#### STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION NOTICE OF PERMIT

In the matter of an Application for Permit by:

DEP File No. AC53-211670 PSD-FL-187 Polk County

Mr. William R. Malenius Polk Power Partners 23293 South Pointe Drive Laguna Hills, CA 92653

Enclosed is Permit Number AC53-211670 to construct a cogeneration facility at County Road 555 approximately 3.7 miles southwest of Bartow, Polk County, Florida, issued pursuant to Section (s) 403, Florida Statutes.

Any party to this Order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date this Notice is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

C. H. Fancy, P.E., Chief Bureau of Air Regulation 2600 Blair Stone Road Tallahassee, FL 32399-2400 904-488-1344

## CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF PERMIT and all copies were mailed before the close of business on Jel. 21,1994 to the listed persons.

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to \$120.52(11), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Copies furnished to:
W. Thomas, SWD
D. Martin, Polk Co.
J. Harper, EPA
J. Bunyak, NPS
K. Kosky, KBN
D. Roberts, HBGS

Polk Power Partners Mulberry Cogeneration Project Polk County, Florida

Permit No. AC 53-211670 PSD-FL-187

Department of Environmental Protection Division of Air Resources Management Bureau of Air Regulation

February 9, 1994

## Final Determination

The Revised Technical Evaluation and Preliminary Determination for the permit to construct a cogeneration facility approximately 3.7 miles southwest of Bartow in Polk County, Florida, was distributed on December 29, 1994. The Notice of Intent to Issue was published in the Polk County Democrat on January 5, 1994. Copies of the evaluation were available for public inspection at the Department's Tallahassee and Tampa offices.

Comments were received from the applicant on January 28, 1994 requesting minor modifications of certain specific conditions. The Department made the following changes to the permit:

Specific Condition No. 2 - A statement was added clarifying that if the NO $_{\rm X}$  limit of 15 ppmvd is achieved prior to 12/31/97, the CO emission limit prior to 12/31/97 will be based on 25 ppmvd.

<u>Specific Condition No. 4</u> - A statement was added to emphasize a rule requirement that sampling ports and access platforms be provided.

<u>BACT Determination</u> - Minor revisions were made to the last paragraph of the  $NO_X$  section to clarify that SCR or another technology may be required if the emission limits are not achieved.

The final action of the Department will be to issue construction permit AC53-211670 (PSD-FL-187) as modified.



## Florida Department of

# Environmental Protection

Lawton Chiles Governor

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

Virginia B. Wetherell Secretary

PERMITTEE:

Polk Power Partners, L.P. 23293 South Pointe Drive Laguna Hills, CA 92653

Permit Number: AC 53-211670 PSD-FL-187

Expiration Date: December 31, 1995

County: Polk

Latitude/Longitude: 27°50'56"N

81°52'39"\

Project: Mulberry Cogeneration

Project

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 17-212 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawings, plans, and other documents attached hereto or on file with the Department and specifically described as follows:

For the construction of a 126 Megawatt cogeneration unit. facility will be located off County Road 555 approximately 3.7 miles southwest of Bartow in Polk County, Florida. UTM coordinates of the site are: Zone 17, 413.6 km E and 3080.6 km N.

Particulate emissions shall be controlled by using clean fuels and good combustion practices. CO emissions shall be controlled by proper combustion techniques. NO<sub>X</sub> emissions shall be initially controlled by water injection and Low NO $_{\rm X}$  Burners. Future control technology for NO $_{\rm X}$  will depend on whether the Low NO $_{\rm X}$  Burners can achieve the levels specified by this permit.

The source shall be constructed in accordance with the permit application, plans, documents, amendments and drawings, except as otherwise noted in the General and Specific Conditions.

## Attachments are listed below:

- 1. DER letter dated May 5, 1992.
  2. KBN letter dated April 15, 1992.
  3. KBN letter dated June 2, 1992.
- 4. EPA letter dated July 1, 1992.
- 5. KBN submittal dated July 8, 1992.
- 6. KBN letter dated July 29, 1992.
- 7. KBN letter dated August 12, 1992. 8. DER letter dated August 13, 1992. 9. KBN letter dated August 26, 1992.
- 10. KBN letter dated October 12, 1992.
- 11. KBN letter dated November 2, 1992.

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Attachments are listed below: (Cont'd)

- EPA letter dated December 16, 1992.
- 13. KBN letter dated February 19, 1993. 14. DER letter dated March 19, 1993.
- 15. KBN letter dated August 17, 1993.
- 16. DER letter dated August 19, 1993.
- 17. KBN letter dated August 27, 1993.
- 18. HBG&S letter dated November 16, 1993.
- 19. DEP letter dated November 18, 1993.
- 20. HBG&S letter dated December 20, 1993.
- 21. PPP letter dated December 17, 1993.
- 22. GECC letter dated December 16, 1993.
- 23. HBG&S letter dated December 22, 1993.
- 24. KBN letter dated January 28, 1994.

## GENERAL CONDITIONS:

- The terms, conditions, requirements, limitations, 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.
- 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, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
- As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit 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 permit is not a waiver of 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.
- This permit conveys no title to land or water, does not constitute State recognition or acknowledgement 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.

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Polk Power Partners, L.P. PSD-FL-187

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## GENERAL CONDITIONS:

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.

- 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.
- 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 any 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.

- 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

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## GENERAL CONDITIONS:

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.

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.

- 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.
- 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.
- 11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 17-4.120 and 17-30.300, 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.
- 12. This permit or a copy thereof shall be kept at the work site of the permitted activity.
- 13. This permit also constitutes:

  - (x) Determination of Prevention of Significant Deterioration (PSD)
  - (x) Compliance with New Source Performance Standards (NSPS)

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## GENERAL CONDITIONS:

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 for 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:
  - 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; and
  - the results of such analyses.
- 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.

## SPECIFIC CONDITIONS:

1. This permit supersedes the initial permit issued on November 24, 1992. Unless otherwise indicated, the construction and operation of the subject facilities shall be in accordance with the capacities and specifications stated in the application and subsequent submittals by the permittee.

PERMITTEE:

Polk Power Partners, L.P.

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## SPECIFIC CONDITIONS:

2. Emissions from the facility shall not exceed the limits listed below based on operation at 59°F and 60% relative humidity (ISO conditions):

Pollu-					Through	12/31/97	After 12/31	./97 (See notes)
tant	Sour	rce		Fuel	lbs/hr	tons/yr	lbs/hr	tons/yr
NOx	HRSG S	Stack	1	Gas	87.8	384.5	52.7	230.7
	HRSG S	Stack	2	Gas	19.9	87.1	18.3	80.0
	HRSG S	Stack	1	Oil	164.0	718.2	164.0	59.0
	HRSG S	Stack	2	Oil	23.4	102.4	23.4	8.4
SO2	HRSG S	Stack	1	Oil	0.1% Su	lfur Max.	0.1% 50	lfur Max.
	HRSG S	Stack	2	Oil		lfur Max.		lfur Max.
VE	HRSG S	Stack	1	Gas	10% Op	acitv	10% Op	acity
	HRSG S	Stack	2	Gas	10% Op		10% Op	
	HRSG S	Stack	1	Oil	20% Op		20% Op.	
	HRSG S	Stack	2	Oil	20% Op		20% Op	
voc	HRSG S	tack	1	Oil	9.2	40.4		
co	HRSG S	tack	1	Gas	42.9	187.8	53.0	232.0
	HRSG S	tack	2	Gas	11.9	52.0	12.6	55.2
	HRSG S	tack	1	Oil	75.3	329.9	75.3	27.1
	HRSG S	tack	2	Oil	13.4	58.5	13.4	4.8

- Notes: (1)  $NO_X$  limits for turbine after 12/31/97 based on 15 ppmvd (gas firing) achievable by 4/30/97 but not effective until after 12/31/97.
  - (2) CO limits for turbine after 12/31/97 based on 25 ppmvd (gas firing). Should the  $NO_{\mathbf{X}}$  emission limit for the turbine based on 15 ppmvd (gas firing) be achieved prior to 12/31/97, the CO emission limit prior to 12/31/97 will be based on 25 ppmvd.
  - (3) Opacity limit will allow one 6-minute period per hour of not more than 27% opacity.
  - (4) HRSG Stack 1 = primary; HRSG Stack 2 = secondary (portion of exhaust from combustion turbine is vented through secondary stack along with exhaust from gas-fired duct burner).
- 3. The cogeneration facility shall be permitted to fire natural gas and No. 2 fuel oil until December 31, 1997, after which the primary fuel will be natural gas. Fuel consumption rates (based on operation at 20°F) and hours of operation for the turbine and duct burner shall not exceed those listed below:

		Natural Gas		No. 2 Fuel Oil			
Turbine Duct Burner	M ft3/hr 1013.4 104.2	MM ft3/yr 8877.4 450.2(2)	hrs/yr 8760 8760	M 1b/hr 55.6 0			

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(1) After December 31, 1997, fuel oil can be used permanently as backup fuel for no more than 720 hours per year.

(2) Based on maximum firing rate for 4,320 hours per year.

4. Before this construction permit expires, the cogeneration facility stack and secondary HRSG stack shall be sampled or tested as applicable according to the emission limits in Specific Condition No. 2. Annual compliance tests shall be conducted each year thereafter. Compliance tests shall be run at 95% to 100% of the maximum capacity achievable for the average ambient temperature during the compliance tests. The turbine manufacturer's capacity vs. temperature (ambient) curve shall be included with the compliance test results. Tests shall be conducted using the following reference methods:

NOX: EPA Method 20

SO2: Fuel supplier's sulfur analysis

VE: EPA Method 9 CO: EPA Method 10 VOC: EPA Method 25A

The Permittee shall provide sampling ports in the air pollution control equipment outlet duct or stack and shall provide access to the sampling ports in accordance with Rule 17-297, F.A.C. Detailed drawings of the stacks showing testing facilities and sampling port locations as required by Rule 17-297.345 shall be submitted to the Southwest District Office for approval at least 60 days prior to construction of the duct and stack.

- 5. The Southwest District office shall be notified at least 30 days prior to the compliance tests. Compliance test results shall be submitted to the Southwest District office in Tampa and the Bureau of Air Regulation office in Tallahassee (third annual compliance test only) within 45 days after completion of the tests. Sampling facilities, methods, and reporting shall be in accordance with F.A.C. Rule 17-2.700 and 40 CFR 60, Appendix A.
- 6. A continuous operations monitoring system shall be installed, operated, and maintained in accordance with 40 CFR 60.334. The natural gas, fuel oil and water injection flows to the cogeneration turbine along with the power output of the generators shall be metered and continuously recorded. The data shall be logged daily and maintained so that it can be provided to DEP upon request.
- 7. The permittee shall have the option of including, in the initial construction, adequate modules and other provisions necessary for future installation of state-of-the-art catalytic abatement or equivalent NOx control systems. The Bureau of Air Regulation shall, if  $NO_X$  emission limits are not met, review the

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## SPECIFIC CONDITIONS:

need for making a revised determination of Best Available Control Technology. If test results show that it is unlikely that  ${\rm NO}_{\rm X}$  limits can be met, a revised BACT determination shall be made. The Department may revise the BACT determination to require installation of such technology if so indicated by the revised BACT cost/benefit analysis. The retrofit costs associated with not making provisions for such technology initially shall not be considered by the Department in the retrofit cost analysis.

- 8. 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 (F.A.C. Rule 17-4.090).
- 9. An application for an operation permit must be submitted to the Southwest District office at least 90 days prior to the expiration date of this construction permit. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. Rules 17-4.055 and 17-4.220).

Issued this 2lst day of February , 1994

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Virginia B. Wetherell, Secretary