

Gulf Power Company
500 Bayfront Parkway
Post Office Box 1151
Pensacola, FL 32520-1151
Telephone 904 444-6111

Conesq.



the southern electric system

April 14, 1992

FEDERAL EXPRESS

Ms. Karrie-Jo Shell
Environmental Engineer
Permits Section
U.S. Environmental Protection Agency
Region IV
345 Courtland Street, N.E.
Atlanta, GA 30365

Dear Ms. Shell:

Intent to Reissue
NPDES Permit No. FL0002283
Scholz Electric Generating Plant

Thank you for your March 3, 1992 letter forwarding EPA Region IV's preliminary draft of the Intent to Reissue the NPDES permit for Gulf Power Company's (Gulf's) Scholz Electric Generating Plant (Scholz Plant). As we understand your March 3, 1992 letter, EPA intends to proceed to public notice in the near future, at which time Gulf will have an additional opportunity to comment on the NPDES permit conditions and that 40 C.F.R. 124.13 will apply.

Gulf would like to take this opportunity to inform EPA of its initial observations and concerns, and would be pleased to meet with you prior to the public notice regarding the issues addressed in this letter. Gulf's comments at this time are as follows:

Pages I-1 and I-2

o Metals Limitations

Gulf requests that the discharge limitations applicable to metals from outfall 001 be set forth as follows:

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<u>PARAMETER</u>	<u>DISCHARGE LIMITATIONS</u>		<u>MONITORING REQUIREMENTS</u>	
	<u>Daily Average</u>	<u>Daily Maximum</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
<u>Outfall 001:</u>				
Arsenic (mg/l)	N/A	(Note 1)	1/quarter	24 hour comp. (Note 2)
Cadmium (mg/l)	N/A	(Note 1)	1/year	24 hour comp. (Note 2)
Total Chromium (mg/l)	N/A	(Note 1)	1/quarter	24 hour comp. (Note 2)
Total Copper (mg/l)	N/A	(Note 1)	1/quarter	24 hour comp. (Note 2)
Total Iron (mg/l)	N/A	(Note 1)	1/quarter	24 hour comp. (Note 2)
Lead (mg/l)	N/A	(Note 1)	1/quarter	24 hour comp. (Note 2)
Mercury (mg/l)	N/A	(Note 1)	1/quarter	24 hour comp. (Note 2)
Nickel (mg/l)	N/A	(Note 1)	1/year	24 hour comp. (Note 2)
Selenium(mg/l)	N/A	(Note 1)	1/year	24 hour comp. (Note 2)
Zinc (mg/l)	N/A	(Note 1)	1/quarter	24 hour comp. (Note 2)

(Note 1) - The Class III water quality standard set forth in Chapter 17-302.530, F.A.C. (2/13/92) or the value of the intake stream, whichever is greater. If the Outfall 001 composite sample exceeds the limitation, the metal concentration of a minimum of five (5) additional subsamples shall be measured from the original intake and Outfall composites and a "student's t-test" shall be run on these additional subsamples comparing the intake and discharge concentrations; unless the discharge concentration exceeds the intake concentration at the 95% confidence level, the facility shall be in compliance with the limitation.

(Note 2) - 24-hour composites from the intake and Outfall 001 shall be collected simultaneously.

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This change reflects the metals limitations imposed by the State of Florida Department of Environmental Regulation (DER), in Gulf's Crist Plant NPDES permit (FL0002275), pursuant to its March 6, 1992 Clean Water Act Section 401 letter to EPA amending its certification of compliance with Florida's water quality standards. Gulf's proposed discharge limitation for metals is identical to that contained in DER's Section 401 certification for the Crist plant. This permit language is necessary in order to account for background conditions, as contemplated under Florida's water quality standards. It is appropriate to include this condition in the Scholz NPDES permit as well. (Note that footnote 2, in Section A., which relates to iron concentrations, will no longer be necessary if EPA concurs with the metals limitation proposed above.)

o TRC Limitations

Gulf is required to comply with the interim TRC limitation of .20 mg/l at the discharge structure prior to mixing with any other waste stream. However, there will be a chlorine discharge at the discharge structure only when we are chlorinating the condensers. Therefore, please add a new footnote No. 7 to the current draft permit language regarding the interim TRC monitoring requirement in Section A.1.:

EFFLUENT CHARACTERISTICS

MONITORING REQUIREMENTS
Measurement Sample
Frequency Type

Total Residual Chlorine
(TRC) mg/l [Interim]

1/Week

Multiple
Grabs 5/, 7/

- 7/ The permittee is only required to monitor for compliance with the interim TRC limitation of .20 mg/l when it is chlorinating its condensers.

To precisely identify the scope of the time limit on TRC addition, please change item A.2. as follows:

TRC associated with condenser cleaning shall not be discharged more than 4 hours per day.

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The FDER sampling location and the discharge structure are located at opposite ends of the discharge canal. Therefore, the language in footnotes 4 and 6, which refers to the mixing zone for TRC, is confusing. In addition, to clarify the location of the discharge monitoring points for TRC, please make the following changes in footnotes 4 and 6:

- 4/ The interim TRC limitation shall be 0.20 mg/l at the described monitoring point (50 feet before the confluence of the cooling water discharge canal and the ash pond discharge) and 0.01 mg/l at the edge of the mixing zone (MZ). The MZ is defined as a 250 meter distance downstream of the FDER sampling location ~~at the discharge structure~~.
- 6/ The final TRC limitation shall be 0.02 mg/l at the described monitoring point (FDER sampling location) and 0.01 mg/l at the edge of the mixing zone (MZ). The MZ is defined as a 250 meter distance downstream of the FDER sampling location ~~at the discharge structure~~. This 0.02 mg/l limit and the monitoring requirements shall be met as provided in the schedule of compliance, Item ~~1.E.1.b 1-F-1-b~~.

The proposed daily maximum TRC discharge limitation at Outfall 001 (Section I.A.1.) would be lowered to 0.02 mg/l. The accompanying fact sheet, by way of explanation, indicates that the 0.02 mg/l limitation conforms with the requirements of Section 17-4.244, Florida Administrative Code, and is consistent with EPA's LC50 value for fresh water organisms. Gulf is not aware of any specific, empirical data that justifies this substantial change from the previous NPDES permit limitation. We would be most appreciative if EPA would provide us with any such data that it believes justifies this substantial change from the previous NPDES permit limitation.

- o Sample Locations

With respect to condition A.5. on page I-2, please change the language to read as follows:

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): flow at the discharge structure; intake temperature at the condenser inlet; discharge temperature at the condenser outlet ~~discharge/structure~~; TRC at the locations described in footnotes 4 and 6, below; ~~discharge/structure/prior to mixing with any other waste stream~~; and metals and oil and grease at the FDER sampling location, which is a point 200 feet

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downstream of the confluence of the ash pond discharge and the cooling water discharge but prior to the confluence of the discharge canal and the Apalachicola River; fecal coliform at the discharge point from the aerobic digestion plant.

These are technical corrections that clarify the precise sampling locations.

o Flow Monitoring

Please substitute "1/Daily" for "1/Hour" under the "Measurement Frequency" column for Flow in Section I.A.1. on page I-1. This change is required because the pump logs provide flow rate on a daily, not hourly, basis.

Page I-3

o Ash Pond Effluent Limitations

Please revise the description of the discharge from Outfall 002 to read as follows:

During the period beginning on the effective date of this permit and lasting through the term of this permit, the permittee is authorized to discharge ash sluice water, low volume waste, chemical metal cleaning waste (from Outfall 003), coal pile runoff, and building and yard sumps from Outfall 002 (Ash Pond Discharge) to Outfall 001.

Outfall 003 is limited only to discharges of chemical cleaning waste. This is a technical correction.

Section I.B.1., which regulates ash pond overflow (Outfall 002), should be revised to include TSS limitations of 100 mg/l (daily max) and 30 mg/l (daily average), as well as oil and grease limitations of 20 mg/l (daily max) and 15 mg/l (daily average). Although the ash pond receives several different waste streams, including coal pile runoff, EPA's co-treatment facilities guidance document allows facilities to demonstrate compliance with flow-weighted dry-weather limitations when the co-treatment facility has sufficient capacity. In the case of Scholz Plant, flow weighting of ash pond waste streams is not necessary under dry weather conditions (because the three streams, ash sluice water, low volume waste, and chemical metal cleaning waste, are subject to the same limitations), and that certification as to the requisite capacity is all that is required

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to demonstrate compliance with the limitation for coal pile and area runoff (under wet weather conditions). Please refer to the attached calculation for this co-treatment facility which shows more than ample capacity exists through 1996.

Also, please revise the heading titled "Daily Average" to read "Monthly Average" to more accurately reflect what is reported thereunder.

o Footnote 2

Language set forth on page I-3, footnote 2, of the draft NPDES permit would continue the existing requirement of additional grab sample monitoring from the ash pond after periods of heavy rainfall. This draft condition, like the parallel condition in the existing NPDES permit, contemplates one year of monitoring, "after which time the permittee may request a reduction in the frequency of or elimination of this additional monitoring." As a practical matter, Gulf has now been complying with this permit condition for several years. Therefore, EPA should at this time have a sufficient data base to accomplish the purposes of this additional monitoring. In addition, the presence of cenospheres is addressed by Section A.4. on Page I-2, prohibiting the discharge of floating solids or visible foam other than in trace amounts. We respectfully request that this footnote be deleted.

Page I-5

o Chemical Metal Cleaning Wastes

All references on page I-4 (Outfall 003) to "metal cleaning wastes" should be changed to "chemical metal cleaning wastes," because Gulf would discharge only the latter waste stream via Outfall 003. The term "chemical metal cleaning waste" is defined as "any wastewater resulting from the cleaning of any metal process equipment with chemical compounds, including, but not limited to, boiler tube cleaning." 40 CFR s 423.11(c). Please include this definition in place of the language presently set forth in Section I.C.2. of the draft permit.

Also, the proposed discharge limitations for oil and grease and total suspended solids should be deleted from page I-4. The effluent limitation guidelines applicable to chemical metal cleaning wastes, as set forth at 40 CFR s 423.13(e), include limits only for copper and iron. These are the only parameters applicable to this waste stream under the current NPDES permit.

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Part II, Page II-1

The reference in the title to "No Discharge" NPDES permits should be deleted, as the Scholz Plant does discharge to waters of the United States.

Part III

o Reporting Requirements

On page III-2, Section III.D., EPA would make several changes to a longstanding condition in the existing NPDES permit. More specifically, the advance notification period would be increased from 90 days to six months and significantly more detailed information would be required. We submit that these proposed changes are unduly burdensome and unwarranted. These changes would substantially hamper Gulf's operational flexibility and apparently would require that we generate information that in many circumstances already will be available to EPA. We propose the following replacement language for this condition:

Notification shall be made to the permitting authority in writing not later than ninety (90) days prior to initiating the addition of any chemical product to the cooling water, other than those approved previously. Such notification should include, but not be limited to:

1. Name and composition of the proposed additive,
2. Proposed discharge concentration,
3. Dosage addition rates,
4. Frequency of use,
5. EPA registration, if applicable, and
6. Aquatic species toxicological data, and applicable.

Written approval must be received from the permitting authority prior to initiating use.

o Survey of Ash Pond Dikes

Gulf requests that condition III.F. on page III-2 be replaced with the following language:

Permittee shall periodically survey all ash pond dikes and toe areas for structural integrity. Not later than December 31, 1992, and annually thereafter, permittee shall certify that no breaches or structural defects resulting in discharges to surface waters of the United States were observed during the

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previous calendar year. In the event that such a defect(s) exists and results in potential discharge(s) to surface waters of the United States, permittee shall notify the Director within fifteen (15) days of becoming aware of the situation and provide a proposed course of corrective action and implementation schedule.

This subject matter was the subject of extensive discussion in the course of EPA's reissuance of the NPDES permit for Gulf's Lansing Smith Power Plant. Ultimately, both EPA and Gulf were satisfied with the language presented above, which appears on page III-2 of the Lansing Smith permit. It is appropriate that this same language be included in the NPDES permit for the Scholz Plant.

o Discharges Associated With Certain Combustion Practices

Section III.H. on page III-3, relating to discharges of any wastes resulting from the combustion of chemical metal cleaning wastes, toxic waste, or hazardous waste, was the subject of much discussion in the recent renewal of the NPDES permit for Gulf's Lansing Smith plant. On the basis of information that Gulf provided in a comment letter (authored by Hopping Boyd Green & Sams) dated December 19, 1990, EPA agreed to include the following language in the Lansing Smith NPDES permit:

The discharge of plant ash transport water, resulting from the combustion of on-specification used oil as authorized under the Resource Conservation and Recovery Act and 40 C.F.R. Part 266, via the ash pond shall be an authorized discharge of this permit.

Please include this language in the Scholz permit as well.

o Total Residual Chlorine

EPA's draft permit for Gulf's Crist Plant includes essentially the following condition on Page III-4, Section M:

Testing for TRC FR0 shall be conducted according to either the low-level amperometric titration method, or the DPD colorimetric method as specified in Section 4500-C1 E. or 4500-C1 G., respectively, Standard Methods for the Examination of Water and Wastewater, 17th edition. If chlorine is not detected using one of these methods, the permittee shall report on the discharge monitoring report form, the analytical results as being measured at less than the detection level for the test method selected;

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the test method shall also be reported. The permittee shall then be considered in compliance with the applicable instantaneous maximum effluent limit for TRC --~~TR0~~.

Gulf respectfully requests that this condition, as modified above, be included in the NPDES permit for the Scholz plant as well.

o Low Volume Waste

Gulf respectfully requests that the following condition be included in the NPDES permit:

Low volume wastes (wastewater from all sources, except those for which specific limitations are otherwise required in this permit, including but not limited to, waste waters from wet scrubber air pollution control systems, ion exchange water treatment systems, water treatment evaporator blowdown, laboratory and sampling streams, floor drainage, water washing of air preheaters and boiler fireside, cooling tower basin cleaning wastes, boiler blowdown, and blowdown from recirculating house service water systems) shall be discharged to the ash pond.

This provision clarifies the constituents of the low volume wastes discharged from the ash pond. This language appears in the Crist permit, as a matter of consistency, we ask that it be added to the Scholz permit.

o Detection Limits

Please add the following condition in Part III of the permit:

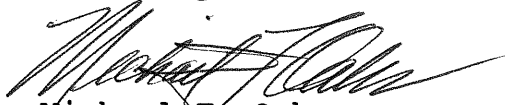
In all circumstances in which the concentration of a parameter is determined to be below an applicable analytical detection limit that is higher than the water quality based effluent limitation for that parameter, the permittee shall be deemed in compliance.

This condition is simply intended to address the problem of water quality standards that are set at levels below available measurement capabilities. This proposed condition comports with EPA's policy as articulated at 56 Federal Register 58438 (Nov. 19, 1991).

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Thank you for considering our comments. Once again, we would be happy to meet with you in Atlanta to discuss these issues. Please let us know if we can be of further assistance.

Sincerely,



Michael F. Oaks
Senior Environmental Affairs
Specialist

rc/l-shell

Attachment

cc: Hopping Boyd Green & Sams
J. S. Alves

Gulf Power Company

M. L. Gilchrist
C. R. Lee
W. T. Lyford
P. Parker
J. O. Vick

Ash Pond Volume Certification Calculation

A. Available Volume 218,426 yd³

(estimated by plant personnel 04/07/92)

B. Wet Weather Flow

$$10.677 \text{ MGD} \times 0.1337 \text{ ft}^3/\text{G} \times \text{yd}^3/27 \text{ ft}^3 = \underline{52,871 \text{ yd}^3}$$

(From draft permit 03/02/92 - one day maximum
based on 10 yr. 24 hr. rainfall event)

C. Estimated Ash Volume To Be Added

Budget Coal Burn	1992 -	36,000 tons
	1993 -	49,000 tons
	1994 -	52,000 tons
	1995 -	69,000 tons
	1996 -	<u>111,000 tons</u>

317,000 tons

$$317,000 \text{ (tons coal)} \times 0.08 \text{ (\% ash)} \times 0.9259 \text{ yd}^3/\text{ton ash} = \underline{23,481 \text{ yd}^3}$$

$$(0.9259 = 2000 \text{ lbs./ton} \times \text{ft}^3/80 \text{ lbs.} \times 27 \text{ ft.}^3/\text{yd}^3)$$

D. Estimated Available Volume through 1996

$$218,426 \text{ yd}^3 - (23,481 \text{ yd}^3 + 52,871 \text{ yd}^3) = \underline{142,074 \text{ yd}^3}$$

OK