



Jeb Bush
Governor

Department of Environmental Protection

Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

RECEIVED

David B. Struhs
Secretary

June 13, 2000

JUN 15 2000

BUREAU OF AIR REGULATION

RE: City of Lakeland, C.D. McIntosh, Jr., Power Plant, Unit No. 5, Application PA 74-06SR2, OGC Case No. 99-0993, Final Order Approving Land Use and Certification

To addressees listed below:

On June 1, 2000, the Siting Board issued the Final Order Approving Land Use and Certification for the above named facility. Attached is the Conditions of Certification for the facility, which was issued as an attachment to, and part of the Final Order as Exhibit (B). The Exhibit was inadvertently left off of the Final Order when initially sent out.

Should you have any questions, please call me at 850/488-9314.

Sincerely,

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Senior Assistant General Counsel

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J. Lawrence Johnston, Administrative Law Judge
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Norman White, Esquire
Central Florida Regional Planning
Council
555 East Church Street
Bartow, Florida 33830

Enclosures

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

RE:

City of Lakeland Department of Electric Utilities

C. D. McIntosh, Jr. Power Plant Unit No. 5; PA 74-06SR2

CONDITIONS OF CERTIFICATION

I. GENERAL

Under the control of these Conditions of Certification the City of Lakeland Department of Electric Utilities (Lakeland) will operate a 370 MW (nominal) facility consisting of one existing combustion turbine generator (250 MW), one heat recovery steam generator, one steam turbine electric generator (120 MW), and ancillary equipment. This facility is located at Lakeland's C. D. McIntosh, Jr. Power Plant on the northeastern shore of Lake Parker in the City of Lakeland, Polk County, Florida. The UTM coordinates are 3106.8 km North and 17,408.8 km East.

The general and specific conditions contained in these Conditions of Certification shall apply to the construction and operation of the C. D. McIntosh, Jr. Power Plant Unit No. 5 Electrical Power Generation Facility (McIntosh No. 5), and replace all prior conditions for McIntosh No. 5's simple cycle operation.

A. Definitions

The meaning of the terms used herein shall be governed by the definitions contained in Chapters 403, 378, 373, 372, and 253, Florida Statutes (F.S.), and any regulation adopted pursuant thereto and the statutes and regulations of any agency party to the certification proceedings. In the event of any dispute over the meaning of a term used in these 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. As used herein:

1. "Application" shall mean the Site Certification Application (SCA) for the City of Lakeland Department of Electric Utilities' (Lakeland) C. D. McIntosh, Jr. Power Plant Unit No. 5 Electrical Power Generation Facility (McIntosh No. 5), filed with the Department on June , 1999 as supplemented or subsequently amended.

2. "DEP" or "Department" shall mean the Florida Department of Environmental Protection.
3. "Emergency conditions" shall mean urgent circumstances involving potential adverse consequences to human life or property as a result of weather conditions or other calamity.
4. "Facility" shall mean the C. D. McIntosh, Jr. Power Plant Unit No. 5 Electrical Power Generation Facility and all associated structures, including but not limited to: the combustion turbine generators, the heat recovery steam generators, the steam turbine generator, transformers, associated transmission lines, substation, fuel and water storage tanks, natural gas delivery metering station, air pollution control equipment, storm water control facilities, the cooling towers and related structures.
5. "Feasible" or "practicable" shall mean reasonably achievable considering a balance of land use impacts, environmental impacts, engineering constraints, and costs.
6. "Permittee" shall mean the City of Lakeland Department of Electric Utilities (Lakeland) or their successors and or assigns.
7. "Power plant" shall mean the electrical power generating plant and appurtenances to be operated on the C. D. McIntosh, Jr. Power Plant Unit No. 5 Electrical Power Generation Facility (McIntosh No. 5) site in Polk County, as generally depicted in the Application.
8. "Project" or "McIntosh No. 5" shall mean the C. D. McIntosh, Jr. Power Plant Unit No. 5 Electrical Power Generation Facility and all associated facilities.
9. "SWFWMD" shall mean the Southwest Florida Water Management District.

B. Applicable Rules

The construction and operation of the McIntosh No. 5 facility shall be in accordance with all applicable provisions of at least the following regulations: Chapters 40D-2, 40D-8, 40D-21, 62-4, 62-17, 62-256, 62-296, 62-297, 62-301, 62-302, 62-531, 62-532, 62-550, 62-555, 62-560, 62-600, 62-601, 62-604, 62-610, 62-620, 62-621, 62-650, 62-699, 62-660, 62-701, 62-762, 62-767, 62-769, 62-770, and 62-25, Florida Administrative Code (F.A.C.), or their successors as they are renumbered.

II. CHANGE IN DISCHARGE

All discharges or emissions authorized herein shall be consistent with the terms and conditions of this certification. The discharge of any regulated pollutant not identified in the application, or more frequent than, or at a level in excess of that authorized herein, shall constitute a violation of the certification. Any anticipated facility expansions beyond the certified initial generating capacities of the existing unit, production increases, or process modifications which may result in new, different, or increased discharges of pollutants, or expansion in steam generation capacity shall be reported by submission of an application for amendment or modification pursuant to Chapter 403, F.S.

III. GENERAL CONDITIONS

A. Facilities Operation

1. The Permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used to achieve compliance with the conditions of this certification, and are required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the approval and when required by Department rules.

2. In the event of a prolonged [thirty (30) days or more] equipment malfunction or shutdown of air pollution control equipment, operation may be allowed to resume and continue to take place under an appropriate Department order, provided that the Permittee demonstrates that such operation will be in compliance with all applicable ambient air quality standards and PSD increments, solid waste rules, domestic wastewater rules and industrial wastewater rules. During such malfunction or shutdown, the operation of the facility shall comply with all other requirements of this certification and all applicable state and federal emission and effluent standards not affected by the malfunction or shutdown which is the subject of the Department's order.

B. 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 DEP Southwest District office by telephone at (813) 744-6100 within one business day. After normal business hours, report any condition that poses a public health threat to the State Warning Point under telephone number (850) 413-9911 or (850) 413-9912. Lakeland shall confirm this non-compliance in writing at 3804 Coconut Palm Drive, Tampa, Florida 33619-8218 within seventy-two (72) hours of becoming aware of such conditions, and shall supply the following information:

1. A description of the discharge and cause of noncompliance; and,
2. 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 noncomplying event.
3. The Permittee shall report all critical (having potential to significantly pollute surface or ground waters) spills of liquid or liquid-solid materials, not confined to a building or similar containment structure, to the Department by telephone immediately after discovery and submit a written report within forty-eight hours, excluding weekends, from the original notification. The telephonic report shall be submitted by calling the DEP Southwest District Industrial Wastewater Compliance/Enforcement Section under telephone number (813) 744-6100. After normal business hours, contact the State Warning Point by calling (850) 413-9911 or (850) 413-9912. The written report shall include, but not be limited to, a detailed description of how the spill occurred, the name and chemical make-up (include any MSDS sheets) of the substance, the amount spilled, the time and date of the spill, the name and title of the person who first reported the spill, the areal size of the spill and surface types (impervious, ground, water bodies, etc.) it impacted, the cleanup procedures used and status of completion, and include a map or aerial photograph showing the extent and paths of

the material flow. Any deviation from this requirement must receive prior approval from the Department.

C. Safety

1. 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. The Safety Standards specified under Section 442.20, F.S., by the Division of Safety of the Florida Department of Labor and Employment Security shall also be complied with.

2. The Permittee shall not discharge to surface waters wastes which are acutely toxic, or present in concentrations which are carcinogenic, mutagenic, or teratogenic to human beings or to significant locally occurring wildlife or aquatic species. The Permittee shall not discharge to ground waters wastes in concentrations which, alone or in combination with other substances, or components of discharges (whether thermal or non-thermal) are carcinogenic, mutagenic, teratogenic, or toxic to human beings (unless specific criteria are established for such components in Section 62-520.420, F.A.C.) or are acutely toxic to indigenous species of significance to the aquatic community within surface waters affected by the ground water at the point of contact with surface waters.

D. Enforcement

The Department may take any and all lawful actions as it deems appropriate to enforce any condition of this certification.

E. Design and Performance Criteria

The power plant may be operated at up to the maximum electrical output projected from design information and system capability without the need for modifying these conditions. Treatment or control facilities or systems installed or used to achieve compliance with the terms and conditions of this certification are not to be bypassed without prior DEP approval. Moreover, the Permittee shall take all reasonable steps to minimize any adverse impacts resulting from noncompliance 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 noncomplying event.

F. Certification - General Conditions

1. The terms, conditions, requirements, limitations and restrictions set forth in these conditions of certification are the same as "Permit Conditions" and are binding and enforceable pursuant to Sections 403.141, 403.161, 403.514, 403.727, and 403.859 through 403.861, F.S. Any noncompliance with a condition of certification or condition of a federally delegated or approved permit constitutes a violation of chapter 403, F.S., and is grounds for enforcement action, permit termination, permit revocation and reissuance, or permit revision. The Permittee is placed on notice that the Department will review this approval periodically and may initiate enforcement action for any violation of these conditions.

2. This approval is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this approval may constitute grounds for revocation and enforcement action by the Department.

3. As provided in Subsections 403.087(7), 403.511, and 403.722(5), F.S., the issuance of this approval does not convey any vested rights or any exclusive privileges. Neither 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. This approval is not a waiver of any other Department approval that may be required for other aspects of the total project under federally delegated programs which are not addressed in this certification.

4. This certification does not relieve the Permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this approved source, or from penalties therefore; nor does it allow the Permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department. The Permittee shall take all reasonable steps to minimize or prevent any discharge, reuse of reclaimed water, or residuals use or disposal in violation of these Conditions which has a reasonable likelihood of adversely affecting human health or the environment. It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with these Conditions.

5. In accepting this certification, the Permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this approved source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the approved source arising under the Florida Statutes or Department rules, except where such use is proscribed by Sections 403.111 or 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

6. This certification is transferable only upon Department approval in accordance with Section 403.516, F.S., Rules 62-17.211(3) and 62-730.300, F.A.C., as applicable. The Permittee shall be liable for any noncompliance of the approved activity until the transfer is approved by the Department.

7. These conditions of certification or a copy thereof shall be kept at the work site of the approved activity.

8. The Permittee shall comply with the following:

a. Upon request, the Permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.

b. The Permittee shall hold at the facility or other location designated by this approval records of all monitoring information (including all calibration and maintenance records and all

original strip chart recordings for continuous monitoring instrumentation) required by this approval, copies of all reports required by this approval, and records of all data used to complete the application for this approval. These materials shall be retained at least three (3) years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule. Data utilized to prepare the application is to be maintained at the following location:

City of Lakeland, Department of Electric Utilities
501 East Lemon Street
Lakeland, Florida 33801-5050

and

C.D. McIntosh, Jr. Power Plant
3030 East Parker Drive
Lakeland, Florida

c. Records of monitoring information shall include:

- the date, exact place, and time of sampling or measurements;
- the person responsible for performing the sampling or measurements;
- the dates analyses were performed;
- the person responsible for performing the analyses;
- the analytical techniques or methods used;
- the results of such analyses.

9. These Conditions may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a permit revision, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

10. The Permittee, by accepting these Conditions, specifically agrees to allow authorized Department personnel, including an authorized representative of the Department and authorized EPA personnel, when applicable, upon presentation of credentials or other documents as may be required by law, and at reasonable times, depending upon the nature of the concern being investigated, to

a. Enter upon the Permittee's premises where a regulated facility, system, or activity is located or conducted, or where records shall be kept under these Conditions;

b. Have access to and copy any records that shall be kept under the conditions of these Conditions;

c. Inspect the facilities, equipment, practices, or operations regulated or required under these Conditions; and

d. Sample or monitor any substances or parameters at any location necessary to assure compliance with these Conditions or Department rules.

11. When requested by the Department, the Permittee shall within a reasonable time provide any information required by law which is needed to determine whether there is cause for revising, revoking and reissuing, or terminating these Conditions, or to determine compliance with the permit. The Permittee shall also provide to the Department upon request copies of records required by these Conditions to be kept. If the Permittee becomes aware of relevant facts that were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be promptly submitted or corrections promptly reported to the Department.

12. Unless specifically stated otherwise in Department rules, the Permittee, in accepting these Conditions, agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the Permittee does not waive any rights granted by Florida Statutes or Department rules. A reasonable time for compliance with a new or amended surface water quality standard, other than those standards addressed in Rule 62-302.500, F.A.C., shall include a reasonable time to obtain or be denied a mixing zone for the new or amended standard.

13. The Permittee, in accepting these Conditions, agrees to pay the applicable regulatory program and surveillance fee in accordance with Rule 62-4.052, F.A.C.

14. The Permittee shall give the Department written notice at least 60 days before inactivation or abandonment of a wastewater facility and shall specify what steps will be taken to safeguard public health and safety during and following inactivation or abandonment.

15. The Permittee shall apply for a revision to any Department issued PSD, Title V, or NPDES permit in accordance with Department Rules in Chapter 62, Florida Administrative Code, before construction of any planned substantial modifications to the permitted facility is to commence or with applicable rules for minor modifications to the permitted facility. A revised permit shall be obtained before construction begins except as provided in the applicable portions of Chapter 62, F.A.C.

16. The Permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. The Permittee shall be responsible for any and all damages which may result from the changes and may be subject to enforcement action by the Department for penalties or revocation of these Conditions. The notice shall include the following information:

- a. A description of the anticipated noncompliance;
- b. The period of the anticipated noncompliance, including dates and times; and
- c. Steps being taken to prevent future occurrence of the noncompliance.

17. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule detailed elsewhere in these Conditions shall be submitted no later than 14 days following each schedule date.

G. Laboratories and Quality Assurance

1. The Permittee shall ensure that all laboratory analytical data submitted to the Department, as required by this certification, must be from a laboratory which has a currently valid and Department approved Comprehensive Quality Assurance Plan (CompQAP) [or a CompQAP pending approval] for all parameters being reported, as required by Chapter 62-160, F.A.C.

2. When a contract laboratory is used to analyze samples required pursuant to this certification, the Permittee is required to have the samples taken by appropriately trained personnel following EPA and Department approved sampling procedures and chain-of-custody requirements in accordance with Rule 62-160, F.A.C.

3. When an in-house laboratory is used to analyze samples required pursuant to this permit, the Permittee is required to have the samples taken by an appropriately trained technician following EPA and Department approved sampling procedures and chain-of-custody requirements. All chain-of-custody records must be retained on-site for at least three (3) years and made available to the Department immediately upon request.

H. Procedures for Post-Certification Submittals

1. *Purpose of Submittals:* Conditions of certification which provide for the post-certification submittal of information to DEP by the Permittee are for the purpose of facilitating DEP's monitoring of the effects arising from the plant facilities. This monitoring is for DEP to assure, in consultation with other agencies with applicable regulatory jurisdiction, continued compliance with the conditions of certification, without any further agency action.

2. *Filings:* All post-certification submittals of information by the Permittee are to be filed with DEP. Copies of each submittal shall be simultaneously submitted to any other agency indicated in the specific conditions requiring the post-certification submittals.

3. *Completeness:* The DEP shall promptly review each post-certification submittal for completeness. This review shall include consultation with the other agencies receiving the post-certification submittal. For the purposes of this condition, completeness shall mean that the information submitted is both complete and sufficient. If found to be incomplete, the Permittee shall be so notified. Failure to issue such a notice within forty-five (45) days after filing of the submittal shall constitute a finding of completeness.

4. *Interagency Meetings:* Within sixty (60) days of the filing of a complete post-certification submittal, DEP may conduct an interagency meeting with other agencies which received copies of the submittal. The purpose of such an interagency meeting shall be for the agencies with regulatory jurisdiction over the matters addressed in the post-certification submittal to discuss whether reasonable assurance of compliance with the conditions of certification has been provided. Failure of any agency to attend an interagency meeting shall not be grounds for DEP to withhold a determination of compliance with these conditions nor to delay the time frames for review established by these conditions.

5. *Reasonable Assurance of Compliance:* Within ninety (90) days of the filing of a complete post-certification submittal, or 45 days after a submittal is made by the Permittee, or unless another date is specified herein, DEP shall give written notification to the Permittee and the agencies

to which the post-certification information was submitted of its determination whether there is reasonable assurance of compliance with the conditions of certification. If it is determined that reasonable assurance has not been provided, the Permittee shall be notified with particularity and possible corrective measures suggested. Failure to notify the Permittee in writing within ninety (90) days of receipt of a complete post-certification submittal shall constitute a compliance determination.

IV. ADVERSE IMPACT

The Permittee shall take all reasonable steps to minimize any adverse impact resulting from noncompliance with any limitation specified in this certification, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

V. RIGHT OF ENTRY

The Permittee shall allow during normal business hours the Secretary of the Florida Department of Environmental Protection and/or authorized representatives, including representatives of the SWFWMD upon the presentation of credentials:

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

B. To have access during normal business hours (Monday-Friday, 7:00 a.m. to 3:30 p.m.) to any records required to be kept under the conditions of this certification for examination and copying;

C. To inspect and test any monitoring equipment or monitoring method required in this certification and to sample any discharge or pollutants, or monitor any substances or parameters at any location reasonably necessary to assure compliance with this certification or Department rules; and,

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

VI. REVOCATION OR SUSPENSION

This certification may be suspended or revoked for violations of any of its conditions pursuant to Section 403.512, F.S.

VII. CIVIL AND CRIMINAL LIABILITY

This certification does not relieve the Permittee from civil or criminal penalties for noncompliance with any conditions of this certification, applicable rules or regulations of the Department or Chapter 403, F.S., or regulations thereunder.

Subject to Section 403.511, F.S., 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.

VIII. PROPERTY RIGHTS

The issuance of this certification does not convey any property rights in either real or personal property, 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.

This certification conveys no title to land or water, does not constitute state recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the state. Only the Trustees of the Internal Improvement Trust Fund may express state opinion as to title.

IX. 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 provisions to other circumstances and the remainder of the certification shall not be affected thereby.

X. REVIEW OF SITE CERTIFICATION

The certification shall be final unless revised, revoked, or suspended pursuant to law. At least every five (5) years from the date of issuance of certification the Department may review these conditions of certification and propose any needed changes.

XI. MODIFICATION OF CONDITIONS

A. Pursuant to Subsection 403.516(1), F.S., the Siting Board hereby delegates the authority to the Secretary of the Department to modify any condition of this certification dealing with sampling, monitoring, reporting, specification of control equipment, boiler capacity, related time schedules, emission limitations (subject to notice and opportunity for hearing), conservation easements, or any special studies conducted, as necessary to attain the objectives of Chapter 403, Florida Statutes. Approval of requests for modifications of monitoring requirements shall not be unreasonably withheld by the Department.

B. This certification shall be automatically modified to conform to any subsequent amendments, modifications, or renewals made by the Department under a federally delegated or approved program to any separately issued Prevention of Significant Deterioration (PSD) permit, Title V air permit, or National Pollutant Discharge Elimination System (NPDES) permit for the certified facility. The Permittee shall send each party to the original certification proceedings (at the party's last known address as shown in the record of such proceeding) notice of requests for modifications or renewals of the above listed permits if the request involves a relief mechanism (e.g., mixing zone, variance, etc.) from standards, a relaxation of conditions included in the permit due to state permitting requirements, or the inclusion of less restrictive air emission limitations in the air permits. The Department shall notify all parties to the certification proceeding of any intent to modify conditions under this section prior to taking final agency action.

C. All other modifications to these conditions shall be made in accordance with section 403.516, F.S..

XII. CONSTRUCTION

A. Standards and Review of Plans

1. All construction at the Facility shall be constructed pursuant to the design standards presented in the application or amended application and the standards or plans and drawings submitted and signed by an engineer registered in the state of Florida. Specific DEP Southwest District office acceptance of plans will be required based upon a determination of consistency with approved design concepts, regulations and these conditions prior to initiation of construction of any: industrial waste treatment facilities; domestic waste treatment facilities; potable water treatment and supply systems; ground water monitoring systems and storm water runoff systems; solid waste disposal areas; and hazardous or toxic handling facilities or areas. The Permittee shall present specific Facility plans for these facilities for review by the Southwest District office at least ninety (90) days prior to construction of those portions of the Facility for which the plans are then being submitted, unless other time limits are specified in the following conditions herein. Review and approval or disapproval shall be accomplished in accordance with Chapter 120, F.S., or these conditions of certification as applicable.

2. The Department must be notified in writing and prior written approval obtained for any material change, modification, or revision to be made to the project during construction which is in conflict with these conditions of certification. If there is any material change, modification, or revision made to a project approved by the Department without this prior written approval, the project will be considered to have been constructed without departmental approval, the construction will not be cleared for service, and the construction will be considered a violation of the conditions of certification.

3. Ninety (90) days prior to the anticipated date of first operation, the Permittee shall provide the Department with an itemized list of any changes made to the facility design and operation plans that would affect a change in discharge as referenced in Condition II. since the time of the approval of these conditions. This pre-operational review of the final design and operation shall demonstrate continued compliance with Department rules and standards.

B. Control Measures

1. *Storm Water Runoff*: To control runoff during construction which may reach and thereby pollute waters of the state, necessary measures shall be utilized to settle, filter, treat or absorb silt containing or pollutant laden storm water to ensure against spillage or discharge of excavated material that may cause turbidity in excess of 29 Nephelometric Turbidity Units (NTU) above background in waters of the state. Control measures may consist of sediment traps, barriers, berms, and vegetation plantings. Exposed or disturbed soil shall be protected and stabilized as soon as possible to minimize silt and sediment-laden runoff. The pH of the runoff shall be kept within the range of 6.0 to 8.5. The Permittee shall comply with the applicable nonprocedural requirements in Chapter 62-25, F.A.C.

2. *Open Burning*: Any open burning in connection with initial land clearing shall be in accordance with Chapter 62-256, F.A.C., Chapter 5I-2, F.A.C., Uniform Fire Code Section 33.101 Addendum, and any other applicable county regulation. Any burning of construction-generated material, after initial land clearing that is allowed to be burned in accordance with Chapter 62-256, F.A.C., shall be approved by the DEP Southwest District office in conjunction with the Division of Forestry and any other county regulations that may apply. Burning shall not occur if not approved by the appropriate agency or if the Department or the Division of Forestry has issued a ban on burning due to fire safety conditions or due to air pollution conditions.

3. *Sanitary Wastes*: Disposal of sanitary wastes from construction toilet facilities shall be in accordance with applicable regulations of the appropriate local health agency.

4. *Solid Wastes*: Solid wastes resulting from construction shall be disposed of in accordance with the applicable regulations of Chapter 62-701, F.A.C.

5. *Noise*: Construction noise shall not exceed noise criteria or any applicable requirements of the City of Lakeland or Polk County. The Permittee shall notify area residents in advance of the onset of the steam blowout of the McIntosh Unit No.5 heat recovery steam generator and steam lines phase of construction. Such steam blowout shall be conducted between 7:00 am and sunset.

6. *Dust and Odors*: The Permittee shall employ proper odor and dust control techniques to minimize odor and fugitive dust emissions. The applicant shall employ control techniques sufficient to prevent nuisance conditions which interfere with enjoyment of residents of adjoining property.

7. *Transmission Lines*: Directly associated transmission lines from the facility electric switchyard to existing transmission lines shall be maintained in accordance with the application and the appropriate state and federal regulations concerning use of herbicides. The Permittee shall notify the Department of the type of herbicides to be used at least 60 days prior to their first use.

8. *Protection of Vegetation*: The Permittee shall develop the site so as to retain the buffer of natural vegetation as described in the application.

9. *Dewatering Operations*: Dewatering operations during construction shall be carried out in accordance with Rule 62-621.300(2), F.A.C.

10. *Historical or Archaeological Finds*: If historical or archaeological artifacts, such as Indian canoes, are discovered at any time within the project site, the Permittee shall notify the DEP Southwest District office and the Bureau of Historic Preservation, Division of Historical Resources, R.A. Gray Building, Tallahassee, Florida 32399, telephone number (850) 487-2073.

C. Environmental Control Program

An environmental control program shall be established under the supervision of a Florida registered professional engineer or other qualified person to assure that all construction activities conform to applicable environmental regulations and the applicable conditions of certification. If a violation of standards, harmful effects or irreversible environmental damage not anticipated by the

application or the evidence presented at the certification hearing are detected during construction, the Permittee shall notify the DEP Southwest District office as required by Condition III.B.

D. Reporting

Notice of commencement of construction shall be submitted to the Siting Coordination Office and the Southwest District office within fifteen (15) days of initiation. Starting three (3) months after construction commences, a quarterly construction status report shall be submitted to the Southwest District office. The report shall be a short narrative describing the progress of construction.

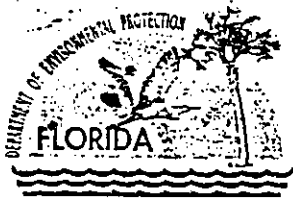
XIII. AIR RESOURCES MANAGEMENT

A. PSD Permit

The Permittee shall comply with all limitations, restrictions, and conditions contained in PSD permit number PSD-FL-245. The PSD permit is included in and made part of these Conditions of Certification as follows:

--- begin PSD permit ---

|



Department of Environmental Protection

Lawton Chiles
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Virginia B. Wetherell
Secretary

PERMITTEE:

City of Lakeland
Department of Electric & Water Utilities
501 East Lemon Street
Lakeland, Fl 33801-5079

File No.	1050004-004-AC
FID No.	1050004-004
SIC No.	4911
Permit No.	PSD-FL-245
Expires:	June 30, 2002

Authorized Representative:
Ronald W. Tomlin
Assistant Managing Director

PROJECT AND LOCATION:


Permit for the construction of 250 megawatt (MW) simple cycle, gas-fired, stationary combustion turbine (CT), a once-through steam generator, and a 1.05 million gallon storage tank for back-up distillate fuel oil. Conditions are included for possible future conversion to a 350 megawatt combined cycle installation including a heat recovery steam generator provided there are no increases in emissions associated with the conversion. The turbine is designated as Unit No. 5 and will be located at the C.D. McIntosh, Jr., Power Plant, 3030 East Lake Parker Drive, Lakeland, Polk County. UTM coordinates are: Zone 17; 409.0 km E; 3106.2 km N.

STATEMENT OF BASIS:

This construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.). The above named permittee is authorized to modify the facility in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department of Environmental Protection (Department).

Attached appendices and Tables made a part of this permit:

- Appendix BD BACT Determination
- Appendix GC Construction Permit General Conditions


Howard L. Rhodes, Director
Division of Air Resources
Management

AIR CONSTRUCTION PERMIT PSD-FL-245 (1050004-004-AC)

SECTION I. FACILITY INFORMATION

SUBSECTION A. FACILITY DESCRIPTION

The existing facility includes: two small diesel powered electric generators; one small gas and distillate-fired combustion turbine; one 90 MW gas and fuel oil-fired steam generator; one 115 MW gas and fuel oil-fired steam generator; and one 364 MW multiple (primarily coal) fuel-fired steam generator. This permit is for the installation of: a 250 MW simple cycle, gas-fired, stationary combustion turbine; a once-through steam generator; a 1.05 million gallon storage tank for back-up (0.05 percent sulfur) distillate fuel oil; and an 85-foot stack. It is possible that in the future the turbine will be converted by the addition of a heat recovery steam generator and a new stack to a 350 MW combined cycle operation without increases in emissions.

Emissions from the McIntosh Unit 5 will be initially controlled by Dry Low NO_x combustors, wet injection when firing fuel oil, use of inherently clean fuels, and good combustion practices. Ultimately the combustors will be replaced and nitrogen oxides emissions reduced by more sophisticated Ultra Low NO_x burners. Otherwise emissions will be reduced by the addition of a selective catalytic reduction (SCR) system.

SUBSECTION B. EMISSION UNITS

This permit addresses the following emission units:

ARMS EMISSION UNIT NO.	SYSTEM	EMISSION UNIT DESCRIPTION
028	Power Generation	250 Megawatt Combustion Turbine and Once Through Steam Generator
029	Fuel Storage	1.05 Million Gallon Fuel Oil Storage Tank

SUBSECTION C. REGULATORY CLASSIFICATION

The facility is classified as a Major or Title V Source of air pollution because emissions of at least one regulated air pollutant, such as particulate matter (PM/PM₁₀), sulfur dioxide (SO₂), nitrogen oxides (NO_x), carbon monoxide (CO), or volatile organic compounds (VOC) exceeds 100 tons per year (TPY).

This facility is within an industry included in the list of the 28 Major Facility Categories per Table 62-212.400-1, F.A.C. Because emissions are greater than 100 TPY for at least one criteria pollutant, the facility is also a Major Facility with respect to Rule 62-212.400, Prevention of Significant Deterioration (PSD). Per Table 62-212.400-2, modifications (such as the construction of Unit 5) at the facility resulting in emissions increases greater than 40 TPY of NO_x or SO₂, 25/15 TPY of PM/PM₁₀, or 3 TPY of fluorides (F) require review per the PSD rules and a determination for Best Available Control Technology (BACT) per Rule 62-212.400, F.A.C.

This facility is also subject to the provisions of Title IV, Acid Rain, Clean Air Act as amended in 1990.

AIR CONSTRUCTION PERMIT PSD-FL-245 (1050004-004-AC)

SECTION I. FACILITY INFORMATION

SUBSECTION D. PERMIT SCHEDULE

- 04/22/98 Notice of Intent published in The Ledger
- 04/23/98 Distributed Intent to Issue Permit
- 04/01/98 Application deemed complete.
- 12/08/97 Received Application

SUBSECTION E. RELEVANT DOCUMENTS:

The documents listed below are the basis of the permit. They are specifically related to this permitting action, but not all are incorporated into this permit. These documents are on file with the Department.

- Application received on December 8, 1997
- Department letters dated January 5, January 12, March 9, 1998, and April 27, 1998
- Comments and letters from the National Park Service dated January 6, January 12, April 2 and April 15, 1998.
- EPA letters dated February 10 and March 6, 1998.
- City of Lakeland letters dated March 4, March 11, March 31, and May 6, 1998.
- Letters from Westinghouse dated March 25, March 30, and March 31, 1998.
- Department's Intent to Issue and Public Notice Package dated April 22, 1998.
- Department's Final Determination and Best Available Control Technology Determination issued concurrently with this permit.

AIR CONSTRUCTION PERMIT PSD-FL-245 (1050004-004-AC)

SECTION II. EMISSION UNIT(S) GENERAL REQUIREMENTS

GENERAL AND ADMINISTRATIVE REQUIREMENTS

1. Regulating Agencies: All documents related to applications for permits to construct, operate or modify an emissions unit should be submitted to the Bureau of Air Regulation (BAR), Florida Department of Environmental Protection (FDEP), at 2600 Blairstone Road, Tallahassee, Florida 32399-2400 and phone number (850)488-1344. All documents related to reports, tests, and notifications should be submitted to the DEP Southwest District office (DEPSW), 3804 Coconut Palm Drive, Tampa, Florida 33619 and phone number 813/744-6100.
2. General Conditions: The owner and operator is subject to and shall operate under the attached General Permit Conditions G.1 through G.15 listed in Appendix GC of this permit. General Permit Conditions are binding and enforceable pursuant to Chapter 403 of the Florida Statutes. [Rule 62-4.160, F.A.C.]
3. Terminology: The terms used in this permit have specific meanings as defined in the corresponding chapters of the Florida Administrative Code.
4. Forms and Application Procedures: The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. [Rule 62-210.900, F.A.C.]
5. Modifications: The permittee shall give written notification to the Department when there is any modification to this facility. This notice shall be submitted sufficiently in advance of any critical date involved to allow sufficient time for review, discussion, and revision of plans, if necessary. Such notice shall include, but not be limited to, information describing the precise nature of the change; modifications to any emission control system; production capacity of the facility before and after the change; and the anticipated completion date of the change. [Chapters 62-210 and 62-212]
6. Expiration: Approval to construct shall become invalid if construction is not commenced within 18 months after receipt of such approval, or if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. The Department may extend the 18-month period upon a satisfactory showing that an extension is justified. [40 CFR 52.21(r)(2)].
7. BACT Determination: In accordance with paragraph (4) of 40 CFR 52.21(j) the Best Available Control Technology (BACT) determination shall be reviewed and modified as appropriate in the event of a conversion to combined cycle operation. This paragraph states: "For phased construction project, the determination of best available control technology shall be reviewed and modified as appropriate at the latest reasonable time which occurs no later than 18 months prior to commencement of construction of each independent phase of the project. At such time, the owner or operator of the applicable stationary source may be required to demonstrate the adequacy of any previous determination of best available control technology for the source."

AIR CONSTRUCTION PERMIT PSD-FL-245 (1050004-004-AC)

SECTION II. EMISSION UNIT(S) GENERAL REQUIREMENTS

This reassessment will be conducted for this project only if the conversion to combined cycle operation is accompanied by any increases in heat input limits, hours of operation, oil firing, low or baseload operation, short-term or annual emission limits, annual fuel heat input limits or similar changes. At a minimum, conversion to combined cycle operation will require a modification of this permit to reflect the ultimate facility description, the higher power production rates and review of the actual control equipment design. [40 CFR 52.21(j)(4), Rule 62-4.070 F.A.C.]

8. Application for Title V Permit: An application for a Title V operating permit, pursuant to Chapter 62-213, F.A.C., must be submitted to the DEP's Bureau of Air Regulation, and a copy to the Department Southwest District office (DEPSW). [Chapter 62-213, F.A.C.]
9. New or Additional Conditions: Pursuant to Rule 62-4.080, F.A.C., for good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]
10. Annual Reports: Pursuant to Rule 62-210.370(2), F.A.C., Annual Operation Reports, the permittee is required to submit annual reports on the actual operating rates and emissions from this facility. Annual operating reports shall be sent to the DEP's Southwest District office by March 1st of each year.
11. Stack Testing Facilities: Stack sampling facilities shall be installed in accordance with Rule 62-297.310(6), F.A.C.
12. Permit Extension: The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Bureau of Air Regulation prior to 60 days before the expiration of the permit (Rule 62-4.080, F.A.C.).
13. Quarterly Reports: Quarterly excess emission reports, in accordance with 40 CFR 60.7 (a)(7) (c) (1997 version), shall be submitted to the DEP's Southwest District office.

AIR CONSTRUCTION PERMIT PSD-FL-245 (1050004-004-AC)

SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

APPLICABLE STANDARDS AND REGULATIONS:

1. Unless otherwise indicated in this permit, the construction and operation of the subject emission unit(s) shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of Chapter 403, F.S. and Florida Administrative Code Chapters 62-4, 62-103, 62-204, 62-210, 62-212, 62-213, 62-214, 62-296, 62-297; and the applicable requirements of the Code of Federal Regulations Section 40, Parts 60, 72, 73, and 75.
2. Issuance of this permit does not relieve the facility owner or operator from compliance with any applicable federal, state, or local permitting requirements or regulations. [Rule 62-210.300, F.A.C.]
3. These emission units shall comply with all applicable requirements of 40CFR60, Subpart A, General Provisions including:
 - 40CFR60.7, Notification and Recordkeeping
 - 40CFR60.8, Performance Tests
 - 40CFR60.11, Compliance with Standards and Maintenance Requirements
 - 40CFR60.12, Circumvention
 - 40CFR60.13, Monitoring Requirements
 - 40CFR60.19, General Notification and Reporting requirements
4. ARMS Emission Unit 028, Power Generation, consisting of a 250 megawatt combustion turbine with a once-through steam generator shall comply with all applicable provisions of 40CFR60, Subpart GG, Standards of performance for Stationary Gas Turbines, adopted by reference in Rule 62-204.800(7)(b), F.A.C. The Subpart GG requirement to correct test data to ISO conditions applies. However, such correction is not used for compliance determinations with the BACT standard(s).
5. ARMS Emission Unit 029, Fuel Storage, consisting of a 1.05 million gallon distillate fuel oil storage tank shall comply with all applicable provisions of 40CFR60, Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels, adopted by reference in Rule 62-204.800, F.A.C.
6. All notifications and reports required by the above specific conditions shall be submitted to the DEP's Southwest District office.

GENERAL OPERATION REQUIREMENTS

7. Fuels: Only pipeline natural gas or maximum 0.05 percent sulfur fuel oil No. 2 or superior grade of distillate fuel oil shall be fired in this unit. [Applicant Request, Rule 62-210.200, F.A.C. (Definitions - Potential Emissions)]

AIR CONSTRUCTION PERMIT PSD-FL-245 (1050004-004-AC)

SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

8. Capacity: The maximum heat input rates, based on the lower heating value (LHV) of each fuel to Unit 5 at ambient conditions of 59°F temperature, 60% relative humidity, 100% load, and 14.7 psi pressure shall not exceed 2,174 million Btu per hour (mmBtu/hr) when firing natural gas, nor 2,236 mmBtu/hr when firing No. 2 or superior grade of distillate fuel oil. These maximum heat input rates will vary depending upon ambient conditions and the combustion turbine characteristics. Manufacturer's curves corrected for site conditions or equations for correction to other ambient conditions shall be provided to the Department of Environmental Protection (DEP) within 45 days of completing the initial compliance testing. [Design, Rule 62-210.200, F.A.C. (Definitions - Potential Emissions)]
9. Unconfined Particulate Emissions: During the construction period, unconfined particulate matter emissions shall be minimized by dust suppressing techniques such as covering and/or application of water or chemicals to the affected areas, as necessary.
10. Plant Operation - Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the owner or operator shall notify the DEP Southwest District office as soon as possible, but at least within (1) working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; the steps being taken to correct the problem and prevent future recurrence; and where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit and the regulations. [Rule 62-4.130, F.A.C.]
11. Operating Procedures: Operating procedures shall include good operating practices and proper training of all operators and supervisors. The good operating practices shall meet the guidelines and procedures as established by the equipment manufacturers. All operators (including supervisors) of air pollution control devices shall be properly trained in plant specific equipment. [Rule 62-4.070(3), F.A.C.]
12. Circumvention: The owner or operator shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rules 62-210.650, F.A.C.]
13. Maximum allowable hours of operation for the stationary gas turbine and once-through steam generator are 8760. Fuel usage as heat input, while burning natural gas in the stationary gas turbine, shall not exceed 15.639×10^{12} BTU (LHV) per year (rolled monthly) until the unit achieves the NO_x emission limits (other than the initial ones) given in Specific Condition 21. Thereafter, only the hourly heat input limits given in Specific Condition 8 apply. [Applicant Request, Rule 62-210.200, F.A.C. (Definitions - Potential Emissions)]
14. Fuel usage as heat input, while burning fuel oil in the stationary gas turbine, shall not exceed 559×10^9 BTU (LHV) per year (rolled monthly). [Applicant Request, Rule 62-210.200, F.A.C. (Definitions - Potential Emissions)]

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SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

Control Technology

15. Westinghouse Dry Low NO_x (DLN) combustors shall be installed on the stationary combustion turbine to control nitrogen oxides (NO_x) emissions while firing natural gas. [Design, Rule 62-4.070, F.A.C.]
16. The Dry Low NO_x (DLN) combustors shall be replaced with Westinghouse Ultra Low NO_x (ULN) combustors to accomplish further NO_x control in order to achieve the emission limits specified in Specific Condition 20 and 21. A high temperature selective catalytic reduction (Hot SCR) system or a low temperature SCR system shall be installed and in operation (together with DLN or ULN combustors) not later than May 1, 2002 if the emission limits specified in Specific Condition No 20 and 21 are not achievable by ULN combustors by this date. [Design, Rules 62-4.070 and 62-212.400, F.A.C.]
17. The permittee shall design the stationary gas turbine, ducting, possible future heat recovery steam generator, and stack(s) to accommodate installation of SCR equipment and/or oxidation catalyst in the event that the ULN technology fails to achieve the NO_x limits given in Specific Condition No. 20 and 21 or the carbon monoxide (CO) limits given in Specific Condition 22 are not met. [Rule 62-4.070, F.A.C.]
18. A water injection system shall be installed for use when firing No. 2 or superior grade distillate fuel oil for control of NO_x emissions. [Design, Rules 62-4.070 and 62-212.400, F.A.C.]
19. The permittee shall provide manufacturer's emissions performance versus load diagrams for the DLN and ULN systems prior to their installation. DLN and ULN systems shall each be tuned upon initial operation to optimize emissions reductions and shall be maintained to minimize NO_x emissions and CO emissions. Operation of the DLN or ULN systems in the diffusion firing mode shall be minimized when firing natural gas. [Rule 62-4.070, and 62-210.650 F.A.C.]

EMISSION LIMITS AND STANDARDS

20. The following table is a summary of the BACT determination and is followed by the applicable specific conditions. Values for NO_x are corrected to 15% O₂. Values for CO are corrected to 15% O₂ only until May 1, 2002. [Rule 62-212.400, F.A.C.]

Operational Mode	NO _x (ppm)	CO (ppm)	VOC (ppm)	PM/Visibility (% Opacity)	Technology and Comments
Simple Cycle	25 - NG (basis) 237 lb/hr (24-hr avg) 42 - FO (3 hr avg)	25 - NG or 10 - Ox Cat 90 - FO	4 - NG 10 - FO	10	DLN on gas, WI on oil. Applies until 05/1/2002. Clean fuels, good combustion
Simple Cycle	9 - NG (basis) 85 lb/hr (24-hr avg) 42 - FO (3 hr avg)	25 - NG or 10 - Ox Cat 90 - FO	4 - NG 10 - FO	10	ULN on gas, WI on oil. Applies after 05/1/2002 Clean fuels, good combustion
Simple Cycle	9 - NG (3 hr avg) 15 - FO (3-hr avg)	25 - NG or 10 - Ox Cat 90 - FO	4 - NG 10 - FO	10	Hot SCR. Applies not later than 05/1/2002 if 9 ppm NO _x not achievable by ULN. Clean fuels, good combustion.
Combined Cycle	7.5 - NG (3 hr avg) 15 - FO (3-hr avg)	25 - NG or 10 - Ox Cat 90 - FO	4 - NG 10 - FO	10	Conventional SCR unless simple cycle limits are achieved on or before 05/01/2002. Clean fuels, good combustion

AIR CONSTRUCTION PERMIT PSD-FL-245 (1050004-004-AC)

SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

21. Nitrogen Oxides (NO_x) Emissions:

- When NO_x monitoring data is not available, substitution for missing data shall be handled as required by Title IV (40 CFR 75) to calculate any specified average time.
- Until May 1, 2002, the concentration of NO_x in the exhaust gas shall not exceed 237 lb/hr (at ISO conditions) on a 24 hr block average (basis 25 ppm @ 15% O₂, full load) when firing natural gas and 42 ppmvd at 15% O₂ when firing fuel oil on the basis of a 3 hr average as measured by the continuous emission monitoring system (CEMS). In addition, NO_x emissions calculated as NO₂ (at ISO conditions) shall exceed neither 25 ppm @15% O₂ nor 237 lb/hr (when firing natural gas) and shall exceed neither 42 ppm @15% O₂ nor 413 lb/hr (when firing fuel oil) to be demonstrated by stack test. [Rule 62-212.400, F.A.C.]
- Not later than May 1, 2002, the concentration of NO_x concentrations in the exhaust gas shall not exceed 85 lb/hr (at ISO conditions) on a 24 hr block average (basis 9 ppm @ 15% O₂) when firing natural gas and 42 ppmvd at 15% O₂ when firing fuel oil on the basis of a 3 hr average as measured by the CEMS. In addition, NO_x emissions calculated as NO₂ (at ISO conditions) shall exceed neither 9 ppm @15% O₂ nor 85 lb/hr (when firing natural gas) and shall exceed neither 42 ppm @15% O₂ nor 413 lb/hr (when firing fuel oil) to be demonstrated by stack test. [Rule 62-212.400, F.A.C.]
- If Hot SCR is installed, achievable short-term NO_x concentrations in the exhaust gas shall be demonstrated at baseload during the first compliance test following installation not to exceed 9 ppmvd at 15% O₂ when firing natural gas. NO_x emissions shall not exceed 9 ppmvd at 15% O₂ when firing natural gas and 15 ppmvd at 15% O₂ when firing fuel oil on the basis of a 3-hr average, as measured by the CEMS. In addition, NO_x emissions calculated as NO₂ (at ISO conditions) shall not exceed 85 lb/hr (when firing natural gas) and 148 lb/hr (when firing fuel oil) to be demonstrated by stack test. [Rule 62-212.400, F.A.C.]
- If conventional SCR is installed in conjunction with conversion to combined cycle operation, achievable short-term NO_x concentrations in the exhaust gas shall be demonstrated at baseload during the first compliance test following installation not to exceed 7.5 ppmvd at 15% O₂ when firing natural gas. If conventional SCR catalyst is installed, NO_x emissions shall not exceed 7.5 ppmvd at 15% O₂ when firing natural gas and 15 ppmvd at 15% O₂ when firing fuel oil on the basis of 3-hr average, as measured by the CEMS. In addition, NO_x emissions calculated as NO₂ (at ISO conditions) shall not exceed 71.1 lb/hr (when firing natural gas) and 148 lb/hr (when firing fuel oil) to be demonstrated by stack test. [Rule 62-212.400, F.A.C.]

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SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

22. Carbon Monoxide (CO) emissions: Prior to May 1, 2002, the concentration of CO (@15% O₂ in the exhaust gas when firing natural gas shall not exceed 25 ppmvd when firing natural gas and 90 ppmvd when firing fuel oil as measured by EPA Method 10. CO emissions (at ISO conditions) shall not exceed 145 lb/hr (when firing natural gas) and 539 lb/hr (when firing fuel oil). [Rule 62-212.400, F.A.C.]
- After May 1, 2002, the concentration of CO in the exhaust gas when firing natural gas shall not exceed 25 ppmvd when firing natural gas and 90 ppmvd when firing fuel oil as measured by EPA Method 10. CO emissions (at ISO conditions) shall not exceed 106 lb/hr (when firing natural gas) and 386 lb/hr (when firing fuel oil). [Rule 62-212.400, F.A.C.]
23. Sulfur Dioxide (SO₂) emissions: SO₂ emissions (at ISO conditions) shall not exceed 7.2 pounds per hour when firing pipeline natural gas and 127 pounds per hour when firing maximum 0.05 percent sulfur No. 2 or superior grade distillate fuel oil as measured by applicable compliance methods described below. Emissions of SO₂ shall not exceed 38.4 tons per year. [Rules 62-4.070 and 62-212.400, F.A.C. to avoid PSD Review]
24. Visible emissions (VE): VE emissions shall not exceed 10 percent opacity when firing natural gas or No. 2 or superior grade of fuel oil.
25. Volatile Organic Compounds (VOC) Emissions: The concentration of VOC in the exhaust gas when firing natural gas shall not exceed 4 ppmvd when firing natural gas and 10 ppmvd when firing fuel oil as assured by EPA Methods 18, and/or 25 A. VOC emissions (at ISO conditions) shall not exceed 10 lb/hr (when firing natural gas) and 25 lb/hr (when firing fuel oil). [Rule 62-212.400, F.A.C.]

EXCESS EMISSIONS

26. Excess emissions resulting from startup, shutdown, malfunction or fuel switching shall be permitted provided that best operational practices are adhered to and the duration of excess emissions shall be minimized. Excess emissions occurrences shall in no case exceed four hours in any 24-hour period for cold startup or two hours in any 24-hour period for other reasons unless specifically authorized by DEP for longer duration.
27. Excess emissions entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction, shall be prohibited pursuant to Rule 62-210.700, F.A.C.
28. Excess Emissions Report: If excess emissions occur due to malfunction, the owner or operator shall notify DEP's Southwest District office within (1) working day of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the Department may request a written summary report of the incident. Pursuant to the New Source Performance Standards, excess emissions shall also be reported in accordance with 40 CFR 60.7, Subpart A. [Rules 62-4.130 and 62-210.700(6), F.A.C.]

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SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

COMPLIANCE DETERMINATION

29. Compliance with the allowable emission limiting standards shall be determined within 60 days after achieving the maximum production rate, for each fuel, at which this unit will be operated, but not later than 180 days of initial operation of the unit for that fuel, and annually thereafter as indicated in this permit, by using the following reference methods as described in 40 CFR 60, Appendix A (1997 version), and adopted by reference in Chapter 62-204.800, F.A.C. Emission limits compliance dates shall conform to the timetable specified on Specific Condition No. 20.
30. Initial (I) performance tests shall be performed on Unit 5 while firing natural gas as well as while firing fuel oil. Initial tests shall also be conducted after any modifications (and shake down period not to exceed 100 days after re-starting the CT) of air pollution control equipment, including installation of Ultra Low NO_x burners, Hot SCR, or conventional SCR. Annual (A) compliance tests shall be performed during every federal fiscal year (October 1 - September 30) pursuant to Rule 62-297.310(7), F.A.C., on Unit 5 as indicated. The following reference methods shall be used. No other test methods may be used for compliance testing unless prior DEP approval is received in writing.
- EPA Reference Method 9, "Visual Determination of the Opacity of Emissions from Stationary Sources" (I, A).
 - EPA Reference Method 10, "Determination of Carbon Monoxide Emissions from Stationary Sources" (I, A).
 - EPA Reference Method 20, "Determination of Oxides of Nitrogen Oxide, Sulfur Dioxide and Diluent Emissions from Stationary Gas Turbines." Initial test only for compliance with 40CFR60 Subpart GG and (I, A) short-term NO_x BACT limits (Method 7E or RATA test data may be used to demonstrate compliance for annual test requirement)
 - EPA Reference Method 18, and/or 25A, "Determination of Volatile Organic Concentrations." Initial test only.
31. Continuous compliance with the NO_x emission limits: Continuous compliance with the NO_x emission limits shall be demonstrated with the CEM system based on the applicable averaging time of 24-hr block average (DLN or ULN technology) or a 3-hr average (if SCR is used). Based on CEMS data, a separate compliance determination is conducted at the end of each operating day (or 3-hr period when applicable) and a new average emission rate is calculated from the arithmetic average of all valid hourly emission rates from the previous operating day (or 3-hr period when applicable). Valid hourly emission rates shall not include periods of startup (including fuel switching), shutdown, or malfunction as defined in Rule 62-210.200 F.A.C., where emissions exceed the applicable NO_x standard. These excess emissions periods shall be reported as required in Condition 28.

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SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

A valid hourly emission rate shall be calculated for each hour in which at least two NO_x concentrations are obtained at least 15 minutes apart. [Rules 62-4.070 F.A.C., 62-210.700, F.A.C., and 40 CFR 75]

32. Compliance with the SO₂ and PM/PM₁₀ emission limits: Notwithstanding the requirements of Rule 62-297.340, F.A.C., the use of pipeline natural gas and maximum 0.05 percent sulfur (by weight) No. 2 or superior grade distillate fuel oil, is the method for determining compliance for SO₂ and PM₁₀. For the purposes of demonstrating compliance with the 40 CFR 60.333 SO₂ standard and the 0.05% S limit, fuel oil analysis using ASTM D2880-71 or D4294 (or equivalent) for the sulfur content of liquid fuels and D1072-80, D3031-81, D4084-82 or D3246-81 (or equivalent) for sulfur content of gaseous fuel shall be utilized in accordance with the EPA-approved custom fuel monitoring schedule. The applicant is responsible for ensuring that the procedures above are used for determination of fuel sulfur content. Analysis may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency pursuant to 40 CFR 60.335(e) (1997 version).
33. Compliance with CO emission limit: An initial test for CO, shall be conducted concurrently with the initial NO_x test, as required. The initial NO_x and CO test results shall be the average of three valid one-hour runs. Annual compliance testing for CO may be conducted concurrent with the annual RATA testing for NO_x required pursuant to 40 CFR 75 (required for gas only).
34. Compliance with the VOC emission limit: An initial test is required to demonstrate compliance with the BACT VOC emission limit. Thereafter, CO emission limit will be employed as surrogate and no annual testing is required.
35. Testing procedures: Testing of emissions shall be conducted with the combustion turbine operating at permitted capacity. Permitted capacity is defined as 95-100 percent of the maximum heat input rate allowed by the permit, corrected for the average ambient air temperature during the test (with 100 percent represented by a curve depicting heat input vs. ambient temperature). If it is impracticable to test at permitted capacity, the source may be tested at less than permitted capacity. In this case, subsequent operation is limited by adjusting the entire heat input vs. ambient temperature curve downward by an increment equal to the difference between the maximum permitted heat input (corrected for ambient temperature) and 105 percent of the value reached during the test until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purposes of additional compliance testing to regain the permitted capacity. Test procedures shall meet all applicable requirements (i.e., testing time frequency, minimum compliance duration, etc.) of Chapter 62-204.800 F.A.C.
36. Test Notification: The DEP's Southwest District office shall be notified, in writing, at least 30 days prior to the initial performance tests and at least 15 days before annual compliance test(s).
37. Special Compliance Tests: The DEP may request a special compliance test pursuant to Rule 62-297.310(7), F.A.C., when, after investigation (such as complaints, increased visible

AIR CONSTRUCTION PERMIT PSD-FL-245 (1050004-004-AC)

SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

emissions, or questionable maintenance of control equipment), there is reason to believe that any applicable emission standard is being violated.

38. Test Results: Compliance test results shall be submitted to the DEP's Southwest District office no later than 45 days after completion of the last test run.

NOTIFICATION, REPORTING, AND RECORDKEEPING

39. Records: All measurements, records, and other data required to be maintained by the City of Lakeland Department of Electric & Water Utilities shall be recorded in a permanent form and retained for at least five (5) years following the date on which such measurements, records, or data are recorded. These records shall be made available to DEP representatives upon request.
40. Emission Compliance Stack Test Reports: A test report indicating the results of the required compliance tests shall be filed with the DEP SW District Office as soon as practical, but no later than 45 days after the last sampling run is completed. [Rule 62-297.310(8), F.A.C.]. The test report shall provide sufficient detail on the tested emission unit and the procedures used to allow the Department to determine if the test was properly conducted and if the test results were properly computed. At a minimum, the test report shall provide the applicable information listed in Rule 62-297.310(8), F.A.C.

MONITORING REQUIREMENTS

41. Continuous Monitoring System: The permittee shall install, calibrate, maintain, and operate a continuous emission monitor in the stack to measure and record the nitrogen oxides emissions from Unit 5. Periods when NO_x emissions (ppmvd @ 15% oxygen) are above the BACT standards, listed in Specific Condition No 20 and 21, shall be reported to the DEP Southwest District Office pursuant to Rule 62-4.160(8), F.A.C. Following the format of 40 CFR 60.7, periods of startup, shutdown, malfunction, and fuel switching shall be monitored, recorded, and reported as excess emissions when emission levels exceed the BACT standards listed in Specific Condition No. 20 and 21. [Rule 62-204.800 and 40 CFR 60.7 (1997 version)]
42. CEMS in lieu of Water to Fuel Ratio: Subject to EPA approval, the NO_x CEMS shall be used in lieu of the water/fuel monitoring system for reporting excess emissions in accordance with 40 CFR 60.334(c)(1), Subpart GG (1997 version). Subject to EPA approval, the calibration of the water/fuel monitoring device required in 40 CFR 60.335 (c)(2) (1997 version) will be replaced by the 40 CFR 75 certification tests of the NO_x CEMS. Upon request from DEP, the CEMS emission rates for NO_x on Unit 5 shall be corrected to ISO conditions to demonstrate compliance with the NO_x standard established in 40 CFR 60.332.
43. Continuous Monitoring System Reports: The monitoring devices shall comply with the certification and quality assurance, and any other applicable requirements of Rule 62-297.520, F.A.C., 40 CFR 60.13, including certification of each device in accordance with 40 CFR 60, Appendix B, Performance Specifications and 40 CFR 60.7(a)(5) or 40 CFR Part 75.

AIR CONSTRUCTION PERMIT PSD-FL-245 (1050004-004-AC)

SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

Quality assurance procedures must conform to all applicable sections of 40 CFR 60, Appendix F or 40CFR75. Data on CEM equipment specifications, manufacturer, type, calibration and maintenance needs, and its proposed location shall be provided to the Department's Southwest District Office (DEPSWD) for review at least 90 days prior to installation.

44. Fuel Oil Monitoring Schedule: The following monitoring schedule for No. 2 or superior grade fuel oil shall be followed: For all bulk shipments of No. 2 or superior grade fuel oil received at the C.D. McIntosh, Jr. Power Plant, an analysis which reports the sulfur content and nitrogen content of the fuel shall be provided by the fuel vendor. The analysis shall also specify the methods by which the analyses were conducted and shall comply with the requirements of 40 CFR 60.335(d).
45. Natural Gas Monitoring Schedule: The following custom monitoring schedule for natural gas is approved (pending EPA concurrence) in lieu of the daily sampling requirements of 40 CFR 60.334 (b)(2):
- Monitoring of natural gas nitrogen content shall not be required.
 - Analysis of the sulfur content of natural gas shall be conducted using one of the EPA-approved ASTM reference methods in Specific Condition No. 32 for the measurement of sulfur in gaseous fuels, or an approved alternative method. Once Unit 5 becomes operational, monitoring of the sulfur content of the natural gas shall be conducted twice monthly for six months. If this monitoring shows little variability in the fuel sulfur content, and indicates consistent compliance with 40 CFR 60.333, then fuel sulfur monitoring shall be conducted once per quarter for six quarters and after that, semiannually.
 - Should any sulfur analysis indicate noncompliance with 40 CFR 60.333, the City shall notify DEP of such excess emissions and the customized fuel monitoring schedule shall be reexamined. The sulfur content of the natural gas will be monitored weekly during the interim period while the monitoring schedule is reexamined.
 - The City shall notify DEP of any change in natural gas supply for reexamination of this monitoring schedule. A substantial change in natural gas quality (i.e., sulfur content variation of greater than 1 grain per 100 cubic foot of natural gas) shall be considered as a change in the natural gas supply. Sulfur content of the natural gas will be monitored weekly by the natural gas supplier during the interim period when this monitoring schedule is being reexamined.
 - Records of sampling analysis and natural gas supply pertinent to this monitoring schedule shall be retained by the City for a period of five years, and shall be made available for inspection by the appropriate regulatory personnel.
 - The City may obtain the sulfur content of the natural gas from the fuel supplier (Florida Gas Transmission) provided the test methods listed in Specific Condition E.4 are used.

AIR CONSTRUCTION PERMIT PSD-FL-245 (1050004-004-AC)

SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

46. Determination of Process Variables:

- The permittee shall operate and maintain equipment and/or instruments necessary to determine process variables, such as process weight input or heat input, when such data is needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
- Equipment and/or instruments used to directly or indirectly determine such process variables, including devices such as belt scales, weigh hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value [Rule 62-297.310(5), F.A.C]

APPENDIX GC
GENERAL PERMIT CONDITIONS [F.A.C. 62-4.160]

- G.1 The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
- G.2 This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings or exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
- G.3 As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey and vested rights or any exclusive privileges. Neither 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. This permit is not a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
- G.4 This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
- G.5 This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
- G.6 The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
- G.7 The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:
- a) Have access to and copy and records that must be kept under the conditions of the permit;
 - b) Inspect the facility, equipment, practices, or operations regulated or required under this permit, and
 - c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.
- Reasonable time may depend on the nature of the concern being investigated.
- G.8 If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
- a) A description of and cause of non-compliance; and
 - b) The period of noncompliance, including 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-compliance.

APPENDIX GC
GENERAL PERMIT CONDITIONS [F.A.C. 62-4.160]

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

- G.9 In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
- G.10 The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.
- G.11 This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
- G.12 This permit or a copy thereof shall be kept at the work site of the permitted activity.
- G.13 This permit also constitutes:
- a) Determination of Best Available Control Technology (X)
 - b) Determination of Prevention of Significant Deterioration (X); and
 - c) Compliance with New Source Performance Standards (X).
- G.14 The permittee shall comply with the following:
- a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
 - b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application or this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
 - c) Records of monitoring information shall include:
 - 1. The date, exact place, and time of sampling or measurements;
 - 2. The person responsible for performing the sampling or measurements;
 - 3. The dates analyses were performed;
 - 4. The person responsible for performing the analyses;
 - 5. The analytical techniques or methods used; and
 - 6. The results of such analyses.
- G.15 When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

— end PSD permit ---

B. Additional Specific Conditions

1. If selective catalytic reduction (SCR) technology is installed, the SCR system shall be designed with a concentration of ammonia in the exhaust gas no greater than that evaluated in the Air Construction permit and PSD approval.

2. During combined cycle operation, steam injection for power augmentation shall not exceed 3000 hours during any consecutive 12-month period. The permittee shall keep records of operation sufficient to demonstrate compliance with this limit. The permittee shall demonstrate compliance with the CO emissions standard by conducting EPA Method 10 in accordance with the following schedule:

a. Within 60 days of implementing power augmentation, the permittee shall conduct an initial CO emissions performance test during the maximum amount of power augmentation to demonstrate compliance with the CO emissions standard.

b. Within 45 days after utilizing power augmentation in a federal fiscal year, the permittee shall schedule and conduct a CO emissions performance test during power augmentation.

c. Within 45 days after operating 1000 hours with power augmentation in a federal fiscal year, the permittee shall schedule and conduct a second CO emissions performance test during power augmentation.

d. Within 45 days after operating 2000 hours with power augmentation in a federal fiscal year, the permittee shall schedule and conduct a third CO emissions performance test during power augmentation.

e. The permittee shall comply with all notification, testing, and reporting requirements required by PSD Permit No. PSD-FL-245. NO_x data compiled by the continuous monitor during each CO performance test shall be reported and summarized with each CO test report. Steam injection shall be limited to the rate during the most recent emissions performance test that demonstrated compliance with the CO standards.

XIV. WATER RESOURCES MANAGEMENT

A. General Conditions (Chapters 40C-2 and 40C-3, F.A.C.)

1. SWFWMD and Department authorized staff, upon proper identification, will have permission to enter, inspect and observe permitted and related facilities in order to determine compliance with the approved plans, specifications and conditions of this certification.

2. Nothing in this certification should be construed to limit the authority of the SWFWMD to declare a water shortage and issue orders pursuant to Section 373.175, Florida Statutes, or to formulate a plan for implementation during periods of water shortage, pursuant to Section 373.246,

Florida Statutes. In the event of a water shortage, as declared by the SWFWMD Governing Board, the Permittee must adhere to reductions in water withdrawals as specified by the SWFWMD.

3. Prior to the construction, modification, or abandonment of an on-site well, the Permittee must submit a completed application form for a Water Well Construction Permit to the Department and SWFWMD. All construction, modification, or abandonment of water wells must be conducted under the supervision of a licensed water well contractor and must be performed in accordance with Chapter 40D-3, Florida Administrative Code. Construction of a well will require modification of the certification when such construction is other than that specified and described in the Site Certification Application. Prior to modification or abandonment of a well, the Permittee must file an amendment to the site certification application with the Department and the SWFWMD. Upon completion of the construction, modification or abandonment of each well, the Permittee must submit to SJRWMD and the Department a completion report for the well.

4. Leaking or inoperative well casings, valves, or controls must be repaired or replaced as required to put the system back in an operative condition acceptable to the SWFWMD. Failure to make such repairs will be cause for deeming the well abandoned in accordance with chapters 403 and 373, Florida Statutes, and the rules promulgated thereunder.

5. The Permittee must mitigate any adverse impact caused by withdrawals permitted herein on legal uses of water existing at the time of application. The Department has the right to curtail permitted withdrawal rate or water allocations if the withdrawals of water cause an adverse impact on legal uses of water which existed at the time of certification. Adverse impacts are exemplified by but not limited to:

a. Reduction of water levels in an adjacent surface water body resulting in a significant impairment of the use of water in that water body.

b. Saline water intrusion or introduction of pollutants into the water supply of an adjacent water use resulting in a significant reduction of water quality; and

c. Change in water quality resulting in either impairment or loss of use of a well or water body.

6. Permittee must mitigate any adverse impact caused by withdrawals permitted herein on adjacent land uses that existed at the time of permit application. The Department has the right to curtail permitted withdrawal rates of water allocations if withdrawals of water cause an adverse impact on adjacent land uses that existed at the time of certification. Adverse impacts are exemplified by but not limited to:

a. Significant reduction in water levels in an adjacent surface water body;

b. Land collapse or subsidence caused by a reduction in water levels; and

c. Damage to crops and other types of vegetation.

B. Specific Conditions

1. Reclaimed water.

a. Reclaimed water is to be used in place of ground water from the on-site wellfield and public supply wells to meet the water needs of the power facility, except for steam cycle needs and potable uses.

b. The Permittee is not required to accept reclaimed water in amounts which exceed the power plant's demand and storage capacity.

1. Groundwater.

a. In the event reuse water is not available, SWFWMD Identification (DID) numbers 31,32, and 33 will be used as a stand-by supply for the cooling tower makeup water associated with McIntosh Unit No. 5.

(1) The stand-by quantities will be:

DID No.	Annual Average Daily (gpd)	Peak Month Daily (gpd)
31	798,900	3,240,000
32	798,900	3,240,000
33	798,900	3,240,000

(2) The combined total stand-by quantities from DID Nos. 31, 32, and 33 for cooling tower makeup water will be limited to 798,900 gpd Annual Average Daily and 3,240,000 gpd Peak Month Daily.

b. Groundwater regulatory aspects under SWFWMD's jurisdiction, except those associated with DID 31, 32, and 33 that pertain to McIntosh Unit No. 5, will be addressed under Water Use Permit (WUP) No. 200047.04 and any subsequent revisions to the WUP.

c. DID numbers 5 and 8 may be used for raw water makeup for McIntosh Unit No. 5.

3. Surface Water

There will be no intake from or discharge to surface Waters of the State associated with the construction or operation of McIntosh Unit No. 5.

XV. SOLID AND HAZARDOUS WASTE MANAGEMENT

A. No solid or hazardous waste is to be permanently stored onsite.

B. Salt cake from the industrial wastewater treatment and cooling water systems is to be sent off-site for disposal.

XVI. INDUSTRIAL WASTEWATER

All industrial wastewater is to be discharged into the existing McIntosh Power Plant Facility wastewater treatment units. Should there be any change in these treatment units that adversely affect the treatment of wastewater from the McIntosh Unit No. 5 these Conditions of Certification must be modified in accordance with Condition XI.

XVII. DOMESTIC WASTEWATER

All sanitary wastewater is to be discharged into the existing McIntosh Power Plant Facility wastewater treatment units. Should there be any change in these treatment units that adversely affect the treatment of wastewater from the McIntosh Unit No. 5 these Conditions of Certification must be modified in accordance with Condition XI.

XVIII. POTABLE WATER

All potable water is to be received from the existing McIntosh Power Plant Facility potable water supply. Should there be any change in these supply units that adversely affect the delivery of potable water to the McIntosh Unit No. 5 these Conditions of Certification must be modified in accordance with Condition XI.

XIX. STORMWATER MANAGEMENT

All stormwater is to be discharged into the existing McIntosh Power Plant Facility stormwater treatment units. Should there be any change in these treatment units that adversely affect the treatment of wastewater from the McIntosh Unit No. 5 these Conditions of Certification must be modified in accordance with Condition XI.

XX. TRANSPORTATION

A. Traffic control will be maintained during plant construction and maintenance in compliance with the applicable standards contained in the Manual on Uniform Traffic Control Devices; Statewide Minimum Level of Service Standards, Rule Chapter 14-94, Florida Administrative Code; Florida Department of Transportation's Roadway and Traffic Design Standards; and Florida Department of Transportation Standard Specifications for Road and Bridge Construction, whichever is more stringent.

B. For the delivery of any overweight or overdimensional loads to the site during the construction of the Facility, the Permittee or its contractors shall adhere to the necessary standards and receive the necessary permits required under Chapter 316, Florida Statutes, and Rule Chapter 14-26, Safety Regulations and Permit Fees for Overweight and Overdimensional Vehicles, Florida Administrative Code.

C. Access Management to the State Highway System: No new access to the State Highway System is proposed in the site certification application. If new access is later proposed, access permitting as defined in Rule Chapters 14-96, State Highway System Connection Permits, Administrative Process, and 14-97, State Highway System Access Management Classification System and Standards, Florida Administrative Code, will be required.

D. Use of State of Florida Right of Way or Transportation Facilities: If any use of State of Florida right of way or transportation facilities is later proposed, such usage will be subject to the applicable requirements of the Department of Transportation's Utility Accommodation Manual and Rule 14-46.001, Railroads/Utilities Installation or Adjustment, Florida Administrative Code.

E. Heavy construction vehicles are to remain on site during the construction phase.

F. A bulletin board shall be located such that employees have easy access to it and on which car pooling advertisements can be placed.



Jeb Bush
Governor

Department of Environmental Protection

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

David B. Struhs
Secretary

June 22, 1999

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Gregg Worley, Section Chief
Air, Radiation Technology Branch
Preconstruction/HAP Section
US EPA Region IV
61 Forsyth Street
Atlanta, Georgia 30303

Re: Lakeland McIntosh Unit 5 Site Certification Application (SCA) & Unit 3 SCA Amendment

Dear Mr. Worley:

Enclosed is a copy of the site certification application for the steam cycle for the City of Lakeland's McIntosh Unit 5 in Polk County. This is a proposed conversion of an existing simple cycle combustion turbine to a combined cycle unit through the addition of one heat recovery steam generator, a stack, one 120 MW (nominal) steam turbine, and cooling towers. Our Siting Coordination Office has indicated that an application is included for modification of the allowable fuel for Unit 3 to include biomass as a fuel supplement. There appears to be no emissions increase associated with the Unit 5 HRSG except for drift from the cooling tower. The proposed conversion to combined cycle and possible installation of a conventional SCR unit was anticipated during the initial permitting so limits were included for the conversion. Therefore the application is not for a PSD permit.

Please provide your comments as soon as possible as we need to comment to our Siting Coordination Office by August 13, 1999. This project is subject to the Florida Power Plant Siting Act and review by the Governor and Cabinet. If you have any questions regarding this matter, please call me, at 850/921-9523.

Sincerely,

A. A. Linero, P.E., Administrator
New Source Review Section

AAL/jk

Enclosure

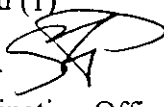
"Protect, Conserve and Manage Florida's Environment and Natural Resources"

Printed on recycled paper.

Memorandum

Florida Department of
Environmental Protection

TO: Clair Fancy (4) ✓
Mike Hickey (4)
Geofrey Mansfield (3)
David Bickner (1)
Scott Gorland (1)

FROM: Steve Palmer 
Siting Coordination Office

DATE: June 14, 1999

SUBJECT: Lakeland McIntosh Unit 5 Site Certification Application (SCA) and Unit 3 SCA Amendment; PA 74-06SA (Module 8016).

RECEIVED
JUN 15 1999
BUREAU OF
AIR REGULATION

Attached is a copy of the City of Lakeland Electric Utilities site certification application (SCA) for the Unit 5 steam cycle. This is a proposed conversion of an existing simple cycle combustion turbine to a combined cycle unit through the addition of one heat recovery steam generator (HRSG), a HRSG stack, heat recovery steam generators, and one one 120 MW (nominal) steam turbine, and cooling towers. An application is also included for modification of the allowable fuel for Unit 3 to include biomass as a fuel supplement.

Please review this SCA for sufficiency and return your comments to me by August 13, 1999. If your office is required to submit a preliminary statement of issues, it is due to the Siting Office no later than August 10, 1999.

If you have any questions, please call me at 850/487-0472.

Attachment --

DEP ROUTING AND TRANSMITTAL SLIP

TO: (NAME, OFFICE, LOCATION)

1. Al Limer
2. MS 5500

3. Patel - Lalalani MEstash
Unit # 5. We issued

4. psd permit system use, but they
5. only now want to use

PLEASE PREPARE REPLY FOR:

- SECRETARY'S SIGNATURE
- DIV/DIST DIR SIGNATURE
- MY SIGNATURE
- YOUR SIGNATURE
- DUE DATE _____

ACTION/DISPOSITION

- DISCUSS WITH ME
- COMMENTS/ADVISE
- REVIEW AND RETURN
- SET UP MEETING
- FOR YOUR INFORMATION
- HANDLE APPROPRIATELY
- INITIAL AND FORWARD
- SHARE WITH STAFF
- FOR YOUR FILES

COMMENTS:

PPS Act. In this goes in original PSD245 file with anything else related to subs equipt PPS upon.

~~Joe - FYI Al~~

~~let me know how to handle.~~

~~KA~~

~~TH - FYI. ^IVE ~~PLEASE~~ CALLED SCOTT & ADVISED THAT BACT DETERMINATION IS MISSING.~~

~~THEN ROUTE TO AAL, FYI.~~

~~→ FILE IN PSD-FC-245.~~

FROM: Jamara Jones DATE: 6/14/00 PHONE: 1-91682