

DOCKET NO. 96 - AN APPLICATION OF
KILLINGLY ENERGY LIMITED PARTNERSHIP
FOR A CERTIFICATE OF ENVIRONMENTAL
COMPATIBILITY AND PUBLIC NEED FOR
THE CONSTRUCTION OF A 32.2 MW (NET)
WOOD BURNING ELECTRIC GENERATING
FACILITY IN THE TOWN OF KILLINGLY,
CONNECTICUT.

: Connecticut Siting
: Council
: May 8, 1989

D E C I S I O N A N D O R D E R

Pursuant to Section 16-50p of the Connecticut General Statutes (CGS), the application submitted by the Killingly Energy Limited Partnership (KELP) to construct and operate a wood burning electric generating facility is hereby approved. A Certificate of Environmental Compatibility and Public Need (Certificate), as required by CGS Section 16-50k, shall be issued, subject to the following conditions and report requirements. Failure to comply with the following conditions may subject the applicant to temporary and permanent injunctive action, and/or civil penalties in an amount not less than one thousand dollars per day pursuant to CGS Section 16-50u.

1. Conditions

- a. The facility shall be constructed substantially as specified by the applicant in the application, as detailed and modified by the applicant in the record.
- b. The exhaust stack shall be no higher than necessary as determined by the DEP, and in no event higher than 270 feet above grade.
- c. A Phase II Intensive Archaeological Survey of Archaeological Area 69-2 shall be prepared and approved prior to any disturbance of this area. The results, recommendations, and mitigation measures of the Phase II Survey shall be provided to the Council for approval.
- d. All site excavations in Archaeological Area 69-2 are to be performed under the supervision of a professional archaeologist. Upon the discovery of any artifact of historical or archaeological significance in the opinion of the archaeologist, excavation shall cease in the area of the discovery pending confirmation of significance by representatives of the Connecticut Historical Commission and, if necessary, approval by such representatives and execution of a plan for the disposition of the artifact.

- e. The facility shall not accept pressure and creosote treated wood, plastics, hazardous wastes as defined by Section 22a-115 of the CGS, as amended, wood treated with preservatives such as pentachlorophenol and copper naphthanate, salt, chlorides, heavy metals, carcinogens, asbestos, asphalt, and other non-wood materials.
- f. A demolition/recycled wood testing procedure shall be developed by the applicant to provide for the sampling, testing, and rejection of pressure and creosote treated wood, plastics, hazardous waste as defined by Section 22a-115 of the CGS, wood treated with preservatives, and other non-wood materials before combustion. Such procedures shall be subject to written comment by parties and intervenors, and approval by the Council before commercial operation of the facility.
- g. No silvicultural wood chips shall be received unless produced as a result of a forest management plan prepared by a registered or licensed forester.
- h. Fuel supply deliveries and ash removal operations shall be limited to between 7:00 A.M. and 7:00 P.M. Monday through Saturday.
- i. The Certificate holder or its successor shall encourage efficient cogeneration through recovery of the waste heat energy from the facility. The applicant shall formally solicit proposals for a greenhouse or other cooling water waste heat applications for two years following issuance of this Certificate, or two years after all injunctive appeals processes are concluded. The Certificate holder or its successor shall permit public or private entities to install waste heat recovery equipment and other cogeneration equipment on the site for fair consideration, or shall provide any requesting entity with specific legal, technical, environmental, or economic reasons precluding such use.
- j. Prior to the commercial operation of the facility, the Certificate holder shall confirm either the acquisition of a legally permitted disposal site, or a contract for the legal disposal or use of ash from facility operation for a period of five years from the time of initial commercial operation of the facility.

- k. Fly and bottom ash shall be separately tested to determine if either or both ashes can be used for land spreading. Tests shall be approved by the DEP, and the applicant shall retain a record of the tests for a minimum of one year. Ash shall not be land spread until the DEP develops regulations governing this activity. Until the time when the DEP establishes regulations governing the land spreading of ash, no wood shall be burned that renders the ash toxic as determined by tests to detect unacceptable levels of metals, dioxins, furans, and other complex organic compounds. Thereafter, if bottom ash cannot be made safe for land spreading in accordance with DEP standards, then fly and bottom ash may be mixed, tested, and managed as directed by the DEP.
- l. Wood fuel and ash shall not be stored on site for more than 90 days. All wood supply and ash conveyors shall be enclosed to reduce dust and noise.
- m. The Quinebaug River and the site aquifer are not to be substantially affected by the operation of the facility. Dry cooling equipment is to be substituted for the proposed wet cooling system for condenser operation, unless the DEP deems the site suitable for a groundwater diversion adequate to meet the needs of the wet cooling system without a substantial effect on the site aquifer or the Quinebaug River.
- n. Air modeling and permitting shall be performed to the satisfaction of the DEP with the assumption that pressure treated wood, plastics, paint, glue, PCB's, herbicides, pesticides, preservatives such as pentachlorophenol and copper naphthanate, salt, chlorides, heavy metals, carcinogens, asbestos, asphalt, and other non-wood materials may be unintended components of the fuel stream.
- o. Stack monitoring, fuel stream limitations, and additional air pollution control equipment, including acid gas scrubbers, shall be installed or implemented on the facility if, as determined by the DEP through their modeling and permitting process, such controls are necessary.
- p. A baghouse collection system shall be used, unless such equipment conflicts with equipment as ordered by the DEP.
- q. A NO_x reducing system shall be added to the facility unless such equipment is rejected by the DEP.

- r. During emissions testing of the facility as required by the DEP during start-up, the boiler shall be initially fired with a fuel stream of whole tree chips, and bulky waste wood from sawmills and land clearing operations. Only after initial emissions information is received shall demolition and recycled wood chips be fired in varying proportions until a maximum of 100 percent demolition wood is fired. The results of such emission testing and corresponding ash testing as required by item 1f of this Decision and Order shall be provided to the Council, the DEP, and any requesting party or intervenor. This incremental testing shall be done in addition to testing required by the DEP. A sampling procedure for this requirement shall first be submitted to the Council for approval.
- s. Demolition wood shall not exceed 20 percent of the wood stream weight on an annual basis.
- t. Recycled wood, excluding demolition wood, shall not exceed 20 percent of the wood stream weight on an annual basis.
- u. If the Town of Killingly develops a waste wood disposal program restricted to its residents, the facility shall accept deliveries on a mutually convenient schedule for fair consideration.
- v. This Certificate will be void if all construction authorized herein is not completed by January 1, 1994, or five years after all appeal processes have been concluded.

2. Notifications

- a. The Certificate holder shall provide to the Council, and all parties and intervenors, two weeks in advance, notification of:
 - (1) commencement of construction;
 - (2) commencement of testing; and
 - (3) commencement of operation.
- b. The Certificate holder shall notify the Council, and all parties and intervenors when operations terminate.

3. Development and Management Plan

To ensure compliance with the Council's Decision and Order, the Certificate holder shall not commence construction until they have secured Council approval of a development and management (D&M) plan which includes the following elements:

- a. A final site plan showing roads, structures, and other improvements. The final site plan shall, to the maximum extent possible, preserve the natural vegetation, especially the buffer between the facility and the Quinebaug River, and shall minimize impacts on any regulated wetland. A minimum of a 75-foot setback from all regulated wetlands, except the wetland in which the retention pond discharge line shall cross, shall be established, and a minimum of a 100-foot setback from the Quinebaug River shall be established. The final site plan shall also include provisions for public access to the Quinebaug River.
- b. A landscaping element for the site. The landscaping element shall be of professional quality and, to the greatest extent possible, provide a vegetative screen around all structures of the facility that are visible from off-site areas. The landscaping element shall include a complete listing, description, and location of all proposed vegetative plantings. The landscaping element shall also include a provision for screening and isolating the Quinebaug River access area and access route from the facility site.
- c. An erosion and sedimentation element, to include provisions to minimize sedimentation in the Quinebaug River and to protect the inland wetlands on the site. The erosion and sedimentation element shall comply with the Connecticut Guidelines for Soil Erosion and Sediment Control, and be subject to inspection by the Town of Killingly.
- d. A landscape maintenance, litter, odor, traffic, and noise control element including:
 - (1) performance standards;
 - (2) provisions for monitoring;
 - (3) provisions for filing complaints; and
 - (4) measures to be taken to achieve the performance standards and to respond to complaints.
- e. An aquifer protection element, to include provisions to protect the aquifer from chemical spills, site runoff, and retention pond discharges.
- f. A truck access plan for access to town and State roads including restrictions and allowances for traffic to and from the facility.
- g. A water conservation plan, if the DEP deems the site suitable for a groundwater diversion permit, with the following features:
 1. The plant water balance shall be redesigned to reduce water withdrawals from the on-site well to the greatest extent possible.

2. The applicant shall provide an annual report summarizing its annual water use, and effects on the Quinebaug River during periods of low flow. The report shall be provided to the Council, the DEP, the Town of Killingly, and all other parties and intervenors, if service is requested.

- h. A final schedule for facility construction, testing, and start-up.

In preparing the D&M plan, the Certificate holder may consult with Council staff; the proposed D&M plan shall be submitted to the Council with copies to all parties and intervenors for written comments to the Council within 20 days. The Council shall approve, modify, or disapprove the D&M plan within 60 days of the time a proposed plan is filed with the Council.

4. Reports

The Certificate holder shall provide the following reports to the Council, and all parties and intervenors if service is requested, and may consult with Council staff in the preparation thereof.

- a. Quarterly progress reports, starting with commencement of construction and ending with the commencement of facility operation.
- b. Continuing quarterly reports describing and documenting:
- (1) instances in which standards established as part of the D&M plan were exceeded, and actions taken in response;
 - (2) tests for all ash disposed of from the facility;
 - (3) sources and percentages of all wood chip fuel, and quantities of wood fuel and non-wood materials burned; and
 - (4) number of days wood fuel and ash have been stored on site.
- c. A first year operating report, to be submitted to the Council within three months after the conclusion of the first year of operation to include:
- (1) sources and percentages of all wood chip fuel, and quantities of wood fuel and non-wood materials burned;
 - (2) percentages, quantities, and number of days when fuel oil or natural gas was used;
 - (3) overall and daily average of electricity output;
 - (4) overall condition and reliability of the facility;
 - (5) the final cost of the facility, prices paid for wood fuel, and other information relevant to the cost and operation of the facility;

- (6) the costs and effectiveness of the wood ash recycling program; and
- (7) all findings and actions for the relocation and/or protection of archaeological resources found on the site during excavation operations.

5. Permits and Plans

The Certificate holder shall provide to the Council, and all parties and intervenors, when available:

- a. the final approved DEP air emission permits;
- b. the final approved DEP solid waste permits;
- c. the final approved DEP water discharge permits;
- d. the final approved DEP water diversion permit; and
- e. the final FAA stack permit, if applicable.

The Council hereby directs that a copy of the Opinion and Decision and Order shall be served to each party and intervenor to this proceeding. A notice of the issuance of this Decision and Order shall be published in the Norwich Bulletin, the Journal Transcript, and The Providence Journal.

2920E

CERTIFICATION

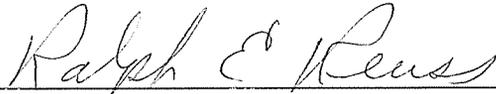
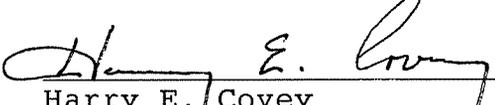
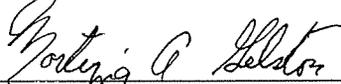
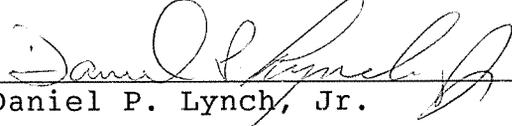
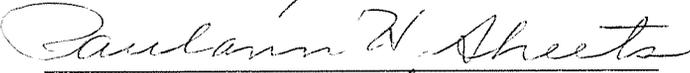
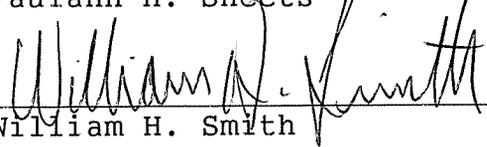
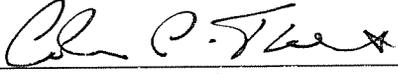
The undersigned members of the Connecticut Siting Council hereby certify that they have heard this case in Docket No. 96 or read the record thereof, and that we voted as follows:

Dated at New Britain, Connecticut the 8th day of May, 1989.

<u>Council Members</u>	<u>Vote Cast</u>
<u>Gloria Dibble Pond</u> Gloria Dibble Pond Chairperson	YES
<u>Ralph E. Reuss</u> Commissioner Peter Boucher Designee: Ralph Reuss	YES
<u>Brian J. Emerick</u> Commissioner Leslie Carothers Designee: Brian Emerick	YES
<u>Harry E. Covey</u> Harry E. Covey	YES
<u>Mortimer A. Gelston</u> Mortimer A. Gelston	YES
<u>Daniel P. Lynch, Jr.</u> Daniel P. Lynch, Jr.	NO
<u>Paulann H. Sheets</u> Paulann H. Sheets	NO
<u>William H. Smith</u> William H. Smith	YES
<u>Colin C. Tait</u> Colin C. Tait	YES

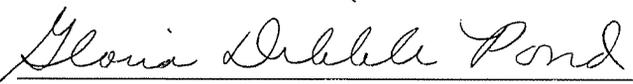
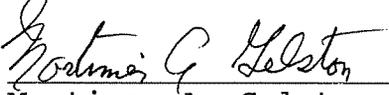
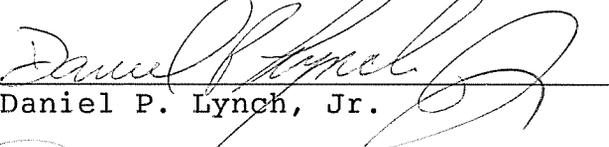
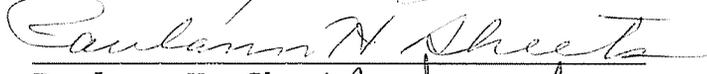
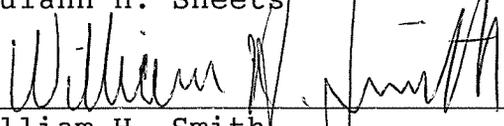
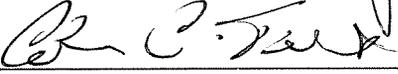
The undersigned members of the Connecticut Siting Council hereby vote as follows on a July 15, 1988, appeal by the applicant, pursuant to the provisions of Section 16-50x(d) of the Connecticut General Statutes, to revoke a June 20, 1988, order issued by the Killingly Inland Wetlands Commission, and to issue the Council's own Decision and Order of May 8, 1989, in substitution thereof.

Dated at New Britain, Connecticut the 8th day of May, 1989.

<u>Council Members</u>	<u>Vote Cast</u>
 _____ Gloria Dibble Pond Chairperson	YES
 _____ Commissioner Peter Boucher Designee: Ralph Reuss	YES
 _____ Commissioner Leslie Carothers Designee: Brian Emerick	YES
 _____ Harry E. Covey	YES
 _____ Mortimer A. Gelston	YES
 _____ Daniel P. Lynch, Jr.	YES
 _____ Paulann H. Sheets	NO
 _____ William H. Smith	YES
 _____ Colin C. Tait	YES

The undersigned members of the Connecticut Siting Council hereby vote as follows on a June 30, 1988, appeal by the applicant, pursuant to the provisions of Section 16-50x(d) of the Connecticut General Statutes, to revoke a June 3, 1988, order with 23 conditions issued by the Killingly Planning and Zoning Commission, and to issue the Council's own Decision and Order of May 8, 1989, in substitution thereof.

Dated at New Britain, Connecticut the 8th day of May, 1989.

<u>Council Members</u>	<u>Vote Cast</u>
 <hr/> Gloria Dibble Pond Chairperson	YES
 <hr/> Commissioner Peter Boucher Designee: Ralph Reuss	YES
 <hr/> Commissioner Leslie Carothers Designee: Brian Emerick	YES
 <hr/> Harry E. Covey	YES
 <hr/> Mortimer A. Gelston	YES
 <hr/> Daniel P. Lynch, Jr.	YES
 <hr/> Paulann H. Sheets	NO
 <hr/> William H. Smith	YES
 <hr/> Colin C. Tait	YES