COMMONWEALTH OF MASSACHUSETTS
Energy Facilities Siting Board

Petition of Russell Biomass, LLC. and Western Massachusetts Electric Company	)	EFSB 07-4/D.P.U. 07-35/07-36

FINAL DECISION

Stephen H. August
Presiding Officer
April 21, 2009

On the Decision:
William Febiger
Enid Kumin
John Young

ABBREVIATIONS

alternative route underground design	underground construction in Russell Village and along U.S. Route 20
Companies	Russell Biomass, LLC and Western Massachusetts Electric Company
CSX Route	Route Alternative 3, along the CSX railroad line
Department	Department of Public Utilities
kV	kilovolt
kV/m	kilovolts per meter
MADEP	Massachusetts Department of Environmental Protection
MADFW	Massachusetts Division of Fish and Wildlife
MEPA	Massachusetts Environmental Policy Act
mG	milligauss
MHC	Massachusetts Historical Commission
MHD	Massachusetts Highway Department
Montgomery underground design	underground construction of the portion of the route in Montgomery
MW	megawatt
NHESP	Massachusetts Natural Heritage and Endangered Species Program
Northern Approach	Connection at 115 kV to existing WMECo substation in Blandford
Petitioners	Russell Biomass, LLC and Western Massachusetts Electric Company
primary route underground design	underground construction of the entire 5.3 miles of primary route
Project	5.3-mile transmission line plus switching station
ROW	right-of-way
Russell Biomass	Russell Biomass, LLC
Siting Board	Energy Facilities Siting Board
Southern Approach	Connection at 115 kV to WMECo's #1512 line in Westfield
WMECo	Western Massachusetts Electric Company
Berkshire Gas Decision	Berkshire Gas Company, 25 DOMSC 1 (1992)
Berkshire Power	Berkshire Power Development, Inc., D.P.U. 96-104 (1997)
Boston Gas	Boston Gas Company, D.T.E. 00-24 (2001).

Braintree	Planning Board of Braintree v. Department of Public Utilities, 420 Mass. 22 (1995).
Cape Wind Decision	Cape Wind Associates, LLC/Commonwealth Electric Company d/b/a NSTAR Electric Company, 15 DOMSB 1 (2005).
CELCO Decision	Cambridge Electric Light Company, 12 DOMSB 305 (2001).
MECo (2002)	Massachusetts Electric Company, D.T.E. 01-77 (2002).
MMWEC Decision	Massachusetts Municipal Wholesale Electric Company, EFSB 07-6 (2008).
New York Central Railroad	New York Central Railroad v. Department of Public Utilities, 347 Mass. 586 (1964).
Nextel Decision	Dispatch Communications of New England d/b/a Nextel Communications, Inc., D.P.U./D.T.E. 95-59-B/95-80/95-112/96-113 (1998).
Save the Bay	Save the Bay, Inc. v. Department of Public Utilities, 366 Mass. 667 (1975).
Tennessee Gas (2002)	Tennessee Gas Pipeline Company, D.T.E. 01-57 (2002)
Town of Truro	Town of Truro v. Department of Public Utilities, 365 Mass. 407 (1974).
1997 BECo Decision	Boston Edison Company, 6 DOMSB 208 (1997).
1998 NEPCo Decision	New England Power Company, 7 DOMSB 333 (1998).

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Pursuant to G.L. c. 164, § 69J, the Energy Facilities Siting Board hereby approves, subject to the conditions set forth below, the joint petition of Russell Biomass, LLC and Western Massachusetts Electric Company for approval to construct a 115 kV transmission line, approximately 5.3 miles in length, and an associated 115 kV switching station, for the purpose of interconnecting a proposed 50 megawatt wood-burning generating facility in Russell, Massachusetts, with the regional electric grid in New England. The Siting Board also grants the Petitioners exemptions from certain provisions of the Zoning By-Laws of the Towns of Russell and Montgomery and the City of Westfield, and denies exemptions from other Zoning By-Law provisions of these municipalities. The Siting Board grants the Petitioners' request for approval pursuant to G.L. c. 164, § 72.

I. INTRODUCTION

A. Summary of the Proposed Project

The proposed project ("Project") consists of (1) an approximately 5.3-mile, 115 kilovolt ("kV") transmission line from the proposed Russell Biomass generating facility in Russell to Western Massachusetts Electric Company's ("WMECo") transmission system in Westfield, and (2) a new switching station facility in Westfield. The transmission line would travel through Russell, Montgomery and Westfield to the proposed new switching station in Westfield, which would be connected to the existing 115 kV WMECo #1512 transmission line in Westfield (Exh. JP-1, at 1-1). The Project would be constructed by Russell Biomass, LLC ("Russell Biomass"), and owned and operated by WMECo.

B. Procedural History

On May 7, 2007, pursuant to G.L. c. 164, § 69J, Russell Biomass and WMECo, a subsidiary of Northeast Utilities (together, "Petitioners" or "Companies") jointly filed a petition with the Energy Facilities Siting Board ("Siting Board") for approval to construct an approximately 5.3-mile 115 kV transmission line and ancillary facilities in the Towns of Russell and Montgomery and in the City of Westfield, and ancillary facilities, including a switching station, in Westfield. This matter was docketed as EFSB 07-4.

On May 10, 2007, the Petitioners filed with the Department of Public Utilities ("Department"): (1) a petition for individual zoning exemptions and a comprehensive zoning exemption, pursuant to G.L. c. 40A, § 3, from Russell, Montgomery and Westfield for the proposed Project; and (2) a petition, pursuant to G.L. c. 164, § 72, for authority to construct and operate the Project. The Department docketed the zoning exemption petition as D.P.U. 07-35, and docketed the § 72 petition as D.P.U. 07-36.

On May 30, 2007, pursuant to G.L. c. 25, § 4, the Department issued a Consolidation Order, which referred the two Department dockets to the Siting Board for review together with the Siting Board docket, and consolidated the three dockets into a single proceeding, Russell Biomass/Western Massachusetts Electric Company, EFSB 07-4/D.P.U. 07-35/07-36. Accordingly, the Siting Board conducted a single adjudicatory proceeding, and a single evidentiary record was established.

On August 24, 2007, the Presiding Officer granted the petitions to intervene of the Town of Montgomery, the City of Westfield, Christian Lent, Thomas and Elizabeth O'Connor, Brian Janik, and Richard and Brenda Scott. The Presiding Officer also granted limited participant status to Sarah Underwood, James E. and Robin L. Unger, Christopher R. Davis, and the Jacob's Ladder Scenic Byway Advisory Board.

The Siting Board held evidentiary hearings on January 15, January 22, January 24, January 25, and February 26, 2008. The Petitioners presented the testimony of eight witnesses: James Ramsey, a partner in Russell Biomass, who presented testimony regarding project development and permitting issues; Robert Fralley, Jr., President of Fralley Electric Utility Consultants, who presented testimony on technical and engineering aspects of the Project as they relate to the Petitioners' project approach analysis, route and site selection process, electric and magnetic field levels, and the cost and reliability analysis of the primary and noticed alternative routes; Rebecca L. Sherer, P.E., an associate at Tighe & Bond, Inc., who testified with respect to environmental issues concerning the Petitioners' project approach analysis, route and site selection process, and the environmental analysis of the primary and noticed alternative routes; Daniel E. Peaco and Mon-Fen Hong, consultants with LaCapra Associates, who testified with respect to public benefits of the proposed project; Kenneth B. Bowes, vice-president of operations for Northeast Utilities, who testified on technical and engineering aspects of the

proposed project; Eric J. Las, an associate with Beals and Thomas, Inc., who testified regarding rare species and wetlands issues; and Tracy J. Adamski, a senior environmental scientist and planner with Tighe & Bond, Inc., who testified with respect to land use and zoning issues.

The City of Westfield presented two witnesses: Thomas E. Converse, a vice-president of New England operations for SourceOne, who provided testimony on project approach analysis and analysis of switching station sites; and Lawrence B. Smith, a city planner for the City of Westfield, who testified concerning the City of Westfield's zoning ordinance.

Over 200 exhibits were entered into the evidentiary record. On April 11, 2008, the City of Westfield and the Town of Montgomery filed initial briefs, followed by the initial brief of the Petitioners on April 18, 2008. The City of Westfield and the Town of Montgomery filed reply briefs on April 25, 2008, and the Petitioners filed their reply brief on May 2, 2008.

The Siting Board staff issued a bench memorandum on September 19, 2008. The Siting Board met on September 25, 2008, and October 2, 2008, to consider the Petitioners' petition. At the meeting on October 2, 2008, the Siting Board, by a unanimous vote, directed the staff to draft a Tentative Decision approving, with conditions, the petition of Russell Biomass and WMECo (October 2, 2008, Siting Board meeting, Tr. at 5-46).

C. The Northern Approach and the Southern Approach

Among potential approaches to interconnect to the Russell Biomass facility, the Petitioners described possible construction of 115 kV transmission lines originating at the Russell Biomass facility and going either south or north. The approach favored by the Petitioners would consist of an approximately 5-mile, overhead, transmission line from the Russell Biomass facility to a new switching station connecting with WMECo's #1512 existing transmission line in Westfield ("Southern Approach") (Exh. JP-1, at 3-4). The alternative approach would consist of an approximately 10-mile overhead radial 115 kV line from the proposed generating facility in Russell to an existing WMECo substation in Blandford, Massachusetts ("Northern Approach") (id. at 3-1 to 3-15).

D. The Primary Route and Alternative Route

Among potential routes that could be used for the Southern Approach, the Petitioners provided public notice of two route alternatives, the Companies' preferred route ("primary

route") and the noticed alternative route [1] ("Alternative Route"). The primary route begins at the proposed Russell Biomass facility location, extends 5.3 miles south and east through Russell, Montgomery, and Westfield on a route which is east of both the Westfield River and the CSX railway line, crossing over the Massachusetts Turnpike and continuing eastward on a cleared utility right-of-way ("ROW") to an interconnect with WMECo's #1512 line in Westfield (Exh. JP-1, at 1-1).

The Alternative Route extends within the U.S. Route 20 ROW, which generally parallels the west bank of the Westfield River and is designated the Jacob's Ladder Trail Scenic Byway through a portion of this route (id. at 1-13). The Alternative Route passes through Russell and Westfield, but does not enter Montgomery. The transmission line would cross the Westfield River from the Russell Biomass site and pass through the residential neighborhoods of Russell Village to intersect with U.S. Route 20. The line would then continue south and easterly along U.S. Route 20 to the intersection with the WMECo #1512 transmission line (id.). There is currently an active above-ground distribution line within the U.S. Route 20 ROW. The Alternative Route is approximately 5.2 miles long (id. at 1-14).

E. Primary Route Variations

The primary route initially included three variations ("route variations") within the northern portions of the route in Russell and Montgomery, as well as two possible switching station sites at the southern terminus of the route in Westfield. The route variations were designated as Route Variations 1a, 1b, and 1c. Route Variation 1a was later modified because the Petitioners were unable to reach an agreement with the CSX Railroad (becoming "Route Variation 1a modified") and Route Variation 1b subsequently was withdrawn by the Petitioners. The switching station sites were designated S-1 and S-2.

Route Variation 1a modified and Route Variation 1c, the two variations of the primary route, travel distinct paths along Shatterack and Tekoa Mountains between the proposed Russell

[1] A Siting Board petition to construct a jurisdictional transmission line must present both the applicant's primary route and at least one alternative to that route (alternative route). Published notice of each route is required, and only a route that has been noticed may be approved by the Siting Board.

Biomass facility and an intermediate route point where the two remaining variations converge in Montgomery about 700 feet north of the Massachusetts Turnpike, from which the remainder of the primary route continues along an existing WMECo right-of-way to WMECo's #1512 line in Westfield, a distance of approximately 1.9 miles (Exh. EFSB-SS-11). An active 23 kV distribution line is located along approximately the last mile of this common segment. A map showing the primary route variations is attached as Figure 1.

F. Switching Stations

The Petitioners presented two alternative sites, Switching Station S-1 and Switching Station S-2, for the proposed switching station associated with the primary route (Exh. JP-1, at 4-17). The ultimate switching station site for the primary route would be the same regardless of whether Route Variation 1a modified or Route Variation 1c of the primary route is used for the Project.

Switching Station S-1 would be located on a 2.1-acre site located slightly northwest of the interconnection of the proposed transmission line with WMECo's existing 115 kV #1512 transmission line for this alternative (id.). Access to this location would be from the east and would require the use of an existing private road, approximately 1800 feet from the end of Furrowtown Road. No residences or other developments are located in the vicinity of Switching Station S-1 (id. at 4-17, 4-18).

Switching Station S-2 would be located on a 7.8 acre site located approximately 700 feet west of the interconnection of the existing WMECo easement and the 115 kV #1512 transmission line (Exh. JP-1, at 4-18). The proposed switching station would be located to the south of the proposed transmission line and north of the existing #1512 line. Access to this location would be either the same as the access for Switching Station S-1 or from the southwest from Pochassic Road. No residences or other developments are located in the vicinity of Switching Station S-2 (id.). The Petitioners seek Siting Board approval for both switching station alternatives (Exh. JP-1, at 1-14).

G. Jurisdiction and Scope of Review

The Petitioners filed their petition to construct the proposed transmission project pursuant to G.L. c. 164, § 69H, which requires the Siting Board to implement its statutory authority so as

to provide a reliable energy supply for the Commonwealth with a minimum impact on the environment at the lowest possible cost, and pursuant to G.L. c. 164, § 69J, which requires a project applicant to obtain Siting Board approval for the construction of proposed energy facilities before a construction permit may be issued by another state agency.

As a new electric transmission line with a design rating of 69 kV or greater and a length in excess of one mile, the Company's proposed project falls within the definition of "facility" set forth in G.L. c. 164, § 69G, which provides that the definition of a "facility" includes:

> a new electric transmission line having a design rating of 69 kV or more and which is one mile or more in length on a new transmission corridor.

In accordance with G.L. c. 164, § 69J, before approving a petition to construct facilities, the Siting Board requires an applicant to justify its proposal in three phases. First, the Siting Board requires the applicant to show that additional energy resources are needed (see Section II.A, below). Next, the Siting Board requires the applicant to establish that, on balance, its proposed project is superior to alternative approaches in terms of cost, environmental impact, reliability and ability to address the identified need (see Section II.B, below). Finally, the Siting Board requires the applicant to show that it has considered a reasonable range of practical facility siting alternatives and that the proposed site for the facility is superior to a noticed alternative site in terms of cost, environmental impact, and reliability of supply (see Sections III.C and III.D, below).

II. PROPOSED PROJECT

A. Need

1. Standard of Review

The Siting Board's review of proposed transmission facilities is conducted pursuant to G.L. c. 164, § 69J. The Siting Board requires an applicant seeking to construct a transmission line to interconnect a new or expanded generating facility to show: (1) that the existing transmission system is inadequate to interconnect the new or expanded generator; and (2) that the new or expanded generator is likely to be available to contribute to the regional energy supply. Cape Wind Associates, LLC/Commonwealth Electric Company d/b/a NSTAR Electric

Company, 15 DOMSB 1, at 29 (2005) ("Cape Wind Decision").[2] If the new or expanded generator exists, or is under construction, the availability showing will be deemed to have been made. If the generator is planned, and is subject to the Siting Board's jurisdiction, that showing may be made by obtaining the Siting Board's approval of the generating facility. Cambridge Electric Light Company, 12 DOMSB 305, at 316-317 (2001) ("CELCo Decision"); ANP Blackstone Energy Company, 8 DOMSB 1, at 201-203 (1999). If the generator is planned, and not subject to the Siting Board's jurisdiction, the showing may be made on a case-by-case basis based on indicators of project progress (e.g., progress in permitting or in obtaining project financing). Cape Wind Decision at 28-29.

2. Adequacy of Existing Transmission System

The Petitioners stated that, without the proposed transmission line, there would be no means by which to deliver energy from the proposed 50 megawatt ("MW") (nominal net design output) Russell Biomass generating facility to potential customers (Exh. JP-1, at 1-1, 2-3). The Petitioners stated that existing circuits that supply Russell customers are not adequate to deliver the energy from the proposed generating facility (Exhs. EFSB-N-1; EFSB-N-3).

3. Permitting Status of Proposed Generating Facility

The Petitioners stated that Russell Biomass is in the process of obtaining the permits and approvals necessary to construct and operate the proposed Russell Biomass generating facility (Exh. JP-1, at 2-6). As of May 2007, Russell Biomass had filed an air permit application with the Massachusetts Department of Environmental Protection ("MADEP"), a permit application for water withdrawal with the MADEP, and a National Pollutant Discharge Elimination System ("NPDES") permit with the U.S. Environmental Protection Agency (id. at 2-8). The Petitioners indicated that there are a number of other required permits for the proposed generating facility, including a wetlands Order of Conditions from the Russell Conservation Commission, a Beneficial Use Determination from the MADEP for ash reuse, a Section 404 Clean Water Act

[2] The Cape Wind Decision was affirmed on appeal in Alliance to Protect Nantucket Sound v. Energy Facilities Siting Board, 448 Mass. 45, at 53 (2006).

permit from the U.S. Army Corps of Engineers, a Chapter 91 License from the MADEP for an intake/discharge structure at the Westfield River, and stack registration with the Federal Aviation Administration (id. at 2-6). In January 2008, the Petitioners indicated that they were in the midst of working with the MADEP in furthering air, water, and wetlands permitting (Tr. 1, at 25-28). On March 28, 2008, the project received a Certificate on its Final Environmental Impact Report (Exh. EFSB-G-5(S)2).

The Department recently issued orders conditionally granting in part, but denying in part, the request of Russell Biomass for a zoning exemption from certain Town of Russell zoning by-laws for the generation portion of the project. Russell Biomass, D.P.U. 06-60 (2008); Russell Biomass, D.P.U. 06-60-A (2009). However, the Department's decision, while granting only some exemptions, did not preclude the siting, construction, or operation of the proposed Russell Biomass generating facility project; the Petitioners may ultimately obtain outstanding zoning approvals and reach an agreement concerning fire response, traffic and other matters for the project to the satisfaction of the Town of Russell. Russell Biomass, D.P.U. 06-60, at 82.

4. Analysis

Pursuant to the standard of review set forth above, the Siting Board requires an applicant seeking to construct a transmission line to interconnect a new or expanded generating facility to show: (1) that the existing transmission system is inadequate to interconnect the new or expanded generator; and (2) that the new or expanded generator is likely to be available to contribute to the regional energy supply.

With respect to the first element of the standard of review, the record indicates that Russell Biomass is proposing to build a 50 MW electric generating facility in Russell, Massachusetts. The record indicates that there is insufficient transmission capacity to transmit the output of the proposed generating facility to the regional transmission grid. The Siting Board therefore finds that the existing transmission system is inadequate to interconnect the proposed Russell Biomass generating facility.

The proposed Russell Biomass generating facility has not yet obtained all necessary project permits, and is not yet under construction. Therefore, to establish that the facility is likely to be available to contribute to the regional energy supply, the Siting Board directs the

Petitioners to submit to the Siting Board copies of all permit approvals required for the Petitioners to begin construction of the proposed generating facility in Russell. Consistent with our standard of review, the Siting Board finds that at such time as the Petitioners comply with this condition, the Petitioners will have demonstrated that there is a need for additional transmission resources to interconnect the Russell Biomass facility with the regional transmission grid. The Petitioners may not commence construction of the proposed transmission project until they have complied with this condition.

B. Comparison of the Proposed Project and Alternative Approaches

1. Standard of Review

General Laws, c. 164, § 69H requires the Siting Board to evaluate proposed projects in terms of their consistency with providing a reliable energy supply to the Commonwealth with a minimum impact on the environment at the lowest possible cost. In addition, G.L. c. 164, § 69J requires a project proponent to present "alternatives to planned action" which may include: (a) other methods of generating, manufacturing, or storing electricity or natural gas; (b) other sources of electrical power or natural gas; and (c) no additional electric power or natural gas.[3] Cape Wind Decision at 21, citing CELCo Decision at 321; Boston Edison Company, 6 DOMSB 208, at 252 (1997) ("1997 BECo Decision").

In implementing its statutory mandate, the Siting Board requires a petitioner to show that, on balance, its proposed project is superior to alternative approaches in terms of cost, environmental impact, and ability to meet the identified need. Cape Wind Decision at 21, citing CELCO Decision at 321; 1997 BECo Decision at 252. In addition, the Siting Board requires a petitioner to consider reliability of supply as part of its showing that the proposed project is superior to alternative project approaches. Cape Wind Decision at 21-22.

[3] General Laws, c. 164, § 69J also requires a petitioner to provide a description of "other site locations." The Siting Board reviews the Petitioners primary route, as well as other possible routes, in Section III, below.

2. Identification of Project Approaches for Analysis

The Petitioners considered options for interconnecting with the regional grid by extending a transmission interconnection in several different directions from the Russell Biomass site. The Petitioners identified six other substations within a 10-mile radius of the proposed Russell Biomass generating facility site (Exhs. EFSB-PA-5; EFSB-PA-2; Tr. at 255).[4] The Petitioners evaluated each of these possible substations based on various selection criteria including the existence of current easements; significant topographical features; proximity to private homeowners; and the presence of natural features such as protected species and habitat, drinking water supply watersheds, and recreational/conservation open areas (Exh. EFSB-PA-5). Based on this evaluation, the Petitioners concluded that only one of these substations (the Blandford Substation) would offer a feasible interconnection point (id.).[5]

We find the Petitioners' conclusion reasonable, and with the exception of the Blandford Substation, other interconnection points do not warrant further consideration. The Siting Board also finds that the interconnection via either the proposed approach, or via an alternative approach that would connect to the Blandford Substation would meet the identified need, and these approaches may provide potential tradeoffs between reliability, environmental impacts and cost worthy of further analysis. Therefore, in the following sections, the Siting Board compares the two approaches with respect to reliability, environmental impacts, and cost.

The proposed approach would consist of an approximately 5-mile, overhead, radial 115 kV transmission line from the proposed biomass generating facility in the Town of Russell

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4 The six substations within a ten-mile radius of the Russell Biomass facility are Blandford 19J to the west, Cobble Mountain 18F to the south, and Buck Pond 34B, Gunn 15A, Elm 22G and Pochassic 37R substations to the east (Exh. EFSB-PA-2). The Cobble Mountain and Elm substations are not owned by WMECo (id.).

5 The Petitioners indicated that voltages other than 115 kV were considered for the proposed project, and stated that a 46 kV or 69 kV line could be adequate to carry power from a 50-MW generator (Exh. EFSB-PA-1; Tr. 2, at 253-254). However, the Petitioners stated that only the 115 kV transmission system in the region is extensive enough to provide a robust set of electrical pathways for the power that would be produced (Tr. 2, at 255). The Petitioners indicated that using a 46 kV or 69 kV transmission voltage for the proposed Project would require installation of a step-up transformer where the proposed Project meets existing 115 kV transmission lines (Exh. EFSB-PA-1; Tr. 2, at 252-253).

to a switching station connecting with WMECo's #1512 existing transmission line in Westfield (the Southern Approach)[6]. The Southern Approach would include the construction of a new switching station as well as new transmission to connect the generating project with WMECo's existing 115 kV #1512 transmission line (Exh. JP-1, at 3-4, 3-6). As noted on page 5, above, the switching station would be located at proposed Switching Station S-1, a 2.1-acre site in Westfield, or proposed Switching Station S-2, a 7.8-acre site in Westfield. The alternative approach would consist of an approximately 10-mile overhead radial 115 kV line from the proposed generating facility in Russell to an existing WMECo substation in Blandford, Massachusetts (the Northern Approach) (Exh. JP-1, at 3-1 through 3-15).

The Northern Approach would follow an existing easement northerly and westerly from the proposed biomass generating facility approximately 10 miles to connect with an alternative existing 115 kV transmission line, the #1421/1512 line, at an existing substation in Blandford (Exh. JP-1, at 3-6, 3-11). The Northern Approach would extend northerly from the Russell Biomass project, to the east of Montgomery Road in Russell and Carrington Road in Montgomery (id. at 3-7, 3-11). The approach would then follow the existing easement westerly, crossing the Westfield River Main Stem and the West Branch in Huntington, then turning southerly into Blandford (id.). Approximately 6 miles of the existing easement contains an active 23-kV distribution line (Exh. COW-RR-2). Of these 6 miles, 0.7 miles of existing easement would require the acquisition of an additional 50 feet of right-of-way to accommodate both the 23 kV and new 115 kV lines. (id.).

The Petitioners also considered an alternative design involving underground construction of the Southern Approach under two different scenarios, an underground alternative where (1) the entire route would be constructed underground, and (2) only a portion of the route, on Tekoa Mountain in Montgomery, would be constructed underground. We consider these underground design alternatives in Section III.D.2.g and III.D.2.i.i below.

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6 The Southern Approach is not a single specific route, but instead is intended to encompass the several different possible "southern" routes, including: (1) the Petitioners' primary routes along the west side of the Shatterack and Tekoa Mountains, then over the Massachusetts Turnpike to a new switching station in Westfield; and (2) the Alternative Route along U.S. Route 20 (Exh. JP-1, at 1-10 through 1-14).

a. Reliability

i. Arguments of the Parties

The Petitioners argue that the 5-mile Southern Approach is more reliable than the 10-mile Northern Approach because it is only one-half as long (Petitioners Brief at 20-21). According to the Petitioners, a longer route would "inherently result in lower reliability of service" (Exh. COW-TI-4). Westfield's witness, Mr. Converse, testified that both lines would be classified as short lines that would have equal reliability (Tr. at 806). The Petitioners argued that the Siting Board has previously held that when comparing interconnect approaches, there is a reliability advantage associated with a shorter line (Petitioners Brief at 22, citing Cape Wind Decision at 39-41). In response, Westfield asserted that the Siting Board's comment in Cape Wind Decision did not relate to a shorter overhead line, but rather was directed to a length of submarine cable that was both shorter and less complex than the proffered alternative (Westfield Reply Brief at 15).

ii. Analysis

The Siting Board found in the Cape Wind Decision that the 32-mile length of the New Bedford marine line may make it a less reliable alternative than the use of a 9-12 mile submarine cable that would interconnect with the Barnstable Switching Station. Cape Wind Decision at 22-23. The Siting Board did not find, however, that a longer transmission line is inherently less reliable as a general principle. Every proposed transmission line and its alternatives raise their own unique facts and circumstances that must be evaluated on a case-by-case basis for the Siting Board to make appropriate findings concerning reliability. In this case, the record shows that the Southern Approach would be more reliable than the Northern Approach, due to the difference in their lengths, but that both routes are fairly short so this reliability difference would be small. Therefore, the Siting Board finds that the Southern Approach would be slightly advantageous to the Northern Approach with respect to reliability.

b. Environmental Impacts

Siting Board precedent requires a reasoned analysis of project approach alternatives, but does not prescribe the level of detail or methodology to be used by a petitioner to evaluate

project approach alternatives.[7] Initially, the Petitioners qualitatively compared the Northern and Southern Approaches with respect to: (i) impacts to vegetation/trees; (ii) wetlands; (iii) previously undisturbed soils; (iv) historic land and/or buildings; (v) rare or endangered species; (vi) state conservation lands; and (vii) scenic views and viewscapes (Exh. EFSB-PA-7-S). However, in response to a City of Westfield information request, the Petitioners provided a site selection screening analysis that included a comparison of the Northern Approach to the Southern Approach alternative routes, including Route Variation 1a modified (Exh. COW-SS-11). In this screening analysis the Petitioners assigned a numerical value to a set of screening criteria including: (1) technical feasibility; (2) land use/human environment; (3) natural environment; and (4) cost. Of these four categories, the specific criteria relating to environmental impacts are the following: (1) proximity to residences; (2) proximity to sensitive receptors; (3) historic/archeological; (4) open space/parklands; (5) hazardous and solid waste sites; (6) switching station impacts on the human environment; (7) visual impacts; (8) wetland resource areas; (9) rare and endangered species; (10) drinking water supplies; (11) tree and vegetation clearing; and (12) switching station impacts to the natural environment (Exh. COW-SS-11-1). Using these twelve criteria, the Petitioners calculated a score for the Northern Approach of 54, compared to the score of 33 calculated for Route Variation 1a modified within the Southern Approach (id.). As designed, a lower score represents less environmental impact from the Project than a higher score (Exh. JP-1, at Table 4-1). Table 1 sets forth the individual scores assigned by the Petitioners to the twelve criteria.

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[7] It would be difficult to create a single set of screening criteria that could be applied to project approaches that may differ significantly from each other. For example, if a petitioner were to compare a demand-side management alternative to the construction of a transmission line, the two approaches would share few characteristics (other than cost) that would permit selected criteria to be compared between the two project approaches.

Table 1. Transmission Route Scoring for Environmental Criteria

Screening Criteria	**Southern Approach (Route Variation 1a modified)**	**Northern Approach**
Proximity to residences	2	4
Proximity to sensitive receptors	2	2
Visual impacts	3	9
Historic/Archeological	2	4
Open space/parklands	2	2
Hazardous and solid waste sites	1	2
Switching facility impacts to human environment	2	2
Wetland resource areas	4	6
Rare and endangered species	6	6
Drinking water supplies	1	9
Tree and vegetation clearing	6	6
Switching Station impacts to natural environment	2	2
TOTAL	33	54

Exh. COW-SS-11-1.

i. Petitioners' Position

The following is a summary of the Petitioners' comparison of the impacts for each of these environmental elements.

Impacts to Vegetation/Trees

The Petitioners stated that the Northern Approach would require more extensive tree clearing along greater lengths of the utility corridor than would the Southern Approach (Exh. EFSB-PA-7-S at 2). The Southern Approach experienced a significant forest fire that resulted in the loss of a significant number of mature trees (id.). According to the Petitioners, as a result of the forest fire the Southern Approach would require clearing of successional trees and shrubs for

approximately 3 miles. By comparison, the Northern Approach will require the clearing of an additional 40 feet of vegetation for four miles of the corridor (id.).

Wetland Impacts

According to the Petitioners, the Southern Approach would require the crossing of four perennial streams: Shatterack Brook, Cooley Brook, Moose Meadow Brook, and an unnamed perennial stream (Exh. EFSB-PA-7-S at 2). The Northern Approach would cross nine perennial streams including the West and Main branches of the Westfield River, Beardon Brook, Roaring Brook, Gibbs Brook, Bedlam Brook, and three unnamed perennial streams (id.). Given that the Northern Approach is twice as long as the Southern Approach, and that there are significantly more perennial stream systems and proportionately more wetland resource areas, the Petitioners argue that the Northern Approach would have significantly more intersecting wetlands and correspondingly greater wetland impacts (id. at 3).

Historic Land and/or Buildings

The Petitioners stated that no historical buildings are likely to be affected by either route because both routes are located in areas where a minimal number of buildings are located (Exh. EFSB-PA-7-S at 3).

Rare or Endangered Species

The Massachusetts National Heritage and Endangered Species Program ("NHESP") mapping indicates that much of the Southern Approach is located within areas mapped for rare and endangered species, including much of its corridor from the proposed generating facility site to the proposed switching station area (Exh. EFSB-PA-7-S at 4). The Northern Approach also has mapped rare and endangered species in the corridor associated with and immediately adjacent to the Westfield River (id.). The Petitioners noted that since species mapped within the Northern Approach are associated only with the Westfield River, only temporary impacts to species, related to construction, are anticipated (id.). In contrast, the Petitioners stated that it is anticipated that some permanent impacts to species may result on the Southern Approach, and that a conservation management plan would be implemented with NHESP to mitigate these impacts (id.). Although the Petitioners gave the same score to both routes, the Petitioners stated that the impacts associated with the Southern Approach would be slightly more significant than those associated with the Northern Approach (id.).

State Conservation Lands

The Petitioners indicated that state conservation lands and protected lands are located along both routes (Exh. EFSB-PA-7-S at 4). The Southern Approach (on the primary route) is located within conservation land owned by the Massachusetts Division of Fish and Wildlife ("MADFW") (id.). The Northern Approach east of U.S. Route 20 and the Westfield River is within protected lands associated with Outstanding Resource Waters that are tributaries to public drinking water supplies (id. at 5). The Northern Approach intersects tributaries that feed the Black Brook Reservoir, a drinking water source for the Town of Russell (id. at 6). According to the Petitioners, the Northern Approach also intersects tributaries that feed Cobble Mountain Reservoir, a water supply for the City of Springfield, Massachusetts (id. at 5).

Scenic Views and Viewscapes

The Petitioners stated that the Northern Approach crosses both the West and Main branches of the Westfield River just south of the village of Huntington, where it is designated as a National Wild and Scenic River (Exh. EFSB-PA-7-S at 5). According to the Petitioners, the Northern Approach would also cross U.S. Route 20, which is designated as Jacob's Ladder Scenic Byway (id.). There are forty or more homes along the Northern Approach that are within 500 feet of the easement (id.). The Petitioners maintained that there are approximately 12 homes within the same proximity along the Southern Approach (id.).

According to the Petitioners, leaves will significantly obscure the view of the Southern Approach during the summer months, and it will also be difficult to see during the spring and fall for the same reason (Exh. EFSB-V-1). The corridor would become more visible in certain areas during the winter (id.). The elevation and location of the corridor would also affect its visibility (id.). The Petitioners state that portions of the Southern Approach may be visible during the winter months by residents in an estimated 50-75 homes primarily located in Woronoco Village and the easterly roadways of Russell Village, adjacent to the proposed biomass generating facility (Exh. EFSB-V-1). According to the Petitioners, a portion of the Southern Approach would be visible crossing West Road, in Westfield, and the Massachusetts Turnpike (Exh. EFSB-V-2). The Petitioners maintained that greater impacts are expected with respect to scenic views and viewscapes for the Northern Approach because the utility corridor along this

route crosses both a Wild and Scenic River and a Scenic Byway, and will be visible to significantly more homes along the route (Exh. EFSB-PA-7-S at 5).

Summary

Overall, the Petitioners maintained that the Northern Approach has greater environmental impacts than the Southern Approach with respect to vegetation/tree clearing, wetlands, drinking water resources and scenic views and viewscapes (Exh. EFSB-PA-7-S at 6). The Petitioners stated that among the potential environmental impacts, the Northern Approach would be preferable only with respect to rare or endangered species (id.).

With respect to the use of the Petitioners' screening analysis, which included a comparison of the Northern and Southern Approach alternatives, the Petitioners noted that screening criteria, weighting system, and ranking system were originally designed specifically to analyze and compare the route alternatives available along the Southern Approach (Exh. COW-SS-11). The Petitioners stated that "[t]here are significant differences" between the Northern Approach and the routes analyzed for the Southern Approach and that the screening criteria, weighting system and ranking system used in the Petition to study only Southern Approach alternatives do not "completely capture," such as the crossing of a designated National Wild and Scenic River (id.).

ii. Westfield's Position

Westfield acknowledged that the Northern Approach would cross branches of the Westfield River; however, Westfield maintained that the crossing would occur in a location where there is already a 23-kV distribution line crossing the river (Exh. COW-RR-2; Tr. at 554-555). Westfield argued that the addition of the Northern Approach line across the river is unlikely to be any more noticeable in the area than the present distribution line (Westfield Brief at 20). Westfield agreed with the Petitioners that the Northern Approach crosses tributaries to drinking water supplies, which the Southern Approach does not (id. at 21). But, according to Westfield, the portion of the Northern Approach where those tributaries are located is already home to the 19J 23 kV WMECo distribution line (id.). Westfield contended that both alternatives run through areas with mapped rare and endangered species (id. at 21). Westfield argued that the weighted score of 9 for the Northern Approach's visual impacts was

inappropriate because such a score required that the route be "visually prominent in an historic district," which it is not (Westfield Reply Brief at 28-29). Westfield objected to the scoring methodology used for open space/parklands because it relies too heavily on the number of parcels rather than the size of the land parcels along the route of the easement (id. at 29).

Westfield argued that the results of the screening analysis that incorporates scoring for the Northern Approach are unreliable because the scoring criteria were not originally designed to include the Northern Approach (Westfield Brief at 27). According to Westfield, the scoring of the Northern Approach was incorrect based on a variety of purported flaws and errors in the Petitioners' analysis (Westfield Reply Brief at 19-31). The Petitioners did not reply to Westfield's critique of the route selection analysis because the Petitioners maintained that Siting Board precedent does not require the application of route selection analysis to the Northern Approach (Petitioners' Reply Brief at 10, n.8).

iii. Analysis

Using the specific criteria relating to environmental impacts in the Petitioners' screening analysis, the Northern Approach received a score of 54, which is less desirable than the score of 33 received for the Southern Approach. Westfield argues that several of the scores assigned by the Petitioners should be adjusted to reflect various countervailing considerations or methodological errors. We need not analyze the merit of Westfield's arguments for individual score changes because if we accept them here, the result is little changed.[8]

As we find in our later discussion of the route selection analysis for the Southern Approach alternatives in Section III, the results of a petitioner's screening matrix are an

[8] In response to Westfield's arguments, the staff considered the effect of adjusting the weighted score for the Northern Route's visual impacts from 9 to 3 and the open space/parklands weighted score from 2 to 1. The staff also considered the effect of adjusting the rare and endangered species weighted score for the Southern Approach from 6 to 9 because the Petitioners stated that a greater portion of the Southern Approach would run through areas with mapped rare and endangered species than would the Northern Route. These adjustments would have resulted in a total weighted score for the Southern Approach of 36, and a total weighted score for the Northern Route of 47 (see Table 1 above).

instructive tool, but are not properly used as a single determinative measure of which route is superior and should ultimately be selected.

We do not agree with Westfield's argument that the results of the screening analysis are unreliable as applied to the Northern Approach because the scoring criteria were not originally designed to include the Northern Approach. The fact that the Northern Approach and the Southern Approach are reasonably similar transmission lines that would travel through reasonably similar terrain supports the application of the same criteria to the Northern Approach. In this case we identify no additional considerations that would suggest that the Northern Approach is superior to the Southern Approach with respect to environmental impacts.

The record indicates that the Southern Approach would be superior to the Northern Approach regarding environmental impacts based on the advantages of the Southern Approach with respect to: the number of residences along the route, the number of stream crossings, its avoidance of surface drinking water resources, and less vegetation and tree clearing requirements. Accordingly, the Siting Board finds that the Southern Approach is superior to the Northern Approach with respect to environmental impacts.

c. Cost

i. Argument of the Parties

The Petitioners maintained that the estimated cost of the Northern Approach ($40.2 million) is significantly higher than the estimated cost for the Southern Approach ($25.3 million) (Exh. JP-1, at 23). The Petitioners cost comparison includes the cost of a new substation for both the Northern and Southern Approach because, according to the Petitioners, either a new substation or a reconfigured substation would be required at the existing Blandford Station for the purpose of completing the Northern Approach alternative (Tr. 1, at 129). According to the Petitioners, the Project cost estimate shows that the cost of constructing the transmission line (without substation costs) for the approximately 10-mile transmission line required for the Northern Approach ($32.1 million) is almost double the construction cost of the line required for the Southern Approach ($17.2 million) (Exh. JP-1, at 3-13, Table 3-1).

Westfield argued that the Petitioners' evidence is insufficient to demonstrate that the cost of the Southern Approach is less than the cost of the Northern Approach (Westfield Reply Brief

at 15). In particular, Westfield argued that the failure to include land acquisition costs in the Petitioners' cost estimate is not reasonable (Westfield Brief at 24). According to Westfield, the Petitioners' cost estimate also failed to include the costs associated with the necessary easement swap for the Southern Approach, which would include expenses associated with an Article 97 legislative action to allow such a swap (id. at 25). Westfield argues that these costs are easily quantified and should be included in the cost analysis to provide a fair comparison between the Northern and Southern Approach alternatives (id.).

The Petitioners acknowledged that there would be land acquisition costs for the Southern Approach to construct the proposed substation, but argued that the Northern Approach would also require land acquisition costs even though the Blandford Substation already exists (Petitioners Brief at 25). According to the Petitioners, Westfield provided no evidence indicating whether the necessary land for the substation expansion is available and what it would cost (id.). As a mitigating consideration in the cost comparison between the two routes, the Petitioners maintained that even though they assumed equal construction costs for both alternatives, in fact the cost of reconfiguring the Blandford Substation would actually be more expensive than the construction costs for the new switching station for the Southern Approach (Petitioners' Reply Brief at 8-9). Citing Berkshire Gas Company, 25 DOMSC 1, at 44, fn.62 (1992) ("Berkshire Gas Decision"), the Petitioners also argued that Siting Board precedent does not require that land acquisition costs be addressed at the project-approach level (Petitioners Brief at 26).

ii. Analysis

The record demonstrates that the Northern Approach would be approximately $15 million more expensive than the Southern Approach. However, the Petitioners' estimate does not include necessary land acquisition costs or costs associated with obtaining legislative Article 97 approval needed for a land swap involving the Southern Approach. The Petitioners' assertion that land acquisition costs need not be included in the cost estimate is not an accurate assessment of Siting Board precedent. The Siting Board recognizes that a petitioner may not be able to provide a detailed cost estimate for land acquisition costs at an early stage in a project's development, but a petitioner should be able to establish a basic estimate using reasonable assumptions for recent comparable land purchases. If the land needed for construction is

significantly more expensive than the land cost for an alternative route, then this information should be factored into the comparative cost analysis. Similarly, a cost estimate for efforts made to obtain legislative Article 97 approval, if substantial, could have affected the total cost comparison between the Northern and Southern Approaches because the Northern Approach does not require any legislative action.

The Petitioners' reliance on Berkshire Gas Decision is misplaced because a difference in land acquisition costs was not at issue in the Berkshire Gas Decision. Rather, the underlying assumption in that case was that the alternatives would all require a meter facility of comparable cost. Here, however, the assumption of similar costs for alternative routes was challenged by Westfield and the Petitioners should have been prepared to provide a basic land acquisition cost comparison.

The proponents of a project bear the burden of proof to demonstrate that another route is not clearly superior as a result of cost. Such a showing can only be made where all the primary elements of construction, including land acquisition costs, are considered. We recognize, however, that costs of land acquisition are but one component of the total cost of a project, and may constitute a relatively small portion of total project cost in many cases.

Land acquisition costs appear to be the vast majority of any costs that might increase the cost of the Southern Approach. The land acquisition costs for the Southern Approach would have to be larger than any cost differential including any land acquisition attributable to using the Northern Approach in order to have the Northern Approach be less costly overall. Based on the proximity of land in the two alternative approaches, we do not believe it is reasonable to conclude that the costs of purchasing either the 2.1 acre or 7.8 acre switching station site or other additional costs for the Southern Approach would be so large as to offset the estimated $14.9 million cost differential for using the Northern Approach. Based on the foregoing, we find that the proposed Southern Approach is superior to the Northern Approach with respect to total cost.

3. Conclusions: Weighing Need, Reliability, Environmental Impacts and Cost

As stated above, Siting Board precedent requires a petitioner to present alternative project approaches to demonstrate that the petitioner's proposed project approach is, on balance,

superior to alternative approaches in terms of cost, environmental impact, and ability to meet the identified need. Cape Wind Decision at 21. The Siting Board places the burden of proof on the Petitioners, in this case to demonstrate that, on balance, the Southern Approach is superior to alternative approaches.

Once a general project approach is chosen, a route selection analysis then examines alternative routes or sites to implement that approach. The two separate analyses (project approach and route selection) are intended to accomplish complementary objectives. Project approach analysis is a broader review of different ways to accomplish a similar objective. As set forth in Section III below, once a particular approach (e.g., transmission at a particular voltage to a particular end point) is identified as the best approach, route selection analysis establishes that a clearly superior alternative route has not been overlooked.

The Siting Board has found that the Southern Approach would be slightly advantageous to the Northern Approach with respect to reliability. The Siting Board also found that the Southern Approach is superior to the Northern Approach with respect to environmental impacts and cost. Accordingly, the Siting Board finds that the Southern Approach would be preferable to the Northern Approach with respect to providing a reliable energy supply to the Commonwealth, with a minimum impact on the environment at the lowest possible cost.

III. ANALYSIS OF THE PRIMARY AND ALTERNATIVE ROUTES

A. Site Selection

1. Standard of Review

G.L. c. 164, § 69J provides that a petition to construct a proposed facility must include "a description of alternatives to [the applicant's] planned action" including "other site locations." In past reviews of alternative site locations identified by an applicant, the Siting Board has required the applicant to demonstrate that it examined a reasonable range of practical siting alternatives. Cape Wind Decision 15 DOMSB 1, at 45; CELCo Decision, 12 DOMSB 305, at 326; New England Power Company, 7 DOMSB 333, at 374 (1998) ("1998 NEPCo Decision"). In order to determine whether an applicant seeking to construct a non-generating facility (e.g., a transmission facility) has considered a reasonable range of practical alternatives, the Siting Board has required the applicant to meet a two-pronged test. First, the applicant must establish

that it developed and applied a reasonable set of criteria for identifying and evaluating alternative sites in a manner that ensures that it has not overlooked or eliminated any sites which, on balance, are clearly superior to the proposed site. Second, the applicant must establish that it identified at least two noticed sites or routes with some measure of geographic diversity.

2. Site Selection Process

The Companies indicated that they evaluated three Southern Approach route alternatives between the proposed Russell Biomass plant and the existing WMECo 115 kV #1512 line in Westfield (Exh. JP-1, at 4-1 to 4-4). These were: (1) Route Alternative 1, which became the primary route, comprising three variations; (2) Route Alternative 2, along U.S. Route 20, which became the alternative route; and (3) Route Alternative 3, along the CSX railroad line ("CSX route") (Exh. JP-1, at 4-1).

The Companies indicated that these routes were identified by applying a number of threshold criteria to a study area bounded by Main Street in Russell to the north, the peaks of the Shatterack and Tekoa Mountains to the west, additional mountains to the west, and the WMECo 115 kV line to the south (id. at 4-4). The Companies stated that these limits were established to avoid the visual and environmental impacts of clearing the right-of-way over the crests of the ridges located east and west of the narrow Westfield River Valley (id. at 4-4).

The threshold criteria by which the routes were evaluated included the following: using existing routes; avoiding close contact with railroad tracks; avoiding, to the extent feasible, residential, school, and hospital areas; avoiding, as practicable, private property; minimizing turning points; minimizing impacts to environmentally sensitive areas; and minimizing impacts to endangered species and their habitats (Exh. JP-1, at 4-5). The Companies stated that they solicited route selection input from the Massachusetts Department of Fish and Wildlife ("MADFW"), NHESP, Massachusetts Highway Department ("MHD"), Massachusetts Turnpike Authority, and CSX (id. at 4-6). As a result of this process, three routes within the study area including one with three variations were identified (id.).

The three identified routes were next subjected to an extensive screening analysis. The routes were screened on the basis of technical feasibility criteria (railroad encroachment, roadway crossings, transmission robustness, steep terrain, access, and property ownership);

human impact criteria (including proximity to residences and other sensitive receptors, visual impacts, and historic/archaeological impacts); natural environment impacts (including rare and endangered species, wetlands, and vegetation clearing); and costs (including construction, operation, and maintenance costs) (Exh. JP-1, at 4-26 to 4-35). These criteria were weighted (1, 2, or 3) based on their relative importance, and routes were scored (1, 2, or 3) on each of the criteria (resulting in weighted scores of 1, 2, 3, 4, 6, and 9 for each criteria), with lower scores being preferred. As screened, the original three Route 1 variations scored 76 to 87,[9] Route Alternative 2, along U.S. Route 20, scored 106, and Route Alternative 3, along the CSX railway, scored 113 (id. at 4-41).

Route Alternative 3 involved conflicts with CSX stemming from its proposed location in an active railroad right-of-way (Exh. JP-1, at 4-24, 4-6, 4-26, 4-27). Potential concerns include safety during transmission line construction and maintenance activities, and the interference with railroad activities that a damaged transmission structure could pose to railroad operations (id. at 4-6). The Petitioners indicated that, in the future, CSX (1) anticipates constructing a second set of tracks in this ROW and therefore wants to retain sufficient ROW width for this purpose; and (2) may wish to use its rails to carry electrical signals, an activity with which a transmission line might interfere (id. at 4-8). The Petitioners also indicated that CSX would charge annual permit fees for a transmission line located in the CSX right-of-way (id.). Finally, the Companies stated that language in the standard CSX draft aerial occupancy agreement gives CSX the right to require a lessee to vacate the easement with 60 days' notice (id.). The Companies state that transmission facilities cannot be moved in a 60-day period (id.). On the basis of these conflicts, the Companies eliminated Route Alternative 3 from further consideration (id. at 4-9).

In past decisions, the Siting Board has found various types of criteria to be appropriate for identifying and evaluating route options for transmission lines and related facilities. These types of criteria include natural resource issues, land use issues, community impact issues, cost and reliability. Cape Wind Decision at 45-49; Boston Edison Company d/b/a NSTAR Electric, 14 DOMSB 233, at 277 (2005); New England Power Company, 4 DOMSB 109, at 167 (1995).

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[9] The Company subsequently provided an analysis showing that the score for Route Variation 1a modified (described below in Section III.B) is 72 under the same scoring regimen (Exh. EFSB-SS-31(1)).

The Siting Board also has found the specific design of scoring and weighting methods for chosen criteria to be an important part of an appropriate site selection process, and in some cases has identified the appropriate allocation of weights among the broad categories of environmental concerns, cost and reliability. CELCo Decision, 12 DOMSB 305, at 331; 1997 BECo Decision, 6 DOMSB 208, at 285; Boston Edison Company, 19 DOMSC 1, at 38-42 (1989).

Here, the Petitioners developed 22 screening criteria, which it used to evaluate the routing options. These criteria generally encompass the types of criteria that the Siting Board previously has found to be acceptable.[10] The Petitioners also developed a quantitative system for ranking routes based on compilation of weighted scores across all criteria; this is a type of evaluation approach the Siting Board previously has found to be acceptable.

The record shows that the Petitioners evaluated a small number of routes within a study area selected for the project. The record shows that Route Alternative 3 scored poorly and is relatively infeasible. While Route Alternative 2 was scored as inferior to Route Alternative 1, with respect to environmental impacts, cost, and reliability factors, the Companies' selection of Route Alternative 1 and Route Alternative 2 for further analysis was reasonable.

Accordingly, the Siting Board finds that the Petitioners have developed and applied a reasonable set of criteria for identifying and evaluating alternative routes in a manner which ensures that the Petitioners have not overlooked or eliminated any routes which are clearly superior to the proposed project.

B. Geographic Diversity

Of the three routes evaluated by the Petitioners, one is to the west of the CSX right-of-way and the Westfield River, one is to the east of CSX and the Westfield River, and one follows CSX in its entirety, east of the Westfield River (Exh. JP-1, at fig. 5-1, fig. 5-2). Although all the routes generally follow the Westfield River valley, the extent to which the routes physically overlap is very small (id.). One route follows a road, one follows a railroad, and one partly

[10] For example, the CELCo Decision, 12 DOMSB 305, at 331, the Company used weighted scores to balance the community/environmental impacts, technical issues and costs, and the Siting Board stated that the allocation of approximately half of the overall weight to community/ environmental and half to technical/cost was reasonable.

follows an existing distribution line and partly goes through the woods (id.). No other existing corridors were identified within the corridor study area (id.).

Thus, the Petitioners considered three geographically diverse transmission line routes to connect the Russell Biomass facility site and the existing WMECo 115 kV #1512 line in Westfield. Consequently, the Siting Board finds that the Companies have identified a range of practical route alternatives with some measure of geographic diversity.

C. Description of the Primary and Alternative Routes

The primary route originally was presented with a total of three variations, 1a, 1b, and 1c (Exh. JP-1, at 4-9 to 4-25). Among these, Route Variation 1a was later modified to accommodate restrictions imposed by CSX, and Route Variation 1b was eventually dropped because it had no identified advantages compared to Route Variation 1a modified (Exhs. EFSB-G-5(S) at 4-34 to 4-39; EFSB-3; EFSB-RR-3). The Petitioners requested that the Siting Board approve both Route Variation 1a modified and Route Variation 1c because the Companies could not be assured that MADFW, as land manager, would be able to finalize the authorizations needed to allow the use of Route Variation 1a modified. The Companies provided maps showing these routes (Exhs. EFSB-G-1(1), EFSB-G-1(2), EFSB-G-1(3), EFSB-G-1(4)).

Route Variation 1c follows an existing 100-foot-wide electric transmission easement from the proposed Russell Biomass generating facility, south and east across the slopes of Shatterack and Tekoa Mountains in Russell, crossing through a corner of Montgomery, to a crossing of the Massachusetts Turnpike (Exh. JP-1, at 4-13, 4-15, 4-16, 5-36). South of the Turnpike, Route Variation 1c continues eastward within the easement for approximately 1 mile in Westfield to a crossing of West Road (id.). Route Variation 1c then continues along the easement another approximately 1 mile to an interconnection with the existing WMECo 115 kV #1512 line (id. at 4-17). Up to the crossing of West Road, the transmission easement is not occupied by any transmission line nor is it fully cleared, former lines having been removed years ago (Exhs. EFSB-RV-21(1); EFSB-RV-21(2); TOM-RV-1(1)). The easement from West Road to the interconnection point already carries a lower voltage distribution line operated by Westfield Gas and Electric Company (Exh. EFSB-RV-21(2); Tr.1, at 91-92). South of the Turnpike, Route Variation 1c passes through an active gravel pit operation, farmlands, and

forested lands (Exh. JP-1, at 4-13, 4-15, 4-16, 5-36). Other than the Massachusetts Turnpike, the only street crossed by Route Variation 1c is West Road in Westfield (Exh. EFSB-RV-21(2)).

Route Variation 1a modified follows a new course, lower on the slopes of Shatterack and Tekoa Mountains than Route Variation 1c, and generally several hundred yards to the west of it (Exh. EFSB-SS-13). It skirts above CSX properties along the Westfield River, and curves uphill around the one residence in Russell east of the railroad in this area (id.). Route Variation 1a modified and Route Variation 1c are close together where they cross through Montgomery, although the proposed pole placements differ (id.). From the Massachusetts Turnpike crossing to the existing WMECo 115 kV #1512 line, Route Variation 1a modified follows the same route as for Route Variation 1c (id.).

For either Route Variation 1a modified or Route Variation 1c, the Companies expect to establish a construction staging yard south of the Massachusetts Turnpike, and another construction staging yard north of the Massachusetts Turnpike (Exh. EFSB-G-9). The Companies stated that they are considering using a gravel pit area just south of the Massachusetts Turnpike, and the Russell Biomass site itself, as the two construction staging areas (id.).

As noted, Route Variation 1a modified and Route Variation 1c end at the existing WMECo 115 kV #1512 line at the same location (Exhs. JP-1, at 1-11, 1-12; EFSB-G-1(4)). The Companies would construct a switching station to the side of the ROW near this intersection. The Companies have identified two specific locations for such a switching station (Exh. JP-1, at 4-17 though 4-18). Switching Station S-1 would be on land currently owned by the Westfield Sportsmen's Club; Switching Station S-2 would be on land currently owned by the Boys & Girls Club of Greater Westfield (Exh. EFSB-G-7). The Companies indicated a modest preference for Switching Station Alternative S-2, but requested flexibility to use either (Exh. EFSB RR-4; Tr. 1, at 48-49). For either switching station location, the existing WMECo #1512 115 kV line would be split and looped in and out of the switching station (Exh. EFSB-G-8). The looped line would cross above the existing Westfield Gas and Electric Company 69 kV line, which is located to the north of the existing WMECo 115 kV #1512 line (id.). A permanent fence would be installed around the switching station (Exh. JP-1, at 1-10). The Companies stated that an access road would be built to the switching station site (id.). A staging yard would be established near the switching station for construction purposes (Exh. EFSB-G-9).

The alternative route would follow U.S. Route 20 to a switching station that would be constructed west of the location where the existing WMECo 115 kV #1512 line crosses U.S. Route 20 (Exh. JP-1, at 1-13). At the northern end, the alternative route would start at the Russell Biomass facility location, cross the Westfield River, and follow streets through the residential neighborhoods of Russell Village to reach U.S. Route 20 (id.). The alternative route is 5.2 miles long; it is located in Russell and Westfield and does not enter Montgomery (id. at 1-13, 1-14, 5-36).

D. Environmental Impacts, Cost and Reliability of the Proposed and Alternative Facilities

1. Standard of Review

In implementing its statutory mandate to ensure a reliable energy supply for the Commonwealth with a minimum impact on the environment at the lowest possible cost, the Siting Board requires a petitioner to show that its proposed facility is sited at a location that minimizes costs and environmental impacts while ensuring a reliable energy supply. To determine whether such a showing is made, the Siting Board requires a petitioner to demonstrate that the proposed site for the facility is superior to the noticed alternatives on the basis of balancing cost, environmental impact, and reliability of supply. Cape Wind Decision at 64; CELCo Decision at 334; MMWEC Decision at 127.

An assessment of all impacts of a proposed facility is necessary to determine whether an appropriate balance is achieved both among conflicting environmental concerns as well as among environmental impacts, cost and reliability. A facility that achieves the appropriate balance thereby meets the Siting Board's statutory requirement to minimize environmental impacts at the lowest possible cost. Cape Wind Decision at 64; CELCo Decision at 335; MMWEC Decision at 128.

The Siting Board recognizes that an evaluation of the environmental, cost and reliability trade-offs associated with a particular proposal must be clearly described and consistently applied from one case to the next. Therefore, in order to determine if a petitioner has achieved the proper balance among various environmental impacts and among environmental impacts, cost and reliability, the Siting Board must first determine if the petitioner has provided sufficient

information regarding environmental impacts and potential mitigation measures to enable the Siting Board to make such a determination. The Siting Board then can determine whether environmental impacts would be minimized. Similarly, the Siting Board must find that the petitioner has provided sufficient cost and reliability information in order to determine if the appropriate balance among environmental impacts, cost, and reliability would be achieved. Cape Wind Decision at 53; CELCo Decision at 336; MMWEC Decision at 128.

Accordingly, in the sections below, the Siting Board examines the environmental impacts, reliability, and cost of the proposed facilities along the Petitioners' primary and alternative route to determine: (1) whether environmental impacts would be minimized; and (2) whether an appropriate balance would be achieved among conflicting environmental impacts as well as among environmental impacts, cost and reliability. In this examination, the Siting Board compares the primary and alternative routes to determine which is superior with respect to providing a reliable energy supply for the Commonwealth with a minimum impact on the environment at the lowest possible cost.

2. Environmental Impacts

a. Land Resources

Use of the primary route would require removal of trees to create a 100-foot corridor along the rocky slopes of Shatterack and Tekoa Mountains (Exh. JP-1, at 5-22). South of the Massachusetts Turnpike, the primary route runs along an existing easement approximately 1.9 miles from the edge of the Massachusetts Turnpike to the vicinity of switching stations S-1 and S-2 (id. at 5-23). Of this route segment, approximately 0.6 miles are cleared to a width of 100 feet and 0.7 miles are cleared to a width of 70 feet (Exh. EFSB-LU-1). Another 0.5 miles were cleared at one time but would require re-clearing; 0.1 miles would require initial clearing (id.). The Petitioners indicated that they would also remove so-called "danger" trees, trees that might fall on or near the proposed 115 kV transmission line (id.). The Petitioners explained that removal of such trees would occur based on safety and at the discretion of the arborist, to the extent that the Petitioners had rights to control trees located outside their easement (id.).

With respect to land resource impacts along Route Variations 1a modified and 1c, the Petitioners indicated that Route Variation 1c would require less tree clearing, and would have

slightly less impact on water and wetlands, compared to Route Variation 1a modified; however, Route Variation 1a modified would have fewer visual and aesthetic impacts, and slightly less impact with respect to archaeological resources (Exh. EFSB-SS-12).

The Petitioners stated that portions of the primary route are mapped as rare and endangered species habitat by the NHESP (Exh. JP-1, at 5-28). Protected species in this general area include four species found in the Westfield River, plus Houghton's flat sedge, smooth rock-cress, spiked false-oats, eastern box turtle, and another vertebrate species (Exhs. JP-1, at 5-26; EFSB-LU-4; Tr. 3, at 423-431). The Petitioners indicated that Route Variation 1a modified was developed in consultation with NHESP to minimize impacts to rare and endangered species (Exh. EFSB-SS-14). Based on consultation with NHESP, the Petitioners stated that construction of the proposed project along the primary route would avoid areas frequented by endangered species (Tr. 1, at 94-95). The Petitioners also asserted that clearing transmission line corridors could enhance habitat quality for rare species that rely on meadow and scrub habitats (Exh. JP-1, at 5-27).

The Companies indicated that NHESP was concerned that if Route Variation 1c were selected, the transmission corridor would attract increased usage by off-road vehicles, which could have an adverse impact on endangered species located on the slopes of Shatterack Mountain and Tekoa Mountain (Exh. JP-1, at 5-28 to 5-29). The Petitioners indicated that NHESP's concern is lessened with route variations lower on the mountain slopes, such as Route Variation 1a modified (Exhs. JP-1, at 5-31; EFSB-RV-23, at 2). The Companies stated that they propose installation of gates, boulders, and barriers to discourage unauthorized off-road vehicle use (Exh. EFSB-LU-7).

The Companies also stated that there are no mapped protected species and habitat at the switching station sites proposed for the primary route (Exh. JP-1, at 5-30).

With respect to the alternative route, the Companies asserted that habitat of creeper mussel in the Westfield River could be affected by a loss of tree canopy cover along the edges of U.S. Route 20 (id.).

The Massachusetts Historical Commission ("MHC") stated that a Native American archaeological site has been recorded within the primary route along the existing transmission line ROW in Westfield (Exh. PA-7(S)(1)). MHC has requested that the Petitioners conduct an

archaeological survey for the Project, results of which would be used in order to avoid, minimize, or mitigate adverse effects to any significant archaeological resources identified (id.). The Companies stated that Route Variation 1a modified is not expected to have associated archaeological resources and that disturbance to archaeological resources along Route Variation 1c can be avoided (Exhs. JP-1, at 5-54; EFSB-RV-23, at 4; Tr. 3, at 435-436). In a May 10, 2008 communication, the MHC indicated three recorded ancient Native American archaeological sites along the alternative route (Exh. JP-4, at App. L). The alternative route would also affect the Russell Village Historic District (Exh. JP-1, at 5-52). The Petitioners asserted that the primary route would therefore be preferable to the alternative route with respect to impacts to historical or cultural resources (Exh. JP-1, at 5-54).

The Petitioners stated that Shatterack and Tekoa Mountains are historically prone to fire and that some of these fires have apparently been caused by CSX railroad activity (Exhs. EFSB-LU-3; EFSB-RR-15). The Petitioners stated that fire damage to transmission lines is very unusual in the eastern United States (Tr. 3, at 460-462). According to the Petitioners, the cleared right-of-way, which would remove surrounding wood fuel, would reduce any expected damage to poles in case of fire (Exh. EFSB-LU-3).

b. Wetlands and Water Resources

The Companies stated that the primary route crosses a number of small, flashy stream channels (where significantly increased flows follow a precipitation event, with return to pre-event state immediately thereafter), including Shatterack Brook on the slopes of Shatterack and Tekoa Mountains (Exh. JP-1, at 5-8). Prominent wetlands along other portions of the primary route, south of the Massachusetts Turnpike, include Moose Meadow Brook, Cooley Brook, and several vegetated wetlands areas (id. at 5-9). No poles would be placed in wetlands, and the Companies presented plans to minimize wetlands impacts from accessing pole locations (EFSB-RR-5; Tr. 1, at 53-54, 94).[11] The Companies indicated that there are existing access roads that could be used to cross all but two of the vegetated wetlands located between the Turnpike and West Road in Westfield (Exh. JP-1, at 5-11). The Companies anticipated that at Shatterack

[11] The proposed transmission line would include single and multiple pole structures, spaced 300 to 500 feet apart (Exh. JP-3, at 3).

Brook, Moose Meadow Brook, and the additional intermittent streams along the primary route, equipment access could be accomplished with timber mats or similar devices; they asserted that construction equipment would thereby be able to cross without impacting stream bottoms or banks (id. at 5-10). The Companies also stated that both switching station locations for the primary route have adequate upland on which to construct a switching station (id. at 5-12).

The Companies stated that next to the Russell Biomass site the alternative route would cross the Westfield River and its floodplain as well as Riverfront Area; vegetation management in the Riverfront Area would be required at the river crossing (Exh. JP-1, at 5-12). In addition, trees located within the Riverfront Area of the Westfield River along U.S. Route 20 would be cleared and vegetation management would be required there (id. at 5-24). The Companies stated that the alternative route would have impact on more wetland resource acreage than the primary route, and therefore asserted that the alternative route would have greater impacts than the primary route (id. at 5-15). With respect to water supplies, the Companies asserted that neither the primary route nor the alternative route would affect drinking water supplies (id. at 5-17).

c. Visual Impacts

The Petitioners asserted that the transmission line along the primary route may be visible at various locations along the sideslopes of Shatterack and Tekoa Mountains parallel to the Westfield River, both by residents and from areas along U.S. Route 20 (Exh. EFSB-PA-7, at 5). The Companies stated that due to the high percentage of deciduous forest in the area, visual impacts would be more prevalent during the late fall through late spring seasons (id.).

The Companies indicated that Tekoa Mountain in Russell and Montgomery presents a dramatic view, seen from the Massachusetts Turnpike (Exh. JP-1, at 5-49; Tr. 1, at 82). The Westfield River valley is valued for its aesthetic qualities; the section of U.S. Route 20 extending north of the Massachusetts Turnpike is designated as Jacob's Ladder Trail, a National Scenic Byway ("Scenic Byway") (Exh. JP-1, at 5-49, 5-50; Tr. 1, at 82). The Companies indicated that the Jacob's Ladder Trail Scenic Byway, Inc. had expressed concern about the visual impact on the people in Russell and the Scenic Byway resulting from clearance of vegetation for the proposed transmission line along the primary route (Exh. JP-4, at App. L).

The Petitioners stated that transmission structures would be all or mostly wooden, approximately 60 to 110 feet tall (Exh. EFSB-V-3). The Companies maintained that, in the Tekoa Mountain area, trees adjacent to the route would provide some visual screening for the transmission lines, and added that route variations lowest on the mountain slopes (e.g., Route Variation 1a modified) would have less visual impact than routes higher on the slope (Exh. JP-1, at 5-50). The Companies estimated that in the winter, when deciduous trees are in leaf-off condition, the transmission line might be visible through adjacent trees from 50 to 75 homes in Russell, mostly in Woronoco Village and the east side of Russell Village (Exhs. EFSB-V-1; EFSB-V-2). According to the Petitioners, the line section close and parallel to the Massachusetts Turnpike on Tekoa Mountain in Montgomery would be well screened by taller trees (Exh. JP-1, at 5-50). The transmission lines would be visible, however, where they cross over the Massachusetts Turnpike (Tr. 1, at 83).

South of the Massachusetts Turnpike, the line would be visible from twelve homes in Westfield, near West Road (Exh. EFSB-V-2). The Companies indicated that the route near the line's terminus, whether at Switching Station S-1 or Switching Station S-2, would be in an undeveloped area, surrounded by forested land (Exh. JP-1, at 5-50). The Companies therefore anticipated no visual impacts from the switching station (id.).

With respect to the alternative route, the Petitioners asserted that from the perspective of an observer following the Scenic Byway directly along U.S. Route 20, the line would likely have more severe visual impacts than with use of the primary route (Exh. JP-1, at 5-51).[12] The alternative route would also visually impact residential areas including Russell Village and built-up segments of U.S. Route 20, notably from the Russell-Westfield line to the southern terminus (id.). The Companies asserted that the primary route, along any variation, is significantly superior to the alternative route with respect to visual impacts (id. at 5-52).

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[12] There is an existing distribution line along U.S. Route 20, but the Companies assert that industry practice requires separate structures for the transmission line (Exh. JP-1, at 5-51).

d. Noise

Construction of the proposed Project would have potential noise impacts. The Petitioners indicated, however, there are few homes near the primary route, and only six within 250 feet (Exh. EFSB-A-3). Of residences close to the primary route, one is in Russell, east of the CSX Railroad; others are east of the Westfield River, separated from the primary route by the railroad, which is heavily used (Exh. JP-1, at 5-47, 5-49). In addition, there are four homes adjacent to the existing right-of-way of the primary route where it crosses West Street in Westfield (Exh. JP-1, at 5-47). Switching Station sites S-1 and S-2 are in undeveloped areas of Westfield, distant from any residences (Exh. JP-1 at 5-50). The Companies stated that work would normally be restricted to 7 a.m. to 5 p.m. on weekdays, and that equipment would be maintained in good working order (Exh. EFSB-A-2).

According to the Petitioners, construction on the primary route would likely entail helicopter use for three or four days (Exh. EFSB-T-3; Tr. 2, at 316-319). The Companies asserted that tree clearing and blasting in remote areas would result in low volume noise in residential and community areas, compared to other noise sources in the valley (Tr. 2, at 316-320).

The Companies would limit noise from off-road vehicles along the primary route by discouraging their use along the ROW with measures such as gates, boulders, and barriers (Exhs. EFSB-LU-7; EFSB-G-5(S) at App. F).[13]

The Petitioners indicated that the alternative route traverses more populated and developed areas than the primary route, including those in Russell Village and along U.S. Route 20 (Exh. JP-1, at 5-36, 5-37). These areas include residences, businesses, industries, a former golf course, and forest lands (id.). The alternative route also crosses the CSX railroad (id. at 5-45). The Petitioners stated that residences would be subject to construction noise during normal daytime work hours (id. at 5-48). The switching station for the alternative route would also be located adjacent to residences (id. at 5-37). The Companies stated that construction noise impacts would be greater along the alternative route than the primary route (id. at 5-49).

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[13] WMECo would, however, maintain authorized access to the ROW area for wildfire control (Exh. EFSB-G-5(S) at App. F).

The Petitioners asserted that operational noise impacts from the transmission lines and switching stations would be minor (id.).

e. Traffic

The proposed Project along the primary route would cross two roadways – the Massachusetts Turnpike and West Road (Exh. JP-1, at 5-44). The Companies stated, however, that significant coordination with the Massachusetts Turnpike Authority would be required to install structures and wires at that crossing (id.). The Companies stated minimal impacts are anticipated to traffic flow on West Road (id.). The primary route does not cross the CSX railroad, but construction access across the CSX railroad would be required (id.). The Companies stated that access to proposed Switching Station S-1 would be from the east via Furrowtown Road and part of which is owned by the Westfield Sportsmen's Club (id. at 5-45). Access to proposed Switching Station S-2 would either be via Furrowtown Road or from Pochassic Road to the southwest (id.). The Companies stated that minor local traffic impacts are anticipated from construction access to either of the switching station locations (id.).

With respect to the alternative route, the Companies stated that construction activities at the railroad crossing would have to conform to CSX construction and access requirements (Exh. JP-1, at 5-46). The Companies stated that construction along U.S. Route 20 would significantly affect traffic, with reduced speeds, restriction of travel lanes, and a police detail required over the anticipated eight-month construction period (id. at 5-46, 5-47). The Companies stated that, compared to the primary route, the alternative route would have significantly greater traffic impacts (id.).

f. Electric and Magnetic Fields

The Companies estimated the strength of electric and magnetic fields along the primary route that would result (a) for the portion of the ROW to be occupied by the proposed transmission line only, and (b) for the portion where the proposed line would parallel the existing 23 kV transmission line (Exhs. JP-1, at 5-55; EFSB-E-1; EFSB-E-1(1)).[14] The Companies'

[14] The Petitioners provided their estimates based on the following assumptions: a radial line configuration of a single circuit 115 kV line plus five percent variation for assumed

analysis showed maximum edge-of-ROW EMF impacts along the segment of the ROW to be occupied by both lines with the proposed 115 kV line 40 feet from the north edge, including the crossing of West Street in Westfield (Exhs. EFSB-E-1; EFSB-E-1(1); EFSB-E-2). Based on estimates provided by the Petitioners, maximum electric fields along the ROW segment occupied by both lines would be approximately 0.375 kilovolts/meter ("kV/m") and edge-of-ROW maximum magnetic fields would be 16.384 milligauss ("mG") (Exhs. EFSB-E-1; EFSB-E-1(1)). The Companies indicated that EMF extending away from the proposed transmission line would be the same along the alternative route as the primary route (Exh. JP-1, at 5-53 to 5-54).

The Companies also provided magnetic field level estimates for four homes located at distances ranging from 19 to 172 feet from WMECo's ROW in Westfield (Exh. EFSB-E-2). The closest home to the ROW would be approximately 47 feet from the proposed 115 kV transmission line (id.). According to the EMF estimates provided by the Petitioners, magnetic fields would be 10.32 mG at the closest home; the maximum magnetic fields at the other homes would range from 0.61 mG to 2.41 mG (id.).

g. Underground Design Alternative

The Petitioners considered the design alternative of underground construction of the primary route under two different scenarios: (1) underground construction of the entire 5.1 miles of the primary route (the "primary route underground design"); and (2) underground construction of the approximately 1000 foot portion of the primary route located in Montgomery (the "Montgomery underground design"). The Petitioners also considered the design alternative of underground construction of the alternative route along streets in Russell Village and U.S. Route 20 (the "alternative route underground design").

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voltage levels; a Russell Biomass projected load of 50 MW (maximum net output) assuming a ninety percent power factor; the two transmission lines separated within the ROW by 35 feet, with the 115 kV circuit approximately 40 feet from the edge of the 100-foot ROW; and a 70-foot-or-higher pole for the 115 kV transmission line, with the lowest arm at least 22 feet above ground (Exh. EFSB-E-1). The Companies stated that they performed calculations using Southern Californian Edison's Fields 2.0 Program at 3.28 feet above ground (id.).

i. Position of the Companies Regarding Underground Design of the Primary and Alternative Routes

The Petitioners considered and rejected the primary route underground design based on cost, environmental, maintenance and other impacts (Exh. EFSB-PA-4).

The Petitioners identified some advantages of the primary route underground design, including: the ability to install line in locations with space constraints for overhead construction; minimization of visual impacts; and reduction of required ROW and ROW clearing (Exh. EFSB-PA-4). The Petitioners asserted, however, that the underground design would be disadvantageous in that: construction and maintenance would be more difficult; costs of transmission construction would be five to ten times more expensive; faults would be more difficult to detect, and more costly and time-consuming to repair; and disturbances to wetlands and rare plant and endangered species would be more difficult to avoid and greater overall (Exh. EFSB-PA-4; Tr. 2, at 274). With respect to an underground line along Route Variation 1a modified, the Petitioners asserted that they would need to return to NHESP to discuss impacts of underground construction on two endangered species in particular, a "data-sensitive" invertebrate and the eastern box turtle (Tr. at 379-380, 491-492).

The Petitioners identified similar advantages and disadvantages for the alternative route underground design (Exhs. EFSB-PA-4; EFSB-PA-7). As an added advantage, they indicated that vegetation management requirements would be reduced or eliminated (id.). As added disadvantages, however, they stated that traffic management concerns would be greater with respect to both crossing the Westfield River, which would require use of an underground directional bore, and construction and maintenance of an underground line (Exhs. EFSB-PA-4; EFSB-RR-8).

ii. Arguments of the Parties Regarding the Montgomery Underground Design

(A) Position of the Town of Montgomery

The Town of Montgomery argued for mitigating impacts of the proposed Project by requiring that the transmission line be placed underground for the approximately 1000 feet of the primary route that would run through Montgomery (Montgomery Initial Brief at 2).

Montgomery indicated that, if not built underground in Montgomery, 75-to-100 foot poles and 1000 feet of transmission line for the proposed project would affect views across the southern ridge of Tekoa Mountain, a strikingly scenic wildlife area (Exhs. TOM-RV-1-1; TOM-RV-2; TOM-V-7(1); Tr. 1, at 81). Montgomery stated that other scenic impacts would occur due to the clearing in Montgomery of a 100-foot-wide easement corridor over Tekoa Mountain and the clearing of 12,000 square feet of vegetation, including "danger trees" – trees that could fall onto a transmission line and cause an outage -- outside the corridor (Tr. 2, at 385; Tr. 3, at 502).

Montgomery cited testimony from the Companies' witnesses in arguing that an underground line in Montgomery would reduce visual impacts and tree clearing there (Exh. EFSB-V-1; Tr. 2, at 385; Tr. 4, at 641-644). Again citing the Petitioners' testimony, Montgomery asserted that there would be no impact to wetlands or to rare or endangered species in Montgomery regardless of whether the transmission line were placed above or below ground (Tr. 3, at 483, 485). Montgomery also questioned the proposed use of herbicides and pentachlorophenol for control of vegetation under the proposed overhead transmission line and preservation of supporting wood poles, respectively (Exhs. TOM-W-3-1; EFSB-W-4; EFSB-LU-3; Tr. 3, at 518-523).[15] Montgomery asserted that undergrounding the transmission line in Montgomery would avoid potential environmental impacts from the use of herbicides and pentachlorophenol (Montgomery Initial Brief at 9-10).

Montgomery argued that testimony by the Companies' witnesses indicated that placing the line underground in Montgomery would not change the cost ranking of the proposed Project; that underground construction in Montgomery would add $2,370,000 to the $17,000,000 cost for constructing the entire line overhead; and that certain cost savings – such as saving on vegetation management expenditures -- would be realized with an underground line (Exh. JP-1, at 5-59; Tr. 2, at 384-385; Tr. 4, at 742-743; Tr. 5, at 871). Montgomery also argued that the cost of underground construction in Montgomery should be reviewed in light of the fact that it would be

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[15] The Town noted that the Companies' witnesses were uncertain whether the application of herbicides would harm endangered plant species within Montgomery or whether pentachlorophenol is harmful to rare and endangered plant or animal species (Tr. 3, at 5-18-523; Montgomery Initial Brief at 9). The Town also expressed concern about the environmental impacts of pentachlorophenol in the event of a fire (Exh. EFSB-LU-3; Montgomery Initial Brief at 9).

built as part of Route Variation 1a modified, a relatively low cost route among the route alternatives considered (Montgomery Initial Brief at 11).

Montgomery also asserted, based on the testimony of the Petitioners' witnesses, that constructing the transmission line underground in Montgomery would not jeopardize financing of the proposed project or harm the public interest or public convenience as it relates to the instant case (Exh. EFSB-T-8; Tr. 4, at 645-647; Montgomery Initial Brief at 11). Montgomery argued, in addition, that even if the cost increase were passed on to the rate payers indirectly, the increase would be sufficiently spread out over time and number of customers so as to cause no appreciable public detriment (Exh. EFSB-T-8; Montgomery Initial Brief at 11).

With respect to reliability, Montgomery argued that placing as much of the proposed transmission line as possible underground would enhance the overall reliability of the system (Tr. 2, at 386-387). According to Montgomery, an underground transmission system would be less prone to damage from the elements, lightning or vegetation (id.). Montgomery also asserted that maintenance was not a significant issue when considering whether to place only the Montgomery portion of the proposed line underground (id.). Montgomery based its assertion on testimony that having a small portion of the line underground would reduce the time necessary to detect and address faults (id.). Montgomery further noted testimony that if an underground line in Montgomery failed, the location of the failure would be known (id.). WMECo would not have to excavate the line; rather, by way of replacement, it could pull a new cable kept on hand (id.). Montgomery also asserted that an underground line would limit fire damage and thus contribute to public safety (id.).

Finally, Montgomery addressed whether the transmission line easement granted to WMECo for use of land in Montgomery would allow for the construction of an underground line (Exh. TOM-RR-1-2; Montgomery Initial Brief at 14). Montgomery asserted that the instant case parallels another case, Western Massachusetts Electric Co. v. Sambo's of Massachusetts, Inc., 8 Mass. App. Ct. 815 (1979), in which WMECo's right to lay underground lines in an easement corridor was ultimately protected against interference from a servient landowner (Montgomery Initial Brief at 14). Montgomery argued that, therefore, the Massachusetts Appeals Court had already resolved the Petitioners concerns with respect to constructing underground in its transmission line easement (id.).

(B) Position of the Companies

The Petitioners asserted that the disadvantages identified for the underground primary route alternative all apply within the Montgomery segment (Exhs. EFSB-PA-4; EFSB-PA-12; Tr. 379-380; Companies Brief at 35-43). The Petitioners asserted that constructing the Montgomery portion of the proposed line underground would add several million dollars to costs based on their estimates for the underground cable and trenching and the need for two additional termination structures (Tr. 2, at 388-389). According to the Petitioners, per foot estimates for the Montgomery segment of the proposed line would be greater than those for the entire line: the Montgomery segment would not benefit from the same economies of scale (EFSB-RR-7; Tr. 5, at 867-873).

With respect to visual impacts, the Companies argued that the two above-ground transition structures for an underground build would be larger and less aesthetically acceptable than typical overhead transmission line structures which, along Route Variation 1a modified, would largely be shielded by trees (id.). In further argument that the impacts associated with the proposed overhead line were minimized, the Companies asserted that (a) no environmental impacts to wetlands or from herbicide or preservative use were anticipated, and (b) the current proposal was consistent with historic use of the proposed construction location in Montgomery because a WMECo line had gone along the Tekoa Mountain through Montgomery for many years (Exh. JP-1, at Fig. 1-1, 1-2; Companies Initial Brief at 42). The Companies also asserted that clearing vegetation along its ROW for the proposed overhead line would remove a potential source of combustion and reduce the likelihood of fire damage (Exh. EFSB-LU-3(c)). Finally, the Companies cited Costello v. Department of Public Utilities, 391 Mass. 527, 540-41 (1984) to support its position that the Massachusetts Supreme Judicial Court has previously held that a decision by the Department not to require underground construction of a proposed transmission line is neither arbitrary nor capricious given ample record evidence that constructing the line underground would be prohibitively costly (Companies Initial Brief at 42).

h. Companies' Summary of Environmental Impacts of the Primary and Alternative Routes

According to the Companies' evaluation, the alternative route would have more environmental impacts than the primary route, including: more wetland resource impacts; more visual impact from tree clearing impacts; more land use impacts and conflicts with residential areas, significantly greater traffic impacts, construction noise impacts for more residents, greater visual impacts from transmission structures, and greater impacts on the Russell Village Historic District (Exh. JP-1, at 5-15, 5-25, 5-34, 5-38, 5-46, 5-49, 5-52). In addition, the Companies anticipated greater chance of encountering hazardous release sites along the alternative route (id. at 5-58). On the basis of its evaluation, the Companies concluded that any of the variations of the primary route would be superior to the alternative route with respect to environmental impacts (id.).

i. Analysis of the Environmental Impacts of the Primary and Alternative Routes

i. Analysis of Underground Design Alternatives

The record shows that use of an underground design has been considered as a means to mitigate environmental impacts of the proposed overhead line on part or all of the primary route, and on the alternative route. With respect to the primary route, the Montgomery underground design would avoid a length of overhead line in a prominent view of Tekoa Mountain. However, much of the line length would be at least partially screened if built overhead, and the two overhead-underground transition structures required for this alternative would be potentially intrusive. In addition, the record shows that underground construction would be disadvantageous based on its potentially greater disturbance to wetlands, rare plants and endangered species. Thus, the record shows that overall, constructing the proposed transmission line underground in Montgomery would not significantly reduce its associated environmental impacts, although some impacts might be increased or decreased relative to impacts of the same portion of the Project constructed overhead. The record shows that, with respect to the full primary route design, the above analysis of environmental effects with use of the Montgomery underground design applies equally, and would affect a more extended area. Based on the record, the Siting Board concludes

that constructing the proposed transmission line underground along part or all of the primary route would not significantly reduce its associated environmental impacts, despite the possibility that some impacts might be less compared to those of constructing overhead along the same route.

With respect to the alternative route, the Siting Board notes that the choice of underground design versus the proposed overhead route raises some different trade-offs. The record shows that relative to the primary route (with overhead construction), the alternative route underground design would provide both visual impact advantages based on avoidance of visible overhead lines, and land resource advantages based on avoidance of a separate new permanent overland ROW. We note that the land resource advantage of the alternative route is similar with use of either an overhead or underground design. Any visual advantage of this route, however, is possible only with an underground design, given that with use of the alternative route on-street overhead lines would run proximate to residences and a Scenic Byway. The alternative route underground design also would provide some benefits over the primary route with respect to temporary construction impacts, including impacts on land and water/wetland resources. The alternative route underground design would likely entail greater construction and maintenance traffic impacts, however, offsetting construction period benefits to land and water/wetland resources. Overall, given its permanent impact advantages, the alternative route underground design would be preferable to the primary route with respect to environmental impacts.

The record shows underground alternatives would be more costly, and added costs for the partial undergrounding with the Montgomery underground design would be an estimated $2,370,000. The cost increment to construct completely underground along either the primary or alternative route would be $68,000,000 or more – that is, a five-fold or more increase in the cost for overhead transmission along the primary route. Compared to a total cost of $24,900,000 to $28,500,000 for the proposed transmission and transfer facility facilities using the primary route, the Montgomery underground alternative would increase cost by less than 10%, while the primary route and alternative route underground designs would increase costs by at least 200%.

The Siting Board recognizes that added costs for underground construction, particularly within the range of the Montgomery underground alternative, could be found to be consistent with the Siting Board's standard of review if warranted due to environmental or reliability

advantages. Here, however, the record shows neither the primary route underground design nor the Montgomery underground design would provide clear net environmental advantages over use of an overhead design on the primary route. The record further shows that the alternative route underground design may provide some net environmental benefits over use of an overhead design on the primary route; however, the impacts avoided would not be severe and the added costs would be very substantial. Thus, the benefits of underground construction do not rise to the level of requiring the Petitioners to construct their proposed transmission line underground along any route, in its entirety or in Montgomery alone. Consequently, the Siting Board finds that constructing the proposed transmission line without use of any alternative underground design would be consistent with the minimization of environmental impacts, consistent with minimizing costs.

ii. Analysis of the Primary and Alternative Routes with Overhead Design

With respect to land resource impacts, the record shows that the primary route would require clearing all of the proposed 100-foot ROW for approximately 3 miles, extending from the proposed biomass generating facility site in Russell to the gravel pit south of the Massachusetts Turnpike in Westfield. In addition, existing cleared ROW would be widened to 100 feet in some portions of the remaining two miles of the route in Westfield, where woodlands are present. Clearing requirements would be comparable for Route Variations 1a modified and 1c, although Petitioners observed that use of Route Variation 1c would entail clearing trees that are less mature based on the route's historical use for a ROW and past fire loss. In terms of permanent impact, the result of establishing new project ROW would be replacement of the cleared woodland habitat with low vegetation.

The record indicates that, while the primary route traverses habitat of some endangered species, any such species along the route would be minimally affected by the project. Further, in response to landowner concerns about overall habitat impacts, the Petitioners agreed to pursue a route variation – Route Variation 1a modified – that would run near the existing CSX line at the base of the mountainside, to avoid or limit possible habitat disturbance from traversing a more remote upslope area. With respect to historic resources, the record indicates the primary route

would contain one archaeological resource site with use of Route Variation 1a modified, and two such sites with use of Route Variation 1c, and for either variation the Petitioners would work with MHC to ensure the project does not compromise archaeological resources.

The alternative route along U.S. Route 20 would require clearing overland ROW at limited locations -- the crossing of the Westfield River in Russell and the off-road location of the transfer facility in Westfield. Predominantly following streets, the alternative route also would require clearing and trimming of roadside trees and vegetation. Although requiring substantially less ROW clearing than the primary route, the alternative route is proximate to the Westfield River at some points and, like the primary route, traverses habitat of endangered species. Regarding land use impact, the alternative route, with the overhead design the Petitioners present, would have some impact relating to incompatibility with adjacent uses – both residential use and use as a Scenic Byway along U.S. Route 20. The alternative route also traverses a historical area, Russell Village Historic District, while the primary route affects no such area. We note that the land use impact of running overhead lines in residential, historic or scenic byway areas relates primarily to the lines' visibility, which is further addressed in our review of visual impacts, below. Overall, with use of overhead construction as presented, the greater ROW clearing impacts of the primary route would be largely offset by greater land use incompatibility impacts of the alternative route. Accordingly, based on the use of an overhead design, the Siting Board finds the land resources impacts of the primary route and the alternative route would be comparable.

As discussed, habitat impacts of the primary route would be less with use of Route Variation 1a modified, and landowner MADFW favors use of that line location. The Siting Board directs the Petitioners to pursue actively the use of Route Variation 1a modified; however, the Petitioners may use Route Variation 1c if use of Route Variation 1a modified is infeasible. With this condition, the Siting Board finds that the land resource impacts of the proposed facilities along the primary route with overhead design would be minimized.

With respect to water resources and wetlands, the record indicates that use of the primary route would include some impact from construction equipment crossing intermittent streams. The record shows that the Companies would avoid stream and wetland crossings to the extent possible, and would use swamp mats or other devices to cross resource areas where unavoidable.

The alternative route would require vegetation cutting at one location along the Westfield River, including within Riverfront Area, but would have no water resources impacts. The Companies' assertion that the primary route would have less water resources impact than the alternative route is not persuasive. While the acreage of affected Riverfront Area may be higher along the alternative route, the primary route work would include vehicles crossing streambeds.

The Siting Board finds that the wetlands and water resources impacts of the primary route and the alternative route would be comparable. The Siting Board finds that wetlands and water resources impacts of the proposed facilities along the primary route with overhead design would be minimized.

With respect to visual impacts, the proposed facilities along the primary route would include 60-110 foot high transmission structures of predominantly wooden, monopole design, together with a switching facility, sited in largely undeveloped areas. North of the Massachusetts Turnpike, the route would traverse lower slopes of the Shatterack and Tekoa Mountains, and the new ROW and line would be closely visible only to users of adjacent MADFW land. The record shows the line also would be visible in the distance or through trees from some local viewpoints, including two residential neighborhoods in Russell as well as the scenic approach toward Tekoa Mountain on the Massachusetts Turnpike. At the same time, the line generally would be screened by adjoining woods from areas of Russell and Westfield along the river valley, including U.S. Route 20 and adjoining land uses. The record indicates Route Variation 1a modified would be located at lower elevation and amid more mature woods, compared to Route Variation 1c, and therefore would have a lower visual profile. Continuing south along the remainder of the primary route in Westfield, visual impacts would include some open views of the proposed line – notably at the new transmission crossing of the Massachusetts Turnpike, and within the segment of the route running parallel to an existing distribution circuit, an area of open land with some residences near West Road.

The record shows that the alternative route, with the construction of an on-street overhead line as proposed by the Companies, would have direct visual impacts for much of its length on U.S. Route 20, a recognized scenic corridor, and at residential locations adjacent to U.S. Route 20. If constructed along the primary route, on the other hand, the proposed facilities would affect a noted scenic view of Tekoa Mountain from the heavily traveled Massachusetts Turnpike;

relative to the alternative route, however, fewer locations would be affected and impacts would be mitigated by distance and partial screening. Thus, there would be different, but comparable visual impacts with construction of the proposed facilities along either the primary or alternative routes. The Siting Board therefore finds, based on use of an overhead design, that the visual impacts of the primary route and the alternative route would be comparable.

As discussed, visual impacts of the primary route would be less with use of Route Variation 1a modified, and landowner MADFW favors use of that line location. The Siting Board notes the proposed line would be visible at residences along the route near West Road in Westfield. The Siting Board directs the Petitioners to offer to provide vegetative plantings in edge-of-ROW or off-ROW locations on residential properties near West Road, where effective to screen views of the proposed transmission line. With the above conditions related to use of Route Variation 1a modified, and provision of requested vegetative plantings near West Road, the Siting Board finds that the visual impacts of the proposed facilities along the primary route with overhead design would be minimized.

The record shows that construction noise would have more impact along the alternative route than the primary route. Use of helicopters would create the most noticeable noise on the primary route, but is warranted as a cost-effective measure that would likely minimize impacts from use of more ground level equipment. The Siting Board finds that the primary route is preferable to the alternative route with respect to noise impacts, and that noise impacts of the proposed facilities along the primary route would be minimized.

The record shows that almost all of the work on the primary route would be away from traveled roads, while work on the alternative route would interfere with the flow of traffic on U.S. Route 20 for the duration of project construction. Therefore, the Siting Board finds that the primary route is preferable to the alternative route with respect to traffic impacts, and that traffic impacts of the proposed facilities along the primary route would be minimized.

The record indicates that electric and magnetic fields at the edge of the ROW of the transmission line would be approximately 0.375 kV/m and 16.384 mG, respectively. In a previous review of proposed transmission line facilities, the Siting Board accepted edge-of-ROW levels of 85 mG for magnetic fields. 1985 MECo/NEPCo Decision, 13 DOMSC 119, at 228-242. The Siting Board has used this edge-of-ROW level in subsequent facility reviews to

determine whether anticipated magnetic field levels are unusually high. See Massachusetts Municipal Wholesale Electric Company, EFSB 07-6, at 57-58 (2008) ("MMWEC Decision"); Cape Wind Decision, 15 DOMSB, at 131 (2005); CELCo Decision, 12 DOMSB 305, at 348, 349; Norwood Municipal Light Department, 5 DOMSB 109, at 145 (1997).

The Companies maintained that EMF levels at particular distances from the transmission line would be similar along the primary or alternative route, but provided no estimates specific to the location of the current roadway or residences along the alternative route. We note, however, the proposed transmission line along the alternative route would be proximate to numerous homes, while the proposed line along the primary route would be within 47 feet of one home on West Road and otherwise at significantly greater distances from any homes.

The Siting Board notes that the primary route is located predominately away from developed areas; furthermore, edge-of-ROW electric and magnetic field levels of 0.375 kV/m and 16.384 mG estimated for the proposed project would be well within edge-of-ROW electric and magnetic field levels of 1.8 kV/m and 85 mG previously accepted by the Siting Board. The Siting Board therefore finds that the primary route is preferable with respect to this issue and that electric and magnetic fields of the proposed facilities along the primary route would be minimized.

j. Conclusions on Environmental Impacts of the Primary and Alternative Routes

The Siting Board finds that the Petitioners have provided sufficient information regarding environmental impacts and potential mitigation measures to determine whether the appropriate balance among environmental impacts, cost, and reliability would be achieved. The Siting Board has found, above, that constructing the proposed transmission line without use of any alternative underground design would be consistent with the minimization of environmental impacts, consistent with minimizing cost. The Siting Board has also found, above, that the primary and alternative routes, with use of an overhead design, are comparable with respect to land resources impacts, water resources and wetlands impacts, and visual impacts. The Siting Board has found that the primary route is preferable to the alternative route with respect to noise impacts, traffic impacts, and electric and magnetic field impacts. Considering all these environmental impacts,

the Siting Board finds that the primary route is preferable to the alternative route with respect to environmental impacts. Based on the findings above that each set of environmental impacts would be minimized, the Siting Board finds, with the conditions stated above, that environmental impacts of the proposed facilities along the primary route would be minimized.

3. Costs

The Companies estimated that the primary route would cost from $24,900,000 to $28,500,000, depending on the variation, including $8,100,000 for the switching station and $18,800,000 to $20,400,000 for the transmission line (Exh. JP-1, at 5-59 to 5-61). The alternative route would cost $33,450,000, including $8,050,000 for the switching station and $25,400,000 for the transmission line (id.). Accounting for much of the added $5 to $8 million costs for the alternative route are (1) a line item of $2,300,000 for traffic control to construct along U.S. Route 20, and (2) a cost of $8,200,000 for transmission structures including excavation, exceeding by up to $2,800,000 the corresponding cost for the primary route (id.).

The Siting Board finds that the Petitioners have provided sufficient cost information to determine whether the appropriate balance among environmental impacts, cost, and reliability would be achieved. The record shows that costs for the alternative route would be 17% to 34% above costs for the primary route. Accordingly, the Siting Board finds that the primary route is preferable to the alternative route with respect to costs.

4. Reliability

The Companies asserted that the primary route would be preferable to the alternative route with respect to reliability (Exh. JP-1, at 5-68). The Companies stated that work along some segments of the primary route, regardless of variation, would require CSX and Massachusetts Turnpike Authority permissions for access, but that the transmission lines themselves would be

outside active transportation corridors; the Companies therefore anticipated limited constraints on access to its transmission facilities (id. at 67).[16]

The Petitioners indicated that maintenance and repair of the proposed transmission line on the alternative route would require access from the active U.S. Route 20 ROW; in addition, access would require placement of vehicles and equipment in the travel way of U.S. Route 20, requiring coordination with MHD to ensure traffic and worker safety (id. at 5-67 to 5-68). The Petitioners also expressed concern that the location of the alternative route on the side of U.S. Route 20 and secondary roads would more likely subject facility structures to damage from traffic accidents (id. at 68).

The Siting Board finds that the Petitioners have provided sufficient reliability information to determine whether the appropriate balance among environmental impacts, cost, and reliability would be achieved. The record shows that the alternative route would pose more reliability concerns than the primary route -- along any variation considered -- due to the likely increased exposure of proposed facility structures to damage from traffic accidents. The records shows that the increased risk of facility structural damage along the alternative route would result from its location within the travel way of U.S. Route 20 and secondary roads. The record also shows that the location of the alternative route would complicate repair and maintenance of the proposed transmission line, reducing reliability. The Siting Board therefore concludes that the proposed facilities would be more reliable along the primary route than along the alternative route. Accordingly, the Siting Board finds that the primary route is preferable to the alternative route with respect to reliability.

5. Conclusion

The Siting Board has found that the primary route is preferable to the alternative route with respect to environmental impacts. The Siting Board has also found that, with the stated conditions, environmental impacts of the proposed facilities along the primary route would be

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[16] The Companies indicated that Route Variation 1c might be less reliable than other variations of the primary route due to its location in relatively more mountainous terrain (Exh. JP-1, at 5-64).

minimized. In addition, the Siting Board has found that the primary route is preferable to the alternative route with respect to costs, and preferable to the alternative route with respect to reliability. Therefore, the Siting Board finds that the primary route is preferable to the alternative route with respect to providing a reliable energy supply for the Commonwealth with a minimum impact on the environment at the lowest possible cost. The Siting Board also finds that the proposed project along the primary route would achieve an appropriate balance among conflicting environmental concerns as well as among environmental impacts, reliability, and cost.

With respect to route variations, the record shows that Route Variation 1a modified and Route Variation 1c are generally similar with respect to environmental impacts. Based on the preference of MADWF, Route Variation 1a modified would be preferable, if use of the route is feasible. In Section III.D.2.i, the Siting Board directed the Petitioners to pursue actively the use of Route Variation 1a modified; the Petitioners may use Route Variation 1c if use of Route Variation 1a modified is infeasible. However, since use of Route Variation 1a modified is not wholly within the control of the Companies, the Siting Board recognizes the utility of approving both Route Variation 1a modified and Route Variation 1c.

The record shows that Switching Stations S-1 and S-2 are similar with respect to environmental impacts; they are both generally suitable for the proposed transmission line project. The Companies have indicated a preference for Switching Station S-2, but have not acquired the right to use either location. The Siting Board finds it reasonable given the particulars of the instant case to approve both Switching Station S-1 and Switching Station S-2.

IV. CONSISTENCY WITH THE POLICIES OF THE COMMONWEALTH

A. Standard of Review

G.L. c. 164, § 69J requires the Siting Board to determine whether the plans for construction of a proposed facility are consistent with current health, environmental protection, and resource use and development policies of the Commonwealth. Health, environmental protection, and resource use and development policies applicable to the review of a transmission facility may include existing regulatory programs of the Commonwealth relating to issues such as wetlands protection, rare and endangered species, historic preservation, and noise. Therefore,

in this section, the Siting Board summarizes the health, environmental protection, and resource use and development policies of the Commonwealth that are applicable to the proposed transmission Project and discusses the extent to which the proposed facility complies with these policies.

B. Analysis

In Sections II and III, above, the Siting Board has reviewed the need for the proposed Project, the process by which the Petitioners sited and designed the proposed facility, and the environmental and health impacts of the proposed facility as sited and designed. As part of this review, the Siting Board has identified a number of Commonwealth policies applicable to the design, construction, and operation of the proposed facility. These are briefly summarized below.

As discussed in Section III.D.2.a, above, the NHESP maintains maps of rare and endangered species in the Commonwealth and provides comments on the potential impacts of projects on rare and endangered species. The Companies have demonstrated that construction of the project would avoid areas frequented by rare and endangered species. In addition, as discussed in Section III.A, the record indicates that the Petitioners solicited input on route selection from MADFW, which is responsible for implementing Commonwealth policies regarding habitat preservation. As further discussed in Section III.D.2.a, the record indicates that the proposed project is not likely to adversely impact historical and archaeological resources. The Companies have thereby demonstrated that they expect to comply with policies of the MHC. Accordingly, based on its review above, the Siting Board finds that plans for construction of the proposed facility are consistent with current health and environmental protection policies of the Commonwealth and with such energy policies of the Commonwealth as have been adopted for the specific purpose of guiding the decisions of the Siting Board.

V. ZONING EXEMPTION AND SECTION 72

Pursuant to G.L. c. 40A, § 3, the Petitioners have requested a number of individual zoning exemptions for the proposed transmission line from the Towns of Russell and Montgomery and the City of Westfield as well as zoning exemptions for the proposed switching

station from the City of Westfield. The Petitioners are also seeking comprehensive zoning exemptions from each municipality for the Project. In addition, the Petitioners are seeking, in accordance with G.L. c. 164, § 72, a determination that the proposed transmission line is necessary and will serve the public convenience and be consistent with the public interest.

A. Standard of Review

1. G.L. c. 40A, § 3

G.L. c. 40A, § 3 provides, in relevant part, that:

> Land or structures used, or to be used by a public service corporation may be exempted in particular respects from the operation of a zoning ordinance or by-law if, upon petition of the corporation, the [Department] shall, after notice given pursuant to section eleven and public hearing in the town or city, determine the exemptions required and find that the present or proposed use of the land or structure is reasonably necessary for the convenience or welfare of the public . . .

Thus, a petitioner seeking exemption from a local zoning by-law under G.L. c. 40A, § 3 must meet three criteria. First, the petitioner must qualify as a public service corporation. Save the Bay, Inc. v. Department of Public Utilities, 366 Mass. 667 (1975) ("Save the Bay"). Second, the petitioner must establish that it requires exemption from the zoning ordinance or by-law. Boston Gas Decision at 3. Finally, the petitioner must demonstrate that its present or proposed use of the land or structure is reasonably necessary for the public convenience or welfare. Massachusetts Electric Company, D.T.E. 01-77, at 4 (2002) ("MECo (2002)"); Tennessee Gas Pipeline Company, D.T.E. 01-57, at 3-4 (2002) ("Tennessee Decision (2002)").

a. Public Service Corporation

In determining whether a petitioner qualifies as a "public service corporation" ("PSC") for the purposes of G.L. c. 40A, § 3, the Massachusetts Supreme Judicial Court has stated:

> among the pertinent considerations are whether the corporation is organized pursuant to an appropriate franchise from the State to provide for a necessity or convenience to the general public which could not be furnished through the ordinary channels of private business; whether the corporation is subject to the

> requisite degree of governmental control and regulation; and the nature of the public benefit to be derived from the service provided.

Save the Bay at 680. See also, Boston Gas Decision at 3-4; Berkshire Power Development, Inc., D.P.U. 96-104, at 26-36 (1997) ("Berkshire Power").

The Department interprets this list not as a test, but rather as guidance to ensure that the intent of G.L. c. 40A, § 3 will be realized, i.e., that a present or proposed use of land or structure that is determined by the Department to be "reasonably necessary for the convenience or welfare of the public" not be foreclosed due to local opposition. See Berkshire Power at 30; Save the Bay at 685-686; Town of Truro v. Department of Public Utilities, 365 Mass. 407 (1974) ("Town of Truro"). The Department has interpreted the "pertinent considerations" as a "flexible set of criteria which allow the Department to respond to changes in the environment in which the industries it regulates operate and still provide for the public welfare." Berkshire Power at 30; see also Dispatch Communications of New England d/b/a Nextel Communications, Inc., D.P.U./D.T.E. 95-59-B/95-80/95-112/96-113, at 6 (1998) ("Nextel Decision"). The Department has determined that it is not necessary for a petitioner to demonstrate the existence of "an appropriate franchise" in order to establish PSC status. See Berkshire Power at 31.

b. Exemption Required

In determining whether exemption from a particular provision of a zoning by-law is "required" for purposes of G.L. c. 40A, § 3, the Department looks to whether the exemption is necessary to allow construction or operation of the petitioner's proposed project. See MECo (2002) at 4-5; Tennessee Decision (2002), D.T.E. 01-57, at 5; Western Massachusetts Electric Company, D.P.U./ D.T.E. 99-35, at 4, 6-8 (1999); Tennessee Gas Company, D.P.U. 92-261, at 20-21 (1993). It is the petitioner's burden to identify the individual zoning provisions applicable to the proposed project and then to establish on the record that exemption from each of those provisions is required:

> The Company is both in a better position to identify its needs, and has the responsibility to fully plead its own case . . . The Department fully expects that, henceforth, all public service corporations seeking exemptions under c. 40A, § 3 will identify fully and in a timely manner all exemptions that are necessary for the

> corporation to proceed with its proposed activities, so that the Department is provided ample opportunity to investigate the need for the required exemptions.

New York Cellular Geographic Service Area, Inc., D.P.U. 94-44, at 18 (1995).

c. Public Convenience or Welfare

In determining whether the present or proposed use is reasonably necessary for the public convenience or welfare, the Department must balance the interests of the general public against the local interest. Save the Bay at 680; Town of Truro at 407. Specifically, the Department is empowered and required to undertake "a broad and balanced consideration of all aspects of the general public interest and welfare and not merely [make an] examination of the local and individual interests which might be affected." New York Central Railroad v. Department of Public Utilities, 347 Mass. 586, 592 (1964) ("New York Central Railroad"). When reviewing a petition for a zoning exemption under G.L. c. 40A, § 3, the Department is empowered and required to consider the public effects of the requested exemption in the State as a whole and upon the territory served by the applicant. Save the Bay at 685; New York Central Railroad at 592.

With respect to the particular site chosen by a petitioner, G.L. c. 40A, § 3 does not require the petitioner to demonstrate that its primary site is the best possible alternative, nor does the statute require the Department to consider and reject every possible alternative site presented. Rather, the availability of alternative sites, the efforts necessary to secure them, and the relative advantages and disadvantages of those sites are matters of fact bearing solely upon the main issue of whether the primary site is reasonably necessary for the convenience or welfare of the public. Martarano v. Department of Public Utilities, 401 Mass. 257, 265 (1987); New York Central Railroad at 591.

Therefore, when making a determination as to whether a petitioner's present or proposed use is reasonably necessary for the public convenience or welfare, the Department examines: (1) the present or proposed use and any alternatives or alternative sites identified; (2) the need for, or public benefits of, the present or proposed use; and (3) the environmental impacts or any other impacts of the present or proposed use. The Department then balances the interests of the general public against the local interest, and determines whether the present or proposed use of

the land or structures is reasonably necessary for the convenience or welfare of the public. Boston Gas Decision at 2-6; MECo (2002) at 5-6; Tennessee Decision (2002) at 5-6; Tennessee Gas Company, D.T.E. 98-33, at 4-5 (1998).

2. G.L. c. 164, § 72

General Laws c. 164, § 72, requires, in relevant part, that an electric company seeking approval to construct a transmission line must file with the Department a petition for "authority to construct and use . . . a line for the transmission of electricity for distribution in some definite area or for supplying electricity to itself or to another electric company or to a municipal lighting plant for distribution and sale … and shall represent that such line will or does serve the public convenience and is consistent with the public interest. . . . The [D]epartment, after notice and a public hearing in one or more of the towns affected, may determine that said line is necessary for the purpose alleged, and will serve the public convenience and is consistent with the public interest."[17]

The Department, in making a determination under G.L. c. 164, § 72, is to consider all aspects of the public interest. Boston Edison Company v. Town of Sudbury, 356 Mass. 406, 419 (1969). Section 72, for example, permits the Department to prescribe reasonable conditions for the protection of the public safety. Id. at 419-420. All factors affecting any phase of the public interest and public convenience must be weighed fairly by the Department in a determination under G.L. c. 164, § 72. Town of Sudbury v. Department of Public Utilities, 343 Mass. 428, 430 (1962).

As the Department has noted in previous cases, the public interest analysis required by G.L. c. 164, § 72, is analogous to the Department's analysis for the "reasonably necessary for the convenience of the or welfare of the public" standard under G.L. c. 40A, § 3. See New England Power Company, D.P. U. 89-163, at 6 (1993); New England Power Company, D.P.U. 91-

[17] Pursuant to G.L. c. 164, § 72, the electric company must file with its petition a general description of the transmission line, a map or plan showing its general location, an estimate showing in reasonable detail the cost of the line, and such additional maps and information as the [Siting Board] requires.

117/118, at 4 (1991); Massachusetts Electric Company, D.P.U. 89-135/136/137, at 8 (1990). Accordingly, in evaluating petitions filed under G.L. c. 164, § 72, the Department relies on the standard of review for determining whether the proposed project is reasonably necessary for the convenience or welfare of the public under G.L. c. 40A, § 3, as set forth above.

B. Public Service Corporation Status

The Petitioners maintained that Russell Biomass qualifies as a public service corporation because WMECo is a regulated Massachusetts electric company, pursuant to G.L. c. 164, § 1 (Petitioners Brief at 108). The Petitioners argued that "there is no need to address Russell Biomass' public service corporation status" given that WMECo is a public service corporation (Petitioners Brief at 108, n.40). In the alternative, the Petitioners contended that Russell Biomass qualifies as a public service corporation because it is a corporation that owns generating assets in Massachusetts and will make the assets available to serve the New England market (id.).

WMECo is an "electric company" as defined in G.L. c. 164, § 1. Western Massachusetts Electric Company, D.P.U. 90-174/90-175/90-176/90-177, at 5 (1990). Accordingly, the Siting Board finds that WMECo qualifies as a public service corporation for the purposes of G.L. c. 40A, § 3. We do not agree with the Petitioners' argument that there is no need to address the qualifications of Russell Biomass as a public service corporation. As a joint petitioner, Russell Biomass must also meet the qualification standards for obtaining a zoning exemption pursuant to G.L. c. 40A, § 3. Notably, a finding in this regard has already been made in Russell Biomass, LLC, D.T.E./D.P.U. 06-60, at 15 (2008). Accordingly, we find that Russell Biomass is a public service corporation.

C. Need for the Requested Individual Zoning By-Law Exemptions

1. Petitioners Position

The Petitioners identified fifteen sections of the Russell, Montgomery and Westfield Zoning By-Laws from which they specifically seek an exemption in order to construct and operate the Project (Exh. JP-2, at 10-18). The Petitioners sought zoning exemptions for the following zoning by-law sections.

Municipality	Title and Section Number	Asserted Need for the Requested Exemption
Russell	Use (§3.0, 6.4)	All variations of the primary route run through either Rural Residential ("RR") or the Industrial District. Petitioners argue that utility uses are not allowed in either case. The Petitioners indicate that it is conceivable that a special permit could be obtained for a "general manufacturing" use in the Industrial District, but there is no relief for the RR District (Petitioners Brief at 110, fn. 41).
Russell	Dimensional and Density Regulation (§ 3.2)	Petitioners maintain that the transmission towers will range from 60-110 feet, exceeding the 35 foot height restriction (Petitioners' Brief at 114). It is unclear whether a variance could be issued (id.).
Russell	Earth Removal (§ 5.2)	Petitioners state that an earth removal special permit would be required from the zoning board of appeals, and that there is no guarantee that Petitioners would receive the special permit. Moreover, Petitioners argue that it would be subject to appeal if they were to obtain the permit (Petitioners Brief at 116).
Russell	Enforcement (§ 6.1)	Petitioners would need to obtain a permit from the selectmen and building inspector. Petitioners are uncertain whether they would receive permit and whether it would be appealed (Petitioners Brief at 114-115).
Montgomery	Establishment of Districts (Article 2)	Entire Town of Montgomery is zoned as Agricultural Residential. Petitioners argue that absent exemption the Project would not be an allowed use in Montgomery (Petitioners Brief at 110).
Montgomery	Use Regulations (Article 3)	Petitioners argue that absent an exemption the Project would not be allowed in Montgomery (Petitioners Brief at 110).
Montgomery	Area, Yard, Floor Area and Coverage Regulations (Article 4)	Petitioners argue that they could not meet these requirements, which typically apply to residences (Petitioners Brief at 116-117).

Municipality	Title and Section Number	Asserted Need for the Requested Exemption
Montgomery	Driveway Standard (Article 6)	Petitioners maintain that these requirements should not apply to the Project, but argue it is needed because Montgomery asserts that driveway requirements should apply to Project (Petitioners' Brief at 117-118).
Westfield	Rural Residential District/Use Dimension Requirements (§ 3-40)	Portions of the switching station would exceed the 35-feet height limit and the 50-feet exception for structures like chimneys (Petitioners Brief at 118).
Westfield	Prohibited Uses and Performance Standards (§ 4-120).	Petitioners argue that they may "run afoul" of some of these requirements during construction. Petitioners assert that it is unclear how provisions would be enforced (Petitioners Brief at 119-120).
Westfield	Movement or Removal of Earth Materials (§5-10).	Petitioners maintain that there is no guarantee that an earth removal permit would issue or, if issued, that no appeal would be filed (Petitioners Brief at 121).
Westfield	Off-Street Parking and Loading Requirements (§ 7-10).	Petitioners assert that literal reading could require 350 parking spaces; no parking is planned for the Project (Petitioners Brief at 121).
Westfield	Site Plan Approval (§6-10)	Petitioners maintain that the Project could not obtain site plan approval because the Project is not in conformance with the intent of the zoning district. Approval could also be appealed (Petitioners Brief at 123).
Westfield	Zoning Permit (§ 1-10.4)	Petitioners argue that there is no guarantee that the Project would receive a permit, or that no appeal would be filed (Petitioners Brief at 123).

The Petitioners acknowledged that they did not seek any local zoning relief from Russell, Montgomery or Westfield before filing their zoning exemption petition in this case (Tr. at 36, Siting Board Meeting September 25, 2008). The Petitioners indicated that it would be typical to assess community opposition as part of the site selection process (Tr. 4, at 663). Nevertheless, the Petitioners acknowledged that they did not engage in any consultations with officials from

either Montgomery or Westfield as part of the initial screening for the proposed transmission route (Tr. 4, at 663-664).

According to the Petitioners, applying to the three municipalities for special permits or variances should not be a necessary prerequisite for the filing of their zoning exemption petition because such a requirement would be contrary to law, would result in unacceptable delays, and would in some cases be futile (Petitioners Brief at 124). In particular, the Petitioners make the following arguments in support of their position:

1. The Petitioners assert that the Supreme Judicial Court and the Department have specifically held that G.L. c. 40A, § 3 contains no requirement that local relief be sought before a public service corporation seeks a zoning exemption (Petitioners Brief at 124, citing Planning Board of Braintree v. Department of Public Utilities, 420 Mass. 22, 32 (1995) (additional cases omitted) ("Braintree");
2. There is no guarantee that the Petitioners would obtain the available relief requested. The Petitioners maintain that this is particularly true in this case where Westfield and Montgomery are opposed to the Project (Petitioners Brief at 124);
3. The time associated with the variance and special permit processes in three different municipalities would result in unacceptable delays (id.); and
4. Even if the Petitioners were able to obtain some zoning relief, opponents could appeal to the Massachusetts Land Court or Superior Courts pursuant to G.L. c. 40A, § 17. Such an appeal would stop the Project because an appeal of a variance stays the issuance of the variance (id. at 125, citing G.L. c. 40A, § 11).

2. Westfield and Montgomery Positions

Westfield argues as a general matter that the Petitioners have not demonstrated that the proposed project is in the public interest, and therefore should not receive any zoning exemptions (Westfield Brief at 31-32). More specifically, Westfield maintained that the site plan review process is clear, designed to reasonably regulate a project, and is typically completed within 35 days, and cannot be used to prohibit a proposed use (Exh. COW-LBS at 3). Westfield also

argued that the process associated with obtaining a zoning permit under Section 1-10.4 is completed within 30 days (id. at 3-4). [18]

Montgomery argues that the only zoning exemption "necessary" for the construction of the Project pertains to the Use Regulations under Article 3, which would prohibit the Project (Montgomery Brief at 18). Other than Article 3, Montgomery maintains that each of the other articles are either irrelevant to the Project or have not been shown to constitute a prohibition to its construction such that an exemption would be required (id.).

3. Analysis

Chapter 40A, § 3 does not explicitly address whether petitioners should be required to seek permits, special permits or variances before seeking relief pursuant to G.L. c. 40A, § 3. The Department has long favored such an approach, although it has not required it.[19] Given the complexities of local zoning ordinances and their application in particular circumstances, the ability of the Department to know when a public service corporation's actions will conflict with local interests often cannot be known with certainty. Historically, the Department has addressed this uncertainty by granting zoning exemptions, not only where a direct conflict in the zoning law was evident, but on some occasions where it was found that some delay might occur or uncertainty exist about the application of a particular zoning by-law to a particular project. New England Power Company/Massachusetts Electric Company, D.T.E. 04-66/04-81, at 23-24 (2005); USGen New England, Inc., D.T.E. 03-83, at 19 (2004); New York Cellular Geographic Service Area, Inc., D.P.U. 94-44, at 18-19 (1995).

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18 According to Westfield, a roundtable permit review process takes place every week in Westfield where the City's department heads, including public works, engineering, conservation, water/sewer and the board of health, meet with developers to review projects in a "one-stop shopping" format to identify local concerns and to try to address them satisfactorily to all parties before a formal permitting process is commenced (Tr. at 826). According to Westfield, these meetings are intended to facilitate an efficient permitting process (id.).

19 The Supreme Judicial Court has not decided the issue. The Court in Braintree did state that the zoning exemption available under G.L. c. 40A, § 3 is intended "to assure utilities' ability to carry out their obligation to serve the public when this duty conflicts with local interests." Braintree at 27.

At the same time, the Department's past cases have recognized the legitimacy of maintaining local control over land use decisions in municipalities under home rule authority. For example, in Tennessee Decision (2002), the Department stated that it is neither sound public policy nor a good use of Department and Company resources for a public service corporation "to seek a zoning exemption without first consulting with the municipality." Tennessee Decision (2002) at 19.

> [T]he Department is cognizant of the inherent tension between the Home Rule authority of municipalities to enact local zoning codes, and the statutory authority of the Department, pursuant to G.L. c. 40A, s. 3, to grant public service corporations exemptions from these codes. *The Department favors the resolution of local issues on a local level whenever possible to reduce local concern regarding any intrusion on Home Rule authority.* The Department urges future petitioners to seek a zoning exemption from the Department only after consulting with municipal officials, and then only if the municipality is unable to grant the necessary zoning approval, or if it encounters difficulties in obtaining municipal zoning approvals within a reasonable period of time.

Id. (emphasis added). See also Nextel Decision at 46) ("To the extent that [public service] providers may in the future avoid controversy and litigation by working with municipalities, we encourage them to do so").

We affirm the commitment, as stated in the Tennessee Decision (2002) and the Nextel Decision, to favor the resolution of local issues on a local level whenever possible to reduce local concern regarding any intrusion on home rule. We believe that the most effective approach in this regard is for public service companies to consult with local officials regarding zoning issues, to take reasonable steps to ascertain whether local zoning approvals will be available, and to obtain them if this appears to be feasible, before seeking zoning exemptions pursuant to G.L. c. 40A, § 3.

We are troubled that the Petitioners did not engage in any consultations with officials from either Montgomery or Westfield as part of the Petitioners' initial screening of potential transmission routes. We are concerned that the Petitioners did not discuss or seek zoning relief relating to the proposed transmission lines from Russell, Montgomery or Westfield (to the extent

that it was legally available).[20] Communication between the Petitioners and Montgomery and Westfield, in particular, was plainly absent in this case. We reaffirm our view that such communication should take place in advance of seeking exemption from municipal zoning regulation.

Therefore, we set forth the following approach to be used by public service companies when seeking zoning exemptions pursuant to G.L. c. 40A, § 3. First, in cases where (1) a local zoning provision would on its face preclude construction and operation of a proposed energy facility, and (2) there is no provision in a local zoning by-law for a special permit, variance or other relief, relief under G.L. c. 40A, § 3 could be considered without further consultation with the local zoning authority. Second, if relief appears to be available, but consultations with the local zoning authority demonstrate that a petitioner is unlikely to obtain that relief, relief under G.L. c. 40A, § 3 could be considered without further local efforts. Absent such circumstances, it is our expectation that a project proponent will make a good faith effort to consult with local zoning authorities and apply for necessary zoning approvals or other relevant relief, as appropriate.

We recognize that there may be particular circumstances when the additional time necessary to obtain local approvals may not be consistent with the avoidance of substantial public harm. Our approach is to consider such circumstances on a case by case basis. Where, as here, it appears that the Companies have had ample opportunity to consult with the municipalities and that no particular urgency prevented them from doing so, it is reasonable to expect that they would have pursued local zoning approvals.

This approach is consistent with the language of G.L. c. 40A, §3, where the Department must determine that the requested exemptions are *required*. Although the obligation to serve the public is a critical one, the issue of whether a particular exemption is *required* should generally be apparent before authority is exercised under G.L. c. 40A, § 3. Where it is possible to obtain the necessary zoning relief, a zoning exemption pursuant to G.L. c. 40A, § 3 would not be

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[20] In this regard, the roundtable permit review process, which takes place every week in Westfield, is particularly well suited to the review of a project in a "one-stop shopping" format to identify local concerns and to try to address them satisfactorily to all parties before a formal permitting process is commenced.

required. Where no particular urgency exists, efforts to pursue local zoning approvals are reasonable and consistent with the language of G.L. c. 40A, § 3.

Based on the above discussion, we make the following finding concerning the Petitioners' individually requested zoning exemptions. The exemptions fall into one of three categories: (1) exemptions that the Petitioners have shown are needed to allow Project construction; (2) exemptions that the Petitioners have not shown to be necessary for Project construction; and (3) exemptions that could be unnecessary if the Petitioners consult with the municipality for the permit or other relief.

Municipality	**Title and Section Number**	**Finding**
Russell	Use (§3.0, 6.4)	The Siting Board finds that this exemption is required within the meaning of G.L. c. 40A, § 3.
Russell	Dimensional and Density Regulation (§ 3.2)	The Siting Board finds that this exemption is required within the meaning of G.L. c. 40A, § 3.
Russell	Earth Removal (§ 5.2)	Petitioners should first consult with the relevant zoning authority in an effort to obtain an appropriate permit or relief.
Russell	Enforcement (§ 6.1)	Petitioners should first consult with the relevant zoning authority in an effort to obtain an appropriate permit or relief.
Montgomery	Establishment of Districts (Article 2)	The Siting Board finds that this exemption is required within the meaning of G.L. c. 40A, § 3.
Montgomery	Use Regulations (Article 3)	The Siting Board finds that this exemption is required within the meaning of G.L. c. 40A, § 3.
Montgomery	Area, Yard, Floor Area and Coverage Regulations (Article 4)	The Petitioners have not demonstrated the need for this exemption (see discussion below).
Montgomery	Driveway Standard (Article 6)	The Siting Board finds that this exemption is required within the meaning of G.L. c. 40A, § 3. See discussion in Section V.D.

Municipality	Title and Section Number	Finding
Westfield	Rural Residential District/Use Dimension Requirements (§ 3-40)	Petitioners should first consult with the relevant zoning authority in an effort to obtain a special permit regarding height restrictions pursuant to § 3-40.6. With the exception of § 3-40.6 (Heights), the Siting Board finds that this exemption is required within the meaning of G.L. c. 40A, § 3.
Westfield	Prohibited Uses and Performance Standards (§ 4-120).	The Petitioners have not demonstrated the need for this exemption (see discussion below).
Westfield	Movement or Removal of Earth Materials (§5-10).	Petitioners should first consult with the relevant zoning authority in an effort to obtain an appropriate permit or relief.
Westfield	Off-Street Parking and Loading Requirements (§ 7-10).	The Petitioners have not demonstrated the need for this exemption (see discussion below).
Westfield	Site Plan Approval (§6-10)	Petitioners should first consult with the relevant zoning authority in an effort to obtain an appropriate permit or relief.
Westfield	Zoning Permit (§ 1-10.4)	Petitioners should first consult with the relevant zoning authority in an effort to obtain an appropriate permit or relief.

We find that the Petitioners have not demonstrated the need for an exemption from three by-law provisions. The Petitioners have failed to show the need for an exemption from Article 4 (Area, Yard, Floor and Coverage Regulations) of the Montgomery By-Law, because of inapplicability to the proposed transmission facilities (i.e., Article 4 applies to dwellings). We find that the Petitioners have not demonstrated the need for an exemption from § 4-120 of the Westfield By-Law (Prohibited Uses and Performance Standards). We are not persuaded that an exemption is required based on the Petitioners' argument that it is unclear how such a provision would be enforced or that the Petitioners may "run afoul" of some of the provision's requirements during construction. We also find that the Petitioners have not demonstrated the need for an exemption from Article 7 (Off-Street Parking and Loading) of the Westfield By-Law because of its inapplicability to the proposed transmission facilities.

We find that the Project requires a zoning exemption from six zoning provisions. We agree with the Petitioners that there is no conceivable zoning provision that would allow the Project in the Russell RR District, and therefore find that an exemption is required from the Use provision (§ 3.0, 6.4). A zoning exemption is also required for Russell's Dimensional and Density Regulation (§3.2) because a variance would otherwise be necessary, and the power to grant variances is sparingly to be exercised and only under exceptional circumstances. Russell Biomass, D.T.E./D.P.U. 06-60-A at 10 (2008), citing Gamache v. Town of Acushnet, 14. Mass. App. Ct. 215, 217, n.6 (1982). Exemptions from Montgomery Zoning By-laws, Articles 2 and 3 are required because public utility uses are not permitted in Montgomery's Agricultural-Residential District. Similarly, we find that an exemption is required from Rural Residential District/Use Dimension Requirements (§ 3-40) because the public utility use is otherwise not permitted.

We find it reasonable for the Petitioners to consult with the relevant zoning authorities with respect to six of the Petitioners' requested exemptions. Accordingly, as a condition of any further Siting Board review of those six requested exemptions, the Petitioners shall first consult with the local zoning authority and file for relevant zoning approvals, permits or other relief. The Petitioners shall report back to the Siting Board with an update on their efforts to obtain the relevant approvals within fourteen (14) days of any termination of the consultations regarding one or more relevant approvals, and either the receipt of a denial or arrival at a point where it appears reasonably likely that the relevant approvals at issue will not be available. The Petitioners shall also report back to the Siting Board with an update on their efforts to obtain the relevant approvals within fourteen (14) days of the filing by either the Petitioners or a third party of any applicable appeal of a local zoning decision. In any case, however, the Petitioners shall provide a status report to the Siting Board within six months. The Petitioners shall also submit to the Siting Board a copy of all zoning approvals received. After the Petitioners have proceeded in accordance with our holding above, the Siting Board will review any outstanding requests for zoning exemption.

D. Montgomery Driveway By-Law

1. Petitioners' Request for Exemption

The Petitioners seek a zoning exemption from Article 6 of the Montgomery's Zoning By-Laws, which imposes a common driveway standard in Montgomery. Article 6 defines a driveway as "the portion of a lot which is prepared for vehicular access to and from a public way" (Exh. JP-2, Attachment 1B, Article 6). The Petitioners argued that Article 6 "should not apply to the Project" (Petitioners' Brief at 117). The Petitioners maintain that the driveway standards are designed for allowed uses such as residential and offices, not transmission lines located on a right-of-way (id., citing Tr. 5, at 768). In addition, the Petitioners contended that the transmission line's access road will not connect to any public way in the Town of Montgomery, and therefore cannot meet the definition of a driveway in Article 6 (Petitioners Brief at 117). The Petitioners sought an exemption from Article 6 because the Town of Montgomery has expressed the position that Article 6 would otherwise apply to the Project (id. at 118).

2. Montgomery's Position

Montgomery maintained that its driveway standards are intended to ensure that public safety vehicles can adequately access land in Montgomery (Montgomery Reply Brief at 10). According to Montgomery, it makes no sense to limit the application of Article 6 to driveways in Montgomery that are reached only from Montgomery public ways (id.). Montgomery stated that the relevant provision of its by-law does not require that the public way be located within Montgomery (Montgomery Reply Brief at 9). Further, Montgomery argued that the driveway requirements "must be met" since the by-law provision does not allow a waiver (id. at 11 (emphasis in original)).

3. Petitioners' Reply

The Petitioners contended that even if Article 6 applies to the Project, the Project cannot meet the Article 6 standards, including a requirement that the access road be 24 feet wide, be constructed using less than a 6 percent grade, and be built with an allowable angle from the public way that is also acceptable to the Massachusetts Turnpike Authority (Petitioners Reply

Brief at 20). The Petitioners argued that Montgomery's statement that Article 6 cannot be waived is itself further reason for the need for an exemption (id. at 20-21).

4. Analysis

The Town of Montgomery, in the first instance, is charged with the responsibility of interpreting its own zoning by-laws. The Town of Montgomery's position is clear in this proceeding -- Article 6 of the Montgomery Zoning By-Law, containing its Driveway Standards, is legally applicable to the proposed right-of-way that would contain the proposed transmission line. The Petitioners disagreed, but argued in the alternative that if Article 6 does apply, the Siting Board should grant the Project a zoning exemption from this provision.

It is difficult for us to determine whether Article 6 applies to the proposed Project as matter of law. However, setting aside Article 6's legal applicability, Montgomery has not persuaded us that it would be appropriate in this case to impose Montgomery's driveway requirement on the Project. Transmission line rights-of-way are not generally designed for ongoing access by municipal emergency vehicles, such as must occur where there are dwellings or staffed operations present. Accordingly, we believe that in this case a use such as the proposed Project should not be held to the requirements of Article 6. Accordingly, we find that an exemption from Article 6 is necessary.

E. Public Convenience or Welfare

1. Need for or Public Benefit of Use

The Petitioners argued that the proposed transmission line and switching station are needed and will benefit the public because they are necessary to connect the proposed Russell Biomass generating facility to the regional electric grid (Petitioners Brief at 130). The Petitioners maintained that without the interconnection, the public will be unable to receive the benefits associated with this generating facility if the facility is constructed and operated (id.). In addition to the direct benefit that the proposed transmission line would provide by facilitating the interconnection of a proposed generating facility to the grid, the Petitioners contend that the proposed transmission line would provide benefits to the public resulting from the proposed biomass generating facility. According to the Petitioners, the proposed biomass generating

facility will help: (1) address the need for new generating capacity in Massachusetts and the New England region; (2) decrease the Commonwealth's dependence on natural gas and oil for power supply; and (3) meet the need in Massachusetts and the region for electric generation using renewable resources (id.).

Westfield argued in response that it is not at all clear that Massachusetts consumers will ever be the beneficiaries of the power generated by Russell Biomass and sent to market over the proposed transmission line (Westfield Brief at 30). According to Westfield, the evidentiary record demonstrated that Russell Biomass has executed a power purchase agreement with a single unnamed customer not based in Massachusetts, and one which does not sell to Massachusetts power customers (id.). Westfield acknowledged that in considering the convenience and welfare of the public, regional benefits may be considered (id. at 29, citing Save the Bay at 685 (1975)). However, according to Westfield, the interests of the Commonwealth's citizens "must be given appropriate weight" (id. at 29-30).

In Section II.A, we found a need for a transmission line to interconnect the proposed Russell Biomass generating facility with the regional transmission grid. We stated that the proposed Russell Biomass generating facility could not supply energy to the region in the absence of an adequate and reliable energy facility to interconnect the proposed generating facility to the transmission system (see Section II.A.4). We also found that, to establish that the proposed generating facility is likely to be available to contribute to the regional energy supply, the Petitioners are required to submit to the Siting Board copies of all permits required for the Petitioners to begin construction of the proposed generating facility (see Section II.A.4). For purposes of G.L. c. 40A, § 3 review, the Siting Board finds that the proposed transmission facility at issue in this case would serve the need for transmission to interconnect the proposed Russell Biomass generating facility.

Our decision in this case is similar to the Cape Wind Decision, EFSB 02-2A/DTE 02-53 (2008), which involved our review of the need for a jurisdictional transmission line that interconnected a proposed non-jurisdictional generation facility, pursuant to G.L. c. 164, § 69J and § 72. In this case, in addition to reviewing need in the context of these statutory provisions, we also examine the need for the facility in the context of the Petitioners' request pursuant to G.L. c. 40A, § 3, for a zoning exemption. In this case, in order to make a finding of need for

purposes of G.L. c. 40A, § 3, we also rely on indicators of generator project progress to establish the need for the transmission line, rather than a consideration of the underlying need for the power that would be made available. Accordingly, we decline to consider Westfield's arguments concerning the need for generating capacity and actual beneficiaries, if any, of the proposed generating facility.

2. The Proposed Project and Alternatives

In Sections II and III, we conducted a comprehensive analysis of the reliability, cost and environmental impacts of a number of project approach and site alternatives for interconnecting the proposed Russell Biomass generating facility with WMECo's transmission system. These alternatives include connecting Russell Biomass via: (1) one of several variations of a proposed overland 115 kV transmission line terminating at one of two different possible switching station in Westfield, combining one of two route variations (Route Variation 1a modified and Route Variation 1c) and one of two switching station locations (S-1 and S-2); (2) a proposed transmission line along U.S. Route 20 terminating at a separate switching station (the noticed route alternative); and (3) an alternative interconnection project approach along the Northern Approach. We found that the Southern Approach would be preferable to the Northern Approach with respect to providing a reliable energy supply to the Commonwealth, with a minimum impact on the environment at the lowest possible cost. We found that the primary route would be preferable to the alternative route with respect to environmental impacts. Further, we found that the primary route would be preferable to the alternative route with respect to cost, and that the primary route and the alternative route would be comparable with respect to reliability. Accordingly, we found that the primary route was preferable to the alternative route with respect to providing a reliable energy supply for the Commonwealth with a minimum impact on the environment at the lowest possible cost. See Section III.D.

With regard to the analysis used to select a route, the Siting Board found that the Petitioners developed and applied a reasonable set of criteria for identifying and evaluating any routes that are clearly superior to the proposed route; and that the Petitioners identified a noticed alternative transmission line route with sufficient geographic diversity. See Section III.B.

3. Impacts of the Proposed Project

In Section III, we conducted a detailed analysis of the cost and environmental impacts of the proposed transmission line along primary routes, including route variations 1(a) modified and 1(c). We found that the Petitioners provided sufficient information concerning cost, reliability and environmental impacts to allow us to determine whether they have achieved the proper balance among environmental impacts, cost and reliability. See Section III.D.5. We imposed conditions on the proposed transmission line, and found that with the implementation of those conditions, environmental impacts would be minimized.

We also found that the proposed transmission line would be generally consistent with the identified requirements of related regulatory and other programs of the Commonwealth, specifically programs supervised or regulated by MADFW, NHESP, MHC, and MADEP. Based on the foregoing, the Siting Board finds that the proposed facility may result in some local adverse environmental impacts primarily with respect to land resources and visual impact, but generally would result in minimal impacts.

4. Conclusion

The Siting Board has found a need for a transmission line to interconnect the proposed Russell Biomass generating facility with the regional transmission grid. The Siting Board has also found that the Petitioners established, through the range of their siting analysis and comparison of identified alternatives, that their proposed transmission line route is advantageous. We also found that the proposed facility may result in some local adverse impact, primarily with respect to land resources and visual impacts, but would generally result in minimal environmental impacts. Based on the foregoing, the Siting Board finds that the general public interest in constructing the proposed facility would outweigh any adverse local impacts of the project. Accordingly, the Siting Board finds that the proposed facility is reasonably necessary for the convenience or welfare of the public.

F. Need for Requested Comprehensive Zoning Exemption

In addition to the Petitioners' request for individual zoning by-law exemptions, the Petitioners have requested a comprehensive zoning exemption that would exempt the Project

from all provisions of the zoning by-laws of Russell, Montgomery and Westfield. As grounds for their request, the Petitioners maintain that such an exemption would avoid uncertainty and the possibility that the zoning by-laws could be used to delay or prevent the project from being built (Petitioners Brief at 125-126). The Petitioners indicated that there is some level of uncertainty whether local zoning by-laws would apply to transmission lines, and that municipalities or third parties may hold differing views on the applicability of by-laws to the proposed Project (id. at 127). The Petitioners also argued that it cannot be the case that a project proponent carries the burden of having to anticipate or guess any conceivable zoning by-law provision that a project opponent might try to use against a project (id.).

Westfield argued that the Petitioners have not met the standard of review for comprehensive zoning exemption relief, which requires a showing that the issuance of a comprehensive exemption could avoid substantial public harm by serving to prevent a delay in the construction and operation of the proposed use (Westfield Brief at 32). Westfield maintained that there is no evidence that a substantial public harm could result from a delay in construction of the transmission line (id.).

Montgomery contended that the Petitioners have failed to meet their burden to demonstrate the need for a comprehensive zoning exemption from the Montgomery Zoning By-Laws (Montgomery Brief at 17-18). According to Montgomery, the only exemption from its zoning by-laws necessary for the construction of the Project pertains to the Use Regulations under Article 3, which would prohibit the Project. Montgomery maintained that the other articles are either irrelevant or have not been shown to constitute a prohibition to the construction of the Project such that an exemption would be required (id. at 18).

In analyzing the Petitioners' request for a comprehensive zoning exemption, we reiterate the Department's previous finding that the Legislature's enactment of the Zoning Act, St. 1975, c. 808, § 3, conferred broad decision-making powers on local authorities under home rule. New England Power Company/Massachusetts Electric Company, D.T.E. 03-128, at 24-25 (2005). We do not lightly set these decision-making powers aside. Id. at 25. In D.T.E. 03-128, the Department noted that:

> almost all regulatory processes are subject to delay and to subsequent appeal, and that the probability of delay and appeal cannot always be accurately assessed in advance. Thus, almost any petitioner proposing a time-sensitive project can

> advance an argument for exemption from process-oriented provisions of a zoning code, such as site plan review.

Id. at 24. Accordingly, a concern as to possible delay, by itself, is not a sufficient basis to obtain a comprehensive zoning exemption. In the absence of a showing that substantial public harm will be avoided by granting a comprehensive zoning exemption, the granting of such extraordinary relief is not justifiable. NSTAR Electric, D.P.U. 07-60/07-61, at 51 (2008).

We decline to grant the Petitioners' request for a comprehensive zoning exemption in this case because the Petitioners have not persuaded us that substantial public harm would be avoided as a result. There will inevitably be some additional time needed to seek various permits from the local zoning authorities which, we observe, could have been minimized had the Petitioners consulted with the towns from the start. In this particular case, we believe that this additional time is not unreasonable when balanced against the important public policy of allowing an opportunity for local zoning authority to exercise its home rule authority whenever practicable. New England Power Decision at 24. As we noted above, almost all regulatory processes are subject to possible delay and to subsequent appeal, and the probability of delay and appeal cannot always be accurately assessed in advance. We are unable to find any substantial public harm that would be avoided in this case by granting a comprehensive zoning exemption.

G. Is "Permitted Use" a Prerequisite For the Applicability of Other Zoning Provisions

The "use" provisions of the Russell, Montgomery and Westfield Zoning By-Laws (and other municipal zoning by-laws more generally) require that any building or structure be a permitted "use" in the district in which it is to be located. For example, Russell Zoning By-Law Section 2.0 divides the Town into five classes of districts, including Residential, Rural Residential, Business, Industrial and Floodplain (Exh. JP-2, at Tab A). Various identified "uses," such as general manufacturing, restaurants, or detached one-family dwellings, are then designated as permitted, prohibited, or allowed by special permit within each of the districts. The Petitioners argue that all of the remaining non-use zoning by-law provisions require, as a threshold matter of law, that the underlying use be a "permitted use" (Petitioners Brief at 111-113). According to the Petitioners, the Department's granting of an exemption from the use provisions of a zoning by-law does not convert the use into a "permitted" use under the local by-

law. The result of granting an exemption under G.L. c. 40A, § 3 from a use by-law, therefore, would not convert what is otherwise a non-permitted use into a permitted use (id. at 112). Because the use continues to be non-permitted, it cannot meet any of the other provisions of the by-law (id.). Based on this argument, the Petitioners maintain that they must be exempted from the remaining non-use zoning by-law provisions (id.).

Montgomery rejected the Petitioners argument as inherently contradictory (Montgomery Reply Brief at 7, n.1). Montgomery reasoned that if the non-use provisions of the by-law are truly inoperable, then the Petitioners request for a blanket exemption would be unnecessary because the non-use provisions would be irrelevant (id.). Montgomery also replied that there are certain uses that are allowed in a district according to state law (e.g., child care facilities) even though they are not specifically listed in the by-laws (id. at 7). Therefore, Montgomery argued the fact that those uses are not listed does not mean that they are not otherwise allowed in a district, and it certainly does not mean that they are automatically exempt from the non-use zoning standards that all other uses must meet (id.).

The Petitioners have made a novel legal argument to support the need for a comprehensive zoning exemption. They have offered no case law to support their position, and candidly acknowledge that this issue has never been raised or decided by the Supreme Judicial Court or any other appellate court in Massachusetts (September 25, 2008 Siting Board meeting; Tr. at 25).

In previous Department orders there appears to be an implicit assumption that granting a use exemption would convert what was otherwise a non-permitted use into a permitted use for purposes of the remaining non-use provisions. See, for example, Tennessee Decision (2002) at 7-9 (2002) (Department granted agricultural district use exemption, but denied non-use exemption for site plan review). New England Power Company/Massachusetts Electric Company, D.T.E. 04-66/04-81, at 18-24 (2005) (Department granted use exemption from residential district, but denied non-use exemption for provision requiring building permit). Whether, as a matter of law, the Department's granting of an exemption from the use provisions of a zoning by-law converts a prohibited use into a permitted use for purposes of the non-use provisions has never been definitively established. However, we believe that the logic of the implicit assumption that it does so is sound because by granting a use exemption to a petitioner

we intend to establish that the proposed use is a "permitted" use as a result of our action for all relevant purposes under the zoning by-law. Thus, we reject the argument that obtaining an exemption from a use provision does not automatically transform a non-permitted use to a permitted use for purposes of the non-use provisions of a local zoning bylaw. We agree with Montgomery that the Petitioners' argument is inherently contradictory because if the non-use provisions of the by-law are truly inoperable, then the Petitioners' request for a blanket exemption would be unnecessary as the non-use zoning by-law provisions would therefore be irrelevant.

H. G.L. c. 164, § 72

As stated above, in evaluating petitions filed pursuant to G.L. c. 164, § 72, the Department relies on the standard of review established for G.L. c. 40A, § 3 for determining whether the proposed project is reasonably necessary for the convenience or welfare of the public. Based on the record in this proceeding and the above analysis, and with the implementation of mitigation measures proposed by the Companies and directed by the Siting Board, the Siting Board finds pursuant to G.L. c. 164, § 72, that the proposed transmission line and ancillary equipment are necessary for the purpose alleged, will serve the public convenience, and are consistent with the public interest.

The Siting Board directs the Petitioners to serve a copy of this decision on the Town of Russell Board of Selectmen, the Town of Russell Planning Board, the Town of Russell Zoning Board, the Montgomery Board of Selectmen, the Montgomery Planning Board, the Montgomery Zoning Board, the Westfield City Council, the Westfield Planning Board, and the Westfield Zoning Board within five business days of its issuance. The Siting Board further directs the Petitioners to certify to the Secretary of the Department within ten business days of its issuance that such service has been made.

I. Section 61 Findings

The Massachusetts Environmental Policy Act ("MEPA") provides that "[a]ny determination made by an agency of the Commonwealth shall include a finding describing the environmental impact, if any, of the project and a finding that all feasible measures have been taken to avoid or minimize said impact." G.L. c. 30, § 61. Pursuant to 301 CMR § 11.01(3),

these findings are necessary when an Environmental Impact Report ("EIR") is submitted by a petitioner to the Secretary of Energy and Environmental Affairs, and should be based on such EIR. Where an EIR is not required, G.L. c. 30, § 61 findings are not necessary. The record indicates that an EIR was required for the Petitioners' proposed generation facility and associated transmission line. Therefore, a finding under G.L. c. 30, § 61 is necessary for the Petitioners' zoning exemption petition and its Section 72 petition.

In Section III.D., above, the Siting Board conducted a comprehensive analysis of the environmental impacts of the proposed transmission project and found that the temporary and permanent impacts of the proposed transmission project along the primary route would be minimized and that the proposed project along the primary route would achieve an appropriate balance among conflicting environmental concerns as well as among environmental impacts, reliability and cost. Accordingly, the Siting Board finds that all feasible measures have been taken to avoid or minimize the environmental impacts of the proposed Project.

VI. DECISION

The Siting Board's enabling statute directs the Siting Board to implement the energy policies contained in G.L. c. 164, §§ 69H to 69Q, to provide a reliable energy supply for the Commonwealth with a minimum impact on the environment at the lowest possible cost. G.L. c. 164, § 69H. In addition, the statute requires that the Siting Board determine whether plans for the construction of energy facilities are consistent with current health, environmental protection, and resource use and development policies as adopted by the Commonwealth. G.L. c. 164, § 69J.

In Section II.A, above, the Siting Board found that the existing electric transmission system is inadequate to interconnect the proposed Russell Biomass generating facility, and that the proposed Project is needed if the Petitioners establish that the proposed Russell Biomass generating facility is likely to be available to contribute to the regional energy supply.

In Section II.B, above, the Siting Board found that the proposed Southern Approach for the transmission facility is preferable to the Northern Approach with respect to providing a reliable energy supply for the Commonwealth with a minimum impact on the environment at the lowest possible cost.

In Section III.A, above, the Siting Board found that the Petitioners developed and applied a reasonable set of criteria for identifying and evaluating alternatives to the proposed project in a manner which ensures that they have not overlooked or eliminated any routes which are clearly superior to the proposed project. The Siting Board also found that the Petitioners have identified a range of practical transmission line routes with some measure of geographic diversity. Consequently, the Siting Board found that the Petitioners have demonstrated that they examined a reasonable range of practical siting alternatives.

In Section III.D.5, above, the Siting Board found that the primary route is preferable to the alternative route with respect to providing a reliable energy supply for the Commonwealth with a minimum impact on the environment at the lowest possible cost. The Siting Board also found that the proposed project along the primary route would achieve an appropriate balance among conflicting environmental concerns as well as among environmental impacts, reliability, and cost.

In Section IV, above, the Siting Board reviewed environmental impacts of the proposed transmission project in light of related regulatory or other programs of the Commonwealth. As evidenced by the above discussions and analyses, the proposed transmission line along the primary route generally would be consistent with the identified requirements of all such programs.

Accordingly, the Siting Board APPROVES the Petitioners' petition to construct the proposed 115 kV transmission line using the Petitioners' primary route, and either proposed Switching Station S-1 or S-2, subject to the following conditions:

(a) To establish that there is a need for additional transmission resources to interconnect the Russell Biomass generating facility with the regional transmission grid, prior to the construction of the transmission line, the Petitioners shall submit to the Siting Board copies of all permits required for Russell Biomass to begin construction of the Russell Biomass generating facility.

(b) To ensure that the visual impacts of the proposed transmission project are minimized, the Petitioners shall offer to provide vegetative plantings in edge-of-

ROW or off-ROW locations on residential properties near West Road, where effective to screen views of the proposed transmission line.

(c) The Petitioners shall pursue actively the use of Route Variation 1a modified; however, the Petitioners may use Route Variation 1c if use of Route Variation 1a modified is infeasible. The Petitioners shall notify the Siting Board in writing if they determine for any reason that the use of Route Variation 1a modified is infeasible and the reasons for that determination.

Because the issues addressed in this Decision relative to this facility are subject to change over time, construction of the proposed facility must commence within three years of the date of the decision**.**

In addition, the Siting Board has found pursuant to G.L. c. 164, § 72 that the Petitioners' proposed transmission line is necessary for the purpose alleged, and will serve the public convenience and is consistent with the public interest.

In addition, the Siting Board has found pursuant to G.L. c. 40A, § 3 that construction and operation of the Petitioners' proposed facility is reasonably necessary for the public convenience or welfare. However, the Siting Board is directing the Petitioners to consult with the relevant zoning authorities concerning a number of the zoning exemption requests. Accordingly, the Siting Board GRANTS in part, DENIES in part, and CONTINUES in part, the Petitioners' request for an exemption from certain provisions of the Town of Russell, the Town of Montgomery, and the City of Westfield Zoning By-laws. Specifically, the Petitioners shall be exempt from those sections of the relevant by-laws enumerated in Section V above. The Siting Board continues the portion of the case involving the six requested exemptions enumerated in Section V above where the Siting Board has directed that further consultations with the relevant zoning authorities first take place before further consideration by the Siting Board. The Siting Board denies the Petitioners' request for a comprehensive zoning exemption from the Town of Russell, the Town of Montgomery and the City of Westfield.

The Siting Board notes that the findings in this decision are based on the record in this case. A project proponent has an absolute obligation to construct and operate its facility in conformance with all aspects of its proposal as presented to the Siting Board. Therefore, the

Siting Board requires the Petitioners to notify the Siting Board of any changes other than minor variations to the proposal so that the Siting Board may decide whether to inquire further into a particular issue. The Petitioners are obligated to provide the Siting Board with sufficient information on changes to the proposed project to enable the Siting Board to make these determinations.

The Siting Board's decision in EFSB 07-4 to approve, with conditions, the proposed 115 kV transmission line using the Petitioners' primary route and either proposed switching station S-1 or S-2, pursuant to G.L. c. 164, § 69J is a final decision pursuant to G.L. c. 30A, § 14.

The Siting Board's decision in D.P.U. 07-36, pursuant to G.L. c. 164, § 72, that the Petitioners' proposed transmission line is necessary for the purpose alleged, and will serve the public convenience and is consistent with the public interest is a final decision pursuant to G.L. c. 30A, § 14.

The Siting Board's decision in D.P.U. 07-35, pursuant to G.L. c. 40A, § 3, is final for purposes of G.L. c. 30A, § 14, except with respect to the six requested exemptions where the Siting Board has directed that Petitioners should first consult with the relevant zoning authority in an effort to obtain an appropriate permit or relief.

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Stephen H. August
Presiding Officer

Dated this 21st day of April 2009

APPROVED by the Energy Facilities Siting Board at its meeting of April 15, 2009, by the members and designees present and voting. **Voting for** approval of the Tentative Decision, **as amended**: Ann Berwick (Acting EFSB Chair/Designee for Ian A. Bowles, Secretary, Executive Office of Energy & Environmental Affairs); Rob Sydney, (Designee for Commissioner, DOER); James Colman (Designee for Commissioner, MADEP); Paul J. Hibbard, Chairman, DPU; Tim Woolf, Commissioner DPU; and Dan Kuhs, Public Member.

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Ann Berwick, Acting Chair
Energy Facilities Siting Board

Dated this 15th day of April 2009

Appeal as to matters of law from any final decision, order or ruling of the Siting Board may be taken to the Supreme Judicial Court by an aggrieved party in interest by the filing of a written petition praying that the order of the Siting Board be modified or set aside in whole or in part. Such petition for appeal shall be filed with the Siting Board within twenty days after the date of service of the decision, order or ruling of the Siting Board, or within such further time as the Siting Board may allow upon request filed prior to the expiration of the twenty days after the date of service of said decision, order or ruling. Within ten days after such petition has been filed, the appealing party shall enter the appeal in the Supreme Judicial Court sitting in Suffolk County by filing a copy thereof with the clerk of said court. (Massachusetts General Laws, Chapter 25, Sec. 5; Chapter 164, Sec. 69P).