 shall not exceed 87,035 tons per year. Although Condition C.16 indicates that monitoring to assure compliance with this limit will be conducted with the SO₂ continuous emission monitor installed on unit 6, data from the flue gas flow rate monitor installed on this unit is needed in order to convert the data from the SO₂ monitor into an hourly mass emission rate that can be totaled in order to verify compliance with the annual SO₂ emission limit. Therefore, Condition C.16 must be revised to require that both the SO₂ and flue gas flow rate monitors be used to determine SO₂ emission rates on unit 6.
7. Periodic Monitoring: Conditions D.7 and D.8 of the permit require that an annual Method 9 test be conducted for these units. In most cases, this does not constitute adequate periodic monitoring to ensure continuous compliance with the visible emissions standard. The permit must require the source to conduct visible emissions observations on a daily basis (Method 22), and that a Method 9 test be conducted within 24 hours of any abnormal qualitative survey. As an alternative to this approach, a technical demonstration can be included in the statement of basis explaining why the State has chosen not to require any additional visible emissions testing. The demonstration needs to identify the rationale for basing the compliance certification on data from a short-term test performed once a year.
8. Acid Rain: Please note that the Phase II Averaging Plan submitted by the source is an enforceable part of this permit. The Averaging Plan, Phase II NO_x Compliance and Phase II Acid Rain Permit Application should be referenced and attached as enforceable parts of the Title V permit. We note that Phase II permit applications, Phase II NO_x Compliance Plans and the Phase II Averaging Plans submitted by this source are referenced in Section IV, Condition A.1. of the proposed permit and on page 1 of the permit in a section entitled, "Referenced attachments made part of this permit". However, the forms and the referenced dates of these two parts of the permit do not coincide and do not appear to reflect the complete signed forms as submitted by the source. It is important that the specific forms and applications (signed and dated by the designated representative) be attached to the permit as enforceable parts of the permit and that they are completely and accurately referenced.
9. Acid Rain: The language contained in section 70.6(a)(1)(ii), regarding Acid Rain Program requirements in title V is not addressed in the Acid Rain Part of the permit and does not appear to be included in elsewhere in the body of the proposed permit. This condition needs to be added to the proposed title V permit for this source.

II. General Comments

1. Section II, condition 1: Please make sure that Appendix TV-2 reflects the updated version of condition 51, as it is contained in Appendix TV-3.
2. Section II, condition 12: Please correct the address, telephone and fax number for the Air Enforcement Section. All required reports should be sent to the Air Enforcement Section (AES), not the Operating Source Section. The correct telephone and fax numbers for AES are 404/562-9055 and 404/562-9163, respectively. Additionally, please delete the information concerning the submission of Acid Rain information. Region 4 does not have an Acid Rain Section.
3. Statement of Basis: The statement of basis indicates that each emission unit is subject to a particulate matter emissions limit of 0.1 lb/MMBtu, and this limit is effectively equivalent to 0.149 lb/MMBtu due to rounding. This is also stated for conditions of soot blowing, where the particulate matter emission limit of 0.3 lb/MMBtu would be equivalent to 0.349 lb/MMBtu. However, these statements are incorrect. A measured emission rate of 0.149 lb/MMBtu actually rounds to 0.15 lb/MMBtu rather than 0.1 lb/MMBtu, which is in excess of the emission limit, and therefore not allowable.

According to the June 6, 1990 memorandum "Performance Test Calculation Guidelines", issued by William G. Laxton, Director of the Technical Support Division, OAQPS, and John S. Seitz, Director of the Stationary Source Compliance Division, OAQPS, when calculating and reporting emission rates and concentrations in determining compliance with the new source performance standards (NSPS) and national emission standards for hazardous pollutants (NESHAP), as well as state implementation plans (SIP's), all emission standards should be considered to have at least two significant figures (SF's), but no more than three. Therefore, since the 0.1 lb/MMBtu emission limit for particulate matter comes from the Florida state SIP, it should be considered to have two SF's. In this case, the emission limit effectively becomes 0.10 lb/MMBtu. In order to comply with the emission limit of 0.1 lb/MMBtu, the highest allowable measured emission rate (measured to four SF's) is 0.1049 lb/MMBtu. Please correct the statement of basis to reflect the above discussion.

4. Section IV, Acid Rain Part: Please note that the allowances allocated to the Crist Plant units 4,5,6,7, as indicated under Section IV, Condition A.2 of the proposed permit have been changed. This revision was published in the Federal Register on September 28, 1998 (Vol. 63 No. 187, pp 51706-51765). We recommend that the allowances that are indicated for these units be adjusted to reflect the revised allocation.
5. Appendix CP-1: Appendix CP-1, "Alternate Phase II NO_x Compliance Plan" of the proposed permit for the Gulf Power Company - Crist Plant requires that the designated representative of the Crist Plant provide certification that the NO_x averaging plan has been approved by all the other involved permitting authorities

prior to Florida's approval of the plan. The procedure, as indicated in the "Appendix CP-1" of this proposed permit, does not appear to consider future revisions to a previously approved Phase II NO_x Averaging Plan. Each year of a plan, the permittee has the option of submitting a revision to an approved averaging plan by January 1 of the calendar year for which the averaging plan is to become effective. Condition 2 of "Appendix CP-1" specifically addresses the approval of the current Phase II Averaging Plan and does not discuss Florida's approval procedures for revisions to an Phase II NO_x Averaging Plan. Condition 3 of "Appendix CP-1" indicates that should the designated representative fail to submit the required certification under this Appendix then the source would be required to comply to the applicable Phase II NO_x emission limits specified in 40 CFR § 76.5. Please note that 40 CFR § 76.11(b)(3) indicates that when an averaging plan or a revision to an approved averaging plan is not approved, the owner or operator of each unit in the plan shall operate the unit in compliance with the emission limitation that would apply in the absence of an averaging plan or revision to a plan. Therefore, in the case where the permittee has an approved averaging plan but wishes to revise the plan, the approval of the revision is not final until all permitting authorities have approved the revision. Should the revision not be approved, then the permittee is required to comply with the originally approved (assuming it has been approved for multiple years) plan in absence of the revision. Appendix CP-1 should be revised to specify that the conditions contained in the appendix only apply to the particular averaging plan attached to this permit and does not prescribe procedures that should be followed for future revisions to the plan.

Region 4's concern regarding the Rule 62-214.330(3)(b) requiring the designated representatives of a source in a multi-agency Phase II Averaging Plan to certify that every other affected permitting authority has approved the plan prior to the State of Florida's approval was indicated in a letter sent to Mr. Howard Rhodes from Mr. Douglas Neeley on December 9, 1997. It was Region 4's understanding, at that time, that Florida's Rule 62-214.330 was scheduled to be revised to avoid conflicts (such as has been described above) with 40 CFR Part 76. Appendix CP-1 was prepared so that the approval process would not be delayed in the interim. Please provide Region 4 with a schedule indicating when the revision is to occur.