CERTIFICATE

STATE OF FLORIDA

COUNTY OF LEON

I, Kathy C. Carter, Agency Clerk of the Department of Environmental Regulation and Notary Public, State of Florida at Large, hereby certify that the attached CERTIFICATION ORDER, IN RE: Jacksonville Electric Authority St. Johns River Power Park, Power Plant Site Certification Application, consisting of eight pages, with an attached Order Responding to Exceptions and three attached exhibits, is a true and correct copy of that instrument as it appears in the Department of Environmental Regulation Final Order file.

WITNESS my hand and official seal, this 14th day of February A. D., 1990.

Kathy C. Carter

KATHY C. CARTER
Agency Clerk
Department of Environmental Regulation
Notary Public
State of Florida at Large

My Commission Expires:

Notary Public, State of Florida
My Commission Expires Sept. 3, 1990
Bonded Thru Troy Fain - Insurance Inc.

BEFORE THE GOVERNOR AND CABINET
OF THE STATE OF FLORIDA

IN RE:	)	
	)	
JACKSONVILLE ELECTRIC AUTHORITY ST. JOHNS RIVER POWER PARK, POWER PLANT SITE CERTIFICATION APPLICATION.	)	DOAH CASE NO. 81-357 OGC # 81-0515

The following persons were present and participated in the disposition of this matter:

Honorable George Firestone
Secretary of State

Honorable Jim Smith
Attorney General

Honorable Bill Gunter
Treasurer and Insurance Commissioner

Honorable Gerald A. Lewis
Comptroller

Honorable Ralph D. Turlington
Commissioner of Education

CERTIFICATION ORDER

BY THE GOVERNOR AND CABINET:

The Governor and Cabinet, sitting as the Board, having heard presentations by the parties, having reviewed the Recommended Order dated May 26, 1982 (attached and incorporated as Exhibit A), the Joint Motion for Official Recognition, the Joint Exceptions to Recommended Order (attached and incorporated as Exhibit B), the Exception to Conclusions of Law and Recommended Order filed by the Sea Oats Garden Circle and Heckscher Drive Community Club, the Exceptions to Hearing Officer's Recommended Order filed by the Clean Air Coalition, the Motion to Strike portions of the Clean Air Coalition's Exceptions filed by the Jacksonville Electric Authority ("JEA"), the Response to Motion to Strike filed by the Clean Air Coalition, the Response to Intervenors' Exceptions to Hearing Officer's Recommended Order filed by JEA, the Motion

for Recusal filed by the Clean Air Coalition, the Motion for Continuance filed by the Clean Air Coalition, the "Response in Opposition to JEA's 'Motion for Official Recognition'" filed by the Clean Air Coalition, and being fully advised herein, it is

ORDERED:

1. The Motion for Recusal filed by the Clean Air Coalition is denied.

2. The Motion for Continuance filed by the Clean Air Coalition is denied.

3. The Joint Motion for Official Recognition is granted.

4. The Motion to Strike portions of the Clean Air Coalition's Exceptions filed by JEA is granted in part. Specifically, the last two sentences of the first full paragraph of section 3(b) of that motion beginning . . . "Thus the hearing officer was without authority" are too broad. It is true that once a determination of need has been made by the Public Service Commission that determination cannot be challenged in the subsequent site certification hearing; nonetheless, the hearing officer must consider the need for the facility in relation to the environmental impact likely to result from construction and operation of that facility. To that end Section 403.502, Florida Statutes, specifically provides that:

> It is the intent to seek courses of action that will fully balance the increasing demands for electrical power plant location and operation with the broad interests of the public. Such action will be based on these premises:
>
> * * *
>
> (2) To effect a <u>reasonable balance between the need for the facility and environmental impact</u> resulting from construction and operation of the facility, including air and water quality, fish and wildlife, and the water resources and other natural resources of the state.
>
> (Emphasis added.)

Therefore, notwithstanding the fact that the need for the facility was not included on the final list of issues to be considered at the certification hearing, the hearing officer has the statutory duty to consider the need for the facility in relation to the environmental impact expected to result from construction and operation of the facility. The Recommended Order shows that the hearing officer performed this statutory duty.

5. The Joint Exceptions to Recommended Order filed by JEA, the Jacksonville Chamber of Commerce, the State of Florida Department of Environmental Regulation, the State of Florida Department of Natural Resources and Board of Trustees of the Internal Improvement Trust Fund, the State of Florida Department of Transportation, the St. Johns River Water Management District, the Consolidated City of Jacksonville, and the Jacksonville Port Authority are adopted as modified herein.

6. The Exception to Conclusions of Law and Recommended Order filed by the Sea Oats Garden Circle and Heckscher Drive Community Club and the Exceptions to Hearing Officer's Recommended Order filed by the Clean Air Coalition are denied. Explicit rulings on each of these denied exceptions, as required by Rule 28-5.405(3), Florida Administrative Code, are set forth in the Board's Order Responding to Exceptions.

7. The Findings of Fact and Conclusions of Law contained in the May 26, 1982, Recommended Order as modified by the Joint Exceptions to Recommended Order adopted herein are correct and are supported by competent and substantial evidence.

8. The Findings of Fact and Conclusions of Law contained in the May 26, 1982, Recommended Order as modified by the Joint Exceptions to Recommended Order adopted herein are specifically approved and adopted.

9. JEA is granted certification pursuant to Chapter 403, Part II, Florida Statutes, for the location, construction and operation of St. Johns River Power Park Units 1 and 2,

their associated facilities, and their directly associated transmission lines as proposed in the amended application and the evidence of record.

10. Variances from surface water quality standards and mixing zones and zones of discharge as set forth in the Conditions of Certification (attached and incorporated as Exhibit C) with regard to the discharge from Units 1 and 2 are granted.

11. Certification of the St. Johns River Power Park Units 1 and 2, their associated facilities, and their directly associated transmission lines is granted subject to the Conditions of Certification (attached and incorporated as Exhibit C), as modified herein.

12. Certification of the Blount Island Coal-Unloading Facility and the variances sought from surface water quality criteria, mixing zones and zones of discharge with regard to the construction of the Blount Island Coal-Unloading Facility are granted subject to the Conditions of Certification (attached and incorporated as Exhibit C) as modified herein.

13. Delegation of Authority is hereby granted to the Secretary of the Department of Environmental Regulation to modify conditions of certification pursuant to Section 403.516(1), Florida Statutes, as contained in Condition XXV as modified herein by adoption of the Joint Exceptions to Recommended Order and in Condition XXXII as adopted herein.

14. New Condition XXXII is hereby adopted:

XXXII Coal Conveyor System

> JEA shall submit to DER information concerning location, design, construction and operation of any coal conveyor system from Blount Island to the main plant site at least 120 days prior to construction of the coal conveyor system. The Secretary of DER shall indicate DER's approval or disapproval within 90 days of receipt. DER may also impose reasonable conditions on the construction and operation of this conveyor system. These conditions may impose appropriate restrictions on construction, operation and maintenance of the coal conveyor system in order to comply with applicable nonprocedural standards of any

agency. DER's decision shall be final unless further review is timely sought by any party pursuant to Section 120.57 or Section 403.516, Florida Statutes. The DER may retain up to $10,000.00 of the unexpended application fee to assist in the review of this coal conveyor.

15. The authority for JEA to use, connect to, and cross over the works and properties of the State of Florida Board of Trustees of the Internal Improvement Trust Fund ("BTIITF"), as provided by the adoption of the Joint Exceptions to Recommended Order, shall be pursuant to the following terms and conditions in lieu of those contained in paragraph (5) of JEA's Proposed Recommended Order:

a. The BTIITF shall issue the instruments described in subparagraph "b" below to JEA for the construction of a coal-unloading facility in, upon, and across sovereignty lands in the St. Johns River. The proposed coal-unloading facility is to be located on the southern shore of Blount Island and borders the Fulton-Dame Point cutoff of the St. Johns River. The specific location of this proposed facility is depicted on Sheet 3, Section 0.1, Appendix "O" of the SCA/EID. The lands for which this conveyance is sought lie in Section 30, Tonwship 1 South, Range 28 East. JEA shall have a survey and legal description of the exact boundaries of the proposed facility made prior to construction and submitted to BTIITF. A mean high water line survey has been completed and is depicted on Sheet 19, Section 0.1, Appendix "O" of the SCA/EID.

b. The activities associated with the proposed coal-unloading facility may include the construction of a 1200-foot wharf consisting of two parallel concrete decks set on piles. A portion of the wharf fill will be contiguous with the existing shoreline. The remaining portion of the wharf may include a pier of approximately 600 feet and will stand over the St. Johns River. A lease shall be the instrument issued for the sovereignty, submerged lands to be preempted by the coal-unloading facility wharf and docking area. The

proposed coal-unloading facility will also require the dredging of approximately 21 acres to a depth of -36 feet MSL. The areas to be dredged are depicted on Sheet 8, Section 0.1, Appendix "O" of the SCA/EID. An easement shall be the instrument issued for the sovereignty, submerged lands to be dredged.

c. The BTIITF shall issue an easement to JEA, in, upon, and across sovereignty land to construct towers supporting a coal-conveyor system or other means of coal transport from Blount Island to the mainland site of the SJRPP only if the final design of this aspect of the project is approved pursuant to Condition of Certification XXXII. The coal transport system may generally follow the existing JEA transmission line easement. The exact locations of the coal transport system support towers as well as a survey and legal description of the boundaries of such towers shall be supplied to BTIITF by JEA prior to issuance of the easement and construction.

d. The BTIITF shall issue an easement to JEA in, upon, and across sovereignty land for the construction of a water intake structure in San Carlos Creek, Duval County, Florida. The proposed water intake structure will be located on the west side of the existing JEA Northside Generating Station discharge canal. The location of this facility is depicted on Sheets 5 and 6, Section 0.1, Appendix "O" of the SCA/EID. The lands for which such conveyance is sought lie in Section 13, Township 1 South, Range 27 East. JEA shall have a survey and legal description of the boundaries of this facility as well as a mean high water line survey conducted prior to issuance of the easement and construction.

e. The activities associated with the proposed water intake structure consist of constructing a channel from the proposed SJRPP to the existing JEA Northside Generating Station discharge canal. The channel to be constructed will have sheet piling sides and a stone blanket for its

base. Some minor alteration of the creek banks and bottom may accompany this activity.

f. The BTIITF shall issue an easement to JEA in, upon, and across sovereignty land to construct electrical transmission line towers in San Carlos Creek and Mill Cove, Duval County, Florida. Only one of the proposed transmission line tower locations in San Carlos Creek will be on state-owned lands. Such tower is to be placed on an elevated and previously impacted portion of the salt marsh. The exact location is shown on Sheet 5, Section 0.1, Appendix "O" of the SCA/EID. Those other electrical transmission line towers to be located on state-owned lands are in Mill Cove, south of the Fulton-Dame Point cutoff of the St. Johns River. The exact locations of the electrical transmission line towers to be located within Mill Cove immediately adjacent to an existing transmission line right-of-way are shown on Sheet 7, Section 0.1, Appendix "O" of the SCA/EID. The lands for which such conveyance is required lie in Section 13, Township 1 South, Range 27 East; Section 32, Township 1 South, Range 28 East; and Section 5, Township 2 South, Range 28 East. JEA shall have a survey and legal description of the boundaries of the transmission line towers made prior to issuance of the easement and construction.

g. The activities associated with the construction of the proposed electrical transmission line towers include the construction of piling supported base points. Construction of these towers in Mill Cove will be from a barge which will be used to gain access to the proposed tower locations. Construction in the near shore zones where water depths limit access by barge will be accomplished with the utilization of temporary matting designed to minimize adverse effects on the marsh.

h. Each of the above-referenced instruments containing terms of these provisions which are applicable, shall be issued by the Executive Director of the Department

of Natural Resources as legally designated agent of BTIITP in a timely manner after: (1) issuance of the Certification Order; and (2) within 60 days following submittal of (a) the survey and legal descriptions for each lease or easement as well as design and construction plans of the respective facilities as they are finalized and (b) the information otherwise required by Section 16Q-21.08, Florida Administrative Code, or Section 16Q-21.09, Florida Administrative Code, as applicable. The issuance of an easement for the coal transport system is further conditioned upon final approval pursuant to Condition of Certification XXXII.

i. Prior to issuance of the easement for dredging described in subparagraph "b," JEA shall be required to submit payment of fees in accordance with Section 16Q-21.11(3)(c), Florida Administrative Code, for the severance of dredged materials from sovereignty, submerged lands at the $1.00 per cubic yard assessment which was in effect at the time the certification application was submitted.

DONE AND ENTERED this 29th day of June, 1982, in Tallahassee, Florida, subsequent to a vote of the Governor and Cabinet at a duly constituted Cabinet meeting of June 29, 1982.

FILING AND ACKNOWLEDGEMENT
FILED, on this date, pursuant to S120.52 (9), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Tracy H. Grantham 7-8-82
Clerk Date

FOR THE GOVERNOR AND CABINET:

BOB GRAHAM, Governor

VOTE:

For	Against
Honorable George Firestone	
Honorable Jim Smith	
Honorable Bill Gunter	
Honorable Gerald A. Lewis	
Honorable Ralph D. Turlington	

Copies furnished to all parties.

BEFORE THE GOVERNOR AND CABINET
OF THE STATE OF FLORIDA

IN RE:	)	
	)	
JACKSONVILLE ELECTRIC AUTHORITY	)	
ST. JOHNS RIVER POWER PARK,	)	DOAH CASE NO. 81-357
POWER PLANT SITE CERTIFICATION	)	
APPLICATION.	)	
	)	

ORDER RESPONDING TO EXCEPTIONS

BY THE GOVERNOR AND CABINET:

The Governor and Cabinet, sitting as the Board, respond as follows to the Exception to Conclusions of Law and Recommended Order filed by Sea Oats Garden Circle and Heckscher Drive Community Club and the Exceptions to Hearing Officer's Recommended Order filed by the Clean Air Coalition.

A. Exception to Conclusions of Law and Recommended Order Filed by the Sea Oats Garden Circle and Heckscher Drive Community Club:

1. No response required.

2. Exception contrary to competent substantial evidence of record.

3. No response required.

4. No response required.

5. Exception contrary to competent substantial evidence of record.

6. No response required.

THEREFORE, the Exception to Conclusions of Law and Recommended Order filed by Sea Oats Garden Circle and Heckscher Drive Community Club is hereby rejected.

B. Exceptions to Hearing Officer's Recommended Order Filed by the Clean Air Coalition.

1. Exception contrary to competent substantial evidence of record.

2. Exception contrary to competent substantial evidence of record and/or exception based on an incorrect interpretation of the rule.

3. Exception not supported by competent substantial evidence in the record and/or exception based on an incorrect interpretation of the rule.

4. Exception not supported by competent substantial evidence in the record.

5. Exception not supported by competent substantial evidence in the record.

6. Exception based on an incorrect characterization of the Recommended Order and on an incorrect interpretation of the statute.

7. Exception not supported by competent substantial evidence in the record.

8. Exception based on an incorrect characterization of the Recommended Order and exception not supported by competent substantial evidence in the record.

9. Exception based on an incorrect interpretation of the statute.

10. Exception based on an incorrect interpretation of the statute and local law.

11. Exception not supported by competent substantial evidence in the record and based on an incorrect interpretation of the rule.

12. Exception based on an incorrect interpretation of the statute.

13. Exception not supported by competent substantial evidence in the record and/or exception contrary to competent substantial evidence of record.

14. Exception contrary to competent substantial evidence of record and exception based on an incorrect interpretation of federal law.

15. Exception not supported by competent substantial evidence in the record.

16. Exception not supported by competent substantial evidence in the record and/or exception contrary to competent substantial evidence of record.

17. Exception contrary to competent substantial evidence of record.

18. Exception based on an incorrect characterization of the Recommended Order, exception not based on competent substantial evidence in the record and based on an incorrect interpretation of the statute.

19. Exception not supported by competent substantial evidence in the record, contrary to competent substantial evidence of record, and based on an incorrect interpretation of the applicable statutes and rules.

THEREFORE, the Exceptions to Hearing Officer's Recommended Order filed by the Clean Air Coalition are hereby rejected.

DONE AND ENTERED this 29th day of June, 1982, in Tallahassee, Florida, subsequent to a vote of the Governor and Cabinet at a duly constituted Cabinet meeting of June 29, 1982.

FILING AND ACKNOWLEDGEMENT
FILED, on this date, pursuant to S120.52 (9), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Clerk 7-8-82 Date

FOR THE GOVERNOR AND CABINET:

BOB GRAHAM, Governor

VOTE:

For:

Honorable George Firestone
Honorable Jim Smith
Honorable Bill Gunter
Honorable Gerald A. Lewis
Honorable Ralph D. Turlington

Against:

Copies furnished to all parties

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing Order Responding to Exceptions and Certification Order has been furnished by hand-delivery to Randall E. Denker, Esquire, 103 North Gadsden Street, Tallahassee, Florida 32301; by Purolator to George W. Kent, Jr., Esquire, 2105 Park Avenue, #21, Orange Park, Florida 32073 and by United States Mail to the following persons this 9th day of July, 1982:

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STATE OF FLORIDA
DIVISION OF ADMINISTRATIVE HEARINGS

IN RE: JACKSONVILLE ELECTRIC AUTHORITY ST. JOHNS RIVER POWER PARK, POWER PLANT SITE CERTIFICATION APPLICATION.	))))	Case No. 81-357

FINDINGS OF FACT, CONCLUSIONS OF LAW AND RECOMMENDED ORDER

This proceeding was held pursuant to the Florida Electrical Power Plant Siting Act, Chapter 403, Part II, Florida Statutes, and Chapter 17-17, Florida Administrative Code, to consider Jacksonville Electric Authority's (JEA) application for site certification of a two-unit electrical generating facility, its associated facilities, and its directly associated transmission lines, collectively known as St. Johns River Power Park Units Number 1 and Number 2, proposed for Jacksonville, Duval County, Florida.

The Governor and Cabinet, sitting as the Board under Chapter 403, Part II, Florida Statutes, entered an ORDER dated September 1, 1981, holding that the proposed site for Units 1 and 2 is consistent and in compliance with existing land-use plans and zoning ordinances.

Pursuant to proper notice, a certification hearing as required by Section 403.508(3), Florida Statutes, was held in Jacksonville, Florida, December 1, 2, 3, and 4, 1981, for the purpose of receiving testimony and evidence concerning whether the location and operation of the proposed facilities will produce minimal adverse effects on human health, the environment, the ecology of the land and its wildlife, and the ecology of state waters and their aquatic life. The hearing included an examination of the following: the need for power as determined by the Florida Public Service Commission; the expected

environmental impact from construction and operation of the facility; operational safeguards of the facility; and other public interests and issues relevant to certification of the proposed site. The following are parties to this proceeding:

(1) Applicant, Jacksonville Electric Authority;

(2) Florida Department of Environmental Regulation;

(3) Florida Department of Veteran and Community Affairs;

(4) St. Johns River Water Management District;

(5) Heckscher Drive Community Club;

(6) Clean Air Coalition, Inc.;

(7) Sea Oats Garden Circle;

(8) Jacksonville Chamber of Commerce, Inc.;

(9) Florida Department of Natural Resources;

(10) Board of Trustees of the Internal Improvement Trust Fund;

(11) Florida Department of Transportation;

(12) Consolidated City of Jacksonville; and

(13) Jacksonville Port Authority.

Beginning at 7:30 P.M. on December 1, 1981, a session of this certification hearing was convened for the sole purpose of allowing the public an opportunity to present testimony and evidence. In order for such testimony and evidence to be considered in this proceeding, it must have been under oath and subject to cross examination. Eighteen members of the public chose to so testify.

Having considered all testimony and evidence properly admitted, having heard argument of counsel, and being otherwise fully apprised herein, the following Findings of Fact, Conclusions of Law, and Recommended Order are entered.

FINDINGS OF FACT

1. The proposed site of the St. Johns River Power Park (SJRPP) is approximately nine miles northeast of downtown Jacksonville, Duval County, Florida. That part of the site upon which Units 1 and 2 will be located occupies approximately 1,656 acres of land contiguous to the existing Jacksonville Electric Authority's Northside Generating Station. The New Berlin Road bounds the site to the west, the Jacksonville City Landfill bounds the site to the north and Clapboard and Brown's Creeks and their associated wetlands bound the site on the northeast, east, and southeast. There is an existing borrow pit on the southeast side of the proposed site. Approximately 290 acres of the proposed site are comprised of various types of wetlands. Approximately 90 acres of these wetlands will actually be used for construction of Units 1 and 2. Approximately 1,307 acres of the site are covered with trees, shrubs and grasses, with the trees generally being fairly young and scattered.

That part of the site upon which the proposed coal unloading facility will be located is comprised of approximately 55 acres of land on Blount Island, in Duval County. This site is contiguous to the St. Johns River Fulton-Dame Point Cutoff to the south, salt marsh and Offshore Power Systems Corporation to the east, Undine Street to the north and the Jacksonville Port Authority to the west. The Blount Island portion of the site will allow an ocean vessel to unload coal for use in proposed Units 1 and 2. The primary purpose stated by the Applicant for building the Blount Island Coal unloading facility is to provide

an alternative means of supplying coal to the site. The Applicant states that its primary source of transporting coal from the coal fields to the site is by cross-country rail line. However, the Applicant asserts that having the capability of bringing in coal by sea renders the Applicant much more flexible in achieving the best price for coal and reduces the potential for interrupting coal supply via a transportation strike or some natural disaster.

The site as proposed also includes four 230 kv directly associated transmission lines. The four transmission lines will be paired in two corridors. The transmission lines will extend from the site of Units 1 and 2 to the Fort Carolyn Substation and the Robinwood Substation south of the plant and to the Normandy Substation west of Jacksonville. Variable width corridors are proposed to the Normandy and Robinwood Substations with corridor width being generally from 0.5 mile to 1.0 mile. Wider corridors were assigned to relatively homogeneous areas. The proposed corridors are depicted in Figure 9.6-2, Volume 2, Applicant's Composite Exhibit G-4. The environmental impacts of the construction of the proposed transmission lines will be minimal.

2. Units 1 and 2, as proposed, are each 612 gross megawatt (550 net megawatt) coal-fired steam electric generating units with related facilities. Each unit will have a natural gas cooling tower approximately 462 feet high and 350 feet in diameter at the base. Makeup and blowdown water for these cooling towers will be withdrawn from and returned to the discharge channel of the existing Northside Generating Station. The two units will share a 640 foot high reenforced concrete chimney. Each unit will be equipped with a flue gas desulfurization system (FGD system) and an electrostatic precipitator. The units are designed to burn coal with a wide range of characteristics similar to most coals found east of the Mississippi River. The units are also designed for potential

conversion to oil, natural gas, and refuse as alternative fuels.

The principal electrical generating components will be located on approximately 300 acres inside the plant rail loop. Rail service by the Seaboard Coast Line Railroad is available to the site. The primary solid by-products of Units 1 and 2 will be fly ash from the precipitator, bottom ash from the boiler and a commerical grade gypsum from the FGD system. The Applicant intends to attempt to market those by-products for purposes such as road construction and wallboard manufacturing. To the extent that the attempt to market those by-products is not successful, those by-products will be disposed of in a landfill in ten-acre cells with a maximum height of 60 feet on an area of the site 560 acres in size outside the rail loop. Approximately 760 to 780 acres of the plant site will remain physically undisturbed by direct construction activities. A fenced buffer zone approximately 200 feet wide will be maintained around the site with additional fencing around the developed areas of the plant site.

3. No endangered plant species were identified on either the proposed site for Units 1 and 2 or the Blount Island portion of the site. No endangered plant species are reported to occur in Duval County. One individual of a species, spoon flower (Peltandra Sagittifolia), which is listed as "Rare" for Duval County, was found in the bayhead community bordering the hardwood swamp in the southern portion of the proposed site for Units 1 and 2. The species listed as "Threatened" for Duval County, Jackson-Vine (Smilax Smallai) and Bartram's Ixia (Spenostigma Coelestinum), were not observed on the proposed site during a reasonable investigation.

The individual example of the Spoon Flower, listed as "Rare" for Duval County, will be destroyed during construction. The loss of one individual example of this rare plant species in this case

is not a significant impact on the environment. No plant species listed by either the State of Florida or the United States Government as endangered or threatened will be affected by construction activities.

With regard to wildlife, several species listed as "Endangered," "Threatened," or "Species of Special Concern" by the Florida Game and Fresh Water Fish Commission were observed on or near the site. These include the Least Turn (Sterna Albifrons), Wood Stork (Mycteria Americana) and Gopher Tortoise (Gopherus Polyphemus). Least Turns, listed as "Threatened" in Florida, were observed in the vicinity of the site and nested in three small colonies on Blount Island. Wood Storks, listed as "Endangered" in Florida, were observed feeding on Blount Island. Gopher Tortoises, listed as a "Species of Special Concern in Florida", were common on the proposed site. Although a search was conducted for Bald Eagles, no eagles or signs of eagles were located on or near the proposed site.

The development of the site will not physically include the existing nesting areas on Blount Island of the Least Turn. Further, a study of Least Turn nesting areas indicates that 80 percent of such nesting areas are man-made and composed primarily of dredging and development spoil. Therefore, no adverse impact is predicted on the Least Turn and a positive effect may result because disposal of dredge material will be timed so that it does not disturb nesting birds. The areas of the proposed site in which Wood Storks were observed feeding in open water habitats will not be directly affected by construction. Further, there is an abundance of alternative feeding sites in the area and no significant impact to Wood Storks in the area is expected. Finally, no significant adverse impact will occur to Gopher Tortoises.

Site specific field studies failed to show any significant population of either game or non-game species within the site boundary. Game animal abundance is very low with huntable populations of only marsh rabbits being present. No white tail deer or their tracks were seen on site.

4. Archaeological sites have been satisfactorily identified and primarily lie along the perimeter of the plant site. These archaeological sites will be adequately protected by fencing and compliance by the applicant with proposed Condition of Certification XIX.

5. The north/south orientation of the 300 acre rail loop area on the main site for Units 1 and 2 does not require any filling of salt marsh. Salt marsh is ecologically the most valuable type of vegetative community on or near the plant site. However, the north/south orientation of the rail loop will require the filling of 33 acres of a hardwood swamp. A different orientation of the rail loop could reasonably be expected to impact on a greater area of hardwood swamp. The thirty-three acres of hardwood swamp which will be filled is not connected to the adjoining salt marsh by a continually flowing stream nor is it connected to other wetlands isolated from the salt marsh.

6. All facilities at the site of Units 1 and 2 and at the Blount Island coal unloading site will be located above the elevation of the storm of record and the calculated 100-year flood.

7. Because of the high groundwater levels at the site, some dewatering of the shallow aquifers will be required during plant construction to permit excavation for structural foundations. Deep excavation will be required for the coal and limestone unloading faciliites and the emergency reclaim hopper. These

excavations may penetrate the full thickness of the water table aquifer and intermediate sands and the uppermost portions of the shallow rock aquifer. Groundwater control measures will be employed that are designed to limit the lateral extent of dewatering effects and minimize the quantities of groundwater which must be produced in order to achieve the desired level of dewatering. These groundwater control measures may include the use of sheet piles, slurry walls, grout curtains, dewatering wells constructed on benches within the excavation, or other methods as required to limit dewatering impacts to the immediate vicinity of the site. The methods or method best suited to the specific site will be selected by the construction dewatering contractor. Impacts of dewatering will be monitored using an appropriate observation well or array of observation wells. The quantity of existing groundwater discharged to the wetlands outside the property boundaries is not expected to be significantly affected by permanent dewatering associated with site drainage. It is not expected that significant water level drawdowns as a result of construction dewatering will take place outside of the property boundaries.

8. Proposed Condition of Certification II.a.12, Applicant's Exhibit E-4, sets forth a satisfactory control measure with regard to storm water runoff from the site during construction and operation. It requires the use of sufficient measures to limit the suspended solids and storm water runoff to 50 mg/l or less at the point of discharge during rainfall periods less than the ten-year, 24-hour rainfall, and to prevent an increase in turbidity of more than fifty Jackson turbidity units above background in waters of the state.

All coal and limestone areas will be lined and runoff collected from them will be treated. The coal pile runoff sedimentation pond has been designed to prevent violations of

surface water quality standards. A monitoring and sampling program will be conducted to determine that levels of suspended solids, turbidity, oil and grease, and total residual chlorine entering the receiving waters meet the levels set forth in proposed Conditions of Certification at Sections II.8.12, II.b, and IV.a, Applicant's Exhibit H-4.

9. During construction of the site, the contractor will control accelerated erosion by compaction of embankments, early soil stabilization, limitation of exposed areas, maintenance of relatively flat grades, stabilized storm water flat grades, stabilized storm water outlets, flat bottom ditches, diversion and interceptor dikes, critical area stabilization with semi-permanent and permanent seedings, temporary mulch or rock cover, and such other appropriate erosion control techniques as may be necessary, including a routine inspection program.

Sedimentation will be controlled during construction by use of sediment control basins and traps, filter berms, straw bales, sediment control fences, perforated riser pipes at drainage structures, or other applicable devices as appropriate. Site drainage shall be toward the south to a sediment control pond located near the plant rail loop.

As necessary, water and/or dust suppression chemicals will be applied by the contractor during construction to exposed areas to control fugitive dust. All main construction roads and parking area surfaces will have prepared surfaces to further control fugitive dust.

The Applicant has stated a commitment to comply with local and state regulations regarding open burning during clearing of the site.

10. The construction and operation of Units 1 and 2 will increase current vehicular volumes on routes presently

accessing the site. These volumes will be at their greatest during construction. The application proposes certain road improvements which are reasonable in scope and which will satisfactorily accommodate the predicted increased traffic volume. No significant adverse impact on the environment or existing roadways in the vicinity of the site will occur because of the increased volume of traffic.

11. Noise impacts from the construction and operation of Units 1 and 2 will fall within acceptable levels. The process of cleaning steam lines by blowing high pressure steam through them will create high noise levels over a two-week period preceding the startup of each unit. The Applicant will confine such steam blowouts to daylight hours and precede such blowouts by a public awareness campaign. Contractors, during construction, will maintain noise attenuating devices on their equipment to minimize impacts and construction will occur primarily during daylight hours. From a distance plant noise during operation will be perceived as a low-level hum. The location of the nearest residence to the site is approximately one mile and the area surrounding the site is generally sparsely settled and already subject to considerable industrial and traffic generated noise.

12. Trains will deliver coal during both day and night. Because of the demands of scheduling equipment and the costs of such scheduling, the proposed carrier for the coal, Seaboard Coast Line Railroad, is unwilling to restrict delivery to daylight hours. Such a restriction, if acceded to by the Seaboard Coast Line Railroad, would increase the cost of coal delivery to the site. If all coal is brought to the site over land by train rather than by sea, the maximum number of trains required would be one per day. These trains would approach and depart the site slowly, thus reducing the noise generated by the train. It is expected that the longest delay of traffic by a coal train at a crossing will be a delay of five minutes.

13. Security of the site will be provided by perimeter fencing and controlled access gates and turnstiles. During construction, safety programs will include observance of OSHA regulations and a site-specific safety program.

14. By the use of mathematical modeling, the thermal impacts of withdrawing cooling water from the Northside Generating Station discharge channel, passing it through the Units 1 and 2 cooling towers and returning blowdown to the Northside Generating Station discharge channel have been predicted. These predictions indicate that the temperature of the water at the edge of a seventeen-acre maximum instantaneous zone of thermal mixing will not be higher than 2° Fahrenheit above ambient temperatures during the months of June, July, August and September, or higher than 4° Fahrenheit above ambient temperatures during the remainder of the year. The Northside Generating Station has a NPDES permit requiring an absolute discharge temperature limit of 104° Fahrenheit or 19° Fahrenheit above ambient at the point of discharge. It is predicted that this requirement will be adhered to by the proposed Units 1 and 2 discharge. The use of natural draft cooling towers will reduce the net heat load to the St. Johns River now occurring from the Northside Generating Station alone.

The use of the Northside Generating Stations's discharge channel as a source of cooling water minimizes the potential for the destruction of aquatic organisms by impingement and entrainment, because such organisms would already have been subjected to the circulating water system of the Northside Generating Station with attendant impingement and entrainment.

15. The coal and limestone handling systems will use dust collector units of the dry bag filter type. These collectors will operate automatically when the associated coal and limestone handling equipment is operating. The coal and limestone handling

systems are within structural steel framed enclosed buildings or galleries with the following exceptions: railway ingress and egress doors which are normally left open when coal or limestone is being unloaded; lowering well discharge windows above coal pile; stacker reclaimer and all conveyors on or connected to the emergency reclaim belt conveyor; and stacker-reclaimer and slewing stacker discharges. The stacker-reclaimer and slewing stacker conveyors are protected from dust generating winds by sheetmetal holds rather than being totally enclosed. The stacker-reclaimer conveyor is sheltered by a wind fence on both sides where not enclosed in a gallery. Further, dusting in unenclosed areas is suppressed by "wet-water" sprays. The system operates automatically when coal is flowing. This control technique represents the best available control technology.

Active and inactive storage pile emissions are controlled by surface treatment, except that which is caused by the stacking and reclaiming operations. The fugitive dust controls proposed constitute the best available control technology.

16. Oxides of nitrogen, carbon monoxide, and non-methane hydracarbons will be controlled by steam generator design and operating practices to achieve required emission levels. This constitutes the best available control technology. The electrostatic precipitator, which will have a design removal efficiency of 99.78 percent, is also the best available control technology for particulate emissions. Drift eliminators will limit the drift rate from the cooling towers to 0.002 percent of the circulating water flow. Again, this constitutes the best available control technology.

The FGD System has a design removal efficiency of 90 percent under worst case coal conditions, and in no event will exceed an emission rate of 0.76 lb/NNBtu on a 30-day

rolling average. This also constitutes the best available control technology for sulfuroxides.

Bottom ash and gypsum by-products will be moved in open trucks in a wet condition to minimize fugitive dust emissions. Fly ash will be transported in closed trucks. The overall air quality control system will comply with Federal New Source Performance Standards.

17. Air quality modeling predicts that Units 1 and 2 will comply with all state and federal ambient air quality standards except for SO_2 emissions at certain times when other JEA generating stations are also operating. In order to avoid such violations, JEA has agreed to submit to DER no later than June 1, 1984, for its approval or disapproval, a proposed operating plan that will allow JEA to permanently eliminate emissions from existing steam generating units equivalent to the impact of the emissions of JEA's proposed Units 1 and 2. As set forth in the proposed Conditions of Certification at Section I.e, Applicant's Exhibit E-4, JEA should not be allowed to operate its Southside, Northside, or Kennedy Generating Stations in such a manner as to cause violation of ambient air quality standards for SO_2 when Units 1 and 2 are operating. The proposed condition set forth in Section I.2 is a reasonable and satisfactory means of alleviating the problem of SO_2 violations. Upon implementation of the operating conditions as required by the proposed Conditions of Certification, Units 1 and 2 will comply with all state and federal ambient air quality standards and prevention of significant deterioration increments, including all of those specifically applicable to Duval County non-attainment areas and the Okefenokee Wilderness Area which is located as near as 61 kilometers to the site.

18. In operation of Units 1 and 2, water will be discharged into Brown's Creek through an existing borrow pit and into the St. Johns River through the diffuser of the existing Northside Generating Station. The discharges reaching Brown's Creek will be area rainfall runoff and will not violate the State of Florida Class III surface water quality criteria. The discharge to the St. Johns River will be composed of the cooling tower blowdown and other wastewater streams.

Computer modeling was used to predict a "worst-case" situation with regard to the wastewater discharge to the St. Johns. The results of that modeling indicate that under a worst-case assumption, aluminum, total residual chlorine, chloride, copper, cyanide, iron, mercury, oil and grease, selenium, and silver would exceed Class III standards at the point of discharge. In every instance except chloride and selenium, the maximum ambient levels of these parameters, as determined during a one-year monitoring program, were also in excess of Class III standards. Chloride and selenium would meet Class III standards with mixing zones of approximately 80 square meters. The other parameters exhibit a rapid approach to ambient levels within a 31-acre mixing zone. When ambient river water is in violation of Class III standards, the conservative, worst-case assumption used in the computer modeling predicts that the remaining eight chemical parameters may not meet the surface water quality standards of the Department of Environmental Regulation at the mixing zone boundary.

Historical water quality data show there are substances which have been observed in concentrations exceeding their applicable water quality criteria in the St. Johns River water in the vicinity of the proposed site. A statistical analysis

of ambient water quality indicates that, of the samples collected during a one-year monitoring program conducted in the vicinity of the proposed site, the mean concentrations of six chemical parameters, and the maximum concentrations of those six chemical parameters, as well as the maximum concentrations of two other chemical parameters exceeded their expected water quality criteria.

Because water from the St. Johns River, when used as cooling water, is concentrated approximately 1.5 times by evaporation in the cooling towers and is then discharged as the major portion of the combined wastewaters from Units 1 and 2, the ambient St. Johns River water quality has the most significant effect on the quality of the wastewater discharge. If the ambient St. Johns River water quality does not exceed the applicable water quality standards, the discharge will not exceed water quality standards. To offset this difficulty, the Applicant has requested, for the chemical parameters of aluminum, copper, cyanide, iron, mercury, oil and grease, silver and total residual chlorine, a mixing zone of 125,600 square meters (31 acres). Further variances from applicable rules and standards of the Department of Environmental Regulation, as more specifically set forth in the Amended Petition for Variance, are requested for those eight substances. Those variances would apply to discharges occurring only when ambient St. Johns River concentrations of those substances are within 10 percent of or exceed the applicable water quality criteria for Class III Waters as adopted by the Department of Environmental Regulation and the City of Jacksonville.

The wastewater treatment system proposed for Units 1 and 2 will contribute relatively small amounts of the foregoing substances to the discharge to the St. Johns River.

By far, the primary contributor of the foregoing substances to the wastewater discharge is the ambient level of those substances existent in the St. Johns River from which the cooling water will be withdrawn. Therefore, to the extent that cooling water must be withdrawn from the St. Johns River, the level of the foregoing substances in the discharge is largely beyond the control of the Applicant.

No evidence was presented from which it could be concluded that an alternative source of water for makeup to the cooling towers would necessarily lead to a net decrease in adverse environmental impact. For example, use of groundwater as makeup to the cooling towers could increase the potential for drawdown and chloride intrusions into the Floridan Aquifer. Other alternatives would similarly invite adverse effects whose net impact would not necessarily be significantly less than that of the system as proposed. Computer modeling was conducted assuming a 31-acre mixing zone and a discharge of pure water into that mixing zone. That model indicated that under such circumstances ambient concentrations of the eight chemical substances listed above could be reduced only to about seven percent below ambient St. Johns River concentration. Further, when considering the net impact on the minimum St. Johns River flow rate of 10,000 cfs, only a theoretical 0.63 percent decrease in ambient river concentrations could be realized in the vicinity of the proposed discharge. Thus, it is concluded that even if this alternative were feasible, it would have only a slight improving effect on water quality at the edge of a 31-acre mixing zone in the St. Johns River.

19. No competent substantial evidence has been presented from which it can be concluded that discharges of wastewaters at the concentration levels proposed by the Applicant will

adversely affect the biota in the St. Johns River or the health of humans who eat fish or shellfish from the river. The actual contribution of the plant discharge to the level of the subject substances presently found in the river will be relatively small. No competent substantial evidence was presented from which it could be concluded that mercury levels in the fish and shellfish from the St. Johns River exceed the standard set for such levels in food for human consumption by the U.S. Food and Drug Administration.

In order to limit the adverse impact of granting the subject wastewater discharge variances, the Applicant has agreed to the imposition of effluent limitations on the possible contribution of plant wastewater streams to water quality conditions in the St. Johns River and has accepted the imposition of 1.5 cycles of concentration as the allowable impact of the cooling towers on ambient river concentrations. The Applicant has further committed itself to conduct an intensive study of the impacts of discharging copper, mercury, and total residual chlorine in order to determine whether the time-limited variances should be extended beyond two years from the commencement of commercial operation.

20. The groundwater requirements of proposed Units 1 and 2 are estimated to be in the range of 2,600 to 3,600 gallons per minute on an average basis, depending on the groundwater requirements of the FGD system, and 54,000 gallons per minute for a short-term (24 hour) demand. A significant user of the required groundwater is the FGD system, which requires groundwater as opposed to saline water in order to avoid corrosion and to produce marketable gypsum. The production of marketable gypsum has the potential of producing the amount of solid waste that must be landfilled as a result of the operation of Units 1 and 2.

Groundwater will not be used in the cooling towers and reuse of wastewaters will be maximized in order to minimize total groundwater demand. Groundwater will be pumped from four production wells. One of these will essentially be a standby well and one will essentially be a monitoring well. Production wells will be drilled to a 750 foot depth so as to penetrate only the Ocala Limestone Formation of the Floridan Aquifer. Such a design will minimize the potential for chloride (salt water) intrusion into the Floridan Aquifer.

At an annual average production rate of 3600 gallons per minute, there will be approximately 15 feet of drawdown at the nearest site boundary, with approximately 9 feet of drawndown at the nearest offsite well. Of the approximately 90 inventoried Floridan Aquifer wells within the general vicinity of the site, approximately 30 could experience water level declines of one foot or greater and approximately 15 could experience declines greater than two feet. The current piezometric level at the nearest well is approximately 15 feet above land surface. Thus, with nine feet of additional drawdown caused by the site production, the piezometric level at that well will be reduced to six feet above land surface. That well is known to be equipped with a surface pump and is not currently in use.

The effect of decreasing the hydraulic head against which a pump must operate by nine feet could mean a decrease in the discharge rate from the pump and thus a longer pumping period to pump a given quantity of water. This could have an adverse economic impact upon the user of the pump. These impacts have not been quantified. No artesian wells are expected to cease flowing as a result solely of the site groundwater usage. Water levels in Floridan Aquifer wells in the area of the site are currently declining at an average rate of approximately 0.5 feet per year. Thus, over an assumed forty-year life of the

proposed units, the Floridan Aquifer water level could be expected to decline by approximately 20 feet, to, at or near, land surface. Many flowing artesian wells over that period of time could thus cease to flow and would have to be equipped with pumps even if Units 1 and 2 were not constructed. However, the effect of the groundwater withdrawals for Units 1 and 2 will be to advance by as much as twelve years the point in time at which domestic Floridan wells would cease to flow at the surface and have to be equipped with pumps. The economic impact of this effect has not been quantified.

Within the perimeter of the primary site for Units 1 and 2 the groundwater within the shallow aquifer system generally flows to the south and east in the direction of the wetland areas adjacent to Brown's Creek and Clapboard Creek. Based upon the water level gradient and the aquifer properties inferred from pumping tests done on the site, the volumetric flow rate per unit cross-sectional area aquifer is approximately one gallon per day per square foot of aquifer in a vertical plain. The quality of water within the shallow water table aquifer is good.

21. The Blount Island coal off-loading facility will include a lined coal storage pile and associated facilities. Runoff and leachate generated at the coal pile will be collected and diverted to a treatment facility. Effluent from the treatment facility will then be directed to a percolation pond so as to percolate downward into the shallow groundwater regime on Blount Island. The groundwater quality in the vicinity of the coal off-loading facility on Blount Island is quite variable, but generally poor. The extremely poor quality of shallow groundwater on Blount Island coupled with the availablility of large quantities of water of good quality from the Floridan Aquifer, makes it extremely unlikely that the shallow groundwater on Blount Island would ever be considered as a water supply source. Since the water

to be percolated at the percolation pond will be effluent from the treatment facility, rather than direct coal pile runoff, applicable water quality standards are not expected to be exceeded even if the local groundwater were to be considered Class I-B water which is unlikely.

22. The facilities at the main site for Units 1 and 2 which could potentially degrade groundwater quality include the coal pile, sedimentation pond and other liquid waste storage areas, and solid waste storage areas. The coal pile and liquid waste storage areas will be lined with relatively impermeable materials so as to preclude liquid waste or leachates from percolating into the underlying groundwater. These areas will be monitored by downgradient monitoring wells so as to detect any possible leaks in the lining materials. The relatively small amount of liquid which might enter the groundwater through a leaky liner, coupled with a rather low probability of such an event occurring, indicate that there is little chance of groundwater degradation resulting from such a source.

23. During the life of Units 1 and 2, it is estimated that approximately two million tons of bottom ash, eight million tons of fly ash, and seventeen million tons of FGD wastes will be generated. The FGD waste will be oxidized and dewatered to produce a marketable, commerical-grade gypsum. Commerical markets for fly ash and bottom ash are also anticipated. In the event, however, that markets do not develop for these waste products, they will be disposed of onsite in a managed landfill. Because of the uncertainties involved in characterizing leachates which might be generated from such a solid waste disposal area, a test program has been proposed. These uncertainties include the marketability of the waste products, the specific source of coal for fuel, and the natural variations in groundwater conditions and aquifer properties. These uncertainties make it impossible

to predict the quantity or quality of solid waste leachates which may be produced at the main site for Units 1 and 2 and which might eventually reach the property boundary. Thus, a test program is designed to meet several objectives:

(1) To characterize the physical aspects of waste material;

(2) To characterize hydrologic aspects of the waste pile; and

(3) To characterize waste leachate properties.

The monitoring and testing program will include continuous monitoring of site precipitation, surface runoff volumes and leachate volumes generated, and periodic sampling and chemical analysis of precipitation, runoff and leachate. The program will also include physical and hydrologic testing. The results of the program will be complemented by data obtained from groundwater monitoring at the solid waste landfill area. Should the test program suggest the potential for long-term violation of water quality standards at the property boundary, there are reasonable appropriate mitigative measures that could be implemented to prevent violation of water quality standards. The proposed Conditions of Certification with regard to lining of the solid waste disposal areas and the testing program to demonstrate the quality and quantity of leachate from an unlined or uncontrolled solid waste facility as set forth in conditions III.g and XII are sufficient to assure that Florida water criteria will not be violated.

24. The St. Johns River Water Management District has filed its report as required by Section 403.507(1)(a), Florida Statutes, and in that report does not object to certification of site with certain conditions it proposes for certification.

25. The Department of Veteran and Community Affairs has filed its report as required by Section 403.507(1)(a), Florida Statutes, and in that report concludes that the proposed

project is essentially compatible with the majority of policies in the State Comprehensive Plan.

26. The construction of Units 1 and 2 as proposed will require connection to, use of or the crossing over of the works and properties of the State of Florida governed by the Board of Trustees of the Internal Improvement Trust Fund, the Florida Department of Transportation, the St. Johns River Water Management District, the City of Jacksonville, and the Jacksonville Port Authority. The position of those entities with regard to the use of their works and properties are set forth in part in Stipulations between the Applicant and each individual agency which Stipulations are contained in Applicant's Exhibit E-3 is discussed below in the Conclusions of Law.

27. The State of Florida, Department of Environmental Regulation, has recommended certification of Units 1 and 2 pursuant to certain Conditions of Certification which are set forth in Applicant's Exhibit E-4.

28. The application proposes to transport the coal unloaded at the proposed coal unloading facility on Blount Island to the mainland site of Units 1 and 2 by shuttle train over a rail line connecting the coal unloading facility on Blount Island to the mainland facility. Applicant's Exhibit G-4, Vol. 2, paragraph 9.8.4. According to the application, this would require the construction of new railroad tracks as depicted in Figure 3.10-1 of Applicant's Exhibit G-4. The application states that among the alternative systems investigated by the Applicant for the transportation of coal from Blount Island to the mainland were three which would use overland conveyor delivery rather than shuttle train. Applicant's Exhibit G-4, Vol. 2, p. 9.8-3. These three alternatives were rejected in the application "[b]ecause of the high costs and attendant potential right-of-way and environmental problems which are associated with the long, overland conveyor. . ."

delivery systems. (Emphasis added) Applicant's Exhibit G-4, Vol 2, paragraph 9.8.4, p. 9.8-5. This issue has become somewhat confused, however, by the evidence presented in this proceeding and by the matters set forth in the Applicant's Proposed Recommended Order which apparently contradict or amend the proposal and conclusions in the application.

Both the evidence presented by the Applicant and its Proposed Recommended Order establish that instead of proposing the use of shuttle trains for transporting coal from Blount Island to the mainland, the Applicant has amended its application and seeks to use a conveyor system. In Paragraph 8 of the Applicant's Proposed Recommended Order is is stated that "The plant will also be connected to the proposed Blount Island deep water coal unloading facility by rail, or by an enclosed conveyor or other similar means of conveyance located within the transmission line right-of-way." (Emphasis added.) Thus, in that statement the Applicant recedes from his position in the application that a shuttle train instead of a conveyor delivery system will be used to transport coal from Blount Island to the mainland. In Paragraph 21 of the Applicant's Proposed Recommeded Order it is stated that the Applicant has entered into various agreements with the Jacksonville Port Authority, the Department of Public Works of the City of Jacksonville, the Florida Department of Transportation, the staff of the Department of Natural Resources and Board of Trustees of the Internal Improvement Trust Fund, and the St. Johns River Water Management District, which, if adopted, would allow the transport of coal from Blount Island to the mainland ". . . by enclosed conveyor or similar enclosed means of conveyance." (Emphasis added). The Proposed Recommended Order notes that the use of such a system would further minimize any impacts from rail traffic to the site. Again, the Applicant indicates its intention to use a conveyor instead of shuttle trains.

The testimony of Fredric J. Bold, Project Engineer on the project for the Applicant's consultant, and the Applicant's witness, testified on direct examination that two alternatives are being considered by the Applicant to move coal from Blount Island to the mainland. Those two alternatives, according to Mr. Bold, are a conveyor system and a rail connection. The conveyor system is described by Mr. Bold as follows:

> The conveyor system will transport the coal directly from the ship to the power plant via an elevated 72" conveyor. The system would be totally enclosed and would be capable of handling 4,000 tons per hour. The proposed route is along the existing transmission line right-of-way. (Applicant's Exhibit E-1, p. 17)

Although Mr. Bold testified that the Applicant was still considering the alternatives of a conveyor system or shuttle trains, an agreement between the Applicant and the Jacksonville Port Authority, as set forth in Applicant's Exhibit H-3, in paragraph 5, states that "JEA shall provide an independent means, such as a belt conveyor, or aerial tramway system, for coal transport between the Blount Island coal unloading facility and the mainland SJRPP site and the St. Johns River Power Park, such that coal shall not be transported over the vehicular roads and bridges or over the existing railroads or bridges." (Emphasis added). Further contradicting the testimony of Mr. Bold that the two alternatives are being considered and conflicting with the proposal of the application that a shuttle train be used is the Condition of Certification proposed by the Applicant in its Proposed Recommended Order at page 32, which states:

> JEA shall submit to DER information concerning location, design, construction and operation of any coal conveyor system from Blount Island to the main plant site at least 120 days prior to construction of the coal conveyor system. The Secretary of DER shall indicate DER's approval or disapproval within 90 days of receipt. DER may impose reasonable conditions on the construction and operation of this conveyor system.

Thus, from the evidence presented at hearing and the argument of the Applicant set forth in its Proposed Recommended Order, it now appears that the Applicant does not intend to transport coal from the coal unloading facility on Blount Island to the mainland by rail. Rather, it now appears that the Applicant intends to use a conveyor delivery system for the transportation of coal from Blount Island to the mainland.

By the Applicant's own statement in paragraph 21 of the Proposed Recommended Order ". . . no detailed information has been submitted in these proceedings regarding design of the coal conveyance system." Therefore, it is found as a matter of fact that no evidence has been presented upon which any findings of fact can be based to determine whether that part of the site that encompasses a means to transport coal from Blount Island to the mainland will produce minimal adverse effects on human health, the environment, the ecology of the land and its wildlife, and the ecology of state waters and their aquatic life. It is impossible to make any factual determination of the environmental or other impact of the system by which the Applicant proposed to transport coal from Blount Island to the mainland because the Applicant has provided no information other than the general statement of Mr. Bold with regard to the route or manner of construction or other design detail of the proposed conveyor system. It is clear that in transporting coal from Blount Island to the mainland, wetlands and waters of the state will have to be crossed. Such a crossing apparently would entail some construction in those wetlands and waters. The only suggestion in the record as to the extent and design of such construction is couched in the most general of terms and suggests that some sort of conveyor system will be used. By the Applicant's own admission no details of such a system have been provided. There is presently

no system in place which the Applicant proposes to use for transporting coal from Blount Island to the mainland.

29. In order to construct the Blount Island coal unloading facility, the Applicant will have to dredge approximately 21 acres in the Fulton-Dame Point Cutoff of the St. Johns River to a depth of approximately 38 feet below mean sea level. Spoil material will be pumped via submerged pipeline to an engineered disposal area on Quarantine Island while dredged material suitable for fill will be placed landward of the wharf within the facility boundary. Approximately 531,000 cubic yards of dredge material will be excavated waterward of the mean high waterline and 20,000 cubic yards will be excavated landward of the mean high waterline.

The dredged spoil will be removed by suction dredge. Settling ponds will be used to reduce sediment loads before discharge into the St. Johns River. Dredging will be limited to a period not exceeding a cumulative total of twelve months to minimize the transient impacts on local aquatic communities.

It is anticipated that temporary localized water quality changes will occur as a result of the Blount Island dredging activities. Anticipated effects include resuspension of substances presently contained in bottom sediments into adjacent waters, thereby causing these waters to exceed specific water quality criteria established for Class III Waters by Chapters 17-3 and 17-4, F.A.C., and adopted by Section 50.101, Jacksonville City Ordinance Code. During these dredging activities it is possible that aluminum, cadmium, copper, cyanide, iron, lead, mercury and silver will be found in excess of their respective water quality criteria outside of a mixing zone having a maximum size allowed under Section 17-4.244, Florida Administrative Code. This is due in part to the ambient water

concentrations of these substances and to the high level of these substances observed in bottom sediments in the area of the proposed dredging activities. For the foregoing reasons, the Applicant seeks a variance from the specific water quality criteria dealing with acute toxicity of wastewater discharge, lead, aluminum, cadmium, copper, cyanide, iron, mercury, silver and mixing zone concentrations exceeding 96 hr LC_{50}.

CONCLUSIONS OF LAW

30. This proceeding was held pursuant to the Florida Electrical Power Plant Siting Act, Chapter 403, Part II, Florida Statutes, and Chapter 17-17, Florida Administrative Code, to consider the subject application for site certification.

31. Notice, in accordance with Chapter 403 and Chapter 120, Florida Statutes, and Chapter 17-17, Florida Administrative Code, has been given to all persons and parties entitled thereto, as well as to the general public.

32. The purpose of the site certification hearing was to receive testimony and evidence concerning whether the location and operation of the proposed facilities will produce minimal adverse effects on human health, the environment, the ecology of the land and its wildlife, and the ecology of state waters and their aquatic life and to fully balance the increasing demand for electric power plant location and operation with the above interests of the public. Chapter 403, Florida Statutes.

33. The record of this proceeding consists of all pleadings and papers filed herein, including the Site Certification Application, as amended, the transcripts of all hearings, all orders entered by the Hearing Officer, and evidence and exhibits properly admitted into the record.

34. By ORDER dated June 26, 1981, amended August 25, 1981, the Florida Public Service Commission, pursuant to Chapter

403, found:

> ". . . that a need exists for the construction of St. Johns River Power Park Units 1 and 2 in the same time frame proposed by the applicants, in that construction of the units appears to be the best available alternative to the continued use of expensive oil-fired generation, based upon the most reasonable projections of future fuel costs and our appraisal of possible alternatives."

35. The report of the St. Johns River Water Management District required by Section 403.507(1)(a), Florida Statutes, has been submitted and does not object to certification of the site with certain requirements to which the Applicant has acceded and which are reasonable. These requirements are set forth in the agreement between JEA and the St. Johns River Water Management District and part of Applicant's Exhibit H-3.

36. The report required of the Department of Veteran and Community Affairs by Section 403.507(1)(a), Florida Statutes, has been submitted and concludes that the proposed project is essentially compatible with the majority of policies in the State Comprehensive Plan.

37. Section 403.507(2), Florida Statutes, requires that the Department of Environmental Regulation conduct, or contract for, studies of the proposed electrical power plant and site, including, but not limited to (a) cooling system requirements, (b) construction and operational safeguards, (c) proximity to transportation systems, (d) soil and foundation conditions, (e) impact on suitable present and projected water supplies for this and other competing areas, (f) impact on surrounding land uses, (g) accessibility to transmission corridors, and (h) environmental impacts. Such a report and recommendations have been submitted and introduced into evidence. The Department of Environmental Regulation recommends certification of the proposed units subject to the proposed Conditions of Certification which are attached.

38. The mainland portion of the proposed site, excluding the Blount Island facility and the means of transporting coal from Blount Island to the mainland, will, when the variances, mixing

zones and zones of discharge are granted as set forth in the Proposed Conditions of Certification, comply with the applicable statutes, rules, regulations and other criteria of the State of Florida, Department of Environmental Regulation, as set forth in Chapters 253 and 403, Florida Statutes, and Chapter 17, Florida Administrative Code. With regard to the mainland portion of the site as outlined above; the construction and operation of Units 1 and 2 are not expected to cause substantial environmental damage to air and water quality or to agriculture, fish or wildlife. The construction and operational safeguards for Units 1 and 2, disregarding the Blount Island site and the coal transport system from Blount Island, are technically sufficient for the welfare and protection of the citizens of Florida. If performed in accordance with the Proposed Conditions of Certification, the construction, operation and location of the proposed mainland site are expected to produce minimal adverse effects on human health, the environment, the ecology of the land and its wildlife, and the ecology of state waters and their aquatic life.

The variances requested by the Applicant with regard to the discharge of wastewater from Units 1 and 2 are necessary and should be granted in accordance with the Proposed Conditions of Certification.

39. In Section 403.502, Florida Statutes, it is stated that

> ". . . The state shall ensure through available and reasonable methods that the location and operation of electrical power plants will produce minimal adverse effects on human health, the environment, the ecology of the land and its wildlife, and the ecology of State waters and their aquatic life. It is the intent to seek courses of action that will fully balance the increasing demands of electrical power plant location and operation with the broad interests of the public. Such action will be based on these premises:
>
> (1) To assure the citizens of Florida that operation safeguards are technically sufficient for their welfare and protection.
>
> (2) To effect a reasonable balance between the need for the facility and the environmental impact resulting from construction and

operation of the facility, including air and water quality, fish and wildlife, and the water resources and other natural resources of the State.

(3) To provide abundant, low-cost electrical energy."

In order to determine whether the location and operation of an electrical power plant will produce minimal adverse effects and to effect a reasonable balance between the need for the facility and the environmental impact resulting from its construction and operation, it is patently necessary to know the details of the components of such a facility.

The system for transporting coal from Blount Island to the mainland is an important component of the proposed facility. Without such a system, it would be meaningless to construct the coal unloading facility since coal could not be transported to Units 1 and 2 for use as fuel. However, the Applicant, by its own admission, has provided no details of the system that will be used. Thus, without knowing how the Applicant intends to construct the coal delivery system, it is impossible as a matter of law to determine whether the system will produce minimal adverse effects and it is further impossible to properly balance the need for the facility against its environmental impact when the extent and type of those impacts is unknown. It is possible from the evidence presented to conclude that some environmental impact will occur from the construction of the coal conveyor system since it must necessarily cross waters of the state with the potential for environmental damage always attendant to such crossings. Therefore, with regard to that part of the site pertaining to the coal conveyor system by which the Applicant intends to transport coal from Blount Island to the mainland site, the Applicant has failed to meet the burden imposed by Chapter 403, Part II, for certification.

Failure to establish that the coal conveyor system can be certified relates directly to the issue of whether the coal unloading facility on Blount Island can be certified. The construction of the coal unloading facility on Blount Island as outlined in the Findings of Fact above, will have significant environmental impacts. These include the dredging of approximately 531,000 cubic yards of material from below the mean high waterline in the navigable waters of the state in order to dredge approximately 21 acres in the Fulton-Dame Point Cutoff of the St. Johns River to a depth of approximately 38 feet below sea level.

This dredging will have effects including the resuspension of substances presently contained in bottom sediments into adjacent waters causing those waters to exceed specific water quality criteria established for those waters by Chapters 17-3 and 17-4, Florida Administrative Code. A further environmental impact of the construction of the Blount Island coal unloading facility will be that aluminum, cadmium, copper, cyanide, iodine, lead, mercury and silver will be found in excess of their respective water quality criteria outside a mixing zone having a maximum size allowed under Section 17-4.244, Florida Administrative Code. These are significant and adverse environmental impacts.

The Applicant has found it necessary to seek a variance from the water quality standards because of the seriousness of these impacts from the construction of the Blount Island coal unloading facility. To grant the requested variances and to certify the Blount Island portion of the site, thus allowing the construction, before it is certain that such construction will be for a beneficial purpose, does not effectuate the intent of Chapter 403, Part II, Florida Statutes. Without a coal conveyor system to deliver the coal from the Blount Island

coal unloading site to Units 1 and 2 on the mainland, all of the dredging and other construction with regard to the coal unloading facility with its attendant environmental impacts would be for no purpose.

The Electrical Power Plant Siting Act contains no presumption that a site shall be certified. To the contrary, the whole purpose of the Act is to determine whether certification should issue. Certification must necessarily depend on the facts and circumstances of a particular identified system and the impacts of that particular identified system. Therefore, there being no presumption by law that a coal conveyor delivery system shall be certified, and there being no facts upon which a decision on certification can be based with regard to a coal conveyor system, on the record of this proceeding it is impossible to determine or predict whether such a coal conveyor system could ever be certified. Since the Applicant has apparently precluded by agreement (see Applicant's Exhibit E-3) the possibility of using existing highways and railroad tracks to deliver coal from Blount Island to the mainland, it would be sheer speculation based on no fact to conclude that any coal conveyor system could be certified in accordance with the requirements of Chapter 403, Part II, Florida Statutes.

Therefore, it is concluded as a matter of law that the Applicant has not demonstrated on the record of this proceeding its entitlement to certification of the coal unloading facility portion of the site on Blount Island nor its entitlement to the requested variances for that part of the site. Without a coal conveyor delivery system to transport coal from the Blount Island coal unloading facility to Units 1 and 2, such construction with its attendant environmental impact would be for no purpose.

The lack of sufficient facts upon which a determination of certification could be based with regard to the coal delivery

system is recognized by the Applicant. The Applicant attempts to deal with this deficiency by proposing a Condition of Certification (see p. 32, Proposed Recommended Order, Applicant) by which the details of the coal conveyor system would be submitted to the Department of Environmental Regulation 120 days prior to its intended construction and the Secretary of the Department would approve or disapprove, imposing reasonable conditions. There is , however, a fallacy in such a mechanism with regard to a significant component of a site certification. A primary purpose of the Florida Electrical Power Plant Siting Act is to allow a broad overview of the entire project with the certification authority resting in a single body, the Governor and Cabinet sitting as the Board. The proposed Condition of Certification that would allow the Secretary of DER the authority to look at a single component of the overall project and to approve or disapprove that component would appear to defeat the purpose of the Florida Electrical Power Plant Siting Act. The proposed site should be looked at by the Board in its entirety in a contemporaneous fashion, combining all of the appropriate governmental regulatory interests and the broad interests of the public. Delegating by a Condition of Certification the actual determination of the certification of a major part of the site to a single regulatory agency with a narrow scope of regulatory responsiblity is outside the purview of the Florida Electrical Power Plant Siting Act. It necessarily severely narrows the scope of investigation when one of the very purposes of the Act is to broaden that scope in order to ". . . fully balance the increasing demands for electrical power plant location and operation with the broad interests of the public." Section 403.502, Florida Statutes. Thus, the Condition of Certification proposed by the Applicant as a solution to the lack of information and detail is inadequate. It remains the

responsibility of the Board, not the Secretary of DER, to determine whether certification should be granted.

40. Applicant's Exhibit H-3 is comprised of individual stipulations between the Jacksonville Electric Authority and the following entitles:

(1) Consolidated City of Jacksonville, Departmentof Public Works

(2) State of Florida, Department of Transportation

(3) State of Florida; Department of Natural Resources/Board of Trustees of the Internal Improvement Trust Fund Staff

(4) St. Johns River Water Management District

(5) Jacksonville Port Authority

In its Proposed Recommended Order the Applicant seeks as Conditions of Certification the matters set forth in the subject stipulations. None of the stipulations purport to be stipulations between all of the parties to this action. Therefore, they cannot be binding as a stipulation on the parties to this action. They are simply, each unto themselves, a private agreement reached between the Jacksonville Electric Authority and the particular entity which is a party to each individual stipulation. These agreements apparently constitute the arrangement between the Jacksonville Electric Authority and each of the entities listed as to their respective rights and responsibilities with regard to construction on the lands, regulatory interests, or properties of each individual entity. The matters set forth in those stipulations are not properly subjects of Conditions of Certification. To the extent that the matters contained in those stipulations reflect the manner in which the Applicant intends to construct the facilities pertinent to Units 1 and 2, the Applicant is bound by its thus stated intent in any certification that should issue.

To the extent that the matters set forth in the stipulations contain agreements for the use of facilities, property or land, between the Jacksonville Electric Authority and the entity that is a party to the stipulation, such appears to be in the nature of a private agreement between those two entities and is not a proper matter for mandatory order by the Board as a Condition of Certification.

Two of the stipulations that are a part of Applicant's Exhibit H-3 must be dealt with individually. Those are the stipulation between the Jacksonville Electric Authority and Consolidated City of Jacksonville, Department of Public Works, and the stipulation between the Jacksonville Electric Authority and State of Florida, Department of Natural Resources/Board of Trustees of the Internal Improvement Trust Fund Staff.

The stipulation between the Jacksonville Electric Authority and the "Consolidated City of Jacksonville, Department of Public Works" is signed by the Managing Director of the Jacksonville Electric Authority and by the Director of the Consolidated City of Jacksonville, Department of Public Works. The "Consolidated City of Jacksonville, Department of Public Works" is not a party to this proceeding. The "Consolidated City of Jacksonville" is a party to this proceeding. It appears from the stipulation between JEA and the Department of Public Works that the stipulation is intended to bind the Consolidated City of Jacksonville. However, since the Department of Public Works is not a party to this proceeding and it is unknown whether the Director of that Department has the authority to bind the Consolidated City of Jacksonville, that stipulation is not treated as a stipulation between parties to this proceeding. Rather it is treated, simply, as what it purports to be on its face; that is, an agreement between the Jacksonville Electric Authority and the Consolidated City of Jacksonville, Department of Public Works.

The stipulation purportedly between the Jacksonville Electric Authority and the State of Florida, Department of Natural Resources/Board of Trustees of the Internal Improvement Trust Fund creates a more difficult problem. The Florida Department of Natural Resources is a party to this action. The Board of Trustees of the Internal Improvement Trust Fund is also a party to this proceeding. The agency head of the Department of Natural Resources is the Governor and Cabinet. Section 20.25(1), Florida Statutes (1981). The Board of Trustees of the Internal Improvement Trust Fund is also the Governor and Cabinet. Section 253.02(1), Florida Statutes (1981). Thus, for both the Department of Natural Resources and the Board of Trustees of the Internal Improvement Trust Fund the agency head, as that phrase is defined by Section 120.52(3), Florida Statutes (1981), is the Governor and Cabinet. Those two agencies can only speak with the authority of the agency head, in each instance, the Governor and Cabinet. The stipulation which is purportedly between the Jacksonville Electric Authority and the Department of Natural Resources and Board of Trustees on its face purports to bind those two agencies to the issuance of certain easements in, upon, and across sovereignty lands of the State of Florida and to commit those agencies and JEA to certain other activities with regard to the construction of Units 1 and 2. These activities include the waiver of payment of fees by JEA to the Board of Trustees for the removal of dredge materials from state owned lands. The stipulation, however, is not in fact and law a stipulation between the Jacksonville Electric Authority and the Department of Natural Resources and Board of Trustees of the Internal Improvement Trust Fund. On page 2 of the stipulation it states:

> "NOW, THEREFORE, it is agreed and stipulated by JEA and DNR/BTIITF staff that any Certification

Order issued in connection with this proceeding shall contain the following provisions and conditions . . . ."
(Emphasis added)

The stipulation is executed by counsel for the Jacksonville Electric Authority and by counsel for the State of Florida, Department of Natural Resources/Board of Trustees of the Internal Improvement Trust Fund. It can be seen from the foregoing language that the stipulation is between the Jacksonville Electric authority and the staff of the two agencies. Such a stipulation cannot bind the Department of Natural Resources or the Board of Trustees. The staff of those agencies is not a party to this proceeding and has no standing to be a party to this proceeding. Those agencies may be bound in a stipulation in this proceeding only when the agency head, the Governor and Cabinet, authorizes such a stipulation and agreement. Any apparent agreement and stipulation between a party to this proceeding and the staff of an agency which is a party to this proceeding is of no force and effect unless the agency head has authorized the staff to act on its behalf. Since here the stipulation specifically states that it is the "DNR/BTIIF staff" who is entering into an agreement, any presumption that counsel for those agencies by his signature speaks with the authority of his client, the agency head, is negated.

Thus, the stipulation between the Jacksonville Electric Authority and DNR/BTIITF staff, which is part of Applicant's Exhibit H-3, is of no force and effect with regard to this proceeding. Further, since it purports to be an agreement between a party to this proceeding and a non-party to this proceeding, it has no relevance to this proceeding and is by this order therefore, not admitted into evidence and is hereby removed as a part of Applicant's Exhibit H-3 as an exhibit in evidence in this proceeding. Finally, it is noted that paragraphs numbered

1, 2, and 3 of the stipulation between the Jacksonville Electric Authority and the DNR/BTIITP staff deal solely with the system for transporting coal from Blount Island to the mainland and the construction of the Blount Island site. Since this Recommended Order concludes that the Applicant has not met the burden required for certification of the Blount Island site and the coal transport system, those three paragraphs have no present bearing on this proceeding.

41. All outstanding motions not otherwise ruled upon are hereby denied.

42. All findings of fact and conclusions of law proposed by the parties have been considered and incorporated where appropriate. To the extent such proposed findings of fact and conclusions of law have not been adopted in this Recommended Order they have been rejected as not based upon competent, substantial evidence, irrelevant or otherwise unnecessary to the conclusion of this cause.

RECOMMENDED ORDER

Based upon the entire record of this proceeding and the above Findings of Fact and Conclusions of Law, it is RECOMMENDED that:

(1) Jacksonville Electric Authority be granted certification pursuant to Chapter 403, Part II, Florida Statutes, for the location, construction and operation of St. Johns River Power Park Units 1 and 2, their associated facilities, and their directly associated transmission lines as proposed in the application as amended except that it is specifically RECOMMENDED that certification not be granted for that part of the associated facilities that include or are related to the Blount Island coal unloading facility and the coal delivery transport system

from Blount Island to the mainland site.

(2) Variances from surface water quality standards and mixing zones and zones of discharge as sought by the application with regard to the discharge from Units 1 and 2 should be GRANTED. Those variances sought from surface water quality standards and any mixing zones and zones of discharge sought with regard to the construction of the Blount Island coal unloading facility or the coal delivery transport system should not be granted.

(3) The certification should be made subject to the Conditions of Certification heretofore agreed to by the Applicant and the Department of Environmental Regulation and supported by the record and marked as Applicant's Exhibit H-4. A copy of those conditions is attached.

DONE and ENTERED this 26th day of May, 1982, in Tallahassee, Florida.

Chris H. Bentley

CHRIS H. BENTLEY
Hearing Officer
Division of Administrative Hearings
The Oakland Building
2009 Apalachee Parkway
Tallahassee, Florida 32301

Filed with the Clerk of the Division of Administrative Hearings this 26th day of May, 1982.

Copies furnished:

See following page

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Case No. 81-357

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11-24-81

State of Florida Department of Environmental Regulation
Jacksonville Electric Authority
SJRPP Units 1 & 2
PA 81-13
CONDITIONS OF CERTIFICATION

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State of Florida Department of Environmental Regulation
Jacksonville Electric Authority
SJRPP Units 1 & 2
PA 81-13

CONDITIONS OF CERTIFICATION

I. Air

The construction and operation of SJRPP Units 1 & 2 at the Jacksonville steam electric power plant site shall be in accordance with all applicable provisions of Chapters 17-2, 17-4, 17-5 and 17-7, Florida Administrative Code. In addition to the foregoing, the permittee shall comply with the following conditions of certification:

A. Emission Limitations

1. Based on a maximum heat input of 6,144 million BTU per hour, stack emissions from SJRPP Unit 1 & 2 shall not exceed the following when burning coal:

   a. SO_2 - 1.2 lb. per million BTU heat input, maximum two hour average, 0.76 lb/MMBtu on a 30-day rolling average.

   b. NO_x - 0.60 lb. per million BTU heat input.

   c. Particulates - 0.03 lb. per million BTU heat input.

   d. Visible emissions - 20% (6-minute average), except one 6-minute period per hour of not more than 27% opacity.

2. The height of the boiler exhaust stack for SJRPP Unit 1 & 2 shall not be less than 640 ft. above grade.

3. Particulate emissions from the coal handling facilities:

   a. The permittee shall not cause to be discharged into the atmosphere from any coal processing or conveying equipment, coal storage system or coal transfer and loading system processing coal, visible emissions which exceed 10 percent opacity. Particulate emissions shall be controlled by use of control devices.

   b. The permittee must submit to the Department within thirty (30) days after it becomes available, copies of technical data pertaining to the selected particulate emissions control for the coal handling

facility. These data should include, but not be limited to, guaranteed efficiency and emission rates, and major design parameters such as air/-cloth ratio and flow rate. The Department may, upon review of these data, disapprove the use of any such device if the Department determines the selected control device to be inadequate to meet the emission limits specified in 3(a) above. Such disapproval shall be issued within 30 days of receipt of the technical data.

4. Particulate emissions from limestone and flyash handling shall not exceed the following:

   a. Limestone silos - 0.050 lb/hr.

   b. Limestone hopper/transfer conveyors - 0.65 lb/hr.

   c. Flyash handling system - 0.2 lb/hr.

5. Visible emissions from the following facilities shall be limited to 10% opacity: (a) limestone and flyash handling system, (b) limestone day silos and (c) flyash silos.

6. Compliance with opacity limits of the facilities listed in Condition 5 will be determined by EPA reference method 9 (Appendix A, 40 CFR 60).

7. Construction shall reasonably conform to the plans and schedule given in the application.

8. The permittee shall report any delays in construction and completion of the project which would delay commercial operation by more than 90 days to the Department's St. Johns River Subdistrict Office.

9. Reasonable precautions to prevent fugitive particulate emissions during construction, such as coating of roads and construction sites used by contractors, regrassing or watering areas of disturbed soils, will be taken by the permittee.

10. Coal shall not be burned in the units unless both electrostatic precipitator and limestone scrubber are operating properly except as provided under 40 CFR Part 60 Subpart Da.

11. The two auxiliary boilers shall fire No. 2 fuel oil with a maximum sulfur content of 0.76 percent by weight, a maximum ash content of 0.01 percent by weight, an ap-

proximate heating value of 19,500 Btu per pound and a maximum viscosity of 3.6 centistokes at 100° F. Samples of all fuel oil fired in the boilers shall be taken and analyzed for sulfur content, ash content, heating value and viscosity. Accordingly, samples shall be taken of each fuel oil shipment received. Records of the analyses shall be kept a minimum of the two years to be available for FDER's inspection.

12. The same quality No. 2 fuel oil, used for the auxiliary boilers, shall be used for the main boilers Units 1 and 2 during start-up and low load operation.

13. Maximum emissions from either of the auxiliary boilers shall be limited to 0.8 lb/MMBTU for SO_2, 0.1 lb/MMBTU for P.M., and 20% opacity for visible emissions.

14. Coal fired in Units 1 and 2 shall have an ash content not to exceed 18% and a sulfur content not to exceed 4% by weight. Coal sulfur content shall be determined and recorded in accordance with 40 CFR 60.47a.

15. No fraction of flue gas shall be allowed to bypass the FGD system to reheat the gases existing from the FGD system, if the bypass will cause overall SO_2 removal efficiency less than 90 percent on as otherwise provided in 40 CFR Part 60, Subpart Da. The percentage and amount of flue gas bypassing the FGD system shall be documented and records kept a minimum of two years available for FDER's inspection.

16. JEA shall keep records of the frequency, duration, load and manner of operation of the auxiliary boilers. During normal operation of the plant the boilers shall not operate more than seven (7%) percent of the time on an annual basis without prior approval of the Department. However, prior to commercial operation and during boiler start-up, shutdown of the main plant or plant upset, the auxiliary boilers may be operated more frequently.

B. Air Monitoring Program

1. The permittee shall install and operate continuously monitoring devices for each main boiler exhaust for sulfur dioxide, nitrogen oxide, carbon monoxide, carbon dioxide and opacity. The monitoring devices shall meet the applicable requirements of Section 17-2.710, FAC, and 40 CFR 60.47a. The opacity monitor may be placed in the duct work between the electrostatic precipitator and the FGD scrubber.

2. The permittee or Jacksonville Bio-Environmental Services Division shall operate two ambient monitoring devices for sulfur dioxide in accordance with EPA ref-

erence methods in 40 CFR, Part 53, and two ambient monitoring devices for suspended particulates. The monitoring devices shall be specifically located at a location approved by the Department. The frequency of operation shall be every six days commencing as specified by the Department.

3. The permittee shall maintain a daily log of the amounts and types of fuel used and copies of fuel analyses containing information on sulfur content, ash content and heating values.

4. The permittee shall provide stack sampling facilities as required by Rule 17-2.700(4) FAC.

5. The ambient monitoring program may be reviewed by the Department and the permittee annually after start-up of Unit 1. The monitoring program may be expanded or modified as deemed necessary by the Department. Modifications shall be effected in accordance with the provisions of Condition XXV.

6. Prior to commercial operation of the source, the permittee shall submit to the Departement a standardized plan or procedure that will allow the permittee to monitor emission control equipment efficiency and enable the permittee to return malfunctioning equipment to proper operation as expeditiously as possible. The permittee shall also submit to the Department a plan to monitor salt drift from the cooling towers and the impact of the salt drift on vegetation. A salt drift monitoring program shall be implemented by December 1, 1984.

C. Stack Testing

1. Within 60 calendar days after achieving the maximum capacity at which each unit will be operated, but no later than 180 operating days after initial start-up, the permittee shall conduct performance tests for particulates SO_2, NO_x, and visible emissions during normal operations near (±10%) 6144 MMBtu/hr heat input and furnish the Department a written report of the results of such performance tests within 45 days of completion of the tests. The performance tests will be conducted in accordance with the provisions of 40 CFR 60.46a, 48a, and 49a.

2. Performance tests shall be conducted and data reduced in accordance with methods and procedures outlined in Section 17-2.700 FAC.

3. Performance tests shall be conducted under such conditions as the Department shall specify based on representative performance of the facility. The permittee shall make available to the Department such records as may be necessary to determine the conditions of the performance tests.

4. The permittee shall provide 30 days prior notice of the performance tests in order to afford the Department the opportunity to have an observer present.

5. Stack tests for particulates NO_x and SO_2 and visible emissions shall be performed annually in accordance with conditions C. 2, 3, and 4 above.

D. Reporting

1. For SJRPP, stack monitoring, fuel usage and fuel analysis data shall be reported to the Department's St. John's River Subdistrict Office on a quarterly basis commencing with the start of commercial operation in accordance with 40 CFR, Part 60, Section 60.7., and in accordance with Section 17-2.08, FAC.

2. Utilizing the SAROAD or other format approved in writing by the Department, ambient air monitoring data shall be reported to the Bureau of Air Quality Management of the Department quarterly. Commencing on the date of certification, such reports shall be due within 45 days following the quarterly reporting period.

3. Beginning one month after certification, the permittee shall submit to the Department a quarterly status report briefly outlining progress made on engineering design and purchase of major pieces of air pollution control equipment. All reports and information required to be submitted under this condition shall be submitted to the Administrator of Power Plant Siting, Department of Environmental Regulation, 2600 Blair Stone Road, Tallahassee, Florida, 32301.

E. Operating Restrictions

1. The permittee shall not operate its Southside, Northside, or Kennedy Generating Station in such a manner as to cause violation of ambient air quality standards for SO_2 when SJRPP is operating.

2. The permittee shall file with the Department, St. Johns River Subdistrict Office and the Jacksonville Bio-Environmental Services by June 1, 1984, the SJRPP/JEA system proposed operating plan and supporting justification that will include the procedures JEA will follow to permanently eliminate emissions from steam generating units equivalent to the impact of the emissions of Southside Units 1 and 2. The Secretary of the Department shall indicate the Department's approval or disapproval within 90 days of receipt. The proposed operating plan shall also contain proposals for operating during air pollution episodes pursuant to 17-2.320(3), FAC., including use of such alternatives as washed coal at SJRPP.

3. The operating plan shall include retirement of Southside Units 1 and 2, or equivalent units, cold storage, construction of tall stacks or other equivalent programs.

4. The schedule for implementation of the plan shall be consistent with the startup of SJRPP.

II. Water Discharges

Any discharges into any waters of the State During construction and operation of SJRPP Units 1 and 2 shall be in accordance with all applicable provisions of Chapter 17-3, Florida Administrative Code, and 40 CFR, Part 423, Effluent Guidelines and Standards for Steam Electric Power Generating Point Source Category, except as provided herein. Also, the permittee shall comply with the following conditions of certification:

A. Plant Effluents and Receiving Body of Water

For discharges made from the power plant the following conditions shall apply:

1. Receiving Body of Water (RBW)

The receiving body of water has been determined by the Department to be those waters of the St. John's River and any other waters affected which are considered to be waters of the State within the definition of Chapter 403, Florida Statutes.

2. Point of Discharge (P.O.D.)

The point of discharge has been determined by the Department to be where the effluent physically enters the waters of the State in the St. Johns River or Browns Creek.

3. Thermal Mixing Zones

The instantaneous zone of thermal mixing for the cooling system shall not exceed an area of 17 acres. The temperature at the point of discharge into the St. John's River shall not be greater than 105 degrees F. The temperature of the water at the edge of the mixing zone shall not exceed the limitations of Paragraph 17-3.05(1)(d). Cooling tower blowdown shall not exceed 95° F. as a 24 hour average.

4. Chemical Wastes

All discharges of low volume wastes (demineralizer regeneration, floor drainage, labs drains, FGD blowdown and similar wastes) and metal cleaning wastes shall comply with Chapter 17-3. If violations of Chapter 17-3 occur, corrective action shall be taken. These wastewaters shall be directed to an adequately sized and constructed treatment facility.

During periods when treated wastewater does not comply with pH discharge limitations, the treated wastewater may be recycled to the coal pile runoff sedimentation pond, except when the sedimentation pond has insufficient capacity to retain the recycled wastewater and the runoff from a rainfall event equal to or less than a ten year, 24 hour storm.

5. Coal Pile

Coal pile runoff shall be directed to the central wastewater treatment facility and shall not be directly discharged to surface waters, except that discharge of stormwater runoff from the coal pile is allowed only during periods of high rainfall in excess of the ten year, 24 hour storm.

6. Chlorine

The concentration of total residual chlorine discharged from Units 1 & 2 and/or Northside Generating Station shall not exceed 0.1 mg/l at the POD nor 0.01 mg/l beyond an instantaneous mixing zone of 17.0 acres. Chlorine resulting from chlorination of either unit at

SJRPP shall not be discharged more than two hours per day and no unit shall be chlorinated simultaneously with any other unit at SJRPP or at Northside Generating Station. Levels of free available chlorine shall not exceed 0.5 mg/l for an instantaneous maximum nor 0.2 mg/l on a daily average from the blowdown of either cooling tower. In the event that 40 CFR, Part 423 is revised with respect to chlorine limitations, such discharge limitations shall apply to cooling tower blowdown.

7. pH

The pH of the combined discharges shall be such that the pH will fall within the range of 6.0 to 9.0.

8. Polychlorinated Biphenyl Compounds

There shall be no net discharge of polychlorinated biphenyl compounds.

9. Combined Low Volume Wastes and Coal Pile Runoff

The combined low volume wastes and coal pile runoff shall be treated to control pH, total suspended solids and toxic metals prior to being discharged. The following effluent limitations will apply:

Effluent	Daily Maximum	Maximum 30-Day Daily Average
TSS	50 mg/l*	30 mg/l
Oil and Grease	15 mg/l	10 mg/l
pH	6-9	6-9

The design plans and specifications of the treatment system shall be submitted to the Department for review and approval prior to construction. The Department will indicate approval or disapproval within 45 days.

*100 mg/l allowed when only low volume wastes are being treated.

10. Metal Cleaning

Metal cleaning wastes shall be treated as appropriate prior to discharge to the cooling water system. The following effluent limitations shall apply:

Effluent	Daily Maximum	Maximum 3 Daily Aver
TSS	100 mg/l	30 mg/l
Oil and Grease	20 mg/l	15 mg/l
Iron	1 mg/l	
Copper	1 mg/l	

11. Solid Waste and Gypsum Storage Areas

There shall be no direct discharge of stormwater runoff to surface waters from the gypsum storage areas, nor from the solid waste areas prior to closure without treatment (closure will be as defined in the solid waste management plan).

12. Storm Water Runoff

During plant operation, necessary measures shall b used to settle, filter, treat or absorb silt-containing or pollutant-laden stormwater runoff to limit the suspended solids to 50 mg/l or less at the POD during rain fall periods less than the 10-year, 24-hour rainfall, a to prevent an increase in turbidity of more than 50 Jackson Turbidity Units above background in waters of t State.

Control measures shall consist at the minimum of filter sediment traps, barriers, berms or vegetative planting. Exposed or disturbed soil shall be protected as soon as possible to minimize silt - and sediment-laden runoff. The pH shall be kept within the range of 6.0 to 8.5 at the POD.

13. Coal Unloading Facility Percolation Pond Overflow

There shall be no direct discharge to surface wate from the coal unloading facility wastewater treatment system percolation pond. Any discharge from the facili shall be reported to the Department and the Environment Protection Agency. The quantity of flow and duration o flow shall be estimated during such episodes.

14. Mixing Zones

The discharge of the following pollutants shall no violate the Water Quality Standards of Chapter 17-3, FA beyond the edge of the designated instantaneous mixing zones as described herein.

Pollutants	Mixing Zone	
Aluminum	125,600 M^2	31 Ac
Copper	125,600 M^2	31 Ac

b. Wastewater Treatment Facility Discharge - Instantaneous maximum concentrations shall not exceed:

Aluminum	1.5 mg/l
Copper	1.0 mg/l
Iron	1.0 mg/l
Mercury	41.1 ug/l
Silver	6.4 ug/l
Oil and Grease	20 mg/l

c. POD to the St. Johns River - Copper concentrations shall not exceed 0.18 mg/l.

B. Water Monitoring Programs

The permittee shall monitor and report to the Department the listed parameters on the basis specified herein. The methods and procedures utilized shall receive written approval by the Department. The monitoring program may be reviewed annually by the Department, and a determination may be made as to the necessity and extent of continuation, and may be modified in accordance with Condition No. XXV.

1. Chemical Monitoring

The following parameters shall be monitored during discharge as shown, commencing with the start of commercial operation of SJRPP and reported quarterly to the Department's St. Johns River Subdistrict Office:

Parameter	Location	Sample Type	Frequency
Flow, Groundwater	Wellfield Pipeline	Recorder	Continuous
Flow, Cooling Water Make-up	Intake	Pump Logs	Daily
Flow, Cooling Tower Blowdown	Cooling Towers	Pump Logs	Daily
Flow, CWTF*	Prior to Pump Sump	Pump Logs	Daily
Flow, Oily Waste-Water collection Basin	Prior to Pump Sump	Pump Logs	Daily

*CWTF = Central Wastewater Treatment Facility

pH	Pump Sump Outfall to NGS	Recorder Grab	Continuous One/per week
Temperature	Outfall to NGS	Recorder	Continuous
TSS	Oily Waste Basin, Metal Cleaning Waste Retention Basin CWTF and Sewage Treatment Facility	Grab 24 Hour Composite " " "	Two/per week Two/per week " " " Monthly
Chlorine, Total Residual	Cooling Tower Blowdown and intake. Discharge to Browns Creek (During construction only)	Multiple Grab	Weekly
Oil and Grease	Oily Wastewater Collection Metal Cleaning Waste Retention Basin CWTF	3 Grab Composite 24 Hour Composite 3 Grab Composite	Two/week One/day Two/week
Metals	Intake and Sump Pump	24 Hour Composite	Once/week starting 90 days after commercial start-up for three months, two/month for the next six months, then monthly thereafter
Aluminum	"		"
Arsenic	"		"
Chromium	"		"
Copper*	"*		" "
Cyanide**	"**		" "
Iron	"		"
Selenium	"		"
Silver	"		"
Zinc	"		"
BOD	STP Influent and effluent	8 Hour Composite	Monthly
COD	Metal Cleaning Waste Facility	24 Hour Composite	Daily

* At POD also
** At Intake only

Phosphorus	Metal Cleaning Facility	24 Hour Composite	Daily (when discharged)
Copper	" " "	" " "	"
Iron	" " "	" " "	"
Cycles-of-concentration	Cooling tower	Calculation	"

2. Groundwater Monitoring

The groundwater levels shall be monitored continuously at selected wells as approved by the St. Johns River Water Management District. Chemical analyses shall be made on samples from all monitored wells identified in Condition III. F. below. The location, frequency and selected chemical analyses shall be as given in Condition III.F.

The groundwater monitoring program shall be implemented at least one year prior to operation of SJRPP Unit 1. The chemical analyses shall be in accord with the latest edition of Standard Methods for the Analysis of Water and Wastewater. The data shall be submitted within 30 days of collection/-analysis to the St. Johns River Water Management District and to the DER St. Johns River Subdistrict Office.

III. Groundwater

A. General

The use of groundwater from the wellfield for plant service water for SJRPP shall be minimized to the greatest extent practicable, but in no case shall exceed 7.6 mgd on a maximum daily basis from any new wells or 5.1 mgd on an average annual basis.

B. Well Criteria

The submission of well logs and test results and location, design and construction of wells to provide plant service water shall be in accordance with applicable rules of the Department of Evironmental Regulation and the St. Johns River Water Management District(SJRWMD). Total water use per month shall be reported quarterly to SJRWMD commencing with the start of construction.

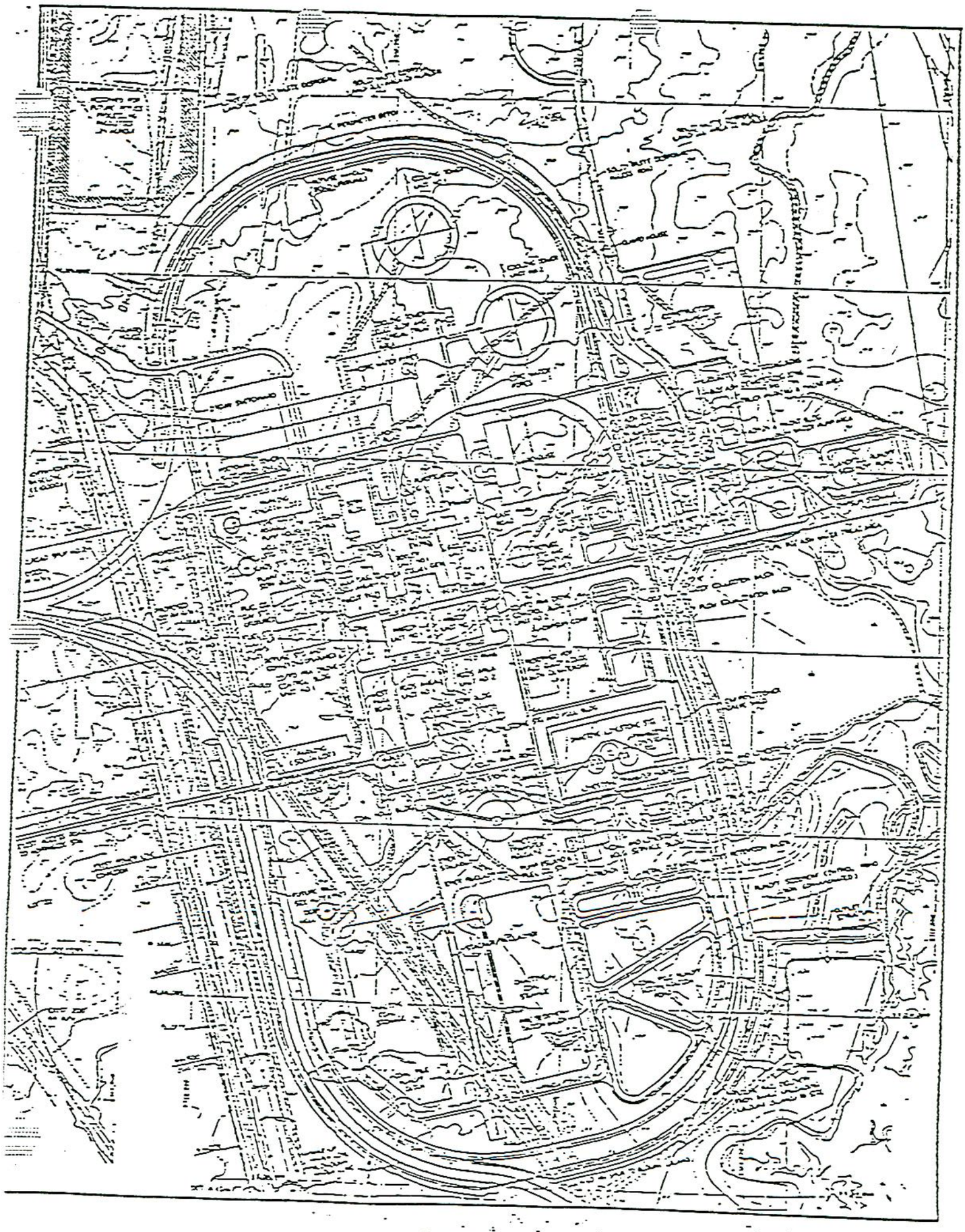

FIGURE 1

C. Well Withdrawal Limits

JEA is authorized to make a combined average annual withdrawal of 5.1 million gallons of water per day with a maximum combined withdrawal rate not to exceed 7.6 million gallons during a single day. Withdrawals may be made from a wellfield consisting of up to four (4) wells whose approximate locations are described in Figure 1.

After wells have been constructed, St. Johns River Water Management District may evaluate the individual wells and may recommend to the Department authorization of different withdrawals based upon hydrologic characteristics for the individual wells. The Department pursuant to Section 403.516, F.S. may modify the above withdrawal limitations with the concurrence of SJRWMD and the permittee.

D. Water Use Restriction

Said water is restricted to uses other than main steam condensing. Any change in the use of said water will require a modification of this condition.

E. Emergency Shortages

In the event an emergency water shortage should be declared pursuant to Section 373.175 or 373.246, F.S., by St. Johns River Water Management District for an area including the location of these withdrawal points, the Department pursuant to Section 403.516, F.S., may alter, modify, or declare to be inactive, all or parts of Condition III. A.-F. An authorized Water Management District Representative, at any reasonable time, may enter the property to inspect the facilities.

F. Monitoring and Reporting

JEA shall, within the time limits hereinafter set forth, complete the following items.

1. JEA shall install a flow meter for the production wellfield and will maintain pump logs for operation of each production well in compliance with SJRWMD specifications on all production wells.

2. JEA shall submit to SJRWMD, on forms available from the District, a record of pumpage for each meter installed in F.1. above. Said pumpage shall be provided on a monthly basis, and shall be submitted by April 15, July 15, October 15, and January 15 for each preceding calendar quarter.

3. JEA shall maintain and operate a continuous water level recorder on the standby production well located at the test site in Duval County, Florida. Detailed hydrographs of water level fluctuations shall be constructed with the data collected from the water level recorder and shall be submitted to SJRWMD by April 15, July 15, October 15, and January 15 for each preceding calendar quarter.

4. Water quality analysis shall be performed on water withdrawn from each production well. The water samples collected from each of the wells shall be collected immediately after removal by pumping of a quantity of water equal to at least two casing volumes. The JEA and staff of SJRWMD may determine and adjust the intervals to be monitored in accordance with hydrologic conditions determined from drilling logs. The water quality analyses shall be performed monthly during the first year of operation, quarterly during the second year and twice each year (May and September) thereafter. Results shall be submitted to SJRWMD and the Bio-Environmental Services Division (BES) within 45 days after following such analyses were performed. Testing for the following parameters is required:

a. When Drilled:

Calcium	Magnesium	Sodium
Potassium	Bicarbonate	Sulfate
Chloride	Nitrate	Total Dissolved Solids
Specific conductance	Gross Alpha	Total Phosphate
Radium 226 (only if gross Alpha is greater than 15 pci/l)	Radiation	

b. During operation:

Chloride, Sulfate, Specific Conductance, Nitrate and Total Dissolved Solids.

5. In the event that SJRWMD or BES determines there is a significant change in the water quality (substantially caused by SJRPP and causing a potentially significant effect on water use), the Department may propose pursuant to Section 403.516, F.S., that the permittee be required to reduce or cease withdrawal from these groundwater sources and that additional parameters be monitored.

6. Minimum Water Level Restrictions

If the Department and SJRWMD at a future date establish a minimum water level of general applicability to all users in the aquifer or aquifers hydrologically associated with these withdrawals, they may propose pursuant to Section 403.516, F.S. that JEA reduce or cease withdrawal from these groundwater sources at times when water levels fall below these minimums.

G. Shallow Aquifer Monitoring Wells

After consulation with the DER and SJRWMD, JEA shall install a monitoring well network to monitor groundwater quality horizontally and vertically through to the top of the Hawthorne Formation's first clayey lithologic Unit. Groundwater quantity and flow directions will be determined seasonally at the site through the preparation of seasonal watertable contour maps, based upon water level data obtained during the applicants preoperational monitoring program. From these maps the water quality monitoring well network will be located. Monitoring well locations and designs shall be submitted to the Department and SJRWMD for review. Approval or disapproval of the locations and design shall be granted within 60 days. Monitoring wells shall be installed upgradient and downgradient from each solid waste disposal area, each liquid waste pond and each coal pile storage area. An additional monitoring well will be placed immediately downgradient of the first section of each solid waste landfill to be utilized. Insofar as possible, these monitoring wells may be selected from the existing wells and piezometers used in the permittees preoperational monitoring program. Existing wells will be properly sealed in accordance with Chapter 17-21, F.A.C., whenever they are abandoned due to construction of facilities or landfill cells. The water samples collected from each of the monitor wells shall be collected immediately after removal by pumping of a quantity of water equal to at least two casing volumes. The water quality analyses shall be performed monthly during the year prior to commercial operation and quarterly thereafter. Results shall be submitted to the Department and the SJRWMD by the fifteenth (15th) day of the month following the month during which such analyses were performed. Testing for the following constituents is required around unlined ponds or storage areas.

TDS	Cadmium
Conductance	Zinc
pH	Copper
Redox	Nickel
Sulfate	Selenium
Sulfite	Chromium

Color	Arsenic
	Beryllium
Chloride	Mercury
Iron	Lead
Aluminum	Gross Alpha

Conductivity shall be monitored in wells around all lined solid waste disposal sites, coal piles, and wastewater treatment and sedimentation ponds.

B. Leachate

1. Zone of Discharge

Leachate from the solid waste landfills, sludge disposal test cells, coal storage piles, wastewater treatment ponds, or sedimentation ponds shall not contaminate waters of the State (including both surface and groundwaters) in excess of the limitations of Chapter 17-3, FAC., beyond the boundary of a zone of discharge extending to the top of the Hawthorne Formation below the waste landfill cell or pond rising to a depth of 50 feet at a horizontal distance of 200 feet from the edge of the landfill or ponds; provided that DER may provide a larger zone of discharge if warranted by the solidwaste test program.

2. Corrective Action

When the groundwater monitoring system or solid waste test program shows a potential for violation of the groundwater water quality standards of Chapter 17-3, FAC, at the boundary of the zone of discharge, the appropriate ponds, FGD landfill, or coal pile shall be bottom sealed, relocated, or the operation of the affected facility shall be altered in such a manner as to assure the Department that no violation of the groundwater standards will occur beyond the boundary of the zone of discharge.

IV. Control Measures During Construction

A. Stormwater Runoff

During construction, appropriate measures shall be used to settle, filter, treat or absorb silt-containing or pollutant-laden stormwater runoff to limit the suspended solids to 50 mg/l or less at the POD during rainfall periods less than the 10-year, 24 hour rainfall, and to prevent an increase

in turbidity of more than 50 Jackson Turbidity Units above background in waters of the State beyond 50 meters from the POD to Brown's Creek. Oil and grease shall not exceed 5 mg/l at the discharge from the borrow pit into Brown's Creek.

Control measures shall consist at the minimum of sediment traps, barriers, berms or vegetative planting. Exposed or disturbed soil shall be protected as soon as possible to minimize silt- and sediment-laden runoff. The pH shall be kept within the range of 6.0 to 8.5 at the POD.

Final drainage plans illustrating any stormwater treatment facilities and conveyances for construction phases and ultimate operations for both the entire St. Johns River Power Park site and the Blount Island coal site shall be submitted to the St. Johns River Subdistrict Manager and the St. Johns River Water Management District for review and approval prior to construction of any such conveyance or facility. The Department shall indicate its approval or disapproval within 60 days of the submittal.

Stormwater drainage to Brown's Creek and Brown's Creek proper shall be monitored as indicated below beginning as soon as possible but not less than 30 days prior to the commencement of construction and continuing throughout construction:

Monitoring Point	Parameters	Frequency	Sample Type
*Stormwater drainage to Brown's Creek from existing borrow pit in southeast portion of site	BOD5, TOC, suspended solids, turbidity, dissolved oxygen, pH, TKN, Total phosphorus, Fecal Coliform, Total Coliform	**	**
	Oil and Grease	**	**
*West Fork of Brown's Creek at Point Downstream from entry of of stormwater from Power Park site by way of a borrow pit	BOD5, TOC, suspended solids, turbidity, dissolved oxygen, pH, TKN, Total phosphorus, fecal coliform, Total coliform	**	**

*Monitoring shall be conducted at suitable points for allowing a comparision of the characteristics of pre-construction and construction phase drainage and receiving waters.

**The frequency and sample type shall be as outlined in a sampling program prepared by the applicant and submitted by February 15, 1982, for review and approval by the St. Johns River Subdistrict Manager and the St. Johns River Water Management District. The districts will indicate their approval or disapproval within 30 days of submittal.

B. Sanitary Wastes

Disposal of sanitary wastes from construction toilet facilities shall be in accordance with applicable regulations of the Department and appropriate local health agency. The sewage treatment plant shall be operated in accordance with Chapters 17-3, 17-6, 17-16, and 17-19, FAC. The discharge of total residual chlorine to Brown's Creek from the borrow pit shall not exceed 0.01 mg/l.

C. Environmental Control Program

An environmental control program shall be established under the supervision of a qualified person to assure that all construction activities conform to good environmental practices and the applicable conditions of certification.

The permittee shall notify the Department by telephone if unexpected harmful effects or evidence of irreversible environmental damage are detected during construction, ~~shall~~ immediately report in writing to the Department and shall within two weeks provide an analysis of the problem and a plan to eliminate or significantly reduce the harmful effects or damage and a plan to prevent reoccurrence.

D. Construction Dewatering Effluent

Construction dewatering effluent shall be treated when appropriate to limit surface water discharges of suspended solids to no more than 50 mg/l. The discharge of construction dewatering liquids shall not cause turbidity in excess of 50 Jackson Turbidity Units above ambient beyond a 20 meter radius from the point of discharge. Weekly grab samples will be collected and analyzed for suspended solids.

A program for controlling the groundwater impacts of construction dewatering shall be submitted to the Department and the St. Johns River Water Management District for review prior to implementation.

V. Solid Wastes

Solid wastes resulting from construction or operation shall be disposed of in accordance with the applicable regulations of Chapter 17-7, FAC. The permittee shall submit a program for approval outlining the methods to be used in handling and disposal of solid wastes. Such program shall indicate at the least methods for erosion control, covering, vegetation and quality control.

Open burning in connection with land clearing shall be in accordance with Chapter 17-5, FAC. No additional permits shall be required, but the Division of Forestry shall be notified prior to burning. Open burning shall not occur if the Division of Forestry has issued a ban on burning due to fire hazard conditions.

VI. Operation Safeguards

The overall design, layout, and operation of the facilities shall be such as to minimize hazards to humans and the environment. Security control measures shall be utilized to prevent exposure of the public to hazardous conditions. The Federal Occupational Safety and Health Standards will be complied with during construction and operation. The Safety Standards specified under Section 440.56, F.S., by the Industrial Safety Section of the Florida Department of Commerce will also be complied with.

VII. Screening

The permittee shall provide screening of the site to the extent feasible through the use of aesthetically acceptable structures, vegetated earthen walls and/or existing or planted vegetation.

VIII. Potable Water Supply System

The potable water supply system shall be designed and operated in conformance with Chapter 17-22, FAC. Information as required in 17-22.108 shall be submitted to the Department prior to construction and operation. The operator of the potable water supply system shall be certified in accordance with Chapter 17-16, FAC.

IX. Transformer and Electric Switching Gear

The foundations for transformers, capacitors, and switching gear necessary to connect SJRPP Units 1 & 2 to the existing distribution system shall be constructed in such a manner as to allow complete collection and recovery of any spills or leakage of oily, toxic, or hazardous substances.

X. Toxic, Deleterious, or Hazardous Materials

The spill of any toxic, deleterious, or hazardous materials shall be reported in the manner specified by Condition XV.

XI. Construction in Waters of the State

A. No construction on sovereign submerged lands shall commence without obtaining lease easement or title from the Department of Natural Resources and/or Trustees of the Internal Improvement Trust Fund.

B. Construction of intake and discharge structures, coal unloading wharf, and transmission towers shall be done in a manner to minimize turbidity. Turbidity screens should be used to prevent turbidity in excess of 50 JTUs above background beyond 150 meters from the dredging, pile driving, or construction site.

All spoil from connecting the SJRPP intake/discharge system to the NGS, and the coal unloading wharf shall be piped hydraulically or tucked to an upland disposal site of sufficient capacity to retain all material. Spoil from construction access canals shall be side cast and used for restoring natural bottom contours upon completion of construction.

C. Variances

1. Variances to the provisions of Section 17-3.061(h) for lead and Section 17-3.121(27) for silver for a period not to exceed a cumulative total of twelve months commencing on the start of dredging activities are granted in accordance with Sections 403.201(1)(c) and 403.511(2), F.S. at the coal unloading facility wharf ~~site~~ on Blount Island. Concentrations of at the boundary of a 150 meter radius mixing zone shall not exceed the following:

Lead	62 µg/l
Silver	6.1 µg/l

2. Variances to the provisions of Sections 17-3.121(9) for cadmium, 17-3.061(h) for lead, 17-3.121(18) for mercury and Section 17-3.121(27) for silver are granted pursuant to the provisions of Sections 403.201(1)(c) and 403.511(2), F.S. at the spoil area site overflow for a period not to exceed a cumulative total of twelve months starting with commencement of dredging activities. Concentrations at the boundary of a 150 meter radius mixing zone shall not exceed the following:

Cadmium	8.2 µg/l
Mercury	0.2 µg/l
Lead	62 µg/l
Silver	6.1 µg/l

D. Mixing Zones

During dredging activities mixing zone radii are designated for the following parameters:

Parameter	Distance to Edge of Mixing Zone[3] (m)
Aluminum	150
Antimony	18

Cadmium	150
Copper	150
Cyanide	19
Iron	150
Lead	150
Mercury	150
Oil and Grease	25
Silver	150

XII. Solid Waste Landfill

A. The proposed solid waste landfill area shall be monitored and studied pursuant to a detailed groundwater testing and monitoring program as defined in Condition III, G. The results of the program will be used by the Department in determining whether JEA has affirmatively demonstrated that Florida Water Criteria (Chapter 17-3, F.A.C.) will not be violated.

B. JEA may implement a test program to demonstrate the quality and quantity of leachate from an unlined or uncontrolled waste facility. During the testing program, JEA shall either provide an impermeable liner under the solid waste disposal areas or shall utilize a chemical fixation process, stabilization or other approved methods to control leachate from the solid waste. Upon an affirmative showing that an uncontrolled solid waste facility will not cause violation of groundwater quality criteria, the Department may approve use of non-lined or uncontrolled landfill cells.

C. JEA shall utilize solid waste disposal area "B", north of Island Drive or the area previously designated for the bottom ash pond, prior to using disposal area "A".

D. Construction of perimeter berms shall be in conformance with the provisions of Chapter 17-9, F.A.C., regarding earthen dams.

E. Prior to the commencement of operation of solid waste disposal areas the following shall be submitted to the St. Johns River Subdistrict Manager for review and approval:

(1) Plot plan - should be drawn on a scale not greater than 200 ft. to the inch showing the following:

a. Dimensions and legal description of the site.

b. Location and depth corrected to MSL of soil borings.

c. Proposed trenching plan.

d. Cover stock piles.

e. Fencing or other measures to restrict access.

f. Cross sections showing both original and proposed fill elevation.

g. Location, depth corrected to MSL and construction details of monitoring wells.

(2) Design Drawings and Maps - may be combined with plot plan and should be drawn on a scale not greater than 200 ft. to the inch showing the following:

a. Topographic map with five foot contour intervals.

b. Proposed fill area.

c. Borrow area.

d. Access roads.

e. Grades required for proper drainage.

f. Typical cross sections of disposal site including lifts, borrow areas and drainage controls.

g. Special drainage devices.

(3) Soil map, Interpretive Guide Sheets, and a report giving the suitability of the site for such an operation.

(4) Contingency plan, including waste handling and disposal methods, in case of an emergency such as equipment failure, natural disaster or fire.

(5) Operation plans to direct and control the use of the site.

(6) An indication by discussion or drawings or both of how the site is designed to meet water quality standards of Chapter 17-3 and 17-4 FAC at the boundary of the zone of discharge.

Based on the Department's reviews of the above, additions to or modifications of the overall monitoring program may be required for monitoring of runoff, groundwaters, and surface waters which may be affected by the various landfilling operations.

The Department shall indicate its approval or disapproval of the submitted plans, drawings, maps, analyses and contingency plans within 60 days.

XIII. Transmission Lines

A. General

1. Filling and construction in water of the State shall be minimized to the extent practicable. No such activities

shall take place without obtaining lease, title or easement from the Department of Natural Resources and/or TIITF where required. Construction and access roads should avoid wetlands and be located in surrounding uplands.

2. Placement of fill in wetland areas shall be minimized by spanning such areas with the maximum span practicable.

3. The Department may determine that any fill required in wetlands for construction but not required for maintenance purposes shall be removed and the ground restored to its original contours after transmission line placement.

4. Where fill in wetlands is necessary for access, keyhole fills from upland areas should be oriented as nearly parallel to surface water flow lines as possible.

5. Sufficient size and number of culverts or other structures shall be placed through fill causeways to maintain substantially unimpaired sheet flow.

6. Turbidity control measures, including but not limited to hay bales, turbidity curtains, sodding, mulching and seeding, shall be employed to prevent violation of water quality standards.

7. The Right-of-Way shall be located so as to minimize impacts in or on stream beds such as the removal of vegetation, to the extent practicable. Within 25 feet of the banks of any streams, rivers, or lakes, vegetation shall be left undisturbed, except for selective topping of trees or removal of trees which topping would kill. If it is necessary to remove such trees within 25 feet of the banks of streams, rivers, or lakes, the root mat shall be left undisturbed.

8. Any necessary water quality certifications which must be made to the Corps of Engineers for water crossings not identified in the applications in this proceeding shall be made at the time of a finding of compliance for specific work at specific locations.

9. Construction activities should proceed as much as practicable during the dry season.

B. Other Construction Activities

1. Maintenance roads under control of the permittee shall be planted with native species to prevent erosion and subsequent water quality degradation where drainage from such roads would impact waters of the State significantly.

2. Good environmental practices such as described in Environmental Criteria for Electric Transmission Systems as published by the U.S. Department of Interior and the U.S. Department of Agriculture shall be followed to the extent practicable.

3. Compliance with the most recent version of the National Electric Safety Code adopted by the Public Service Commission is required.

4. Fences running parallel to the transmission line which may become conductive shall be grounded at appropriate intervals; fences running perpendicular to the line shall be grounded at the edge of the right-of-way.

5. Where suitable habitat is present, field reconnaissance of rare and endangered species shall be performed in order to minimize impacts on these species.

6. Open burning in connection with land clearing shall be in accordance with the applicable rules of the Department of Agriculture and Consumer Services. No additional permits shall be required, but the Division of Forestry shall be notified prior to burning. Open burning shall not occur if the Division of Forestry has issued a ban on burning due to fire hazard conditions.

C. Maintenance

1. Vegetative clearing operations for maintenance purposes to be carried out within the corridor shall follow the general standards for clearing right-of-way for overhead transmission lines as referenced in Sections XIII. A.7. and XIII.B.2. Selective clearing of vegetation is preferred over clearing and grubbing or clear cutting.

2. If chemicals or herbicides are to be used for vegetation control, the name, type, proposed use, locations, and manner of application shall be provided to the Department prior to their application for assessment of compliance with applicable regulations.

D. Archaeological Sites

Any archaeological sites discovered during construction of the transmission lines shall be disturbed as little as possible and such discovery shall be communicated to the Department of State, Division of Archives, History and Record Management (DAHRM). Potentially affected areas will be surveyed, and if a significant site is located, the site shall be avoided, protected, or excavated as directed by DAHRM.

E. Road Crossing

For all locations where the transmission line will cross State highways, the applicant will submit materials pursuant to the Department of Transportion's (DOT) "Utility Accomodation Guide" to DOT's district office for review and approval. All applicable regulations pertaining to roadway crossings by transmission lines shall be complied with.

F. Emergency Reporting

Emergency replacement of previously existing right-of-way or transmission lines shall not be considered a modification pursuant to Section 403.516, F.S. A verbal report of the emergency shall be made to the Department as soon as possible. Within fourteen (14) calendar days after correction of the emergency, a report to the Department shall be made outlining the details of the emergency and the steps taken for its temporary relief. The report shall be a written description of all of the work performed and shall set forth any pollution control measures or mitigative measures which were utilized or are being utilized to prevent pollution of waters, harm to sensitive areas or alteration of archaeological or historical resources.

G. Final Right-of-Way Location

A map of 1:24000 scale showing final location of the right-of-way shall be submitted to the Department upon completion of acquisition.

H. Compliance

Construction and maintenance shall comply with the applicable rules and regulations of the Department and those agencies specified in 17-17.54(2)(a) and (b), FAC.

XIV. Change in Discharge

All discharges or emissions authorized herein shall be consistent with the terms and conditions of this certification. The discharge of any pollutant not identified in the application or any

discharge more frequent than, or at a level in excess of, that authorized herein shall constitute a violation of the certification. Any anticipated facility expansions, production increases, or process modification which will result in new, different or increased discharges or expansion in steam generating capacity will require a submission of new or supplemental application pursuant to Chapter 403, F.S.

XV. Non-Compliance Notification

If, for any reason, the permittee does not comply with or will be unable to comply with any limitation specified in this certification, the permittee shall notify the manager of DER's St. Johns River subdistrict office by telephone during the working day in which permittee becomes aware of said non-compliance and shall confirm this situation in writing within seventy-two (72) hours supplying the following information:

a. A description and cause of non-compliance; and

b. The period of non-compliance, including exact dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate and prevent recurrence of the non-complying event.

XVI. Facilities Operation

The permittee shall at all times maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this certification. Such systems are not to be bypassed without prior Department approval. Exceptions such as that during periods when light oil is used for ignition, or as provided in 40 CFR 60 Subpart Da, allow that the FGD system may be bypassed.

XVII. Adverse Impact

The permittee shall take all reasonable steps to minimize any adverse impact resulting from non-compliance with any limitation specified in this certification, including, but not limited to, such accelerated or additional monitoring as necessary to determine the nature and impact of the non-complying event.

XVIII. Right of Entry

The permittee shall allow the Secretary of the Florida Department of Environmental Regulation and/or authorized representatives, upon the presentation of credentials:

a. To enter upon the permittee's premises where an effluent source is located or in which records are required to be kept under the terms and conditions of this permit; and

b. to have access to and copy all records required to be kept under the conditions of this certification; and

c. to inspect and test any monitoring equipment or monitoring method required in this certification and to sample any discharge or pollutants; and

d. to assess any damage to the environment or violation of ambient standards.

XIX. Revocation or Suspension

This certification may be suspended or revoked pursuant to Section 403.512, Florida Statutes, or for violations of any Condition of Certification.

XX. Civil and Criminal Liability

This certification does not relieve the permittee from civil or criminal responsibility or liability for non-compliance with any conditions of this certifiation, applicable rules or regulations of the Department, or Chapter 403, Florida Statutes, or regulations thereunder.

Subject to Section 403.511, Florida Statutes, this certification shall not preclude the institution of any legal action or relieve the permittee from any responsibilities or penalties established pursuant to any other applicable State Statutes or regulations.

XXI. Property Rights

The issuance of this certification does not convey any property rights in either real or personal property, tangible or intangible, nor any exclusive privileges, nor does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations. The applicant will obtain title, lease or right of use to any sovereign submerged lands occupied by the plant, transmission line structures, or appurtenant facilities from the State of Florida.

XXII. Severability

The provisions of this certification are severable, and, if any provision of this certification or the application of any provision of this certification to any circumstances is held invalid, the application of such provision to other circumstances and the remainder of the certification shall not be affected thereby.

XXIII. Definitions

The meaning of terms used herein shall be governed by the definitions contained in Chapter 403, Florida Statutes, and any regulation adopted pursuant thereto. In the event of any dispute over the meaning of a term used in these general or special conditions which is not defined in such statutes or regulations, such dispute shall be resolved by reference to the most relevant definitions contained in any other state or federal statute or regulation or, in the alternative, by the use of the commonly accepted meaning as determined by the Department.

XXIV. Review of Site Certification

The certification shall be final unless revised, revoked or suspended pursuant to law. At least every five years from the date of issuance of this certification or any National Pollutant Discharge Elimination System Permit issued pursuant to the Federal Water Pollution Control Act Amendments of 1972 for the plant units, the Department shall review all monitoring data that has been submitted to it during the proceeding five-year period for the purpose of determining the extent of the permittee's compliance with the conditions of this certification of the environmental impact of this facility. The Department shall submit the results of its review and recommendations to the permittee. Such review will be repeated at least every five years thereafter.

XXV. Modification of Conditions

The conditions of this certification may be modified in the following manner:

A. The Board hereby delegates to the Secretary the authority to modify, after notice and opportunity for hearing, any conditions pertaining to consumptive use of water, monitoring, sampling, groundwater, mixing zones, zones of discharge, leachate control programs, effluent limitations, air emission limitations or variances to water quality standards.

B. All other modifications shall be made in accordance with Sections 403.516, Florida Statutes.

XXVI. Flood Control Protection

The plant and associated facilities shall be constructed in such a manner as to comply with the Duval County flood protection requirements.

XXVII. Effect of Certification

Certification and conditions of certification are predicated upon design and performance criteria indicated in the application. Thus, conformance to those criteria, unless specifically amended,

modified, or as the Department and parties are otherwise notified, is binding upon the applicant in the preparation, construction and maintenance of the certified project. In those instances where a conflict occurs between the application's design criteria and the conditions of certification, the conditions shall prevail.

XXVIII. Noise

To mitigate the effects of noise produced by the steam blowout of steam boiler tubes, JEA shall conduct public awareness campaigns prior to such activities to forewarn the public of the estimated time and duration of the noise.

XIX. Archaeological Sites

The following archaeological sites shown in Figure 2 shall be preserved whenever practical. If they must be altered by construction, then archaeological salvage excavation shall be performed prior to construction under the supervision of the Florida Department of State, Division of Archives, History and Records Management.

Site -	8Du669	8Du670
	8Du671	8Du673
	8Du674	8Du675
	8Du677	8Du678

XXXI. Blount Island Coal Unloading Facility

Area drainage and rainfall runoff from the lined coal pile on Blount Island shall be directed to a lined treatment system designed to process the runoff from the 24-hour, ten-year storm. Wastewater treatment shall consist of as a minimum: removal of solids and metals by precipitation and sedimentation followed by pH adjustment to no less than 8.0 and final disposal by percolation. Sufficient capacity shall be provided to allow for accumulation of settled solids of up to 20 percent of the total pond volume. Solids removed from the sedimentation pond shall be disposed in a properly designed landfill.

The sedimentation pond liner shall be impervious and designed for the life of the facility. The liner shall be installed in such a manner as to prevent rupture during cleaning or removal of solids.

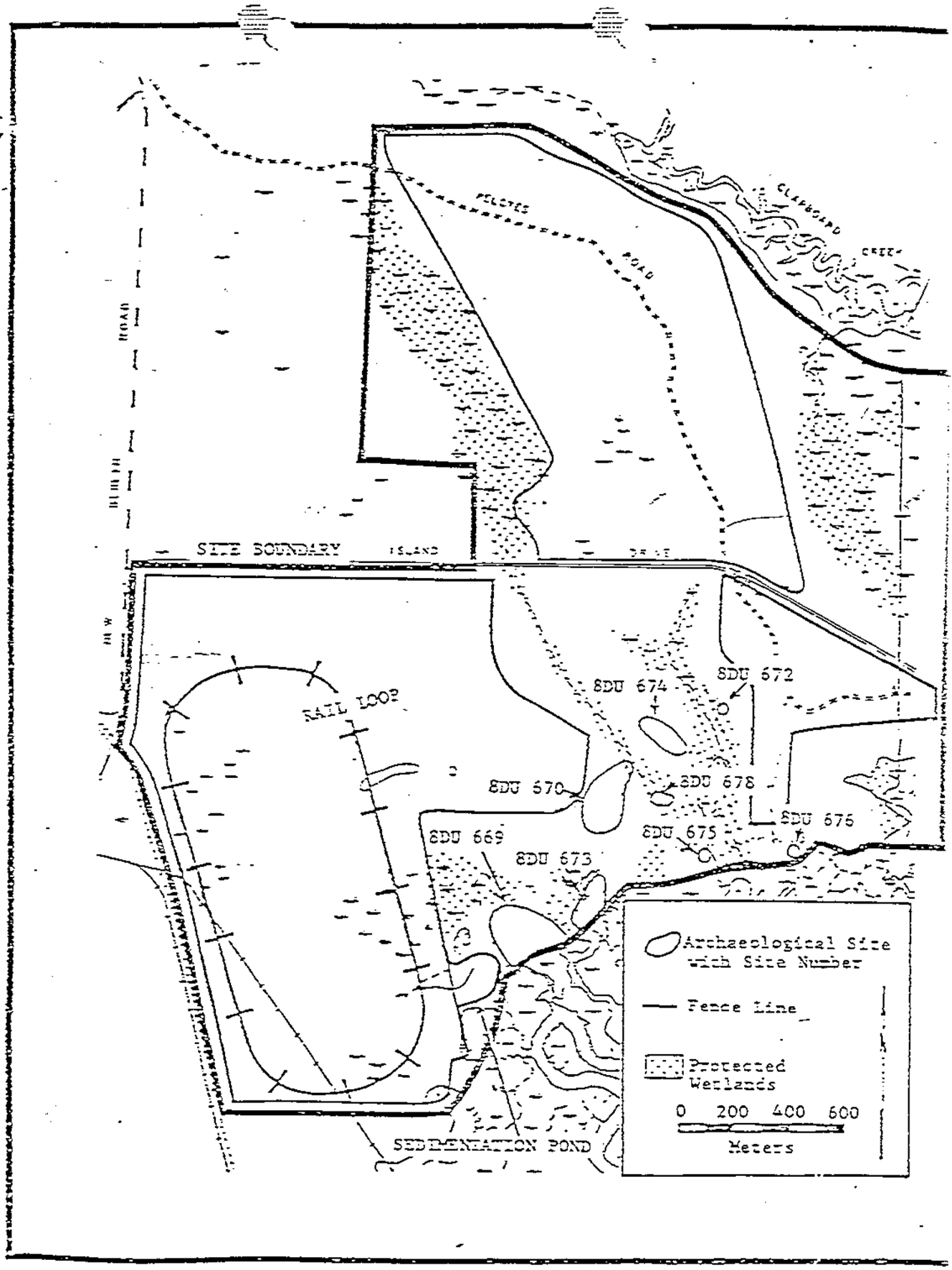
FELCYES
ROAD
CLAYBOARD
CREEK
SITE BOUNDARY
ISLAND
RAIL LOOP
8DU 674
8DU 672
8DU 670
8DU 678
8DU 676
8DU 675
8DU 669
8DU 673
SEDIMENTATION POND
Archaeological Site with Site Number
Fence Line
Protected Wetlands
0 200 400 600
Meters

FIGURE 2

BEFORE THE GOVERNOR AND CABINET
OF THE STATE OF FLORIDA

IN RE:	)	
JACKSONVILLE ELECTRIC AUTHORITY ST. JOHNS RIVER POWER PARK, POWER PLANT SITE CERTIFICATION APPLICATION.	)	DOAH CASE NO. 81-357

JOINT EXCEPTIONS TO RECOMMENDED ORDER

Introduction

The following parties to this proceeding --

Applicant, JACKSONVILLE ELECTRIC AUTHORITY;
Intervenor, JACKSONVILLE CHAMBER OF COMMERCE;
Agency parties:
STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION;
STATE OF FLORIDA DEPARTMENT OF NATURAL RESOURCES AND BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND;
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION;
ST. JOHNS RIVER WATER MANAGEMENT DISTRICT;
CONSOLIDATED CITY OF JACKSONVILLE; and
JACKSONVILLE PORT AUTHORITY --

by and through their respective undersigned counsel, jointly file these Exceptions to the Hearing Officer's Recommended Order dated May 26, 1982. References to pages in the transcript are indicated by "T." followed by the page number. References to the Hearing Officer's Recommended Order will be by paragraph number, e.g., "Finding of Fact No. 1."

The Hearing Officer recommends that JEA be granted certification for the location, construction and operation of the St. Johns River Power Park Units 1 and 2, their directly associated transmission lines, and their associated facilities except the associated facilities that include or are related to the Blount Island coal unloading facility and the coal delivery transport system from Blount Island to the mainland site. Recommendation for certification of the Blount Island coal unloading facility is withheld because the Hearing Officer concludes that the "facility with its attendant environmental impacts would be for no purpose" without a coal conveyor system to deliver the coal from the Blount

Island coal unloading site to Units 1 and 2 on the mainland. (Conclusion of Law No. 39 at p. 32.) The Hearing Officer fails to recommend that JEA be granted permission to connect to, cross over, or use the works of five (5) agency parties. He also fails to recommend the adoption of stipulated conditions recommended by JEA and those parties.

Technical Corrections

1. Finding of Fact No. 1. In the last paragraph of Finding of Fact No. 1, the reference to the "Fort Carolyn Substation" should be to the "Fort Caroline Substation." (See JEA's Site Certification Application, Figure 1.4-1.)

2. Finding of Fact No. 2. In the second sentence of Finding of Fact No. 2, the reference to "a natural gas cooling tower" should be to "a natural draft cooling tower." (See JEA Exhibit C-1 at p. 5.)

3. Finding of Fact No. 4. At the end of Finding of Fact No. 4, the reference to "Condition of Certification XIX" should be to "Condition of Certification XXIX" as that is the condition which deals with archaeological sites.

4. Finding of Fact No. 8. In the last sentence of Finding of Fact No. 8, the reference to "Conditions of Certification at Sections I.8.12, II.b, and IV.a" should be to "Conditions of Certification at Sections I.A.12, II.B, and IV.A."

5. Finding of Fact No. 16. In the first sentence of the second paragraph of Finding of Fact No. 16, the reference to "0.76 lb./NNBtu" should be to "0.76 lb./MMBtu." (See JEA Exhibit E-1 at p. 33.)

6. Finding of Fact No. 17. In the second sentence of Finding of Fact No. 17, the reference to "JEA's proposed Units 1 and 2" should be to "JEA's Southside Units 1 and 2." (See JEA Exhibit J-1 at p. 30; Proposed Condition of Certification I.E.2.) Also, the references to "Conditions of Certification at Section I.e" and to "Section I.2" should be

to "Conditions of Certification at Section I.E." and to "Section I.E.2." respectively, as those are the conditions which deal with SO_2 emissions.

7. Finding of Fact No. 20. In the first sentence of Finding of Fact No. 20, the reference to "54,000 gallons per minute" should be to "5400 gallons per minute." (See JEA Exhibit D-1 at p. 7.) Also, in the third sentence the reference to "potential of producing" should be to "potential of reducing." (See T. 85, 107.)

8. Finding of Fact No. 29. The parties request the words "acute toxicity of wastewater discharge" be stricken from the last sentence of Finding of Fact No. 29 because JEA's request for a variance from this water quality criterion was withdrawn as evidenced by its omission from JEA's Proposed Recommended Order in which DER concurred.

* * *

The following exceptions to the Hearing Officer's Recommended Order are substantive in nature. At the outset, however, it should be noted that prior to the Hearing Officer's Recommended Order, neither he nor any party to this proceeding had identified or argued the issues raised in the Recommended Order and addressed below. Thus, these Exceptions constitute the parties' first opportunity to address these issues.

Waterborne Coal Unloading Facility

9. Finding of Fact No. 28 and Conclusion of Law No. 39. The Hearing Officer's Findings of Fact, Conclusions of Law, and Recommended Order evidence substantial confusion on several factual and legal matters relating to the coal conveyor system from the Blount Island coal unloading facility to the mainland power plant site proposed by JEA. Each of these matters will be addressed separately.

(a) Design of the Coal Conveyor System. After citing JEA's statement that "no detailed information has been submitted in these proceedings regarding design of the coal conveyance system" (see JEA's Proposed Finding of Fact

No. 21), the Hearing Officer states that "[b]y the Applicant's own admission no details of such a system have been provided." (Finding of Fact No. 28 at p. 25.) In the same Finding of Fact, however, the Hearing Officer acknowledges the evidence presented by JEA setting forth the general characteristics for the coal conveyance system. That evidence establishes that JEA proposes a system which will be elevated, 72 inches wide, totally enclosed, capable of handling 4,000 tons of coal per hour, and aligned along the existing transmission line right-of-way. (Finding of Fact No. 28 at p. 24.) On the face of Finding of Fact No. 28 it is, therefore, evident that the Hearing Officer's statement that "no evidence has been presented upon which any findings of fact can be based" (Finding of Fact No. 28 at p. 25, emphasis added) should be limited to design detail and specific environmental impacts. Additionally, the parties request that the Hearing Officer's parallel conclusion of law that there were "no facts upon which a decision on certification can be based with regard to a coal conveyor system" (Conclusion of Law No. 39 at p. 32) be similarly limited based on his Finding of Fact No. 28 establishing the general characteristics of the conveyor system as more fully described above.

There are sufficient facts on the record showing the general characteristics and location of the coal conveyor system for the Board to frame a reasonable delegation of authority to DER of detailed environmental review and final design approval or disapproval. Furthermore, it is important to consider that the level of detail provided at the hearing for the coal conveyor facility is consistent with the level of design detail required for associated facilities by the DER application form for power plants subject to the Florida Electrical Power Plant Siting Act ("PPSA"):

> The applicant shall describe the purpose, location, and pertinent characteristics such as size or type of the associated facilities. (Section 3.9.1, DER Form 17-1.122(72).)

Such a level of detail is deemed to be adequate for the "proper evaluation" of such a facility. § 17-17.20, F.A.C.

(b) Environmental Impacts of the Overhead Coal Conveyance System. The Hearing Officer states that confusion exists regarding the position of JEA in proposing an overland coal conveyance system. (Finding of Fact No. 28 at p. 23.) The confusion apparently arises from JEA's initial position in its application that it had rejected the use of an overland conveyor delivery system in favor of a shuttle train "[b]ecause of the high costs and attendant potential right-of-way and environmental problems which are associated with the long, overland conveyor ... delivery system" (JEA's Exhibit G-4, Vol. 2, ¶9.8.4, p. 9.8-5) and its subsequent position at the certification hearing that it was proposing an overland coal conveyance system for certification. The apparent inconsistencies are resolved by noting that at the time JEA rejected the use of an overland conveyor in its application, JEA had not considered aligning that system along the existing transmission line right-of-way. By paralleling an existing overhead utility facility and thereby crossing the St. Johns River at a point where similar development already exists, JEA will be able to limit the "potential right-of-way and environmental problems" by minimizing the number of locations at which the river will be crossed by overhead facilities. Additionally, the record shows that the use of the totally enclosed coal conveyance system will eliminate any traffic disruption attendant to the use of trains and will lower the noise associated with the coal delivery system. (JEA Exhibits C-1 at p. 12, I-1 at p. 22, and K-1 at p. 14.) Thus, the Hearing Officer's apparent confusion can be resolved by noting the different contexts within which JEA formulated its two positions on overland coal conveyance systems. Moreover, the Hearing Officer's statement that JEA's Proposed Recommended Order apparently contradicts or amends the conclusions stated in the application (Finding of Fact No. 28 at p. 23) should

not affect the Board's proper delegation of authority for DER to approve or disapprove the proposed coal conveyor system subject to applicable standards and procedures as set forth in section (c) below.

(c) Delegation of Final Design Approval to the Secretary of DER. In Conclusion of Law No. 39, the Hearing Officer suggests that the delegation of final design approval of a component of a power plant project would "defeat the purpose of the Florida Electrical Power Plant Siting Act." (Conclusion of Law No. 39 at p. 33.) This conclusion is inconsistent with the express terms of the PPSA, prior practice of the Board, and the recommended Conditions of Certification in this proceeding.

Section 403.516, Florida Statutes (1981), expressly authorizes the Board to delegate to the Secretary of DER "the authority to modify specific conditions in the certification." This broad authority to delegate approval to the Secretary of DER encompasses the authority to delegate approval of a detailed design consistent with a conceptual plan approved by the Board in its certification order. Also, the PPSA defines "certification" as "the written order of the board approving an application in whole or with such modifications or conditions as the board may deem appropriate." Section 403.503(6), Florida Statutes (1981) (emphasis added). Delegation of approval authority to the Secretary of DER is a type of "condition" to the certification of a facility. The Hearing Officer, by suggesting that it would be improper to delegate final design approval authority to the Secretary of DER for the totally enclosed coal conveyance system, is attempting to limit the type of condition which the Board can impose in a power plant certification order. No statutory authority is cited by the Hearing Officer for such a limitation on the Board's power, nor does any exist. In fact, the provisions of the PPSA discussed above have been the basis for numerous delegations of authority for post-certification final design approval in the past. (See

Joint Motion for Official Recognition, ¶1.) Additionally, in this proceeding the Hearing Officer recommends that detailed design approval of another component of the power plant, the particulate emission control device, be delegated to DER. (See proposed Condition of Certification I.A.3.b.) The Hearing Officer's conclusion that it would be inconsistent with the purpose of the PPSA to delegate final design approval authority for the coal conveyance system to the Secretary of DER, therefore, is contrary to the construction of the PPSA followed by the Board on numerous occasions and inconsistent with other portions of the Hearing Officer's Recommended Order in this proceeding.

Based on the foregoing, the parties request that the Board adopt the Condition of Certification contained in paragraph (4) of JEA's Proposed Recommended Order delegating final detailed design approval authority for the enclosed coal conveyance system to the Secretary of DER, modified as follows:

> JEA shall submit to DER information concerning location, design, construction and operation of any coal conveyor system from Blount Island to the main plant site at least 120 days prior to construction of the coal conveyor system. The Secretary of DER shall indicate DER's approval or disapproval within 90 days of receipt. DER may also impose reasonable conditions on the construction and operation of this conveyor system. These conditions may impose appropriate restrictions on construction, operation and maintenance of the coal conveyor system in order to comply with applicable nonprocedural standards of any agency. DER's decision shall be final unless further review is timely sought by any party pursuant to Section 120.57 or Section 403.516, Florida Statutes.

This provision, which allows for participation by all interested parties, will resolve the Hearing Officer's concern about DER's "narrow scope of regulatory responsibility" (Conclusion of Law No. 39 at p. 33) and assure that all appropriate perspectives are duly considered.

In order to further clarify the procedures which would apply to any post-certification review, the

parties to these Exceptions recommend modification as follows of the Conditions of Certification attached to the Hearing Officer's Recommended Order:

XXV. Modification of Conditions

The conditions of this certification may be modified in the following manner:

A. The Board hereby delegates to the Secretary the authority to modify, after notice and opportunity for hearing, any conditions pertaining to consumptive use of water, monitoring, sampling, groundwater, mixing zones, zones of discharge, leachate control programs, effluent limitations, air emission limitations, or variances to water quality standards, or any conditions which must be modified to meet licensing conditions or requirements imposed by any federal regulatory agency. JEA shall notify DER within 30 days of the issuance of a federal license that would require a modification of any of these conditions.

B. All other modifications shall be made in accordance with Sections 403.516, Florida Statutes.

(d) Lack of a Coal Conveyor System Between Blount Island and the Mainland. The Hearing Officer also incorrectly concludes that "the Applicant has apparently precluded by agreement ... the possibility of using existing highways and railroad tracks to deliver coal from Blount Island to the mainland." (Conclusion of Law No. 39 at p. 32.) He correctly points out that the agreement between JEA and the Jacksonville Port Authority (JEA Exhibit E-3) states in paragraph 5 that "JEA shall provide an independent means, such as a belt conveyor, or aerial tramway system, for coal transport between the Blount Island coal unloading facility and the mainland SJRPP site and the St. Johns River Power Park, such that coal shall not be transported over the vehicular roads and bridges or over the existing railroads or bridges." The Hearing Officer overlooks, however, the final paragraph of that agreement which states:

> It is the essence of this Stipulation that JEA and the Authority may modify any conditions contained herein by mutual consent and written agreement and without further proceedings under Part II; Chapter 403, Florida Statutes. (Emphasis added.)

Accordingly, if the totally enclosed coal conveyance system is not certified, JEA and the Jacksonville Port Authority may renegotiate their agreement to provide for the use of another mutually acceptable means of delivering coal from Blount Island to the mainland. The Hearing Officer's statement, therefore, that JEA "has apparently precluded by agreement ... the possibility of using existing highways and railroad tracks to deliver coal from Blount Island to the mainland" reflects an incomplete understanding of the facts. His finding of fact should be supplemented accordingly.

(e) Certification of the Blount Island Coal Unloading Facility. In Conclusion of Law No. 39, the Hearing Officer states:

> Failure to establish that the coal conveyor system can be certified relates directly to the issue of whether the coal unloading facility on Blount Island can be certified.
>
> * * *
>
> Without a coal conveyor system to deliver the coal from the Blount Island coal unloading site to Units 1 and 2 on the mainland, all of the dredging and other construction with regard to the coal unloading facility with its attendant environmental impacts would be for no purpose. (Conclusion of Law No. 39 at pp. 31-32.)

Thus the Hearing Officer recommends denial of certification for the Blount Island coal unloading facility based on his perceived inability to recommend certification for the coal conveyor system. As shown above, the Hearing Officer's conclusion that he is unable to recommend certification of the coal conveyor system subject to DER's post-certification final design approval is inconsistent with law and precedent. Even without the enclosed coal conveyor system, however, it is erroneous to presume the Blount Island coal unloading facility would serve no purpose because coal could be trans-

ported to the mainland through some other mechanism. JEA would prefer to have the totally enclosed coal conveyance system certified as it will eliminate any traffic disruption attendant to the use of trains and will lower the noise associated with the coal delivery system (JEA Exhibits C-1 at p. 12, I-1 at p. 22, and K-1 at p. 14), but JEA would seek to use another means of delivering coal acceptable to the Jacksonville Port Authority and DER if the totally enclosed coal conveyance system is not ultimately approved. Accordingly, the parties request that the Blount Island coal unloading facility be certified based on the Hearing Officer's Findings of Fact Nos. 21 and 29 which show that the Blount Island facility will have minimal adverse environmental impacts.

10. Conclusion of Law No. 39. The parties request that the references in Conclusion of Law No. 39 to the "significant and adverse environmental impacts" associated with the construction of the Blount Island coal unloading facility be stricken as inconsistent with the Hearing Officer's Finding of Fact No. 29 in which it is found that:

> Dredging will be limited to a period not exceeding a cumulative total of twelve months to minimize the transient impacts on local aquatic communities.
>
> It is anticipated that temporary localized water quality changes will occur as a result of the Blount Island dredging activities. (Finding of Fact No. 29 at p. 26, emphasis added.)

"Transient," "temporary" and "localized" impacts are not, in the context of the entire record, so significantly adverse as to deny JEA the capability of bringing in coal by sea, which would provide flexibility in achieving the best price for coal and reducing the potential for interruption of the coal supply via a transportation strike or some natural disaster. (See Finding of Fact No. 1 at p. 4.)

Based on the matters addressed in sections 9 and 10 above, the parties request the Board to certify the Blount

Island coal unloading facility using the totally enclosed coal conveyance system with final design approval authority delegated to DER or, alternatively, using another connection between Blount Island and the mainland subject to approval of the Jacksonville Port Authority and DER, and to approve the variances, mixing zones and zones of discharge related to the Blount Island facility. Those variances, mixing zones and zones of discharge are contained in the Conditions of Certification attached to the Hearing Officer's Recommended Order.

Right to Use Agency Works and Related Conditions

11. Additional Conclusions of Law. In Finding of Fact No. 26, the Hearing Officer finds that:

> The construction of Units 1 and 2 as proposed will require connection to, use of or the crossing over of the works and properties of the State of Florida governed by the Board of Trustees of the Internal Improvement Trust Fund, the Florida Department of Transportation, the St. Johns River Water Management District, the City of Jacksonville, and the Jacksonville Port Authority.

The Hearing Officer does not, however, include a provision in his Recommended Order authorizing the needed connection to, use of, or crossing over of these agency works. This deficiency in the Recommended Order is inconsistent with the express language of the PPSA:

> In regard to the properties and works of any agency which is a party to the certification hearing, the Board shall have the authority to decide issues relating to the use, the connection thereto, or the crossing thereof, for the electrical power plant and site and to direct any such agency to execute, within 30 days of the entry of certification, the necessary license or easement for such use, connection, or crossing, subject only to the conditions set forth in such certification. (Section 403.509(2), Florida Statutes (1981).)

The failure to provide express authorization for JEA to use, connect to, and cross over works and properties of the agencies where needed is also contrary to the practice of this Board in past certification orders. (See Joint Motion for Official

Recognition, ¶2.) Accordingly, the parties request that the authorization to use, connect to, and cross over the works and properties of the various governmental agencies as proposed in paragraphs (5) through (9) of JEA's Proposed Recommended Order be included in the final certification order issued by the Board.

12. Conclusion of Law No. 40 -- Stipulations of the Parties Regarding Appropriate Conditions for the Use of Agency Works. The Hearing Officer's conclusion that the five bilateral stipulations between JEA and several governmental agencies are nothing more than private agreements and the matters addressed therein are not proper subjects for conditions of certification (Conclusion of Law No. 40 at p. 34) is inconsistent with substantial precedent in prior PPSA certification proceedings. (See Joint Motion for Official Recognition, ¶3.) In addition, this conclusion of the Hearing Officer is inconsistent with Florida's Administrative Procedure Act which encourages the use of stipulations. See Section 120.57(3), Florida Statutes (1981).

Moreover, the Hearing Officer's conclusion that the matters addressed in stipulations between JEA and the various governmental agencies are not proper for mandate in the final certification order (Conclusion of Law No. 40 at p. 35) is totally contrary to the law. During the certification hearing, all five bilateral stipulations were properly moved into evidence and subsequently admitted without objection of any party. If the Hearing Officer had reservations about the evidentiary sufficiency of the stipulations, he should have raised his concern sua sponte during the hearing and given the parties an opportunity to present argument in support of the stipulations' evidentiary status.[1/] Instead, the Hearing Officer waited until five months after the hearing

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[1/] It is clear from the transcript of the certification proceeding that the parties and the Hearing Officer were well acquainted with JEA's intention to introduce its stipulations with the various state agencies. (T. 34-38.)

to suggest that the bilateral stipulations are mere private agreements. While the Hearing Officer only purports to remove one of the stipulations from the record (see discussion in section 14 below), relegating the stipulations to private agreement status effectively renders all of them of no force and effect in regard to this proceeding. Such an after-the-fact unilateral decision to disallow full evidentiary status to the bilateral stipulations without prior notice to the parties is patently unfair and violates the parties' constitutional rights of due process. See Manatee County v. Florida Public Employees Relation Commission, 387 So.2d 446 (Fla. 1st DCA 1980). The Hearing Officer's attempt to limit the evidentiary value of the stipulations is contrary to Section 90.104, Florida Statutes (1981), since there was never a timely objection to the admission of any of the stipulations. Diaz v. Rodriguez, 384 So.2d 906 (Fla. 3d DCA 1980); see also David v. Star Manufacturing Company, 385 So.2d 179 (Fla. 3d DCA 1980). Since the Hearing Officer's Recommended Order was the first instance that any of the parties learned of the Hearing Officer's disapproval of the stipulations and his intent to effectively remove them from the record, the parties were impermissibly denied the right to offer other testimony and evidence on the matters addressed in the stipulations. See generally, Diaz v. Rodriguez at 907. The stipulating parties are all prejudiced since they were led to believe that the stipulations were properly before the Hearing Officer and would be considered in the drafting of the Recommended Order and Conditions of Certification. In reliance on this belief and in compliance with Section 120.58(1)(a), Florida Statutes (1981), which provides for the exclusion of repetitious evidence, they did not offer additional evidence to expand upon the matters contained in their stipulations.

The Hearing Officer's position regarding bilateral stipulations also has significant adverse practical ramifications. Absent bilateral stipulations, it would be

necessary to obtain concurrence from every party to a certification proceeding on every issue to which the utility and the agency agree, regardless of whether those other parties have an interest in the subject of the stipulation.[2/] Alternatively, if any party were unwilling to sign a stipulation even though such party did not have an objection to the stipulation, each governmental agency would have to offer testimony and evidence at the certification hearing to prove the necessity of each condition of certification sought to be imposed upon the utility. Such a requirement would unnecessarily prolong the certification hearing and impose an unjustified burden on the governmental agencies and other parties by requiring attendance at the certification hearing not only by the agency attorneys, but also by factual and expert witnesses. Requiring testimony and evidence on every condition of certification would be futile when the utility and an agency agree to the imposition of the conditions of certification and no party voices an objection to the stipulation, as in this case. This extensive participation at the certification hearing by every agency with an interest in the matter is unprecedented and would result in the needless expenditure of public funds.

Additionally, by assigning the stipulations the status of mere private agreements, the conditions agreed to in each stipulation would be enforceable only through a breach of contract action in circuit court rather than as a violation of Chapter 403 pursuant to Section 403.514, Florida Statutes (1981). This result would defeat the intent of the PPSA that violations of conditions of certification be enforced through the procedure established in Section 403.412, Florida Statutes (1981).

13. Conclusion of Law No. 40 -- Stipulation Between JEA and the Consolidated City of Jacksonville, Department of

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[2/] Of course, even with any stipulation, any party could object to a provision in the stipulation and evidence would have to be taken on that issue.

Public Works. The Hearing Officer expresses concern that the stipulation between JEA and the Consolidated City of Jacksonville, Department of Public Works does not bind the Consolidated City of Jacksonville, the party to this proceeding. This concern is unfounded because the Consolidated City of Jacksonville is a party to this proceeding but has not objected to the entry of the stipulation into evidence or the issuance of a certification order based upon it. The stipulation is, therefore, presumptively entitled to consideration. Accordingly, the parties request that the discussion on page 35 of the Recommended Order regarding this stipulation be stricken.

14. Conclusion of Law No. 40 -- Stipulation Between JEA and the State of Florida, Department of Natural Resources/ Board of Trustees of the Internal Improvement Trust Fund. The Hearing Officer's conclusion that the stipulation between JEA and the State of Florida, Department of Natural Resources/ Board of Trustees of the Internal Improvement Trust Fund (DNR/BTIITF) is one which "on its face purports to bind those two agencies to the issuance of certain easements in, upon, and across sovereignty lands of the State of Florida and to commit those agencies and JEA to certain other activities with regard to the construction of Units 1 and 2" (Conclusion of Law No. 40 at p. 36) is contradicted by the express language of that stipulation. The Hearing Officer's incorrect interpretation apparently is the result of a misreading of that stipulation. He quotes from page 2 of the stipulation as follows:

> NOW, THEREFORE, it is agreed and stipulated by JEA and DNR/BTIITF staff that any certification order issued in connection with this proceeding shall contain the following provisions and conditions .... (Conclusion of Law No. 40 at pp. 36-37, emphasis added.)

This is a misquote. The stipulation actually states:

> NOW, THEREFORE, it is agreed and stipulated by JEA and DNR/BTIITF staff that any certification order issued in connection with this proceeding should contain the following provisions and conditions .... (JEA Exhibit H-3, emphasis added.)

The stipulation executed by JEA and the DNR/BTIITF staff was thus never intended to bind the DNR/BTIITF, nor was it intended to contain provisions or conditions that must be a part of the final certification order. The stipulation shows that the DNR/BTIITF staff recommends that the provisions and conditions contained therein be included in the certification order. Of course, the Governor and Cabinet in their dual role as heads of DNR/BTIITF and as the Siting Board under the PPSA are free to accept, reject or modify those recommendations.

The procedure of including the DNR/BTIITF staff recommendation to the Board in the recommended order has been followed in past PPSA certification proceedings. (See Joint Motion for Official Recognition, ¶4.) Additionally, as noted previously, the Hearing Officer wrongfully removed the stipulation from evidence after the close of the hearing.[3/]

Based on the matters addressed in sections 11, 12, 13 and 14 above, the parties request the Board to adopt paragraphs (5) through (9) of JEA's Proposed Recommended Order which grant JEA the right to use, connect to, or cross over the agency works found necessary by the Hearing Officer and which impose appropriate conditions on such use. A copy of paragraphs (5) through (9) of JEA's Proposed Recommended Order is attached.

[3/] Had the Hearing Officer raised his concern about the scope of the JEA/DNR/BTIITF stipulation at the hearing, the parties could have corrected his misconception about the purported binding effect of the stipulation.

Respectfully submitted this 8th day of June, 1982.

JACKSONVILLE ELECTRIC AUTHORITY

By _____
Attorney

JACKSONVILLE CHAMBER OF COMMERCE

By _____
Attorney

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

By _____
Attorney

STATE OF FLORIDA DEPARTMENT
OF NATURAL RESOURCES AND BOARD
OF TRUSTEES OF THE INTERNAL
IMPROVEMENT TRUST FUND

By _____
Attorney

STATE OF FLORIDA DEPARTMENT
OF TRANSPORTATION

By _____
Attorney

ST. JOHNS RIVER WATER
MANAGEMENT DISTRICT

By _____
Attorney

CONSOLIDATED CITY OF JACKSONVILLE

By _____
Attorney

JACKSONVILLE PORT AUTHORITY

By _____
Attorney

(5) JEA shall have the right to use, connect to, and cross over the works and properties of the State of Florida Department of Natural Resources/Board of Trustees of the Internal Improvement Trust Fund, upon the following terms and conditions of certification:

a. The DNR/BTIITF shall issue an easement to JEA in, upon, and across sovereignty lands in the St. Johns River for the construction of a coal-unloading facility. The proposed coal-unloading facility is to be located on the southern shore of Blount Island and borders the Fulton-Dame Point cutoff of the St. Johns River. The specific location of this proposed facility is depicted on Sheet 3, Section 0.1, Appendix "O" of the SCA/EID. The lands for which this conveyance is sought lie in Section 30, Township 1 South, Range 28 East. JEA shall have a survey and legal description of the exact boundaries of the proposed facility made prior to construction and submitted to DNR/BTIITF. A mean high water line survey has been completed and is depicted on Sheet 19, Section 0.1, Appendix "O" of the SCA/EID.

b. The activities associated with the proposed coal-unloading facility may include the construction of a 1200 foot wharf consisting of two parallel concrete decks set on piles. A portion of the wharf will be contiguous with the existing shoreline. The remaining portion of the wharf may include a pier of approximately 600 feet and will stand over the St. Johns River. The proposed coal-unloading facility will also require the dredging of approximately 21 acres to a

depth of -36 feet MSL. The areas to be dredged are depicted on Sheet 8, Section 0.1, Appendix "O" of the SCA/EID.

c. The DNR/BTIITF shall issue an easement to JEA, in, upon, and across sovereignty land to construct towers supporting a coal-conveyor system or other means of coal transport from Blount Island to the mainland site of the SJRPP. The coal transport system may generally follow the existing JEA transmission line easement. The exact locations of the coal transport system support towers as well as a survey and legal description of the boundaries of such towers shall be supplied to DNR/BTIITF by JEA prior to issuance of the easement and construction.

d. The DNR/BTIITF shall issue an easement to JEA in, upon, and across sovereignty land for the construction of a water intake structure in San Carlos Creek, Duval County, Florida. The proposed water intake structure will be located on the west side of the existing JEA Northside Generating Station discharge canal. The location of this facility is depicted on Sheets 5 and 6, Section 0.1, Appendix "O" of the SCA/EID. The lands for which such conveyance is sought lie in Section 13, Township 1 South, Range 27 East. JEA shall have a survey and legal description of the boundaries of this facility as well as a mean high water line survey conducted prior to issuance of the easement and construction.

e. The activities associated with the proposed water intake structure consist of constructing a channel from the proposed SJRPP to the existing JEA Northside Generating Station discharge canal. The channel to be constructed will have sheet piling sides and a stone blanket for its base. Some minor alteration of the creek banks and bottom may accompany this activity.

f. The DNR/BTIITF shall issue an easement to JEA in, upon, and across sovereignty land to construct electrical transmission line towers in San Carlos Creek and Mill Cove, Duval County, Florida. Only one of the proposed transmission line tower locations in San Carlos Creek will be on state-owned

lands. Such tower is to be placed on an elevated and previously impacted portion of the salt marsh. The exact location is shown on Sheet 5, Section 0.1, Appendix "O" of the SCA/EID. Those other electrical transmission line towers to be located on state-owned lands are in Mill Cove, south of the Fulton-Dame Point cutoff of the St. Johns River. The exact locations of the electrical transmission line towers to be located within Mill Cove immediately adjacent to an existing transmission line right-of-way are shown on Sheet 7, Section 0.1, Appendix "O" of the SCA/EID. The lands for which such conveyance is required lie in Section 13, Township 1 South, Range 27 East; Section 32, Township 1 South, Range 28 East; and Section 5, Township 2 South, Range 28 East. JEA shall have a survey and legal description of the boundaries of the transmission line towers made prior to issuance of the easement and construction.

g. The activities associated with the construction of the proposed electrical transmission line towers include the construction of piling supported base points. Construction of these towers in Mill Cove will be from a barge which will be used to gain access to the proposed tower locations. Construction in the near shore zones where water depths limit access by barge will be accomplished with the utilization of temporary matting designed to minimize adverse effects on the marsh.

h. Each of the above-referenced easements, containing terms of these provisions which are applicable, shall be issued by DNR/BTIITF after issuance of the Certification Order and within 60 days following submittal of the survey and legal descriptions for each easement as well as design and construction plans of the respective facilities as they are finalized.

i. DNR/BTIITF shall waive the payment of fees by JEA for the removal of dredged materials from state-owned lands subject to the following conditions:

(i) A written request for waiver of the fee requirement is submitted by the Managing Director of JEA;

conditions or other presently unknown circumstances necessitate a change in such locations:

Tower No.	Waterbody Location	UTM Coordinates
2	San Carlos Creek	65000N; 47577E
13	Marsh bordering northern side of Mill Cove	60885N; 49404E
14	Mill Cove	60481N; 49500E
15	Mill Cove	60077N; 49615E
16	Mill Cove	59827N; 49692E
17	Marsh bordering southeastern side of Mill Cove	56635N; 50006E

The locations of these towers are depicted in sheets "5 of 20" and "7 of 20" as found in Section 0.1, Appendix "O" of the SCA/EID. If the final locations of these towers vary by more than 100 feet in any direction from the above-referenced UTM coordinates due to changes in engineering requirements, JEA will notify the District of such changes no later than 45 days prior to construction.

(ii) Ensure that construction of any transmission line towers in the salt marsh will be minimized to the extent practicable.

(iii) Utilize matting in marsh vegetation areas to protect the marsh surface while transporting construction machinery into or out of the marsh area.

(iv) If possible, conduct no dredging in Mill Cove to construct transmission line towers. Barging of materials into and out of the area of Mill Cove will be done whenever possible.

(v) Construct transmission line access roads across drainage creeks which are works of the District so as to include the installation of culverts to maintain an unrestricted water flow. Design and construction plans including crossing size, culvert size, culvert invert and discharge elevation and other engineering features shall be submitted to the District for its review no later than 45 days prior to installation of such culverts.

b. If possible, dredging associated with the construction of the SJRPP, associated transmission lines, and the coal-transport system and coal-handling facilities will be

confined to the late fall and winter to minimize effects on aquatic communities.

c. JEA shall abide by those Conditions of Certification related to variances which are included within the Certification Order, subject to its rights on appeal and Condition of Certification XXV.

d. The proposed coal transport system from Blount Island to the mainland site of the SJRPP shall be properly designed using good engineering practices and may generally follow the existing JEA transmission line easement. The exact location of the coal transport system and its configuration and design shall be submitted to the District for its review no later than 45 days prior to construction.

(8) JEA shall have the right to use, connect to, and cross over the works and properties of the Consolidated City of Jacksonville upon the following terms and conditions of certification:

a. Within 30 days of the entry of the Certification Order the City shall issue to JEA driveway permits for the connection of driveways and turnouts from the SJRPP to New Berlin Road and Island Drive in accordance with the permit application attached as Exhibit "A" to the Stipulation between JEA and the City. Upon selection of a subcontractor by JEA's technical consultant, the required subcontractor information will be submitted to the City in order to complete the permit application.

b. City road improvements described in Exhibit "B" to the Stipulation between JEA and the City will be required at the locations indicated. The City will include any of such road improvements as it deems necessary in its applicable budget documents and will construct the necessary improvements consistent with the SJRPP construction schedule. Costs of such improvements shall be financed by JEA subject to a schedule to be agreed upon by JEA and the City. The City and JEA shall jointly determine whether additional City road improvements

will likely be necessary regarding construction related impacts associated with the SJRPP. The City shall take all reasonable steps to seek state, federal, or other funds to pay for those costs associated with such improvements jointly determined to be necessary. It will be the responsibility of JEA to identify the funding source to pay for the balance of such road improvement costs.

c. Water supply and wastewater treatment facilities for the SJRPP will be constructed and operated by JEA at the plant site. These facilities, including distribution systems for domestic and process water supply; stormwater runoff collection, treatment, and disposal systems; sewer and sanitary treatment systems; and process wastewater treatment systems, will not be interconnected with any City water or sewer systems. Additionally, all sludges and solid wastes generated at the SJRPP, except normal garbage and refuse, will be handled and disposed of by SJRPP personnel or private disposal contractors. Normal garbage and refuse generated at the SJRPP and associated facilities will be deposited in dumpsters for collection and disposal by the City.

d. JEA shall have the right to develop the City-owned approximately 80-acre parcel of property contained within the SJRPP site and specifically referenced in the Option Agreement between JEA and the City, a copy of which is attached to the Stipulation between JEA and the City as Exhibit "C." The right to develop the property shall be conditioned upon the terms and conditions of such Option Agreement.

(9) JEA shall have the right to use, connect to, and cross over the works and properties of the Jacksonville Port Authority ("Authority") upon the following terms and conditions of certification:

a. Within 30 days of the entry of the Certification Order the Authority shall execute a lease or other form of conveyance authorizing JEA to utilize an approximately 55-acre, more or less, tract located on the southern half of Blount Island for the construction and operation of the proposed coal-

unloading facility. The lease or other form of conveyance shall authorize JEA to utilize such area over the project life (currently estimated to be approximately 40 years) of the coal-unloading facility for a reasonable yearly lease fee. Any additional terms or conditions of the lease or other form of conveyance shall be further negotiated between JEA and the Authority.

b. The coal-unloading facility shall be equipped with bulk material handling equipment designed to unload, handle, store and transport coal to be utilized in support of electric power generation. The facility shall be bounded generally on the south by the Fulton-Dame Point cutoff of the St. Johns River, on the west by the existing container facility of the Authority, on the north by Undine Street, and on the east by the eastern boundary of the JEA existing transmission line easement.

c. JEA shall be authorized to construct within the leased area a wharf and associated bulk material handling facilities capable of supporting coal-unloading equipment including gantry-mounted clamshell unloaders, bucket-wheel stacker reclaimers, lowering wells, underground reclaim hoppers, belt conveyors, and similar associated bulk material handling equipment, subject to the following conditions:

(i) The wharf and coal-unloading facility shall be properly designed using good engineering practices;

(ii) The wharf shall be located so as to maintain reasonable navigation clearances in the Fulton-Dame Point Cutoff in accordance with established practice as defined by the U.S. Army Corps of Engineers and U.S. Coast Guard and shall not impair either the established dredged fairway to the existing Authority facilities on Blount Island, or future development and usage of waterfront property owned by the Authority easterly thereof; and

(iii) The bulk material handling equipment shall be configured to control fugitive dust emissions using appropriate

measures; for example, wet dust suppression systems, dry dust collection systems and conveying equipment enclosures.

d. The Authority shall provide the necessary easement over its lands easterly of the existing powerline easement in order to accomodate the construction and operation of the proposed pair of 230 kV transmission lines associated with the SJRPP which shall generally follow the existing JEA transmission line easement.

e. JEA shall provide an independent means, such as a belt conveyor, or aerial tramway system, for coal transport between the Blount Island coal-unloading facility and the mainland SJRPP site and the St. Johns River Power Park, such that coal shall not be transported over the vehicular roads and bridges or over the existing railroads and bridges. The coal transport system shall be constructed and operated generally within the existing powerline easement (or extensions thereof) on Blount Island. The coal transport system shall pass above or below existing grade with adequate clearance provided at any point where the system crosses an existing vehicular or railroad right-of-way. For the purposes of this paragraph, the term "adequate clearance" shall be defined in accordance with existing Seaboard Coastline Railroad standards for rail crossings, and U.S. Department of Transportation standards for vehicular crossings. The coal transport system shall be properly designed using good engineering practices, and shall be enclosed for dust and spillage suppression.

f. The Authority shall:

(i) Provide potable water and fire protection water service to the boundary of the coal-unloading facility property, for metered sale to JEA;

(ii) Accept sanitary sewage from the coal-unloading facility, not to exceed 500 gpd, into its existing sanitary sewage collection system for treatment at its existing plant located on Blount Island.

g. The Authority shall grant free and unobstructed access in common with others to the coal-unloading facility

property via existing vehicular roads and bridges, and via existing railroads and bridges except as provided in subparagraph e. The Authority shall also cooperate with JEA in providing such utility easements as may be necessary.

h. JEA and the Authority may modify any of conditions (9)a. through g. by mutual consent and written agreement and without further proceedings under Chapter 403, Part II, Florida Statutes.

(ii) All dredge spoil material is placed on an upland spoil site owned or controlled by the U.S. Army Corps of Engineers; and

(iii) No dredge spoil material is sold to any private party.

(6) JEA shall have the right to use, connect to, and cross over the works and properties of State of Florida Department of Transportation upon the following terms and conditions of certification:

a. DOT shall issue a permit for each transmission line crossing a state road within the corridors identified in Appendix "K" to the SCA/EID and for a coal-conveyor system or other means of coal transport crossing a state road between Blount Island and the mainland site of the SJRPP within 30 days of the submission of a complete utility permit application for such transmission line or coal transport system crossing.

b. In the construction of associated transmission lines, or coal transport systems, JEA shall:

(i) Follow the DOT Utilities Accomodation Guide as of June 4, 1979, unless JEA and DOT subsequently agree to the contrary.

(ii) Make all crossings as nearly perpendicular to and place all towers as far from state, county, and city road rights-of-way as practicable in order to allow future widening and expansion.

(iii) Not construct transmission lines or a coal transport system across any state, county, or city bridge which is supported by pilings.

(7) JEA shall have the right to use, connect to and cross over the works and the properties of the St. Johns River Water Management District upon the following terms and Conditions of Certification:

a. In the construction of associated transmission lines, JEA shall:

(i) Locate the transmission line tower structures at the approximate locations indicated below, unless foundation

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Jacksonville Electric Authority
SJRPP Units 1 & 2
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CONDITIONS OF CERTIFICATION

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State of Florida Department of Environmental Regulation
Jacksonville Electric Authority
SJRPP Units 1 & 2
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CONDITIONS OF CERTIFICATION

I. Air

The construction and operation of SJRPP Units 1 & 2 at the Jacksonville steam electric power plant site shall be in accordance with all applicable provisions of Chapters 17-2, 17-4, 17-5 and 17-7, Florida Administrative Code. In addition to the foregoing, the permittee shall comply with the following conditions of certification:

A. Emission Limitations

1. Based on a maximum heat input of 6,144 million BTU per hour, stack emissions from SJRPP Unit 1 & 2 shall not exceed the following when burning coal:

   a. SO_2 - 1.2 lb. per million BTU heat input, maximum two hour average, 0.76 lb/MMBtu on a 30-day rolling average.

   b. NO_x - 0.60 lb. per million BTU heat input.

   c. Particulates - 0.03 lb. per million BTU heat input.

   d. Visible emissions - 20% (6-minute average), except one 6-minute period per hour of not more than 27% opacity.

2. The height of the boiler exhaust stack for SJRPP Unit 1 & 2 shall not be less than 640 ft. above grade.

3. Particulate emissions from the coal handling facilities:

   a. The permittee shall not cause to be discharged into the atmosphere from any coal processing or conveying equipment, coal storage system or coal transfer and loading system processing coal, visible emissions which exceed 10 percent opacity. Particulate emissions shall be controlled by use of control devices.

   b. The permittee must submit to the Department within thirty (30) days after it becomes available, copies of technical data pertaining to the selected particulate emissions control for the coal handling

facility. These data should include, but not be limited to, guaranteed efficiency and emission rates, and major design parameters such as air/-cloth ratio and flow rate. The Department may, upon review of these data, disapprove the use of any such device if the Department determines the selected control device to be inadequate to meet the emission limits specified in 3(a) above. Such disapproval shall be issued within 30 days of receipt of the technical data.

4. Particulate emissions from limestone and flyash handling shall not exceed the following:

   a. Limestone silos - 0.050 lb/hr.

   b. Limestone hopper/transfer conveyors - 0.55 lb/hr.

   c. Flyash handling system - 0.2 lb/hr.

5. Visible emissions from the following facilities shall be limited to 10% opacity: (a) limestone and flyash handling system, (b) limestone day silos and (c) flyash silos.

6. Compliance with opacity limits of the facilities listed in Condition 5 will be determined by EPA reference method 9 (Appendix A, 40 CFR 60).

7. Construction shall reasonably conform to the plans and schedule given in the application.

8. The permittee shall report any delays in construction and completion of the project which would delay commercial operation by more than 90 days to the Department's St. Johns River Subdistrict Office.

9. Reasonable precautions to prevent fugitive particulate emissions during construction, such as coating of roads and construction sites used by contractors, regrassing or watering areas of disturbed soils, will be taken by the permittee.

10. Coal shall not be burned in the units unless both electrostatic precipitator and limestone scrubber are operating properly except as provided under 40 CFR Part 60 Subpart Da.

11. The two auxiliary boilers shall fire No. 2 fuel oil with a maximum sulfur content of 0.76 percent by weight, a maximum ash content of 0.01 percent by weight, an ap-

proximate heating value of 19,500 Btu per pound and a maximum viscosity of 3.6 centistokes at 100° F. Samples of all fuel oil fired in the boilers shall be taken and analyzed for sulfur content, ash content, heating value and viscosity. Accordingly, samples shall be taken of each fuel oil shipment received. Records of the analyses shall be kept a minimum of the two years to be available for FDER's inspection.

12. The same quality No. 2 fuel oil, used for the auxiliary boilers, shall be used for the main boilers Units 1 and 2 during start-up and low load operation.

13. Maximum emissions from either of the auxiliary boilers shall be limited to 0.8 lb/MMBTU for SO_2, 0.1 lb/MMBTU for P.M., and 20% opacity for visible emissions.

14. Coal fired in Units 1 and 2 shall have an ash content not to exceed 18% and a sulfur content not to exceed 4% by weight. Coal sulfur content shall be determined and recorded in accordance with 40 CFR 60.47a.

15. No fraction of flue gas shall be allowed to bypass the FGD system to reheat the gases existing from the FGD system, if the bypass will cause overall SO_2 removal efficiency less than 90 percent or as otherwise provided in 40 CFR Part 60, Subpart da. The percentage and amount of flue gas bypassing the FGD system shall be documented and records kept a minimum of two years available for FDER's inspection.

16. JEA shall keep records of the frequency, duration, load and manner of operation of the auxiliary boilers. During normal operation of the plant the boilers shall not operate more than seven (7%) percent of the time on an annual basis without prior approval of the Department. However, prior to commercial operation and during boiler start-up, shutdown of the main plant or plant upset, the auxiliary boilers may be operated more frequently.

B. Air Monitoring Program

1. The permittee shall install and operate continuously monitoring devices for each main boiler exhaust for sulfur dioxide, nitrogen oxide, carbon monoxide, carbon dioxide and opacity. The monitoring devices shall meet the applicable requirements of Section 17-2.710, FAC, and 40 CFR 60.47a. The opacity monitor may be placed in the duct work between the electrostatic precipitator and the FGD scrubber.

2. The permittee or Jacksonville Bio-Environmental Services Division shall operate two ambient monitoring devices for sulfur dioxide in accordance with EPA ref-

erence methods in 40 CFR, Part 53, and two ambient monitoring devices for suspended particulates. The monitoring devices shall be specifically located at a location approved by the Department. The frequency of operation shall be every six days commencing as specified by the Department.

3. The permittee shall maintain a daily log of the amounts and types of fuel used and copies of fuel analyses containing information on sulfur content, ash content and heating values.

4. The permittee shall provide stack sampling facilities as required by Rule 17-2.700(4) FAC.

5. The ambient monitoring program may be reviewed by the Department and the permittee annually after start-up of Unit 1. The monitoring program may be expanded or modified as deemed necessary by the Department. Modifications shall be effected in accordance with the provisions of Condition XXV.

6. Prior to commercial operation of the source, the permittee shall submit to the Department a standardized plan or procedure that will allow the permittee to monitor emission control equipment efficiency and enable the permittee to return malfunctioning equipment to proper operation as expeditiously as possible. The permittee shall also submit to the Department a plan to monitor salt drift from the cooling towers and the impact of the salt drift on vegetation. A salt drift monitoring program shall be implemented by December 1, 1984.

C. Stack Testing

1. Within 60 calendar days after achieving the maximum capacity at which each unit will be operated, but no later than 180 operating days after initial start-up, the permittee shall conduct performance tests for particulates SO_2, NO_x, and visible emissions during normal operations near (±10%) 6144 MMBtu/hr heat input and furnish the Department a written report of the results of such performance tests within 45 days of completion of the tests. The performance tests will be conducted in accordance with the provisions of 40 CFR 60.46a, 48a, and 49a.

2. Performance tests shall be conducted and data reduced in accordance with methods and procedures outlined in Section 17-2.700 FAC.

3. Performance tests shall be conducted under such conditions as the Department shall specify based on representative performance of the facility. The permittee shall make available to the Department such records as may be necessary to determine the conditions of the performance tests.

4. The permittee shall provide 30 days prior notice of the performance tests in order to afford the Department the opportunity to have an observer present.

5. Stack tests for particulates NO_x and SO_2 and visible emissions shall be performed annually in accordance with conditions C. 2, 3, and 4 above.

D. Reporting

1. For SJRPP, stack monitoring, fuel usage and fuel analysis data shall be reported to the Department's St. John's River Subdistrict Office on a quarterly basis commencing with the start of commercial operation in accordance with 40 CFR, Part 60, Section 60.7., and in accordance with Section 17-2.08, FAC.

2. Utilizing the SAROAD or other format approved in writing by the Department, ambient air monitoring data shall be reported to the Bureau of Air Quality Management of the Department quarterly. Commencing on the date of certification, such reports shall be due within 45 days following the quarterly reporting period.

3. Beginning one month after certification, the permittee shall submit to the Department a quarterly status report briefly outlining progress made on engineering design and purchase of major pieces of air pollution control equipment. All reports and information required to be submitted under this condition shall be submitted to the Administrator of Power Plant Siting, Department of Environmental Regulation, 2600 Blair Stone Road, Tallahassee, Florida, 32301.

E. Operating Restrictions

1. The permittee shall not operate its Southside, Northside, or Kennedy Generating Station in such a manner as to cause violation of ambient air quality standards for SO_2 when SJRPP is operating.

2. The permittee shall file with the Department, St. Johns River Subdistrict Office and the Jacksonville Bio-Environmental Services by June 1, 1984, the SJRPP/JEA system proposed operating plan and supporting justification that will include the procedures JEA will follow to permanently eliminate emissions from steam generating units equivalent to the impact of the emissions of Southside Units 1 and 2. The Secretary of the Department shall indicate the Department's approval or disapproval within 90 days of receipt. The proposed operating plan shall also contain proposals for operating during air pollution episodes pursuant to 17-2.320(3), FAC., including use of such alternatives as washed coal at SJRPP.

3. The operating plan shall include retirement of Southside Units 1 and 2, or equivalent units, cold storage, construction of tall stacks or other equivalent programs.

4. The schedule for implementation of the plan shall be consistent with the startup of SJRPP.

II. Water Discharges

Any discharges into any waters of the State During construction and operation of SJRPP Units 1 and 2 shall be in accordance with all applicable provisions of Chapter 17-3, Florida Administrative Code, and 40 CFR, Part 423, Effluent Guidelines and Standards for Steam Electric Power Generating Point Source Category, except as provided herein. Also, the permittee shall comply with the following conditions of certification:

A. Plant Effluents and Receiving Body of Water

For discharges made from the power plant the following conditions shall apply:

1. Receiving Body of Water (RBW)

The receiving body of water has been determined by the Department to be those waters of the St. John's River and any other waters affected which are considered to be waters of the State within the definition of Chapter 403, Florida Statutes.

2. Point of Discharge (P.O.D.)

The point of discharge has been determined by the Department to be where the effluent physically enters the waters of the State in the St. Johns River or Browns Creek.

3. Thermal Mixing Zones

The instantaneous zone of thermal mixing for the cooling system shall not exceed an area of 17 acres. The temperature at the point of discharge into the St. John's River shall not be greater than 105 degrees F. The temperature of the water at the edge of the mixing zone shall not exceed the limitations of Paragraph 17-3.05(1)(d). Cooling tower blowdown shall not exceed 96° F. as a 24 hour average.

4. Chemical Wastes

All discharges of low volume wastes (demineralizer regeneration, floor drainage, labs drains, FGD blowdown and similar wastes) and metal cleaning wastes shall comply with Chapter 17-3. If violations of Chapter 17-3 occur, corrective action shall be taken. These wastewaters shall be directed to an adequately sized and constructed treatment facility.

During periods when treated wastewater does not comply with pH discharge limitations, the treated wastewater may be recycled to the coal pile runoff sedimentation pond, except when the sedimentation pond has insufficient capacity to retain the recycled wastewater and the runoff from a rainfall event equal to or less than a ten year, 24 hour storm.

5. Coal Pile

Coal pile runoff shall be directed to the central wastewater treatment Facility and shall not be directly discharged to surface waters, except that discharge of stormwater runoff from the coal pile is allowed only during periods of high rainfall in excess of the ten year, 24 hour storm.

6. Chlorine

The concentration of total residual chlorine discharged from Units 1 & 2 and/or Northside Generating Station shall not exceed 0.1 mg/l at the POD nor 0.01 mg/l beyond an instantaneous mixing zone of 17.0 acres. Chlorine resulting from chlorination of either unit at

SJRPP shall not be discharged more than two hours per day and no unit shall be chlorinated simultaneously with any other unit at SJRPP or at Northside Generating Station. Levels of free available chlorine shall not exceed 0.5 mg/l for an instantaneous maximum nor 0.2 mg/l on a two hour average from the blowdown of either cooling tower. In the event that 40 CFR, Part 423 is revised with respect to chlorine limitations, such discharge limitations shall apply to cooling tower blowdown. Chlorine shall not be discharged from the SJRPP during periods when chlorine is being discharged from any unit at NGS except if due to cooling tower makeup (from ambient or from chlorination of NGS).

7. pH

The pH of the combined discharges shall be such that the pH will fall within the range of 6.0 to 9.0.

8. Polychlorinated Biphenyl Compounds

There shall be no net discharge of polychlorinated biphenyl compounds.

9. Combined Low Volume Wastes and Coal Pile Runoff

The combined low volume wastes and coal pile runoff shall be treated to control pH, total suspended solids and toxic metals prior to being discharged. The following effluent limitations will apply:

Effluent	Daily Maximum	Maximum 30-Day Daily Average
TSS	50 mg/l*	30 mg/l
Oil and Grease	15 mg/l	10 mg/l
pH	6-9	6-9

The design plans and specifications of the treatment system shall be submitted to the Department for review and approval prior to construction. The Department will indicate approval or disapproval within 45 days.

*100 mg/l allowed when only low volume wastes are being treated.

10. Metal Cleaning

Metal cleaning wastes shall be treated as appropriate prior to discharge to the cooling water system. The following effluent limitations shall apply:

Effluent	Daily Maximum	Maxmimum 30-Day Daily Average
TSS	100 mg/l	30 mg/l
Oil and Grease	20 mg/l	15 mg/l
Iron	1 mg/l	
Copper	1 mg/l	

11. Solid Waste and Gypsum Storage Areas

There shall be no direct discharge of stormwater runoff to surface waters from the gypsum storage areas, nor from the solid waste areas prior to closure without treatment (closure will be as defined in the solid waste management plan).

12. Storm Water Runoff

During plant operation, necessary measures shall be used to settle, filter, treat or absorb silt-containing or pollutant-laden stormwater runoff to limit the suspended solids to 50 mg/l or less at the POD during rainfall periods less than the 10-year, 24-hour rainfall, and to prevent an increase in turbidity of more than 50 Jackson Turbidity Units above background in waters of the State.

Control measures shall consist at the minimum of filters, sediment traps, barriers, berms or vegetative planting. Exposed or disturbed soil shall be protected as soon as possible to minimize silt - and sediment-laden runoff. The pH shall be kept within the range of 6.0 to 8.5 at the POD.

13. Coal Unloading Facility Percolation Pond Overflow

There shall be no direct discharge to surface waters from the coal unloading facility wastewater treatment system percolation pond. Any discharge from the facility shall be reported to the Department and the Environmental Protection Agency. The quantity of flow and duration of flow shall be estimated during such episodes.

14. Mixing Zones

The discharge of the following pollutants shall not violate the Water Quality Standards of Chapter 17-3, FAC, beyond the edge of the designated instantaneous mixing zones as described herein.

Pollutants	Mixing Zone	
Aluminum	125,600 M^2	31 Acres
Copper	125,600 M^2	31 Acres

Cyanide	125,600	M^2	31 Acres
Iron	125,600	M^2	31 Acres
Mercury	125,600	M^2	31 Acres
Silver	125,600	M^2	31 Acres
Oil and Grease	125,600	M^2	31 Acres
Selenium	80	M^2	0.02 Acres
Chlorides	80	M^2	0.02 Acres

15. Variances to Water Quality Standards

In accordance with the provisions of Sections 403.201 and 403.511(2), F.S., Jacksonville Electric Authority is hereby granted variances to the water Quality Standards of Chapter 17-3.121, F.A.C., for Aluminum, Copper, Iron, Mercury and Silver and 17-3.061, F.A.C., for Oil and Grease but only at such times as the natural background levels of the St. Johns River approach or exceed those standards. In any event, the discharge from the SJRPP shall comply with the effluent limitations set forth in paragraph II.A.16. The variances for mercury, copper, and silver shall only be for two years from the commencement of commercial operation, but may be extended by the Secretary based on results of monitoring data on wastewater treatment plant efficiency and ambient water quality and bioassays performed for copper, mercury, and total residual chlorine. A Bioassay test program shall be implemented after review and approval by the Department. The test program shall be submitted to the Department by December 1, 1983. The Department shall indicate its approval or disapproval within 60 days.

16. Effluent Limitations

The following effluent limitations shall apply for Aluminum, Copper, Iron, Mercury, Silver, and Oil and Grease at the locations specified:

a. Cooling Tower Blowdown - Cycles of concentration on a daily average shall not exceed 1.5: Daily average concentrations of chemicals in the cooling tower blowdown shall not exceed 1.5 times the concentrations present in the intake of the applicant's Northside Generating Station.

b. Wastewater Treatment Facility Discharge - Instantaneous maximum concentrations shall not exceed:

Aluminum	1.5 mg/l
Copper	1.0 mg/l
Iron	1.0 mg/l
Mercury	41.1 ug/l
Silver	6.4 ug/l
Oil and Grease	20 mg/l.

c. POD to the St. Johns River - Copper concentrations shall not exceed 0.18 mg/l.

B. Water Monitoring Programs

The permittee shall monitor and report to the Department the listed parameters on the basis specified herein. The methods and procedures utilized shall receive written approval by the Department. The monitoring program may be reviewed annually by the Department, and a determination may be made as to the necessity and extent of continuation, and may be modified in accordance with Condition No. XXV.

1. Chemical Monitoring

The following parameters shall be monitored during discharge as shown, commencing with the start of commercial operation of SJRPP and reported quarterly to the Department's St. Johns River Subdistrict Office:

Parameter	Location	Sample Type	Frequency
Flow, Groundwater	Wellfield Pipeline	Recorder	Continuous
Flow, Cooling Water Make-up	Intake	Pump Logs	Daily
Flow, Cooling Tower Blowdown	Cooling Towers	Pump Logs	Daily
Flow, CWTF*	Prior to Pump Sump	Pump Logs	Daily
Flow, Oily Waste-Water collection Basin	Prior to Pump Sump	Pump Logs	Daily

*CWTF = Central Wastewater Treatment Facility

pH	Pump Sump Outfall to NGS	Recorder Grab	Continuous One/per week
Temperature	Outfall to NGS	Recorder	Continuous
TSS	Oily Waste Basin, Metal Cleaning Waste Retention Basin	Grab 24 Hour Composite	Two/per week One/day
	CWTF and Sewage Treatment Facility	8 hour Composite	Two/week Monthly
Chlorine, Total Residual	Cooling Tower Blowdown POD and intake Discharge to Browns Creek (During construction only)	Multiple Grab	Weekly
Free Available	Cooling Tower	" "	"
Oil and Grease	Oily Wastewater Collection	3 Grab Composite	Two/week
	Metal Cleaning Waste Retention Basin CWTF	" "	"
	Brown's Creek	As described in Condition IV. A	
Metals	Intake and Sump Pump	24 Hour Composite	Once/week starting 90 days after commercial start-up for three months, two/month for the next six months, then monthly thereafter
Aluminum	"		"
Arsenic	"		"
Chromium	"		"
Copper*	"*		"
Cyanide**	"**		"
Iron	"		"
Lead	"		"
Mercury	"		"
Nickel	"		"
Selenium	"		"
Silver	"		"
Zinc	"		"
BOD	STP Influent and effluent	8 Hour Composite	Monthly
COD	Metal Cleaning Waste Facility	24 Hour Composite	Daily

* At POD also
** At Intake only

Phosphorus	Metal Cleaning Facility	24 Hour Composite	Daily (when discharged)
Copper	" " "	" " "	"
Iron	" " "	" " "	"
Cycles-of-concentration	Cooling tower	Calculation	"

2. Groundwater Monitoring

The groundwater levels shall be monitored continuously at selected wells as approved by the St. Johns River Water Management District. Chemical analyses shall be made on samples from all monitored wells identified in Condition III. F. below. The location, frequency and selected chemical analyses shall be as given in Condition III.F.

The groundwater monitoring program shall be implemented at least one year prior to operation of SJRPP Unit 1. The chemical analyses shall be in accord with the latest edition of Standard Methods for the Analysis of Water and Wastewater. The data shall be submitted within 30 days of collection/-analysis to the St. Johns River Water Management District and to the DER St. Johns River Subdistrict Office.

III. Groundwater

A. General

The use of groundwater from the wellfield for plant service water for SJRPP shall be minimized to the greatest extent practicable, but in no case shall exceed 7.6 mgd on a maximum daily basis from any new wells or 5.1 mgd on an average annual basis.

B. Well Criteria

The submission of well logs and test results and location, design and construction of wells to provide plant service water shall be in accordance with applicable rules of the Department of Evironmental Regulation and the St. Johns River Water Management District(SJRWMD). Total water use per month shall be reported quarterly to SJRWMD commencing with the start of construction.

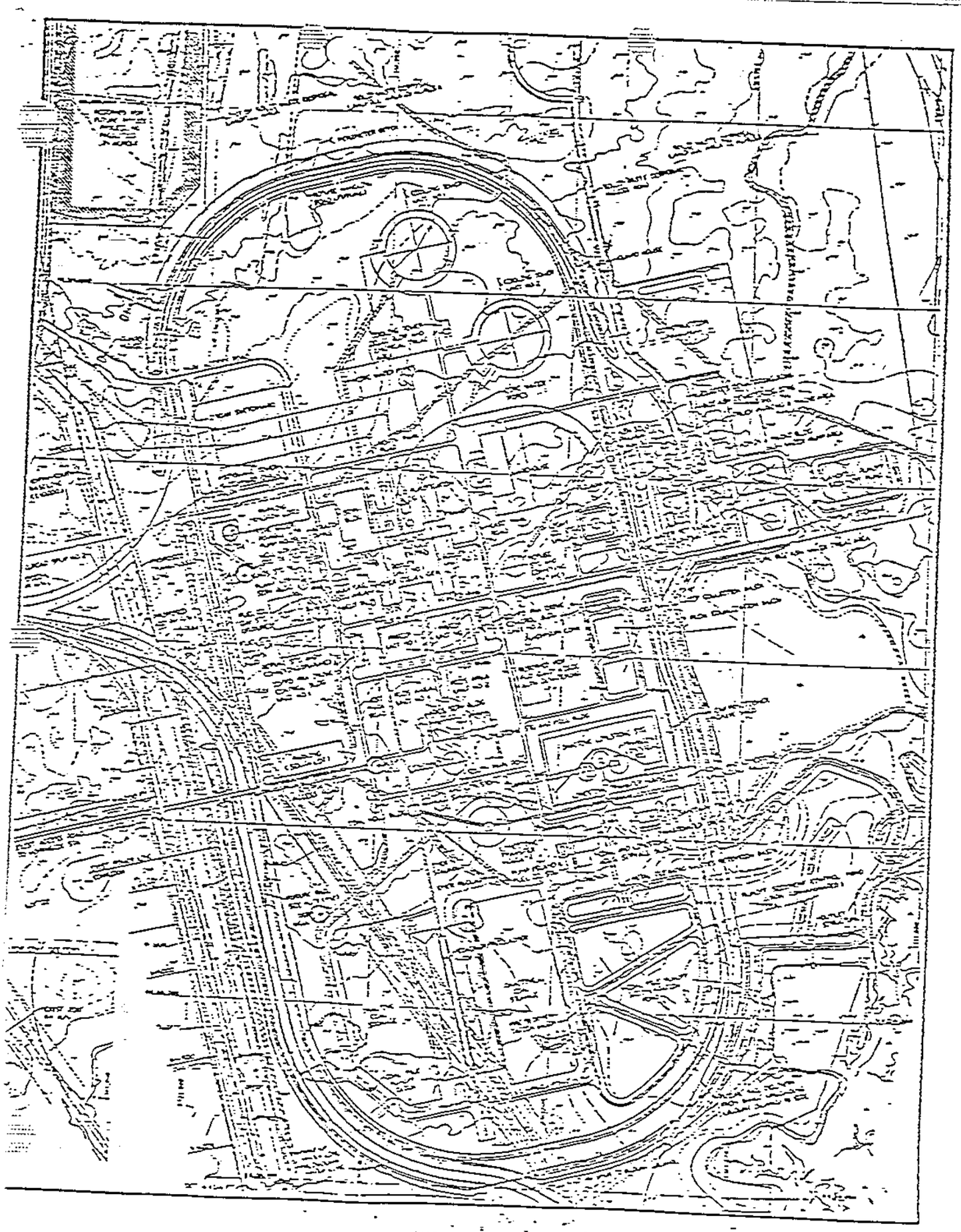

FIGURE 1

C. Well Withdrawal Limits

JEA is authorized to make a combined average annual withdrawal of 5.1 million gallons of water per day with a maximum combined withdrawal rate not to exceed 7.6 million gallons during a single day. Withdrawals may be made from a wellfield consisting of up to four (4) wells whose approximate locations are described in Figure 1.

After wells have been constructed, St. Johns River Water Management District may evaluate the individual wells and may recommend to the Department authorization of different withdrawals based upon hydrologic characteristics for the individual wells. The Department pursuant to Section 403.516, F.S. may modify the above withdrawal limitations with the concurrence of SJRWMD and the permittee.

D. Water Use Restriction

Said water is restricted to uses other than main steam condensing. Any change in the use of said water will require a modification of this condition.

E. Emergency Shortages

In the event an emergency water shortage should be declared pursuant to Section 373.175 or 373.246, F.S., by St. Johns River Water Management District for an area including the location of these withdrawal points, the Department pursuant to Section 403.516, F.S., may alter, modify, or declare to be inactive, all or parts of Condition III. A.-F. An authorized Water Management District Representative, at any reasonable time, may enter the property to inspect the facilities.

F. Monitoring and Reporting

JEA shall, within the time limits hereinafter set forth, complete the following items.

1. JEA shall install a flow meter for the production wellfield and will maintain pump logs for operation of each production well in compliance with SJRWMD specifications on all production wells.

2. JEA shall submit to SJRWMD, on forms available from the District, a record of pumpage for each meter installed in F.1. above. Said pumpage shall be provided on a monthly basis, and shall be submitted by April 15, July 15, October 15, and January 15 for each preceding calendar quarter.

3. JEA shall maintain and operate a continuous water level recorder on the standby production well located at the test site in Duval County, Florida. Detailed hydrographs of water level fluctuations shall be constructed with the data collected from the water level recorder and shall be submitted to SJRWMD by April 15, July 15, October 15, and January 15 for each preceding calendar quarter.

4. Water quality analysis shall be performed on water withdrawn from each production well. The water samples collected from each of the wells shall be collected immediately after removal by pumping of a quantity of water equal to at least two casing volumes. The JEA and staff of SJRWMD may determine and adjust the intervals to be monitored in accordance with hydrologic conditions determined from drilling logs. The water quality analyses shall be performed monthly during the first year of operation, quarterly during the second year and twice each year (May and September) thereafter. Results shall be submitted to SJRWMD and the Bio-Environmental Services Division (BES) within 45 days after following such analyses were performed. Testing for the following parameters is required:

a. When Drilled:

Calcium	Magnesium	Sodium
Potassium	Bicarbonate	Sulfate
Chloride	Nitrate	Total Dissolved Solids
Specific conductance	Gross Alpha	Total Phosphate
Radium 226 (only if gross Alpha is greater than 15 pci/l)	Radiation	

b. During operation:

Chloride, Sulfate, Specific Conductance, Nitrate and Total Dissolved Solids.

5. In the event that SJRWMD or BES determines there is a significant change in the water quality (substantially caused by SJRPP and causing a potentially significant effect on water use), the Department may propose pursuant to Section 403.516, F.S., that the permittee be required to reduce or cease withdrawal from these groundwater sources and that additional parameters be monitored.

6. Minimum Water Level Restrictions

If the Department and SJRWMD at a future date establish a minimum water level of general applicability to all users in the aquifer or aquifers hydrologically associated with these withdrawals, they may propose pursuant to Section 403.516, F.S. that JEA reduce or cease withdrawal from these groundwater sources at times when water levels fall below these minimums.

6. Shallow Aquifer Monitoring Wells

After consulation with the DER and SJRWMD, JEA shall install a monitoring well network to monitor groundwater quality horizontally and vertically through to the top of the Hawthorne Formation's first clayey lithologic Unit. Groundwater quantity and flow directions will be determined seasonally at the site through the preparation of seasonal watertable contour maps, based upon water level data obtained during the applicants preoperational monitoring program. From these maps the water quality monitoring well network will be located. Monitoring well locations and designs shall be submitted to the Department and SJRWMD for review. Approval or disapproval of the locations and design shall be granted within 60 days. Monitoring wells shall be installed upgradient and downgradient from each solid waste disposal area, each liquid waste pond and each coal pile storage area. An additional monitoring well will be placed immediately downgradient of the first section of each solid waste landfill to be utilized. Insofar as possible, these monitoring wells may be selected from the existing wells and piezometers used in the permittees preoperational monitoring program. Existing wells will be properly sealed in accordance with Chapter 17-21, F.A.C., whenever they are abandoned due to construction of facilities or landfill cells. The water samples collected from each of the monitor wells shall be collected immediately after removal by pumping of a quantity of water equal to at least two casing volumes. The water quality analyses shall be performed monthly during the year prior to commercial operation and quarterly thereafter. Results shall be submitted to the Department and the SJRWMD by the fifteenth (15th) day of the month following the month during which such analyses were performed. Testing for the following constituents is required around unlined ponds or storage areas.

TDS	Cadmium
Conductance	Zinc
pH	Copper
Redox	Nickel
Sulfate	Selenium
Sulfite	Chromium