

STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051
Phone: (860) 827-2935 Fax: (860) 827-2950
E-Mail: siting.council@ct.gov
www.ct.gov/csc

October 9, 2009

TO:

Parties and Intervenors

FROM:

S. Derek Phelps, Executive Director

RE:

PETITION NO. 907 – Montville Power LLC petition for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the retrofit and operation of a 40 MW Biomass-Fueled Generation Unit at the

Montville Station in Uncasville, Connecticut.

Comments have been received from the State of Connecticut Department of Environmental Protection, dated October 8, 2009. Copies are attached for your review.

SDP/laf

c: Council Members





STATE OF CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION



October 8, 2009

Daniel F. Caruso, Chairman Connecticut Siting Council 10 Franklin Square New Britain, Connecticut 06051

> RE: Retrofit and Operation of a 40-MW Biomass-fueled Generation Unit Montville Power LLC Montville, Connecticut Petition No. 907

Dear Chairman Caruso:

Staff of this department has reviewed the above-referenced petition for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need will be required for the retrofitting of Unit #5 at Montville Station to burn biomass. The following comments are offered to the Council for your use in this proceeding.

Montville Power LLC, a subsidiary of NRG Energy, proposes to retrofit Unit #5 at Montville Station, which is currently operated as a peaking facility capable of burning No. 6 fuel oil or natural gas, to a base load unit fueled by biomass in the form of wood chips from clean, untreated wood sources.

While it is recognized that that applicant is eligible to file for Council approval via a petition rather than a full application, the document submitted for review is very general in nature and lacking some of the key quantitative data that would be useful in reviewing such a proposal. The petition does not provide figures for the daily or annual tonnage of wood chips to be processed, the daily volumes of wastewater currently handed by the on-site wastewater treatment facility scheduled to be closed, or the volume of wastewater to be generated by the retrofitted Unit #5 operating in base load mode. Such basic figures were provided in Petitions 784 and 834 for the biomass-fueled facilities proposed by Plainfield Renewable Energy and Watertown Renewable Energy (Tamarack Energy), respectively.

The proposed facility would contribute to the diversity of Connecticut's energy supply by using a fuel source which is not currently part of this state's energy supply mix, although the two approved facilities referenced above would also contribute to this diversity if and when they go into operation. In addition, the Connecticut Solid Waste Management Plan, as amended and adopted in December 2006, sets out the State's strategy to manage and reduce the volume of

solid waste generated within the state of Connecticut through the increased use of strategies including source reduction, reuse, recycling and composting. Part of Connecticut's long range vision is to view and treat solid waste as a valuable resource and to seek beneficial uses for it rather than to treat it solely as a waste to be disposed of. The Montville Power LLC proposal would be consistent with this strategy as it diverts clean wood waste material, such as land clearing debris, pallets, spools, silvicultural thinnings and mill residues, from the waste stream and puts them to a beneficial use. As there are potentially competing users for clean waste wood material in the form of Plainfield Renewable Energy, Tamarack Energy or possibly biomass plants in Rhode Island or central Massachusetts which could draw from overlapping wood supply areas, the Council should consider fuel supply information such as the findings from DPUC's recent docket on wood fuel availability, or other sources available to the Council or to the applicant, to confirm the likely availability of a sufficient supply of fuel to operate the retrofitted unit as proposed.

As discussed briefly on page 6 of the petition, anticipated clean wood fuel sources include manufacturing and mill residues, urban wood including pallets and spools, and forest residues from logging, land clearing and thinning operations. While conventional wisdom, as well as our Forestry Division's best judgment, is that fuel wood chips do not have sufficient economic value to encourage the harvest of forest resources solely for this purpose, the Council should seek assurances that the portion of fuel derived from thinning, commercial stand improvements, and other forestry practices are derived in a sustainable manner so as not to diminish the long-term productivity of Connecticut's forest lands.

Relative to specific regulatory programs of this department, comments regarding air, waste, water and the Natural Diversity Data Base are provided below.

Air Permit

DEP has received an application for a Permit for Fuel Burning Equipment for the proposed facility. Review of this application is well underway. Modeling for the facility's emissions is currently in process which, upon completion, will allow the draft permit to be completed.

The retrofitted Unit No. 5 will employ regenerative selective catalytic reduction for NOx control, an oxidation catalyst for CO and VOC control, and a new electrostatic precipitator for particulate emissions control. Absent the plans to burn biomass at this unit, the facility would have no need to add these new controls. The new controls will provide for substantially reduced emission rates of pollutants, not only when burning biomass, but also when operating on ultralow sulfur distillate fuel oil or on natural gas in peaking power mode. For instance, SOx emissions rates will be reduced from a current allowable level of 0.33 pounds of sulfur dioxide per MMBTUs to 0.025 pounds per MMBTU on wood, 0.0017 pounds per MMBTU on distillate fuel oil, and 0.006 pounds per MMBTU on natural gas. Particulate emissions will be reduced from existing rates of 0.12 pounds per MMBU for total suspended particulates on oil and 0.10 pounds of TSP on gas to post-project rates of 0.026 pounds per MMBTU on biomass, 0.0024 pounds per MMBTU on distillate oil, and 0.0076 pounds per MMBTU on natural gas. As a final example, NOx emissions rates are currently 0.313 pounds per MMBTU on distillate oil but will drop to 0.06 pounds per MMBTU on all three fuels: biomass, distillate oil and natural gas.

The text of page 11-12 of the petition discussing air emissions is accurate in its description of the regulatory treatment of this facility.

Waste Permitting Issues

The petition makes mention, both on pages 6-7 and in Appendix C, of an on-site wood hogger to process a small amount of oversized wood ships which may be received from the wood chip vendors. The applicant is strongly urged to put the burden of providing wood chips which meet the plant's operating specifications squarely upon the chip vendors. The wood chip hogger would qualify as a volume reduction facility and would, therefore, require either an individual permit or registration under a general permit from DEP for this equipment.

In order to qualify under the general permit, the wood hogger operation would need to be kept under the limits of having 2,500 cubic yards of unprocessed material and under 1,000 cubic yards of processed chips on site at any time. This requires that the hogger feedstock and throughput be kept separate from other chips, which may be difficult to accomplish at Montville Station due to both the limited space available and the nature of the chip deliveries. It should also be noted that the existing general permit for this specific activity will expire on August 11, 2010, though the department is in the process of drawing up a new general permit.

If the on-site chip hogger operation would exceed the two size limits given above, an individual volume reduction facility permit would be required. This would involve a permit fee of \$14,250 and the potential need to hold a public hearing, should one be requested.

For the above reasons, it would be beneficial to Montville Power LLC to put the burden of delivering specification-compliant chips squarely on the shoulders of its chip vendors. Garbrielle Frigon can be contacted at (860) 424-3795 if the applicant has questions on the issue of the Volume Reduction Facility Permit.

As was the case in Petition 834 for the Tamarack Energy facility, if the Montville facility is a biomass gasification process facility and is limited to receiving only clean, untreated wood chips complying with the requirements of C. G. S. Sect. 22a-208l, it will not need to obtain a Solid Waste Facility Permit from DEP.

Wastewater Treatment

The petition proposes that Montville Station's existing on-site wastewater treatment facility will be closed and the station's wastewater flows will be routed to the Montville wastewater treatment plant (pp. 14-15) and indicates that discussions with the Town over this issue have already commenced. The petition does not give any volume figure for the amount of wastewater to be sent to the Town treatment plant or any description of the nature or expected constituents in the wastewater. From the standpoint of available capacity, there should not be any problem with accommodating these new flows at the Montville wastewater facility. However, the applicant is requested to contact Dennis Greci of DEP's Municipal Water Pollution Control Section at (860) 424-3751 to provide added guidance to the department on the volume and nature of these added flows to the Town's plant.

The petition acknowledges (p. 15) the need to examine and potentially to modify the registration under the General Permit of the Discharge of Stormwater Associated with Industrial

Activities. This might be necessary in part for reasons such as a name change of the applicant, but the more relevant update would be to the associated Stormwater Pollution Control Plan, as necessary depending on the facility changes. The same discussion in the petition mentions registration under the General Permit for Discharge of Stormwater Associated with Construction Activities. Depending on the extent of construction disturbance, the registration would be made with DEP if 5 or more acres are being disturbed, or would fall under local jurisdiction if the disturbed area is 1-5 acres.

Natural Diversity Data Base

The applicant did submit a request to DEP's Natural Diversity Data Base to confirm the findings of its own review that there are no listed species on site or otherwise affected by the proposed action. By letter of September 30, 2009 to the applicant, DEP confirmed that these conclusions are correct.

Miscellaneous Petition Commentary

Two inconsistencies are noted between information supplied in the petition and in the answers to the Council's interrogatories. Page 6 of the petition cites 2" as the upper size limit for acceptable wood chips, while the response to interrogatory no. 7 defines over-sized wood chips as those exceeding 3".

A similar minor discrepancy is noted between the petition's description that a fuel storage shed sized to house a 14-day supply of wood chips will be constructed on site, whereas the responses to Council interrogatories 9 and 11 say the storage building will be capable of housing a 12-day supply of chips.

It is unclear what is meant by reclaiming wood chips, a terminology which is used in several instances including in the responses to interrogatories 9 and 11.

Thank you for the opportunity to review this petition and to submit these comments to the Council. Should you, other Council members or Council staff have any questions, please feel free to call me at (860) 424-4110.

Respectfully yours, Frederich L. Riese

Frederick L. Riese

Senior Environmental Analyst

cc: Commissioner Amey Marrella

Petition No. 907 Page 1 of 2

LIST OF PARTIES AND INTERVENORS $\underline{\text{SERVICE LIST}}$

| | Document | Status Holder | Representative |
|----------------|-------------|--------------------------------|--|
| Status Granted | Service | (name, address & phone number) | (name, address & phone number) |
| | | | |
| Applicant | 🛛 U.S. Mail | Montville Power LLC | Andrew W. Lord, Esq. Murtha Cullina LLP |
| | | | CityPlace I, 29 th Floor |
| | | | 185 Asylum Street |
| | | | Hartford, CT 06103 |
| | | 4 | (860) 240-6180 |
| | | | (860) 240-6150 |
| | | | alord@murthalaw.com |
| | 🛛 U.S. Mail | | Julie L. Friedberg. Esq. |
| | | | Senior Counsel |
| | | | NRG Energy, Inc. |
| | | | 211 Carnegie Center |
| | | | Princeton, NJ 08540 |
| | | | (609) 524-5232 |
| | | | (609) 524-4941 |
| | U.S. Mail | | Judith Lagano |
| | | | Director – Asset Management |
| | | | NRG Energy, Inc. |
| | | | c/o Montville Power LLC |
| | | | 74 Lathrop Road |
| | | | Uncasville, CT 06382 |
| | | | (203) 854-3625 |
| | | | (203) 854-3658 |
| | U.S. Mail | | Jonathan Baylor |
| | | | Senior Analyst, Development & Asset |
| | | | Management |
| | | | NRG Energy, Inc. |
| | | | 211 Carnegie Center |
| , | | | Princeton, NJ 08540 |
| | | | (609) 524-4958 |
| | | | (609) 524-4941 |
| Party | ⊠ U.S. Mail | The Connecticut Light and | John R. Morissette |
| (granted on | N O.P. Mail | Power Company | Manager – Transmission Siting & |
| 9/16/09) | | 1 ower company | Permitting |
| 7,10,07, | | | Northeast Utilities Service Company |
| | | | P.O. Box 270 |
| | | | Hartford, CT 06141-0270 |
| | | | (860) 665-6774 |
| | | | morisjr@nu.com |
| | | | |

Date: September 16, 2009

Petition No. 907 Page 2 of 2

LIST OF PARTIES AND INTERVENORS $\underline{SERVICE\ LIST}$

| | Document | Status Holder | Representative |
|----------------------------------|-------------|---|--|
| Status Granted | Service | (name, address & phone number) | (name, address & phone number) |
| Party (granted on 9/16/09) | ⊠ U.S. Mail | The Connecticut Light and Power Company continued | Jeffery D. Cochran, Esq. Senior Counsel Northeast Utilities Service Company P.O. Box 270 Hartford, CT 06141-0270 (860) 665-3548 (860) 665-5504 fax cochrid@nu.com |
| | ☑ U.S. Mail | | Robert S. Golden, Jr., Esq. Carmody & Torrance LLP P.O. Box 1110 50 Leavenworth Street Waterbury, CT 06721-1110 (203) 573-1200 (203) 575-2600 rgolden@carmodylaw.com |
| | ⊠ U.S. Mail | | Anthony M. Fitzgerald, Esq. Carmody & Torrance LLP P.O. Box 1950 195 Church St., 18 th Floor New Haven, CT 06509-1950 (203) 777-5501 afitzgerald@carmodylaw.com |