

STATE OF VERMONT
PUBLIC SERVICE BOARD

Docket No. 4450

Petition of the City of	X	
Burlington Electric Department	X	
requesting a certificate of public	X	(3)
good pursuant to 30 V.S.A. Section	X	
248 to construct and operate a	X	
50 MW wood-fired electric	X	
generating station to be known as	X	
the Joseph C. McNeil Station --	X	Order Entered: 9/14/81

INTRODUCTION

On March 14, 1980 the City of Burlington Electric Department (BED or the Petitioner) filed a petition pursuant to 30 V.S.A. §248 seeking a certificate of public good for the construction of an electric generating facility to be known as the Joseph C. McNeil Station.

Plans for the proposed facility were submitted by the Petitioner to the City of Burlington Planning Commission and the Chittenden County Regional Planning Commission. By resolution of August 27, 1979, the Chittenden County Regional Planning Commission waived its right to receive said plans 45 days prior to the submission of the application for a certificate of public good; and by resolution of September 4, 1979, the City of Burlington Planning Commission did likewise.

Pursuant to Section 248(a), notice of the hearing on this petition was properly given to the Vermont Attorney General, the Department of Health, the Agency of Environmental Conservation, the Historic Sites Board, the Scenery Preservation Council, the State Planning office, the Agency of Transportation, the Chairman of the Burlington Planning and the Executive

47. Fugitive dust from construction and from the ash landfill will be adequately controlled by measures which the Petitioner will be required to undertake, in accordance with the conditions of the certificate and the conditions of the air quality certificate issued by the Vermont Agency of Environmental Conservation.

48. Because of the conditions imposed by this certificate, clearcutting for fuel will be limited to areas of 25 acres or less in general. The proposed facility will not, therefore, result in major esthetic degradation of forests. *OK*

49. The proposed facility will have no undue adverse effect on esthetics.

V. EFFECT ON HISTORIC SITES

50. Under the sponsorship of the Petitioner, studies were conducted to determine whether the proposed plant location contained sites of historic significance. (Tr., 11/12/80, pp. 64-72.)

51. Those studies disclosed several such sites and, as a result, the plant design was modified so that the sites would remain undisturbed. (Tr., 11/12/80, pp. 72-74, 83-84; Pet's Ex. No. 78.)

52. A substantial portion of fuel truck traffic will utilize the principal streets of the City of Winooski, some of which pass through historic districts. Because of the conditions of the certificate limiting the use of trucks for fuel transportation, and because of the projected use of such streets by other traffic, the effect will be minimal. (Tr., 1/13/81, pp. 38-44; Tr., 1/14/81, pp. 17-18.)

87. Harvesting of fuel will be accomplished by a technique known as whole tree chipping. After they are cut and brought to a central location, trees which can be utilized for lumber are separated and delimbed. The remaining trees are fed into a chipper which reduces them to one inch by two inch chips. The chips are then blown into a tractor trailer van for direct delivery to the site at which they are to be burned or to a transfer site. (Tr., 1/23/81, pp. 5-11; Pet's Ex. No. 100.)

OK
88. The forests of Vermont in which woodchip harvesting will be performed contain an overabundance of low quality timber which presently has no substantial market and which takes growing space from more valuable timber. (Tr., 2/24/81, pp. 140-141; Tr., 3/4/81, pp. 34-35; State's Ex. No. 18.)

OK
89. Harvesting the quantity of woodchips required for operation of the proposed facility provides an opportunity to improve the management of a substantial portion of Vermont's forests. (Tr., 1/22/81, pg. 156; Tr., 3/4/81, pp. 34-35; State's Ex. No. 18.)

what are the proposed conditions
90. Although harvesting performed in an improper manner can cause soil erosion, stream sedimentation, needless destruction of wildlife habitat and esthetic degradation, (Tr., 3/4/81, pp. 92-95) the conditions imposed by this certificate will require woodchip suppliers to adhere to procedures which will protect against such effects.

91. The proposed location of the plant itself is a 46 acre portion of a 400 acre parcel owned by the City of Burlington within an area known as the Intervale. (Pet's Ex. No. 96.)

III. EFFECTS ON ESTHETICS, HISTORIC SITES, AIR AND WATER PURITY, THE NATURAL ENVIRONMENT, PUBLIC HEALTH AND SAFETY

It may be worth observing that any large, industrial project will have certain adverse impacts upon its environment and on those who live or work nearby. At the least, undeveloped land must be utilized, and resources must be consumed. Beyond that, each project will have its particularized impacts which, in the case of the McNeil Station, are described in our findings. Overall, however, the environmental, health and safety effects of this project impress us as being remarkably slight.

OK

Among the more serious effects will be noise at the project site resulting from a combination of regular plant operations and fuel handling. While the Board concludes that from the point of view we are required by statute to adopt, that of the public good this particular adverse effect will not be undue, it may very well be a serious problem to a small number of residents in the area. To a degree, this kind of problem is a risk assumed by those who elect to live adjacent to a zone reserved for industrial use. Indeed, if the market is functioning properly, this risk is reflected in property values and rental levels in this area, and the residents that stand to be affected will have paid and will be paying lower purchase prices and rents as a result.

Whether or not this is so, we are requiring as a condition of this certificate that BED utilize reasonable noise limitation procedures and technologies in the design and operation of the facility. We note also that EED is voluntarily considering more direct measures such as the furnishing of air conditioners to the affected homes, the negotiation of noise easements or the outright purchase of certain properties. Additional possibilities

exist, and the Board would not consider other reasonable accommodations to be illegally preferential. Yet, if the measures adopted are insufficient, residents may have legal or equitable remedies, and BED must take account of this possibility in evaluating the question of whether and how to proceed with the project.

Other environmental effects will also be produced.

ok
Wildlife habitat will be destroyed or disrupted, both at the plant location and in the forests where fuel is to be harvested. There will be a certain amount of air pollution, and water quality may be affected, again both on site and off. As our findings show, however, these effects will not be severe.

The witnesses to this proceeding were in general agreement that the quality of the state's forests affected by fuel harvesting would actually be improved as a result. This conclusion, of course, is based upon the quantity of harvest, and the harvesting techniques to be employed, as required by the terms of this order. Needless to say, the conclusion would not necessarily be valid for substantially greater amounts of harvest, nor in the absence of controls on harvesting techniques.

Through other administrative processes, the facility has satisfied existing legal criteria regarding air and water quality. This does not mean that there will be no air or water pollution. It means only that such pollution will be kept within the limitations established by the state's legislative and administrative processes. Section 248 does not state whether the Board is bound to follow, or is limited by, the same criteria as are utilized in the air and water quality certificate processes. For purposes of this case, we do not find it necessary to rule on the

ORDER AND CERTIFICATE OF PUBLIC GOOD
PURSUANT TO 30 V.S.A. SECTION 248

IT IS HEREBY ORDERED, ADJUDGED AND DECREED by the Public Service Board of the State of Vermont that the construction of a fifty megawatt wood-fired electric generating station as proposed by the Petitioner will promote the general good of the state, and it is further

ORDERED that the petition for a certificate of public good is granted subject to the following conditions, unless otherwise ordered by this Board:

1. The Petitioner shall commence construction of the facility within 12 months of the date of this order and shall complete construction within a reasonable time thereafter in accordance with the plans and specifications submitted to this Board, the Vermont Agency of Environmental Conservation and the Vermont Water Resources Board.

2. The Petitioner shall comply with conditions 1 through 9 of the air quality permit issued on May 2, 1980 by the Vermont Agency of Environmental Conservation and shall at all times during the construction and operation of the facility maintain in effect such permit or any similar permit required by law. The Petitioner shall notify the Board promptly of any further application with respect to such permit and of any further agency action upon any such application or permit.

3. The Petitioner shall comply with the terms and conditions of the discharge permit issued on November 5, 1979 by the Vermont Water Resources Board and shall at all times during the construction and operation of the facility maintain in effect

such permit or any similar permit required by law. The Petitioner shall notify the Board promptly of any further application with respect to such permit and of any further agency action upon any such application or permit.

4. The Petitioner shall comply with the terms and conditions of the temporary pollution permit issued on November 14, 1980 by the Vermont Water Resources Board and shall at all times during the construction and operation of the facility maintain in effect such permit or any similar permit required by law. The petitioner shall notify the Board promptly of any further application with respect to such permit and of any further agency action upon any such application or permit.

5. The Petitioner shall comply with the terms and conditions of the disposal facility certification issued on November 3, 1980 by the Vermont Agency of Environmental Conservation and shall at all times during the construction and operation of the facility maintain in effect such permit or any similar permit required by law. The Petitioner shall notify the Board promptly of any further application with respect to such permit and of any further agency action upon any such application or permit.

6. Within one year after the commencement of commercial operation of the facility, the Petitioner shall present to the Board for its approval a detailed plan for the disposal of wood ash for use after the on-site disposal facility has been fully utilized.

7. Not less than 75% of all wood fuel to be consumed by the facility shall be delivered to the plant site by railway.

8. All agreements between the Petitioner and other parties for the delivery of wood fuel by truck shall be in writing and shall provide that no fuel trucks may enter or utilize the five-corners intersection, so called, in Essex Junction, Vermont between the hours of 7:00 A.M. and 8:30 A.M. nor between the hours of 4:00 P.M. and 5:30 P.M., Mondays through Fridays, inclusive, holidays excepted, and that no such trucks may enter or utilize streets or highways within the Cities of Burlington or Winooski on Sundays or before 6:30 A.M. or after 9:30 P.M. on any other day. Violation of any such provision shall expressly be made a cause for cancellation of such agreements, and in the case of any such violation, then, at the discretion of the Petitioner or upon order of this Board, such termination shall be effected. The Petitioner shall promptly notify the Board of any violation of such provisions of which it becomes aware. Copies of all agreements for delivery of wood fuel by truck shall be furnished to the Board promptly upon the execution thereof.

9. No fuel shall be off-loaded at the facility from any truck or railway car on Sundays or before 7:00 A.M. or after 9:00 P.M. on any other day.

10. All agreements between the Petitioner and other parties for the harvesting of woodchip fuel shall be in writing and shall provide that the harvester shall (a) advise the Vermont Department of Fish and Game in advance of the location of harvesting operations; (b) adhere to the recommendations of the Vermont Department of Fish and Game regarding cutting near deer yards, wetlands or the habitat of any endangered species; (c) comply with all applicable environmental protection standards

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established under state or federal law; (d) limit clear cutting to 25 acres or less except in genuine cases of ~~land use conversion~~; and in all such cases, the harvester shall advise the Petitioner sufficiently far in advance to permit the Petitioner to verify that the conversion is in fact genuine; and (e) comply with all terms and conditions of "Harvesting Policy for Whole Tree Chipping Operations in Vermont (Second Revised Draft)" as set forth in Petitioner's Exhibit No. 101. Violation of any such provision shall expressly be made a cause for cancellation of such agreements and, in the case of any such violation, then, at the discretion of the Petitioner or upon order of this Board, such termination shall be effected. The Petitioner shall promptly notify the Board of any violation of such provisions of which it becomes aware. Copies of all agreements for harvesting of woodchip fuel shall be furnished to the Board promptly upon the execution thereof. Not later than the first day upon which woodchip harvesting commences, the Petitioner shall have and maintain a staff of not less than 11 professional foresters to monitor the provisions of this paragraph.

11. Acoustic louvers shall be installed on all plant building openings. All outdoor pumps shall be enclosed to minimize site noise. Wood fuel at the site shall be handled by a front end loader or other equipment having a maximum noise rating of 77 dBA at a distance of 50 feet. The acoustic noise levels of major pieces of plant equipment shall be given significant weight in evaluating their acceptability for use at the plant.

12. The Board recommends that, with the permission of the property owners, the Petitioner purchase and install air conditioners for these residences on Newlatten Drive and Intervale Road

which are likely to be substantially affected by site generated noise. The Board further recommends that, in the case of any severely affected properties, the Petitioner investigate the desirability of the negotiation of noise easements or the purchase of the properties.

13. Within twelve months from the date of this certificate, the Petitioner shall file a petition under 30 V.S.A. §248 for a certificate of public good for transmission facilities to transmit power from the proposed facility to the VELCO transmission grid.

14. The Board shall retain continuous jurisdiction over plant construction, operation, emissions, discharges, shut down, decommissioning, fuel harvesting, fuel procurement and fuel delivery and may require any and all such changes as it may in its discretion determine to be necessary to protect the public health, safety and welfare or the natural environment.

Dated at Montpelier, Vermont this 14th day of September, 1981.

_____)	PUBLIC SERVICE
s/ Rosalyn L. Hunneman)	
_____)	BOARD
s/ Samuel S. Bloomberg)	
OFFICE OF THE CLERK	OF VERMONT

FILED: September 14, 1981

ATTEST: s/ Susan M. Hudson
Clerk of the Board

Allen

Petition of City of Burlington)
Electric Department requesting)
modification of its Certificate)
of Public Good for the con-)
struction and operation of the)
50 MW wood-fired electric gen-)
erating station known as the)
Joseph C. McNeil station)

Hearing at
Burlington, Vermont
May 16, 1983

Order Entered: *6/22/83*

PRESENT: Rosalyn Hunneman, Hearing Examiner

APPEARANCES: Nancy Sheahan, Esq.
McNeil, Murray & Sorrell
for the Petitioner

William Wargo, Esq.
for City of Winooski

Arthur Hogan
for Chittenden County Regional Planning
Commission

William Griffin, Esq.
for Attorney General's Office

Michael Marks, Esq.
for the Department of Public Service

INTRODUCTION

On September 14, 1981, the Board issued a Certificate of Public Good pursuant to 30 V.S.A. §248 for the construction of the Joseph C. McNeil Station, a 50-megawatt wood-fired electric generating facility to be constructed by the City of Burlington Electric Department ("BED") in Burlington. Condition 10 of the certificate imposed a number of requirements relating, inter alia, to the size of the professional forestry staff to be maintained by BED, advance notification to the Vermont Department of Fish and Game regarding fuel harvesting operations, and adherence to certain guidelines and standards in the harvesting of fuel.

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By petition dated February 8, 1983, and filed February 9, 1983, BED asked for certain modifications to Condition 10 of the Certificate of Public Good. Copies of the petition and accompanying testimony were filed with all parties of record in the original proceeding and with the Director of Public Advocacy of the Department of Public Service.¹ All parties were given notice of a prehearing conference to be held in Montpelier on March 31, 1983. At this prehearing conference, issues which had been raised by the parties concerning the Board's jurisdiction, Winooski's party status, and certain procedural requirements were discussed.

On April 18, 1983, the Hearing Examiner issued a Pre-Hearing Conference Memorandum and Procedural Order. This document concluded that the Board retained continuing jurisdiction under Section 248, upheld Winooski's right to participate in the hearing on Burlington's Petition for Modification, and stated that since this hearing was a continuation of Docket No. 4450, all of the special notice requirements of Section 248 had been fulfilled. Those rulings are hereby reaffirmed.

¹ Although the particular notice requirements of Section 248 need not be complied with a second time--this being a continuation of the original proceeding--the Chittenden County Regional Planning Commission and the Burlington Planning Commission submitted waivers of any rights to notice they may have had. In addition public notice of the hearing was published in the Burlington Free Press on May 4, and May 11, 1983. Judicial notice was taken of these matters over the objection of the City of Winooski. Tr., 5/16/83, at 4-12. Notice was also taken, without objection, of the prior proceedings and decision in this case.

The hearing was held in Burlington on May 10, 1983. During the course of the hearing, Winooski attempted to examine Mr. Kropelin with respect to Condition 8 of the Certificate. BED objected and was supported in its objection by the DPS, the Attorney General's Office, and the Chittenden County Planning Commission. The Hearing Examiner ruled that this line of inquiry was beyond the scope of this hearing.

FINDINGS

1. The projected fuel consumption of the McNeil Plant continues to be 500,000 green tons per year. Tr., 5/16/83, at 71.

2. BED plans to obtain fuel for the McNeil Plant in two ways: direct purchase of whole tree chips from contractor-producers and indirect purchase of whole tree chips and wood-processing residues through brokers and from processing mills. Kropelin pf. at 3.

3. Approximately 70% of the total fuel supply will originate in Vermont and 30% will come from out-of-state suppliers. Tr., 5/16/83, at 42, 43.

4. 70% of the Vermont fuel, and approximately 83% of the cut-of-state fuel, will come from direct suppliers. Tr., 5/16/83, at 43-44.

5. BED has and will continue to have knowledge of whole tree chipping operations in Vermont, and BED can readily exercise control over the conduct of such operations, whether the chips are supplied directly or indirectly (through a broker). Tr., 5/16/83, at 50-52, 58.

6. BED can also exercise control over the conduct of out-of-state whole chipping operators to the extent of requiring them to adhere to local environmental laws and regulations.

5/16/83, at 45.

7. The harvesting of timber ultimately converted to fuel by wood processing operations (mill residue, shavings from manufacturing, and the like), as opposed to fuel produced by whole tree chipping, cannot feasibly be controlled by BED, Kropelin, pf. at 6; and only minimal regulation of such harvesting has been found necessary in Vermont. Id. at 7.

8. Surrounding states and the Province of Quebec have had timber harvesting requirements and enforcement mechanisms in effect for some period of time. These requirements, though at least as stringent as and in many respects similar to those adopted by the Board in its September 14, 1981 order in Docket No. 4450, occasionally conflict with the standards adopted by the Board. Kropelin pf. at 9.

9. BED and the Vermont Fish and Game Department have reached an agreement as to the most efficient and expedient manner of implementing Condition 10(a) of the Board's September 14, 1981 order in Docket No. 4450. The agreement shifts the responsibility of advance notification of harvesting operations from the harvester to BED and clarifies the information to be included in such notification and the individuals to whom the notification would be made. Tr., 5/16/83, at 10.

10. Initial projections regarding BED forestry staff requirements provided for more staff than will be required to implement the fuel procurement program for the McNeil Plant pursuant to the Certificate of Public Good. Kropelin pf. at 15.

11. The responsibilities of BED's forestry staff will conclude with the wood receiving phase and will not include wood handling or wood handling supervision at the McNeil Station. Id. at 12.

12. The services which a BED mill residue procurement forester would provide are currently being provided very advantageously by a mill residue broker. Id. at 13.

13. The perceived work load of the staff foresters has been reduced significantly by the development of a computerized forest inventory, yield and growth procedure, successfully identifying adequate numbers of whole tree chip suppliers and stumpage and the ease with which BED's Tree Farm Family Program of landowner assistance has been implemented. Id. at 13-14.

14. A staff consisting of 1 chief forester, 3 wood procurement foresters, 1 mill residue broker or mill residue forester and 2 consulting foresters would result in much more intensive supervision and management than is the norm. Id. at 14-15; Pet. Exh. at 4.

15. The modifications and clarifications requested by BED, as amended in the order proposed by the Hearing Examiner, conform to the evidence presented to the Board in the earlier proceeding, are consistent with the Board's findings, opinion and order to date, transcript and Exhibits, Docket No. 4450; PSB Order, Docket No. 4450, September 14, 1981, and are consistent with the criteria of 30 V.S.A. §248.

Proposal for decision has been served on the parties to this case pursuant to the provisions of 3 V.S.A. §811.

The foregoing is reported to the Board by the Hearing Examiner in accordance with provisions of 30 V.S.A. §8.

Dated at Montpelier, Vermont this 10th day of

June, 1983.

Rosalyn L. Hunneman
Rosalyn Hunneman, Hearing Examiner

ORDER

IT IS HEREBY ORDERED, ADJUDGED AND DECREED by the Public Service Board of the State of Vermont that:

1. Condition 10 of the Certificate of Public Good issued on September 14, 1981, is amended to read as follows:

a) All agreements between the Petitioner and direct and indirect suppliers of whole tree chips harvested within the State of Vermont shall be in writing and shall provide that the harvester shall: (1) adhere to the recommendations of the Vermont Department of Fish and Game regarding cutting near deer yards, wetlands or the habitat of any endangered species; (2) comply with all applicable environmental protection standards established under state or federal law; (3) limit clear cutting to 25 acres or less except in genuine cases of land use conversion, and in all such cases, the harvester shall advise the Petitioner sufficiently far in advance to permit the Petitioner to verify that the conversion is in fact genuine; and (4) comply with all terms and conditions of "Harvesting Policy for Whole Tree Chipping Operations in Vermont (Second Revised Draft)" as set forth in Petitioner's Exhibit No. 101.

b) All agreements between the Petitioner and direct and indirect suppliers of whole tree chips harvested outside the State of Vermont shall be in writing and shall provide that the harvester shall comply with all locally applicable harvesting and environmental standards.

c) Violation of any of the above provisions shall expressly be made a cause for cancellation of such agreements and, in the case of any such violation, then, at the discretion of the Petitioner or upon order of this Board, such termination shall be

(effected. The Petitioner shall promptly notify the Board of any violation of such provisions of which it becomes aware.

d) Copies of all agreements for harvesting of wood chip fuel shall be furnished to the Board promptly upon the execution thereof.

e) With respect to each location within Vermont in which whole tree chipping operations are to be performed and from which chips are to be supplied, directly or indirectly, to the Petitioner, the Petitioner shall prepare a map which shows, in addition to the location of operations, information regarding the nature of the harvest (including harvest acreage and description), the approximate dates during which operations will be conducted, and the name and address of the prospective operator. The maps and information shall be delivered to the wildlife habitat biologist employed by the Vermont Department of Fish and Game in whose district each operation will occur at least fifteen days prior to the commencement of the operation. In the event that the Department of Fish and Game determines that a modification of the harvest plan will be necessary in order to protect deer yards, wetlands or the habitat of any endangered species, or in order to assure compliance with any environmental protection law or regulation, it shall notify the Petitioner within fifteen days of receiving the map and other information described in this subparagraph. In the event that such notification is given, the Petitioner shall assure that harvesting operations do not commence until a harvesting plan is approved by the Department of Fish and Game or by this Board. Nothing contained herein shall limit the right of any person or party to seek at any time an order from this Board or from any other authority having jurisdiction requir-

ing, for good cause, a modification or cessation of harvesting operations.

f) Not later than the first day upon which wood chip harvesting commences, the Petitioner shall have and maintain a staff of not less than 1 Chief Forester, 3 Wood Procurement Foresters, 1 Mill Residue Broker or Mill Residue Procurement Forester and 2 Consulting Foresters on an as needed basis who shall monitor the provisions of this paragraph. The Petitioner shall maintain records identifying the direct and indirect suppliers of wood fuel with which it contracts, and the amount of wood fuel it derives from each of such suppliers. The data thus compiled shall be provided to the Board, the Department of Public Service and the State of Vermont Agency of Environmental Conservation on an annual basis.

2. The foregoing amendment shall not be construed to limit or otherwise modify any of the other conditions, or the applicability thereof, of the Certificate of Public Good issued in this proceeding.

Dated at Montpelier, Vermont this 22nd day of

June, 1983.

Whaise R. Laney)
) PUBLIC SERVICE
Rosalyn L. Hunneman)
) BOARD
) OF VERMONT
)

OFFICE OF THE CLERK

FILED: June 22, 1983

ATTEST: [Signature]
CLERK OF THE BOARD



MAR 10 1983

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STATE OF VERMONT
OFFICE OF THE ATTORNEY GENERAL
109 STATE STREET
MONTPELIER
05602
TEL.: 802-828-3111

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FISH AND GAME

MEMORANDUM Office of Attorney General

TO: Honorable Brendan Whittaker,
Secretary of Environmental Conservation

Honorable Leo Laferriere,
Commissioner of Forests, Parks and Recreation

FROM: William Griffin, Chief Assistant Attorney General *WG*

RE: Joseph C. McNeil Station/Public Service Bd. Docket 4450

DATE: March 9, 1983

Enclosed for your information is State's Memorandum in Response to Petition of the City of Burlington Electric Department's Petition for Modification of Certificate of Public Good in the above-captioned matter.

/kac
enclosure

Ron
Keep this
Gray

STATE OF VERMONT
PUBLIC SERVICE BOARD

PETITION OF THE CITY OF *
BURLINGTON ELECTRIC DEPT. *
REQUESTING MODIFICATION OF *
CERTIFICATE OF PUBLIC GOOD *
FOR CONSTRUCTION AND *
OPERATION OF THE JOSEPH C. *
MCNEIL STATION *

DOCKET NO. 4450

MEMORANDUM IN RESPONSE TO PETITION OF THE CITY
OF BURLINGTON ELECTRIC DEPARTMENT'S PETITION FOR
MODIFICATION OF CERTIFICATE OF PUBLIC GOOD

Subject to certain minor qualifications the State of Vermont does not object to Burlington Electric Department's petition to modify.

Specifically, the State of Vermont does not object to Burlington's request that the last sentence in Condition #10 be amended to provide that "the Petitioner shall have and maintain a staff of not less than one chief forester and three full-time foresters in addition to one mill residue broker or one mill residue procurement forester and, as necessary, the services of consulting foresters."

The State does not object to Burlington's request that Condition #10(a) be clarified by striking the condition #10(a) advance notice requirement and relettering conditions (b) through (e) as (a) through (d). The notice requirement should then be restated as a separate condition providing as follows:

The Burlington Electric Department shall:

(a) provide a map showing the location of each prospective whole-tree chipping operation from which chips will be procured by Burlington Electric;

(b) each map will be accompanied by information relative to the nature of the harvest (i.e., harvest acreage and prescription), the approximate time period of the harvest, and the name of the prospective operator;

(c) the maps and information will be delivered to the wildlife habitat biologist in whose district each operation will occur at least fifteen (15) days prior to the commencement of the operation.

The State does not object to Burlington's request that the first sentence in Condition #10 be amended to read:

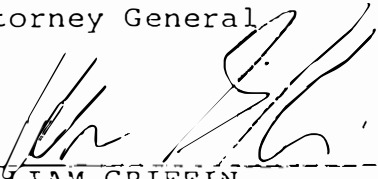
"All agreements between the Petitioner and direct in-state suppliers of whole-tree chips shall be in writing . . . "

The State, of course, reserves its right to petition the Board for modification of these and other provisions of its Order if and when circumstances warrant.

DATED AT Montpelier, Vt. this 9th day of March 1983.

STATE OF VERMONT
JOHN J. EASTON, JR.
Attorney General

BY:



WILLIAM GRIFFIN
Chief Assistant Attorney General

cc: Nancy Sheahan, Esq.
Darby Bradley, Esq.
Gerald Tarrant, Esq.
Stephen C. Walke, Esq.
William Wargo, Esq.



State of Vermont

Buck

AGENCY OF ENVIRONMENTAL CONSERVATION

Montpelier, Vermont 05602

DEPARTMENT OF FISH AND GAME

255 North Main Street
Barre, Vermont 05641

Phone: 828-2454

April 27, 1982

Department of Fish and Game
Department of Forests, Parks, and Recreation
Department of Water Resources and Environmental Engineering
Division of Protection
Natural Resources Conservation Council

MEMO TO: District Biologists and Habitat Biologists

FROM: *Bill* Sladyk

For your information I am enclosing portions of a ruling by the Vermont Public Service Board regarding a recent petition for a certificate of public good for the McNeil generating station in Burlington. Rather than duplicating the entire 36 page document, I have enclosed only those sections which appear to relate to Fish and Game matter.

Page 1 is the cover sheet and introduction.

Page 10 from the section entitled "Findings of Fact" item 48.

Page 16 from the Findings of Fact, items 87, 88, 89 and 90.

Page 27, the first paragraph, last sentence is significant.

Page 28, paragraph 1 and 2.

I have enclosed the entire Order and Certificate of Public Good, Pages 33, 32 through 36, Pages 34 and 35 and 36; items 10, 11 and 14 are of direct interest to this Department.

If anyone would like a complete copy of the entire document, please let me know.

I intend to meet with Bill Kropelin, Forester for Burlington Electric, to review how to meet the conditions of Section 10 page 34. If anyone has any suggestions, drop me a note.

WS:NL

cc: Ben Day
Conrad Motyka

STATE OF VERMONT
PUBLIC SERVICE BOARD

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③

Order Entered: 9/14/81

INTRODUCTION

On March 14, 1980 the City of Burlington Electric Department (BED or the Petitioner) filed a petition pursuant to 30 V.S.A. §248 seeking a certificate of public good for the construction of an electric generating facility to be known as the Joseph C. McNeil Station.

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47. Fugitive dust from construction and from the ash landfill will be adequately controlled by measures which the Petitioner will be required to undertake, in accordance with the conditions of the certificate and the conditions of the air quality certificate issued by the Vermont Agency of Environmental Conservation.

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51. Those studies disclosed several such sites and, as a result, the plant design was modified so that the sites would remain undisturbed. (Tr., 11/12/80, pp. 72-74, 83-84; Pet's Ex. No. 78.)

52. A substantial portion of fuel truck traffic will utilize the principal streets of the City of Winooski, some of which pass through historic districts. Because of the conditions of the certificate limiting the use of trucks for fuel transportation, and because of the projected use of such streets by other traffic, the effect will be minimal. (Tr., 1/13/81, pp. 38-44; Tr., 1/14/81, pp. 17-18.)

87. Harvesting of fuel will be accomplished by a technique known as whole tree chipping. After they are cut and brought to a central location, trees which can be utilized for lumber are separated and delimbed. The remaining trees are fed into a chipper which reduces them to one inch by two inch chips. The chips are then blown into a tractor trailer van for direct delivery to the site at which they are to be burned or to a transfer site. (Tr., 1/23/81, pp. 5-11; Pet's Ex. No. 100.)

88. The forests of Vermont in which woodchip harvesting will be performed contain an overabundance of low quality timber which presently has no substantial market and which takes growing space from more valuable timber. (Tr., 2/24/81, pp. 140-141; Tr., 3/4/81, pp. 34-35; State's Ex. No. 18.)

89. Harvesting the quantity of woodchips required for operation of the proposed facility provides an opportunity to improve the management of a substantial portion of Vermont's forests. (Tr., 1/22/81, pg. 156; Tr., 3/4/81, pp. 34-35; State's Ex. No. 18.)

90. Although harvesting performed in an improper manner can cause soil erosion, stream sedimentation, needless destruction of wildlife habitat and esthetic degradation, (Tr., 3/4/81, pp. 92-95) the conditions imposed by this certificate will require woodchip suppliers to adhere to procedures which will protect against such effects.

91. The proposed location of the plant itself is a 46 acre portion of a 400 acre parcel owned by the City of Burlington within an area known as the Intervale. (Pet's Ex. No. 96.)

III. EFFECTS ON ESTHETICS, HISTORIC SITES, AIR AND WATER PURITY, THE NATURAL ENVIRONMENT, PUBLIC HEALTH AND SAFETY

It may be worth observing that any large, industrial project will have certain adverse impacts upon its environment and on those who live or work nearby. At the least, undeveloped land must be utilized, and resources must be consumed. Beyond that, each project will have its particularized impacts which, in the case of the McNeil Station, are described in our findings. Overall, however, the environmental, health and safety effects of this project impress us as being remarkably slight.

Among the more serious effects will be noise at the project site resulting from a combination of regular plant operations and fuel handling. While the Board concludes that from the point of view we are required by statute to adopt, that of the public good this particular adverse effect will not be undue, it may very well be a serious problem to a small number of residents in the area. To a degree, this kind of problem is a risk assumed by those who elect to live adjacent to a zone reserved for industrial use. Indeed, if the market is functioning properly, this risk is reflected in property values and rental levels in this area, and the residents that stand to be affected will have paid and will be paying lower purchase prices and rents as a result.

Whether or not this is so, we are requiring as a condition of this certificate that BED utilize reasonable noise limitation procedures and technologies in the design and operation of the facility. We note also that BED is voluntarily considering more direct measures such as the furnishing of air conditioners to the affected homes, the negotiation of noise easements or the outright purchase of certain properties. Additional possibilities

exist, and the Board would not consider other reasonable accommodations to be illegally preferential. Yet, if the measures adopted are insufficient, residents may have legal or equitable remedies, and BED must take account of this possibility in evaluating the question of whether and how to proceed with the project.

Other environmental effects will also be produced. Wildlife habitat will be destroyed or disrupted, both at the plant location and in the forests where fuel is to be harvested. There will be a certain amount of air pollution, and water quality may be affected, again both on site and off. As our findings show, however, these effects will not be severe.

The witnesses to this proceeding were in general agreement that the quality of the state's forests affected by fuel harvesting would actually be improved as a result. This conclusion, of course, is based upon the quantity of harvest, and the harvesting techniques to be employed, as required by the terms of this order. Needless to say, the conclusion would not necessarily be valid for substantially greater amounts of harvest, nor in the absence of controls on harvesting techniques.

Through other administrative processes, the facility has satisfied existing legal criteria regarding air and water quality. This does not mean that there will be no air or water pollution. It means only that such pollution will be kept within the limitations established by the state's legislative and administrative processes. Section 248 does not state whether the Board is bound to follow, or is limited by, the same criteria as are utilized in the air and water quality certificate processes. For purposes of this case, we do not find it necessary to rule on the

ORDER AND CERTIFICATE OF PUBLIC GOOD
PURSUANT TO 30 V.S.A. SECTION 248

IT IS HEREBY ORDERED, ADJUDGED AND DECREED by the Public Service Board of the State of Vermont that the construction of a fifty megawatt wood-fired electric generating station as proposed by the Petitioner will promote the general good of the state, and it is further

ORDERED that the petition for a certificate of public good is granted subject to the following conditions, unless otherwise ordered by this Board:

1. The Petitioner shall commence construction of the facility within 12 months of the date of this order and shall complete construction within a reasonable time thereafter in accordance with the plans and specifications submitted to this Board, the Vermont Agency of Environmental Conservation and the Vermont Water Resources Board.

2. The Petitioner shall comply with conditions 1 through 9 of the air quality permit issued on May 2, 1980 by the Vermont Agency of Environmental Conservation and shall at all times during the construction and operation of the facility maintain in effect such permit or any similar permit required by law. The Petitioner shall notify the Board promptly of any further application with respect to such permit and of any further agency action upon any such application or permit.

3. The Petitioner shall comply with the terms and conditions of the discharge permit issued on November 5, 1979 by the Vermont Water Resources Board and shall at all times during the construction and operation of the facility maintain in effect

such permit or any similar permit required by law. The Petitioner shall notify the Board promptly of any further application with respect to such permit and of any further agency action upon any such application or permit.

4. The Petitioner shall comply with the terms and conditions of the temporary pollution permit issued on November 14, 1980 by the Vermont Water Resources Board and shall at all times during the construction and operation of the facility maintain in effect such permit or any similar permit required by law. The petitioner shall notify the Board promptly of any further application with respect to such permit and of any further agency action upon any such application or permit.

5. The Petitioner shall comply with the terms and conditions of the disposal facility certification issued on November 3, 1980 by the Vermont Agency of Environmental Conservation and shall at all times during the construction and operation of the facility maintain in effect such permit or any similar permit required by law. The Petitioner shall notify the Board promptly of any further application with respect to such permit and of any further agency action upon any such application or permit.

6. Within one year after the commencement of commercial operation of the facility, the Petitioner shall present to the Board for its approval a detailed plan for the disposal of wood ash for use after the on-site disposal facility has been fully utilized.

7. Not less than 75% of all wood fuel to be consumed by the facility shall be delivered to the plant site by railway.

8. All agreements between the Petitioner and other parties for the delivery of wood fuel by truck shall be in writing and shall provide that no fuel trucks may enter or utilize the five-corners intersection, so called, in Essex Junction, Vermont between the hours of 7:00 A.M. and 8:30 A.M. nor between the hours of 4:00 P.M. and 5:30 P.M., Mondays through Fridays, inclusive, holidays excepted, and that no such trucks may enter or utilize streets or highways within the Cities of Burlington or Winooski on Sundays or before 6:30 A.M. or after 9:30 P.M. on any other day. Violation of any such provision shall expressly be made a cause for cancellation of such agreements, and in the case of any such violation, then, at the discretion of the Petitioner or upon order of this Board, such termination shall be effected. The Petitioner shall promptly notify the Board of any violation of such provisions of which it becomes aware. Copies of all agreements for delivery of wood fuel by truck shall be furnished to the Board promptly upon the execution thereof.

9. No fuel shall be off-loaded at the facility from any truck or railway car on Sundays or before 7:00 A.M. or after 9:00 P.M. on any other day.

10. All agreements between the Petitioner and other parties for the harvesting of woodchip fuel shall be in writing and shall provide that the harvester shall (a) advise the Vermont Department of Fish and Game in advance of the location of harvesting operations; (b) adhere to the recommendations of the Vermont Department of Fish and Game regarding cutting near deer yards, wetlands or the habitat of any endangered species; (c) comply with all applicable environmental protection standards

established under state or federal law; (d) limit clear cutting to 25 acres or less except in genuine cases of land use conversion, and in all such cases, the harvester shall advise the Petitioner sufficiently far in advance to permit the Petitioner to verify that the conversion is in fact genuine; and (e) comply with all terms and conditions of "Harvesting Policy for Whole Tree Chipping Operations in Vermont (Second Revised Draft)" as set forth in Petitioner's Exhibit No. 101. Violation of any such provision shall expressly be made a cause for cancellation of such agreements and, in the case of any such violation, then, at the discretion of the Petitioner or upon order of this Board, such termination shall be effected. The Petitioner shall promptly notify the Board of any violation of such provisions of which it becomes aware. Copies of all agreements for harvesting of woodchip fuel shall be furnished to the Board promptly upon the execution thereof. Not later than the first day upon which woodchip harvesting commences, the Petitioner shall have and maintain a staff of not less than 11 professional foresters to monitor the provisions of this paragraph.

11. Acoustic louvers shall be installed on all plant building openings. All outdoor pumps shall be enclosed to minimize site noise. Wood fuel at the site shall be handled by a front end loader or other equipment having a maximum noise rating of 77 dBA at a distance of 50 feet. The acoustic noise levels of major pieces of plant equipment shall be given significant weight in evaluating their acceptability for use at the plant.

12. The Board recommends that, with the permission of the property owners, the Petitioner purchase and install air conditioners for these residences on Manhattan Drive and Intervale Road

which are likely to be substantially affected by site generated noise. The Board further recommends that, in the case of any severely affected properties, the Petitioner investigate the desirability of the negotiation of noise easements or the purchase of the properties.

13. Within twelve months from the date of this certificate, the Petitioner shall file a petition under 30 V.S.A. §248 for a certificate of public good for transmission facilities to transmit power from the proposed facility to the VELCO transmission grid.

14. The Board shall retain continuous jurisdiction over plant construction, operation, emissions, discharges, shut down, decommissioning, fuel harvesting, fuel procurement and fuel delivery and may require any and all such changes as it may in its discretion determine to be necessary to protect the public health, safety and welfare or the natural environment.

Dated at Montpelier, Vermont this 14th day of September, 1981.

)	
)	PUBLIC SERVICE
s/ Rosalyn L. Hunneman)	BOARD
)	
s/ Samuel S. Bloomberg)	OF VERMONT

OFFICE OF THE CLERK

FILED: September 14, 1981

ATTYST: s/ Susan M. Hudson
Clerk of the Board

Burlington Electric Department

Harvesting Policy for Whole Tree Chipping Operations in Vermont.

2nd Revised Draft

It will be the policy of Burlington Electric Department to accept delivery of whole tree chips only from harvesting operations in Vermont certified by a professionally trained forester as meeting the criteria of "good forestry practice" as outlined below. Burlington Electric Department foresters or their authorized agents will conduct periodic on-site inspections to insure compliance with the following practices. Unresolved violation of these practices will result in the termination of chip purchase from the offending producer.

1. The use of necessary and applicable erosion and sedimentation control practices will be required. Every harvesting contractor will become familiar with the publication Guides for Controlling Soil Erosion and Water Pollution on Logging Jobs in Vermont. Contractors will be required to implement procedures outlined in the guide to the satisfaction of Burlington Electric Department foresters.
2. Consideration for visual quality will be required.
 - A. All refuse will be removed from the landing/logging site prior to termination of the operation.
 - B. Appropriate techniques will be used adjacent to major hiking trails to protect the integrity of the trail and the hiking experience. Trail treadways will be kept clear of logging debris. Crossing of trails by logging vehicles will be at right angles and kept to the minimum number necessary. Cutting within 50 feet of either side of major trails will be limited to the removal of high risk trees or the removal of less than 30%

of the basal area of existing trees greater than 5 inches DBH, whichever is less.

- C. Landings will be laid out so as to reduce adverse visual impact. Newly constructed landings along public highways will be screened by a strip of undisturbed vegetation at least 25 feet wide when such vegetation exists. Where open areas or abandoned landings are suitable for use as landings, they will be so used in spite of the lack of a buffer strip, so as to reduce the amount of area cleared for such use.
- 3. Wildlife and fisheries will be given consideration in harvesting planning.
 - A. Landowners will be made aware of wildlife and fishery options and impacts in determining management goals.
 - B. Burlington Electric Department foresters will refer to maps furnished to B.E.D. by the Vermont Fish and Game Department in July 1980, and as from time to time amended, to determine if scheduled harvest areas coincide with bonafide deer wintering areas as delineated by the Vermont Fish and Game Department. In the event such areas do coincide, guidance in harvest planning will be sought from a Vermont Fish and Game Department wildlife biologist or other trained wildlife biologist prior to the commencement of harvesting.
 - C. Modification or curtailment of normal harvesting practices will be required where adverse impacts would otherwise be felt on species recognized by the Vermont Fish and Game Department as rare or endangered.
 - D. When landowner goals require silvicultural manipulation for wildlife management purposes, guidance may be sought from the Vermont Fish and

Game Department or other qualified source as well as the publication A Landowners Guide to Wildlife Habitat Management for Vermont Woodlands by the Vermont Fish and Game Department.

- E. Protection of fisheries resources will be provided through the use of acceptable erosion and sedimentation control practices including the use of filter strips and protection of streamside shade. Harvesting contractors will be required to implement applicable procedures outlined in the publication Guides for Controlling Soil Erosion and Water Pollution on Logging Jobs in Vermont to the extent specified by Burlington Electric Department foresters.
4. Burlington Electric Department foresters will seek guidance in protecting significant archeological sites. Such guidance will be provided by the Vermont Division for Historic Preservation in the form of State-sponsored training to aid in on-the-ground identification of such sites and/or in the form of guidance from the Division of Historic Preservation in the determination of the likelihood of occurrence of significant archeological deposits within areas scheduled for harvesting. Burlington Electric Department will require the modification or termination of harvesting in areas thought to be archeologically significant by the Division of Historic Preservation until such time as examination of the area has been completed. Burlington Electric will also make the landowner aware of significant archeological sites on his property and aid him in adjusting his management decisions to protect such sites.

5. Timber Harvesting -

The development of management goals will involve consideration of;

- A. The objectives of the landowner and alternatives available to him.
- B. The characteristics of the site and forest stand.
- C. The impacts on related resources (water quality, wildlife, scenic quality, recreation).

The landowner or land manager, the harvesting contractor, and a professional forester representing Burlington Electric Department will confer in developing a harvesting procedure which meets the foresters approval. In all cases, harvesting will incorporate to the extent reasonably possible, the protection of residual trees, minimization of waste and assurance of rapid and adequate regeneration. Every effort will be made to see that higher value products are separated and put to their best use.

In developing specific silvicultural techniques for meeting management goals, reliance will be placed on a combination of the foresters' professional judgement and recognized silvicultural guides including but not limited to;

- A. A Silvicultural Guide for Northern Hardwoods in the Northeast by Leak, Solomon and Filip.
- B. A Silvicultural Guide to White Pine in the Northeast by Lancaster and Leak.
- C. A Silvicultural Guide for Spruce-Fir in the Northeast by Frank and Bjorkhom.

- D. A Silvicultural Guide for Developing a Sugarbush by Lancaster, Walters, Laing and Foulds.
- E. Uneven-Aged Management of Northern Hardwoods in New England by Leak and Filip.
- F. A Landowner's Guide to Wildlife Habitat Management for Vermont Woodlands by Vermont Fish and Game Department.
- G. Manager's Handbook for Red Pine in the North Central States by North Central Forest Experiment Station, U.S.D.A. Forest Service.
- H. A Guide to Hardwood Timber Stand Improvement by U.S.D.A. Forest Service, Northeastern Area State and Private Forestry.
- I. Establishing Even-Age Northern Hardwood Regeneration by the Shelterwood Method - A Preliminary Guide by North Central Forest Experiment Station, U.S.D.A. Forest Service.

Specific types of cutting will include,

- A. The Selection System - A silvicultural system involving the removal of trees of all sizes singly or in groups, at regular intervals resulting in an uneven-aged stand. This system involves a continuous forest cover and favors shade - tolerant species.
- B. The Seed Tree System - A silvicultural system involving the retention of a very light stocking of selected trees after an initial cut. The role of the residual trees is to furnish seed for the next crop. This system results in an even-aged stand.

- C. The Shelterwood System - A silvicultural system that involves the removal of the overstory in several stages. The partial overstory removal provides favorable conditions for the establishment of regeneration. The residual overstory is removed after the new stand is well-established. Shelterwood cutting also results in an even-aged stand and modified forms of it have found favor with many New England foresters.
- D. The Clearcutting System - A silvicultural system which involves the harvesting in one cut of all trees larger than 2 inches in diameter on an area and results in an even-aged stand. The size and configuration of the cut area is variable (even to as small as a fraction of an acre). Clearcutting is recognized to be useful in certain silvicultural and wildlife management situations. However, due to public sensitivity, only modified forms of clearcutting will be allowed by B.E.D. (narrow progressive strips and small blocks under 25 acres in size). It should be noted that land clearing operations involving land use conversions do employ larger clearcut openings. However, the objective in such cases is not future timber production.
- E. Improvement Cut - An improvement cut is an intermediate cut which can be prescribed by a forester as part of either of the previously mentioned silvicultural systems and can be carried out at various times during the rotation (in even-aged stands) or as part of the regeneration cut (in the Selection System). The objective of an improvement cut is the reduction

of low-value and low-potential-value stand components through the removal of poorly formed stems and less valuable species.

- F. Thinning - Thinning is an intermediate cut prescribed by a forester to reduce the level of tree stocking to a recommended level in order to concentrate tree growth on fewer but selected stems.

It should be noted that due to variability in forest stands as a result of site conditions and past treatment, it will often be necessary to incorporate more than one of the above-mentioned types of cutting within a single woodlot. In addition, dependent upon the intensity of past high-grading, it will often be necessary to leave numerous poor quality trees uncut in order to maintain recommended stocking levels.

6. Harvesting contractors will be expected to abide by all applicable local, State and federal regulations including but not limited to;
 - A. Occupational safety and insurance coverage.
 - B. Forest fire prevention and control.
 - C. Protection of property of others.
 - D. Water quality protection.
 - E. Harvesting and transportation of forest products.
7. Landowners will be made aware of the desirability of having a stumpage sale contract outlining the details of the harvest operation. If the landowner elects to utilize such a document, the harvesting contractor will be required to meet the terms of that contract.