

MEMORANDUM



DATE: June 9, 1987
To: Tom Rogers, JEA
From: Marion G. DeGrove, Associate Engineer
Re: **SO₂ Modeling**

Thanks for sending me your file. I copied it, and am returning the original. It will take me a while to digest all of the information.

Marion G. DeGrove

Marion G. DeGrove, Associate Engineer

Enclosures

cc: BESD File, Air Monitoring 1987

MGD/bgm

ST. JOHNS RIVER COAL TERMINAL

Submittal Title	Licensing Procedure	JEA Sub. Date	Agency Review	Exp. Response Date	Next Agency Action	Comments
Blount Island Well	Amend SCA/EID Modif. Cond. of Cert. III	3/26/86	N/A	N/A	Issue Final Order of Modification	- FDER sent out Notice to parties on 3/27/86 - FAW Notice May 2, 1986
FDER Dredge and Fill Modification	Approval Under Cond. of Cert. XXXII	3/24/86	90 days	6/24/86	Publish Notice of Decision in FAW	- FDER sent out Notice to parties on 3/27/86 - FDER questions 5/30/86 / JEA response 6/18/86 - Dredge and Fill approval for FDER lease and fee waiver
Amendment to Fugitive Emissions Control Summary	Approval Under Cond. of Cert. XXXII	5/15/86	90 days	8/15/86	Publish Notice of Decision in FAW	- FDER sent out Notice to parties on 6/2/86 - FDER questions 5/30/86 / JEA response 6/18/86
Condition of Certification XXXII	Approval Under Cond. of Cert. XXXII	4/25/86	90 days	7/28/86	Publish Notice of Decision in FAW	- FDER sent out Notice to parties 5/14/86 - Need FDER approval for FDER Use Approval - Approval should include Water Quality Cert. for conveyor and State concurrence with JEA's CZM statement. WQC and CZM necessary for U.S. Coast Guard Bridge Permit
PSD Revision	FDER to provide tech. review	⁵ 8/12/86/EPA 6/15/86/FDER	N/A	8/15/86	FDER Technical Comments to EPA	- FDER to provide JEA with information for Public Notice (Ed: Svec-FDER)
Particulate Emission Control Equipment Data	Compliance w/ Cond. of Cert. I.A.3.b.	Exp. 7/21/86	30 days	Exp. 8/21/86		- Submittal currently being prepared by JEA

July 17, 1986

DER

JUL 21 1986

BAQM



Mr. Hamilton S. Oven, Jr., P.E.
Administrator
Siting Coordination Section
Fla. Dept. of Env. Regulation
2600 Blair Stone Road
Tallahassee, Florida 32301

Dear Mr. Oven:

Subject: Jacksonville Electric Authority
St. Johns River Coal Terminal
Response to BESD Letter

The Jacksonville Electric Authority (JEA) has received a copy of the Bio-Environmental Services Division (BESD) letter dated July 1, 1986, concerning the modification of the St. Johns River Coal Terminal's PSD permit. The purpose of this letter is to discuss BESD's comments, many of which JEA feels are based on information which has been taken out of context and are therefore not representative of expected operating conditions at the coal unloader and conveyor system. Listed below are JEA's responses to BESD's comments.

1. BESD supports the design change from rail coal conveying to an enclosed belt conveyor.

JEA appreciates BESD's support of the conveyor design. JEA maintains that the transport of coal by an enclosed conveyor represents an improved design, resulting in reduced environmental impacts over the original rail transport design.

2. Dust control on the ship unloader

JEA shares BESD's concern for potential deposition on the import car facilities; however, BESD's statement that emissions at the ship unloading point would be over 330% of the original value is based on an analysis taken out of context. It is true that the emissions from the ship unloading point will increase; however, in absolute terms, BESD has compared two very small numbers. The increase at the ship unloading point is from approximately 0.3 lb/hr to 1.0 lb/hr. In addition, a major point which seems to have been overlooked by BESD is that the current design modification will in fact result in a significant decrease in particulate emissions on Blount Island of approximately 5.1 lb/hr, not a "substantial increase" as indicated by BESD.

(CONT.)

JEA proposes to use wet dust suppression in addition to containment to meet the emission limits presented in the PSD modification. The vendor supplying the ship unloader (which will include the particulate control equipment) will be required per his contract to guarantee that the 10% opacity standard will be met.

3. Separate BACT determinations

The total emissions resulting from the modification of the PSD permit results in a net decrease in particulate emissions. Thus, re-addressing BACT (Best Available Control Technology) is not warranted by the proposed PSD modification.

4. Lower the visible emission standard

BESD asserts without supporting information that the visible emission standard should be reduced from 10% to 5% opacity. The initial licensing process for the Power Park and the coal unloading facility established a 10% standard. During this licensing process, analyses were conducted to determine the effect on ambient air quality and appropriate standards were set by the agencies. Since that time, ambient particulate levels have improved in Duval County resulting in a reduction in the size of the particulate non-attainment area. For this reason, there has been an increase in the distance between the non-attainment area boundary and the project site. This improvement along with the fact that the total emissions are slightly less than the original PSD permit levels would seem to justify the current 10% opacity level.

5. Installation and operation of deposition monitoring station

BESD has recommended that JEA install a particulate deposition monitor on Blount Island. In light of the proposed impact reduction in particulate emissions, JEA does not feel that a deposition monitoring program is necessary as part of the PSD permit. If this program is deemed necessary for some other regulatory purpose, JEA would be willing to discuss this matter further.

(CONT.)

Mr. Hamilton S. Oven
July 17, 1986
Page 3.

If you have any questions or require any additional information,
please feel free to contact me at (904) 633-4517.

Very truly yours,



Richard Breitmoser, P.E.
Division Chief
Research & Environmental
Affairs Division

RB/AJT/lwr

cc: Royce Lyles, JEA
Bill Stewart, DER
Clair Fancy, DER
Henry Colson, JPA
Paul deMariano, JPA
Bruce Miller, EPA
Ted Bisterfeld, EPA
Mike Branden, EPA
Ed Svec, FDER

State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION



Interoffice Memorandum

To: Buck Oven

From: John Brown ^{JB}
Clair Fancy ^{CF}

Subject: St. Johns River Power Park Operating Restrictions Proposal

Date: October 31, 1986

FOR ROUTING TO OTHER THAN THE ADDRESSEE	
To: <u>Clair Fancy</u>	LOCN: _____
To: _____	LOCN: _____
To: _____	LOCN: _____
From: _____	DATE: _____

The following comments are submitted in reference to Jacksonville Electric Authority's proposal for meeting the requirements of Part IE, Conditions of Certification of the St. John's River Power Plant.

It appears that JEA did not meet the requirement of condition IE2 since they did not file the operating plan by June 1, 1986 as required.

Their proposal seems to otherwise meet the requirements of condition IE. Paragraph 3 of the JEA letter should state that "JEA will not start up Southside units 1 or 2 until the department reviews and approves the operating plan to offset emissions equivalent to those from Southside units 1 and 2."

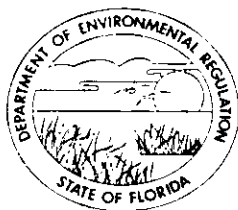
The plan to leave SJRPP in operation during an episode seems reasonable subsequent to demonstrating full compliance. Until then there needs to be a contingency plan.

If you have additional information or questions on the above, please contact Jim Pennington at 904-488-1344.

JB:JP:ht

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241



BOB GRAHAM
GOVERNOR
VICTORIA J. TSCHINKEL
SECRETARY

December 9, 1985

Mr. Richard Breitmoser, Chief
Research & Environmental Affairs Division
Jacksonville Electric Authority
233 West Duval Street
Jacksonville, Florida 32202

Dear Mr. Breitmoser:

The second ambient air monitoring site for the St. Johns River Power Park that you proposed in your November 27, 1985, letter is acceptable to us at this time. All EPA siting and instrumentation criteria must be met, and all necessary SAROAD forms must be filed with the department as soon as possible.

Our acceptance of this site at this time does not preclude you from relocating the site in the future, provided such relocation would also have to be approved. We understand that the Jacksonville Bio-Environmental Services Division is concerned that construction in the area may someday adversely affect this location.

Please direct all future correspondence on this subject to Mr. Bill Blommel, Environmental Administrator, Air Monitoring Section.

Sincerely,

Lawrence A. George
Environmental Administrator
Bureau of Air Quality
Management

LG/ps

cc: M. DeGrove, Jacksonville BESD
B. Blommel
F. Watkins

SJRMISC-85-525
November 27, 1985



Mr. Larry George
Florida Department of
Environmental Regulation
2600 Blair Stone Rd.
Tallahassee, Florida 32301

Dear Mr. George:

Subject: **St. Johns River Power Park, Units 1 & 2**
AMBIENT AIR MONITORING STATIONS
SITE SELECTION

The SJRPP is required by our Conditions of Certification to site and operate two ambient air monitors for SO₂ and particulate matter (each). One site has been selected to the north of the plant off of Cedar Point Road. This site was previously approved by your office and the Jacksonville Bio-Environmental Services Division (BESD). The other site which we are now proposing is located south and west of the plant adjacent to August Drive. This site is located as close to a predicted location of maximum concentration as possible; it conforms to EPA siting criteria, and was identified in cooperation with the BESD.

Thus, we request that you review the site location as necessary and notify me of its acceptability. Following the approval we plan to begin installation of the shelter and equipment with Start-up by early January, 1986. Bio-Environmental Services will then operate the stations as part of a cooperative agreement.

DER

DEC 02 1985

BAQM

AMBIENT AIR MONITORING
Page Two

If you have any questions please call Mr. Stan Stokes
at 757-2866. Your prompt review will be appreciated.

Sincerely,



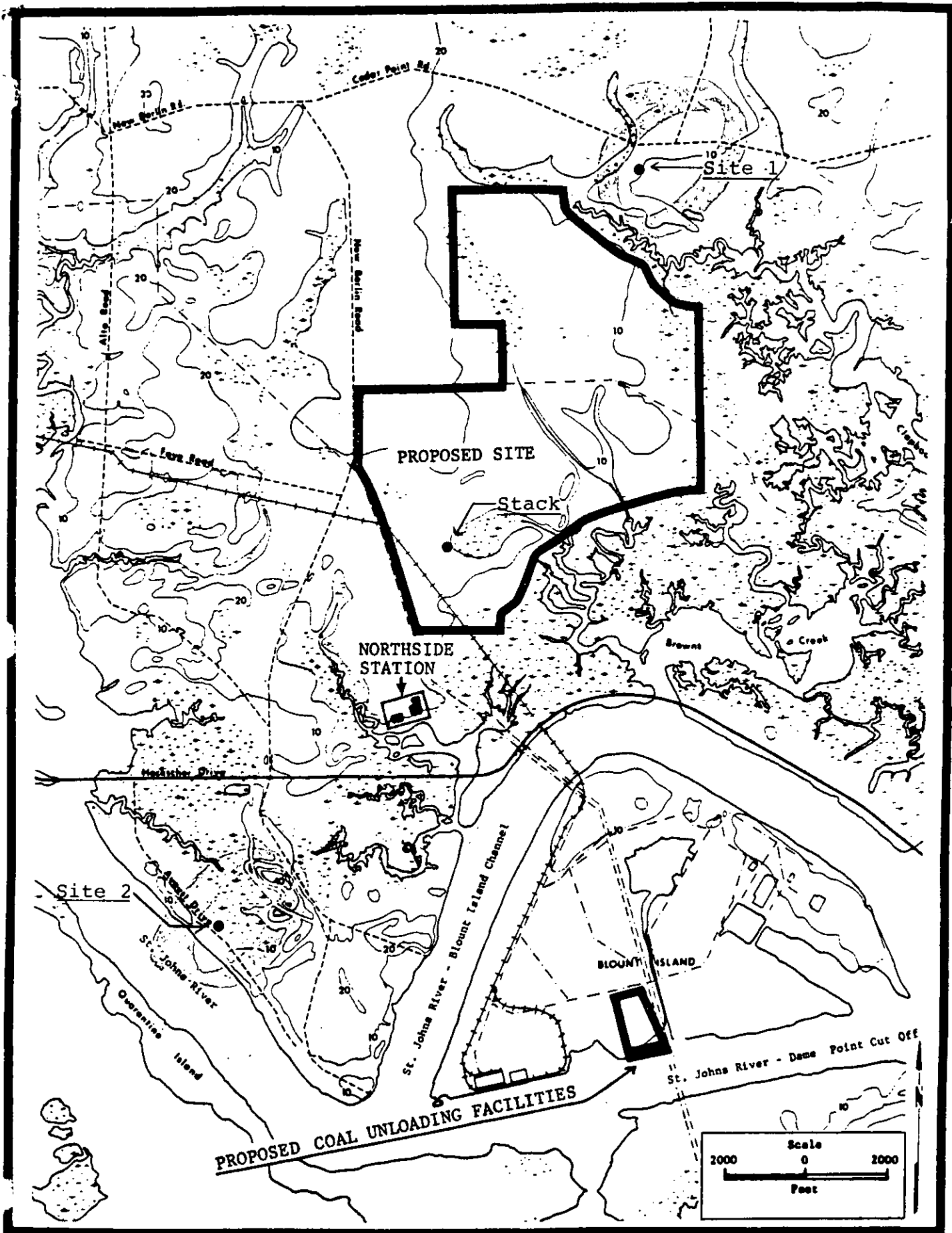
Richard Breitmoser, Chief
Research & Environmental
Affairs Division

RB/STS/pmh

cc: R. Lyles
W. Fries
R. Donatelli (2)
R. Bloor
B. Wirz
A. Bavington
C. Slepow
J. Herman
J. Clark
C. French
R. Kermitz
F. Fuerst
F. Bold
J. Rutledge
W. Ondler
J. Weitzel
S. Stokes
C. Pait
M. DeGrove
B. Blommel, FDER
F. Watkins, FDER

Attachment: Map of Selected Monitoring Sites

wp: STS/Env.



AIR MONITORING SITES 1 AND 2

copy: district } sent
 Jax BES } 10/20/83 PA
 } file permit file



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET
ATLANTA, GEORGIA 30365

OCT 3 1983

4AW-AM

Mr. Richard Breitmoser, P.E.
Division Chief
Research & Environmental Affairs Division
Jacksonville Electric Authority
233 W. Duval Street
Jacksonville, Florida 32201

RE: St. Johns River Power Park - Auxiliary Boiler Design and
Conveyor Gallery Design

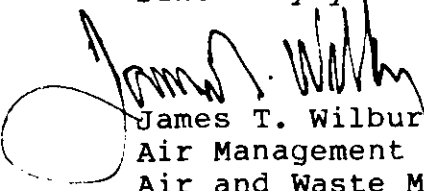
Dear Mr. Breitmoser:

This letter is in response to your letters of August 29, 1983 and August 22, 1983, regarding the increase in steam pressure and temperature and BTU input for the auxiliary boilers and conveyor gallery design and control efficiency considerations.

In regard to the conveyor gallery design, we generally concur with the information provided, with the exception of the control efficiency for water spray dust suppression on the stacker/reclaimer conveyor discharges. Literature indicates efficiencies of 30-40% for wet suppression on conveyors. In conjunction with partial enclosures with estimated efficiency of 70% to 80%, the estimated total efficiency will be 91% ($1 - [(1 - .75) \times .35]$). In addition, the face velocity at the ventilation system vents within the galleries should be held well below 100 ft. per second per ft.² to prevent entrainment of dust particles.

If you should have any questions or comments regarding this letter please contact Mr. Michael Brandon at 404/881-7654.

Sincerely yours,


James T. Wilburn, Chief
Air Management Branch
Air and Waste Management Division

cc: Steve Smallwood, Chief
Bureau of Air Quality Management

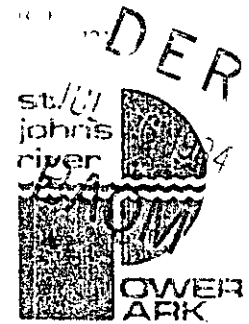
Received DER

AUG 23 1983

PPSS

JACKSONVILLE ELECTRIC AUTHORITY
P.O. BOX 52015
JACKSONVILLE, FL 32202

SJRPPDER 83-8
August 18, 1983



Mr. Hamilton S. Oven, Jr., P.E.
Administrator - Power Plant Siting Section
Florida Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Fl 32301

Dear Mr. Oven:

Subject: St. Johns River Power Park Units 1 & 2
Change in Project Construction Schedule

The purpose of this letter is to inform you of the change in the Project Construction Schedule as required by Section I.A.8 of the Conditions of Certification.

The Project Construction Schedule contained in the PSD application and the SCA/EID indicated Project Certification (commercial operation) for Unit 1 in December 1985 and for Unit 2 in July 1987. Although construction has already commenced (December 1, 1982), the present schedule calls for Project Certification for Unit 1 in April 1987 and for Unit 2 in October 1988.

The Conditions of Certification which associate the SJRPP Units 1 & 2 Project Certification Dates with the submittal date of a particular condition will be changed accordingly.

Further, submittal dates for some other conditions should be changed appropriately to reflect the revised commercial operation dates.

These changes include the following:

<u>Section</u>	<u>Existing Date</u>	<u>Revised Date</u>
I.B.6 - Salt Drift Monitoring Program Implementation (1 yr before project cert.)	Dec. 1, 1984	April 1, 1986
I.E.2 - Proposed System Operating Plan (6 mo. before proj. cert.)	June 1, 1984	Oct. 1, 1985

Mr. Hamilton S. Oven
August 18, 1983
Page 2 -

<u>Section</u>	<u>Existing Date</u>	<u>Revised Date</u>
I.E.4 - Schedule of Implementation (date of proj. cert.)	Dec. 1, 1985	April 1, 1987
II.A.15 Submittal of Bioassy Test Program (2 yrs. before proj. cert.)	Dec. 1, 1983	April 1, 1985

If you have any questions, please contact me at (904)633-4517.

Sincerely,



Richard Breitmoser
Environmental Supervisor

RB:PEJ:cb

cc: D. Dutton, FDER
P. Gaboury, JEA
L. Leskovjan, FPL
P. Jennings, FPL
J. Jackson, ESI

File: 1.6.10.1(2)
1.6.10.13(2)
NG
Chrono

cc Clair Fancy
Doug Outten
JACKSONVILLE ELECTRIC AUTHORITY
BOX 3015
20 W. DEVAL STREET
TALLAHASSEE, FL 32201

SJRFDER 83-7

August 16, 1983



DER
AUG 19 1983
BAOM
Received DER

Mr. Hamilton S. Oven, Jr., P.E.
Administrator - Power Plant Siting Section
Florida Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32301

AUG 18 1983

Dear Mr. Oven:

Subject: St. Johns River Power Park
Units 1 & 2
Revised Chimney Location

PPS

This is to provide a change in the coordinates of the main chimney of the proposed St. Johns River Power Park. The revised chimney coordinates are:

N	Latitude:	30°	25'	51"
W	Longitude:	81°	33'	03"
UTM N-S		3366.42	km	
UTM E-W		447.07	km	

This new chimney location is .12 km north of the original location presented in the 1980 Prevention of Significant Deterioration (PSD) Report for the Jacksonville Electric Authority and the 1981 St. Johns River Power Park Site Certification Application/Environmental Information Document.

This chimney relocation is small relative to the downwind distances (ranging between 1 km and 5 km) at which maximum ground level air quality impacts resulting from the main boiler operation were predicted by dispersion modelling. Therefore, the changes in location and magnitude of the calculated maximum ground level impacts for PSD increment consumption and compliance with National and Florida Ambient Air Quality Standards will be insignificant.

(CONT.)

Mr. Hamilton S. Oven, Jr.
August 16, 1983
Page 2.

If you have any questions regarding the new chimney location, please call me at (904) 633-4517 at your earliest convenience.

Very truly yours,



Richard Breitmoser, P.E.
Division Chief
Research & Environmental
Affairs Division

RB/lwr

cc: D. Bayly, BES
P. Gaboury, JEA
L. Leskovjan, FPL
P. Jennings, FPL
J. Jackson, ESI
File 1.6.9.14
1.6.10.3 (2)
NG
Chrono