



# The Commonwealth of Massachusetts

## DEPARTMENT OF PUBLIC UTILITIES

D.P.U. 09-24/09-25

March 19, 2010

Petition of Western Massachusetts Electric Company pursuant to G.L. c. 164, § 72 for approval to alter and operate as altered existing transmission lines and petition pursuant to G.L. c. 40A, § 3 for exemption from the zoning ordinances of Agawam and West Springfield.

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## I. INTRODUCTION

### A. Description of Proposed Project

On March 13, 2009, the Petitioner, Western Massachusetts Electric Company (“WMECo” or “Company”) filed a petition with the Department of Public Utilities (“Department”) pursuant to G.L. c. 164, § 72 for approval to construct and operate two transmission lines in the Towns of Agawam and West Springfield (“Towns”) (“Section 72 Petition”). On March 13, 2009, WMECo also filed with the Department a related petition pursuant to G.L. c. 40A, § 3 seeking both individual and comprehensive exemptions from the Zoning Ordinances of the Towns of Agawam and West Springfield, associated with the Company’s proposed project, as described below (“Zoning Exemption Petition”). The matters were docketed as D.P.U. 09-24 and D.P.U. 09-25.<sup>1</sup>

The Company proposes to reconstruct two existing 115 kV transmission lines, known as lines 1311 and 1412, along an existing 2.5-mile long right-of-way (“ROW”) between the Agawam Substation and the West Springfield Substation in the towns of Agawam and West Springfield (Exh. WMECO-1, at 3-1).<sup>2</sup> The location of the lines would be approximately 0.5 miles in the Town of Agawam and approximately two miles in the Town of West Springfield

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<sup>1</sup> On June 8, 2009, the Chairman of the Department issued an order consolidating the Department’s review of the two petitions.

<sup>2</sup> In addition to the route considered herein (which traverses Bondi’s Island Landfill in West Springfield), the petitions include a variation of the route which goes around the landfill instead of through it (Exh. WMECO-1, at 3-3). During the proceeding, the Company, the Town of West Springfield, the City of Springfield and the landfill operator agreed to the use of the existing ROW through the landfill. Accordingly, the Company withdrew its “around the landfill” route variation from Department consideration (Exh. DPU-L-6, Sp-1; Tr. 3, at 287).

(id. at 3-1). The Company would replace lines 1311 and 1412, currently co-located on double-circuit lattice-steel structures ranging in height from 80 to 115 feet, with two lines of steel-monopole transmission structures ranging in height from 80 to 195 feet (id. at 6-10 – 6-12). WMECo asserts that the proposed project is necessary in order to reinforce the Springfield area transmission system and bring the system into compliance with WMECo's reliability standards (Exh. WMECO-1, at 4-1).

B. Procedural History

On May 6, 2009, the Department conducted a site visit in the Towns of Agawam and West Springfield, as well as a public hearing in the Town of Agawam. The Company sponsored the following witnesses in the proceeding: (1) William H. Bailey, Ph.D., principal scientist in the Health Services practice of Exponent, Inc.; (2) Timothy B. Barton, senior environmental specialist at Burns & McDonnell; (3) David J. Cameron, program manager and senior ecologist at AECOM Environment; (4) Robert E. Carberry, project manager for Northeast Utilities Service Company ("NUSCO"); (5) John C. Case, project manager for NUSCO; (6) Donald D. Cooper, Esq., partner in the law firm of Nixon Peabody; (7) Jeffrey Martin, project manager for NUSCO; (8) Scott E. Newland, program manager, Burns & McDonnell; and (9) Allen W. Scarfone, manager, transmission systems planning for NUSCO.

The Department granted the petition of David Sterling, representative of certain residents of Prospect Street, Agawam, for limited participant status in the proceeding. The Department denied the petition to intervene filed by Ashley Jones. The Department received no additional petitions to intervene. The Department conducted evidentiary hearings at its offices in Boston on September 9, 11, and 25, 2009. The evidentiary record consists of

approximately 170 exhibits, consisting primarily of the Company's responses to Department information requests. The Company and the limited participant, Mr. Sterling, submitted briefs.

II. REQUEST FOR INDIVIDUAL ZONING EXEMPTIONS PURSUANT TO G.L. c 40A, § 3

A. Standard of Review

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 Company, D.T.E. 00-24, at 3 (2001). Finally, the petitioner must demonstrate that its present or proposed use of the land or structure is reasonably necessary for the convenience or welfare of the public. Massachusetts Electric Company, D.T.E. 01-77, at 4 (2002); Tennessee Gas Pipeline Company, D.T.E. 01-57, at 3-4 (2002).

1. 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 D.T.E. 00-24, at 3-4; Berkshire Power Development, Inc., D.P.U. 96-104, at 26-36 (1997).

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 D.P.U. 96-104, at 30; Save the Bay at 685-686; Town of Truro v. Department of Public Utilities, 365 Mass. 407, at 410 (1974). 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.” D.P.U. 96-104, 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). 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. D.P.U. 96-104, at 31.

## 2. Public Convenience and 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, 366 Mass. at 680; Town of Truro, 365 Mass. at 410. 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). 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, 366 Mass. at 685; New York Central Railroad, 347 Mass. 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, 347 Mass. 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. D.T.E. 00-24, at 2-6; D.T.E. 01-77, at 5-6; D.T.E. 01-57, at 5-6; Tennessee Gas Company, D.T.E. 98-33, at 4-5 (1998).

### 3. 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 makes a determination whether the exemption is necessary to allow construction or operation of the petitioner’s proposed project. See D.T.E. 01-77, at 4-5; 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 a 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).<sup>3</sup>

#### B. Public Service Corporation Status

WMECo is an electric company as defined by G.L. c. 164, § 1, and, as such, is a public service corporation. Western Massachusetts Electric Company, D.P.U. 09-174/175/176/177, at 5 (1990). Accordingly, WMECo is eligible to petition the Department for exemptions from local zoning ordinances under G.L. c. 40A, § 3.

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<sup>3</sup> See also Section II.D.5 n. 15.

C. Public Convenience and Welfare

1. Need for or Public Benefit of Use

a. The Company's Position

The Company states that the proposed project improvements are needed to ensure reliable transmission service to the Clinton Substation in downtown Springfield, the Breckwood Substation in southeast Springfield, and the West Springfield Substation (Exh. WMECO-1, at 4-11). The Company states that there is need for the proposed project because under current conditions<sup>4</sup> two foreseeable double-contingency outages would result in loss of service to thousands of customers and, by 2011, a foreseeable single-contingency outage would require rolling loss of load (id. at 4-11, 4-12).

The Company described the load served by the lines and substations that the project will support. The numbers of distribution customers served by West Springfield, Clinton and Breckwood substations in 2008 were 6,642, 14,284 and 20,291 customers, respectively, and smaller substations served by these three substations serve an additional 4,700 customers (id.). The affected area includes significant residential load in the greater Springfield area, all of the major municipal buildings in Springfield (including the Police Department and Fire Department), every major hospital and medical center in Springfield, all of the traffic and street lights in downtown Springfield and numerous educational institutions (id. at 4-13, 4-14). According to the Company, there are foreseeable contingency outages on the local 115 kV transmission system which would result in a loss of service to some or all of these customers

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<sup>4</sup> The double contingency outage analysis is based on actual summer 2008 peak loads (Exh. WMECO-1, at 4-12).

(Exh. WMECO-1, at 4-11). The Company asserts that the proposed project would alleviate this problem (id.).

Additionally, the Company states that the proposed project is designed to bring the Springfield area transmission system into compliance with WMECo's reliability standards (Exh. WMECO-1, at 4-1). Northeast Utilities' Transmission Planning Guideline ("NU TPG") sets forth local area reliability standards applicable to the WMECo system (Exh. WMECO-1, at 4-5). The Company states that its reliability standards are consistent with national and regional reliability standards, including those of the North American Electric Reliability Corporation ("NERC"), the Northeast Power Coordinating Council ("NPCC"), and the Independent System Operator-New England ("ISO-NE") (id. at 4-1). WMECo indicated that the NU TPG generally requires transmission systems be designed to withstand a single contingency outage (or N-1 contingency) – that is to allow the loss of any single element – without a resulting loss of load (Exh. WMECO-1, at 4-5). Furthermore, the NU TPG requires that, where contingencies involving the outage of multiple elements have a potential aggregate loss of load exceeding 100 MW, measures should be taken to reduce the frequency and/or impact of those contingencies (id.). Such contingencies may result from outages that occur simultaneously (e.g., simultaneous outage of two elements, or an N-2 contingency) or successively (e.g., outage of an element and, prior to its restoration, outage of a second element, or an N-1-1 contingency) (Exh. WMECO-1, at 4-3).

WMECo states that it first modeled the ability of the local area transmission system to withstand the single contingency outage of both lines 1311 and 1412, co-located on a single set of structures, between the Agawam and West Springfield Substations (Exh. WMECO-1, at 4-

11). In the event of the outage of lines 1311 and 1412, a circuit breaker at the Breckwood Substation would close<sup>5</sup> or remain closed to provide supply to the Clinton and West Springfield Substations (id.). Switching distribution circuits would allow up to 30 megavolt amperes (“MVA”) of load to be shifted away from the East Springfield and Breckwood Substations to adjacent substations. At current load levels, this would ensure that cable circuit 1322, extending between the Breckwood and East Springfield Substations, could supply the area without exceeding the circuit’s long-term emergency (“LTE”) rating. The Company notes, however, that by the year 2011, under ISO-NE forecasted peak load, an outage of lines 1311 and 1412 would necessitate “rolling loss” of load to rely on cable circuit 1322 to supply the area, without exceeding the circuit’s LTE rating (id. at 4-11). The Company concluded that this potential loss of local load by 2011 violates the NU TPG provision requiring that the transmission system withstand the outage of any single element without a resulting loss of load (id. at 4-5).

The Company then assessed the impacts of two foreseeable N-1-1 contingencies, using actual summer 2008 peak loads (Exh. WMECO-1, at 4-12). First, if cable circuit 1322, between the East Springfield and Breckwood Substations, experienced an outage, followed by the outage of lines 1311 and 1412 on common structures between the Agawam and West Springfield Substations, supply would be lost to the Clinton, West Springfield and Breckwood Substations, an aggregate loss of 160 MW resulting in a loss of service to most of the 41,000

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<sup>5</sup> The Company states that this circuit breaker would normally be open once its proposed Greater Springfield Reliability Project is in service (Exh. WMECO-1, at 4-11). The Greater Springfield Reliability Project is currently under review by the Energy Facilities Siting Board in EFSB 08-2, DPU 08-105/106.

customers served by these substations (Exh. WMECO-1, at 4-12).<sup>6</sup> Second, if cable circuit 1433 between the West Springfield and Breckwood Substations experienced an outage, followed by an outage of lines 1311 and 1412, the supply would be lost to the Clinton and West Springfield Substations. This contingency would cause an aggregate loss of 101 MW resulting in a loss of service to most of the 20,000 customers served by these substations (id.).<sup>7</sup> The Company therefore asserts that in both cases the aggregate potential loss of local load exceeds the Company's planning criteria, which requires project improvements be undertaken to reduce the frequency and/or impact of contingencies involving the potential aggregate loss of load exceeding 100 MW (id.).

b. Analysis and Findings

The record shows that the proposed project is needed to bring the existing system into compliance with reliability standards. WMECo has demonstrated that by 2011 the existing transmission lines and equipment in the area served by the Clinton, West Springfield, and Breckwood Substations would be insufficient to maintain service to downtown Springfield in the event of a foreseeable N-1 contingency (Exh. WMECO-1, at 4-13). Specifically, the Company has shown that, under design summer conditions for the year 2011, the simultaneous loss of WMECo's 1311 and 1412 lines, located on double-circuit towers, would necessitate

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<sup>6</sup> The Company states that in the event that this N-1-1 contingency occurs, some load could be shifted from the Clinton and Breckwood Substations to neighboring Substations, after which approximately 85% of the Clinton Substation load would remain unserved and 70% of the Breckwood Substation would remain unserved (Exhs. WMECO-1, at 4-12; DPU-N-1).

<sup>7</sup> See Footnote 6.

“rolling loss” of load in order to rely on another circuit, line 1322, without exceeding that line’s LTE rating (id.).

Furthermore, under the conditions that exist today, there is a need to prevent the isolation of several substations under N-1-1 contingency conditions. Specifically, the Company has demonstrated that in the event of the outage of WMECo’s 1311 and 1412 lines together with that of another system element, an aggregate loss of load of over 100 MW and loss of service to thousands of customers could occur. (Exh. WMECO-1, at 4-12).

The Company’s analysis demonstrates that the proposed project would allow for a local transmission system that complies with applicable reliability criteria and reliable service to the Springfield area under current and near-term contingency conditions (id. at 4-15).

Accordingly, the Department finds that there is a need for, and public benefits that would result from, the construction and operation of the proposed project.

## 2. Alternatives Explored

The Company states that the proposed project was designed in order to bring the system into compliance with WMECo’s reliability standards, consistent with national and regional reliability standards (Exh. WMECO-1, at 4-1). The proposed project is estimated to cost approximately \$22.2 million (id. at 5-14). The Company indicated that in addition to the preferred alternative (the proposed project) WMECo assessed three alternative electrical solutions.

### a. Alternative 1

The first alternative would involve construction of a new, single-circuit 115-kV overhead transmission line running parallel to the existing circuits 1311 and 1412 between the

Agawam Substation and the West Springfield Substation (Exh. WMECO-1, at 5-4). This new 115 kV transmission line would be constructed on new independent steel-monopole structures approximately 95-feet high (id.). The ROW would need to be expanded by 25 feet to accommodate the addition of the new line (id.). Alternative 1 would also require the addition of a new line terminal and associated equipment at both the Agawam and West Springfield Substations to accommodate the new circuit (id.).

According to the Company, the new overhead circuit would ensure supply to the Clinton, West Springfield and Breckwood Substations under the double contingencies in question (Exh. WMECO-1, at 5-4). Alternative 1 would cost approximately \$26.3 million (Tr. 1, at 68).

b. Alternative 2

The second alternative would involve construction of a new 4-mile long, 115-kV underground cable circuit from the Clinton Substation to the East Springfield Substation (Exh. WMECO-1, at 5-6). The Company states that an overhead line in the area between these substations is impractical because the area is congested with commercial, industrial and residential development (id.). This alternative would be installed primarily within public roadways beginning at the Clinton Substation and ending at the East Springfield Substation (id. at 5-6).<sup>8</sup>

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<sup>8</sup> Alternative 2 would run from Clinton Substation east along Clinton Street, under a railroad and interstate overpass to East Columbus Avenue, continuing northwest to St. George Road, which becomes Carew Street, then St. James Boulevard, then continuing northeast where the road becomes Page Boulevard to Rose Street and into the existing East Springfield Substation (Exh. WMECO-1, at 5-6).

WMECo asserts that this alternative would meet WMECo's reliability need by supplying Clinton, West Springfield and Breckwood Substations in the event of the failure of both the existing double-circuit structures between Agawam Substation and West Springfield Substation following the failure of either the cable circuit from East Springfield Substation to Breckwood Substation or the cable circuit from Breckwood to the West Springfield Substation (Exh. WMECO-1, at 5-6). However, the Company notes that the roadways in which Alternative 2 would be placed have a high density of existing utilities within the ROW which could both interfere with the placement of the cable and increase costs (id.). The Company further states that, due to the length of Alternative 2 and the fact that it would be underground, construction impacts, in particular noise and traffic impacts, would be greater than the proposed project or Alternative 1 (id. at 5-16). Alternative 2 would cost approximately \$50.2 million (Exh. WMECO-1, at 5-14).

c. Alternative 3

Alternative 3 would include the installation of two underground cables supplementing an existing underground transmission cable from the West Springfield Substation to the Breckwood Substation, and from the Breckwood Substation to the East Springfield Substation (Exh. WMECO-1, at 5-9). The Company states that overhead cables in this area would not be practical because of heavy development and congestion (id.). The first cable circuit would be approximately 4.7 miles long and would extend south from the West Springfield Substation along public roadways, continue under the Connecticut River as a horizontal directional drill

and end at the Breckwood Substation (id.).<sup>9</sup> The second cable circuit is approximately 3.7 miles long and would extend from the existing Breckwood Substation and progress along public roadways and end at the East Springfield Substation (id.).<sup>10</sup>

The Company states that the redundancy provided by the two new cable circuits would ensure continued supply to the Clinton, West Springfield, and Breckwood Substations under the N-1-1 outages in question (Exh. WMECO-1, at 5-1). The Company states that both cables must be backed up since the initial cable outage could occur either to cable 1322, between the East Springfield and Breckwood Substations or cable 1433, between the Breckwood and West Springfield Substation (id.). The Company states that, due to the length of Alternative 3 and the fact that it would be underground, construction impacts, in particular noise and traffic impacts, would be greater than the proposed project or Alternative 1 (id. at 5-16). Alternative 3 is estimated to cost approximately \$131 million (id. at 5-14).

d. Analysis and Findings

The Company described three alternative projects, in addition to the proposed project. All three alternatives would meet the Company's reliability need (Exh. WMECO-1, at 5-12). Alternative 1, a single overhead 115-kV line in the existing ROW between the Agawam and West Springfield Substations would require the ROW be expanded by 25 feet (id. at 5-4). The

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<sup>9</sup> The first cable circuit of Alternative 3 would travel from the West Springfield Substation along U.S. Highway 5 to M Street, then east to a Massachusetts Department of Conservation and Recreation boat ramp and parking lot, under the Connecticut River, continue northwest along West Columbus Avenue to Union Street, east along Union Street to Eastern Street and then north to Wilbraham Road and end at the Breckwood Substation (Exh. WMECO-1, at 5-9).

<sup>10</sup> The second cable circuit would travel from the Breckwood Substation west along Wilbraham Road, cross Lake Lookout/Watershops Pond, to Roosevelt Avenue, continue northwest, then northeast to a railroad crossing and a crossing of Interstate 291, to the East Springfield Substation (Exh WMECO-1, at 5-9).

second and third alternatives would involve lengthy underground cables, partially through heavily developed and congested areas (id. at 5-6, 5-9). Each of the three alternatives would be more costly than the proposed project, the second and third alternatives on the order of twice and six times as much, respectively (id. at 5-14). In addition, Alternatives 2 and 3 would involve significantly more construction impacts than the proposed project or Alternative one (id. at 5-17). Accordingly, the Department finds the Company's decision to pursue the proposed project, rather than the alternatives, was reasonable.

3. Impacts of the Proposed Use

a. Land Use Resources

The proposed project is located within an existing transmission ROW, which need not be expanded to accommodate the new towers (Exh. WMECO-1, at 3-1). The Company states that there would be some temporary and permanent alterations to uplands (id. at 6-5). The temporary impacts would amount to 3.9 acres and include access road improvement and construction, crane pads, and staging areas. The permanent impacts would total 0.6 acres and include structure installation and tree clearing (id.).

The project would cross Priority and Estimated Habitats associated with rare species, including the bald eagle, shortnose sturgeon, arrow clubtail, Eastern box turtle and triangle floater (Exh. WMECO-1, at 6-13). The National Heritage Endangered Species Program ("NHESP") has required WMECo to conduct "eagle tree" surveys at each of the river crossings, as well as a triangle floater survey (id.). The Company states that it did not observe indication of eagle usage within any of the trees in the study area, and that suitable habitat for the triangle floater does not exist within the proposed work areas (id.; Exh. DPU-L-3).

NHESP did not require surveys for the other species (Exh. WMECO-1, at 6-13). WMECo submitted the findings of the bald eagle and triangle floater surveys and NHESP concluded that the proposed project would not result in a prohibited taking of state-listed rare species (Exh. DPU-L-3).

b. Visual

The proposed project would be located along an existing transmission line ROW, through residential, agricultural and commercial land uses as well as Bondi's Island Landfill (Exh. WMECO-1, at 6-9). The existing lines are supported on a single set of lattice structures ranging in height from 80 to 115 feet (id. at 6-10). The relocated lines would be supported on two sets of steel monopoles ranging in height from 80 to 195 feet tall. Two sets of structures in the Bondi's Island area (for a total of 4 structures) would be 195 feet tall, the remaining structures would be 80 to 145 feet tall (id. at 6-11, Tr. 1, at 91-93). The Company states that replacing the single structures with sets of two taller structures would result in an increased visual impact (Exh. WMECO-1, at 6-11).

There are 16 residences within 100 feet of the ROW (with four of those residences located within the ROW) along one portion of the proposed project, between the Agawam Substation and Walnut Street in Agawam (Exh. DPU-G-1). These 16 nearby residences are those in the vicinity of Springfield Street south of the ROW. Based on project location mapping, approximately 10 of these residences are located directly abutting or within the ROW (id., Att. 1). In addition, there are residences along Prospect Street to the north of the Agawam Substation (id., Atts. 1 and 2). There are approximately 500 residences within a quarter mile of the ROW, the majority of which are either in the vicinity of the Agawam

Substation or the ROW between the Agawam Substation and the Westfield River in Agawam (Exh. DPU-G-1).

The proposed project would result in an approximately one-half acre (40 feet wide by 500 feet long) decrease in wooded buffer between Prospect Street and the Agawam Substation, although clearing directly behind the Prospect Street residence closest to the Substation will be kept to a minimum (Exhs. DPU-V-1; DPU-V-5). The Company states that this planned tree clearing would leave a wooded buffer between the closest residence on Prospect Street and the substation of approximately 50 feet in depth (Exh. DPU-V-6).

c. Wetlands and Water Resources

The project would result in alterations to the following jurisdictional wetlands: bordering vegetative wetlands (“BVWs”), bordering land subject to flooding (“BLSF”), and 200-foot riverfront area (Exh. WMECO-1, at 6-23). These impacts are summarized below in Table 1. In addition, the proposed project area crosses over the Westfield River in three locations. However, the Company proposes no alterations to jurisdictional Land Under Waterbodies and Waterways or the Banks of the Westfield River (*id.* at 6-22, 6-23).

**Table 1      Summary of Wetlands Impacts**

| Wetland/Resource Area Type         | Estimated Alterations (square feet) |           |
|------------------------------------|-------------------------------------|-----------|
|                                    | Temporary                           | Permanent |
| Bordering Vegetated Wetlands       | 32,469                              | 2073      |
| Bordering Land Subject to Flooding | 114,662                             | 4129      |
| 200-foot Riverfront Area           | 65,653                              | 3831      |

Because of the proposed work in jurisdictional areas, the Company must obtain permits from the U.S. Army Corps of Engineers (“USACE”), MADEP, and must obtain orders of conditions from both the Agawam and the West Springfield Conservation Commissions (Exh. DPU-W-2).<sup>11</sup> The Company states that, in order to minimize impacts to wetland areas it would: install temporary construction matting within wetlands where necessary; avoid placement of permanent structures in wetland areas where feasible; restore wetlands to pre-construction conditions to the extent practicable; and provide mitigation in order to offset any permanent wetlands impacts, in consultation with the Agawam and West Springfield Conservation Commissions (Exh. WMECO-1, at 6-24). The Company states that the mitigation may be in the form of restoring or enhancing on-site wetlands, creating wetlands on or off- site, restoring off-site wetlands, and/or preserving wetlands (id.).

d. Traffic

The Company states that there would be 10-25 personal vehicles entering and leaving the construction site daily, as well as construction vehicles and material transfer vehicles, the number of which would vary throughout construction (Exh. DPU-T-4). The Company states that there could be up to seven crews comprised of 4 to 15 people each working on the project at various times, but not all at once (Exh. DPU-T-3). Construction workers would generally report daily to a staging area designed to accommodate approximately 15 vehicles (id.). A staging area would not be chosen until the contractor is hired, but the Company states a preference for using either Company property or municipal property for staging areas (Exh.

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<sup>11</sup> WMECo received an Order of Conditions from the West Springfield Conservation Commission on September 3, 2009 and an Order of Conditions from the Agawam Conservation Commission on October 22, 2009 (Exhs. WMECO-DJC-5; WMECO-DJC-6).

DPU-T-5). The Company maintains that there are several important considerations for choosing a staging area, one of which is impacts to local traffic (Tr. 1, at 129).

The proposed project would require two road crossings: Walnut Street in Agawam and Memorial Avenue/Route 147 in West Springfield (Exh. WMECO-1, at 6-25). The Company has entered into memoranda of understanding (“MOUs”) with Agawam and West Springfield, and has agreed to consult with town representatives to minimize construction traffic impacts resulting from road crossings or other construction activities which may impact traffic (Exhs. DPU-Z-2-SP-1, Att. 1, at 7; DPU-Z-1-SP-1, Att. 1, at 7).

e. Construction-Related Noise and Air Impacts

The Company states that any noise impacts associated with the project would occur during construction (Exh. WMECO-1, at 6-34). Consistent with applicable source emission requirements, WMECo states that project construction equipment will be properly muffled and maintained, and that such equipment will be prohibited from idling unnecessarily (Exh. DPU-G-7).

The MOUs between the Company and Agawam and West Springfield limit construction hours to between the hours of 7 a.m. and 7 p.m. every day, including weekends and holidays (Exhs. DPU-Z-1-Sp.-1, Att. 1; DPU-Z-2-Sp.-1, Att. 1). The Company characterizes the project area as urban/suburban where ambient noise levels are influenced by traffic and commercial and industrial activities (Exh. WMECO-1, at 6-33). The Company measured ambient noise levels at several points along or adjacent to the ROW (Exh. DPU-NO-2). The measured average  $L_{90}$

sound levels<sup>12</sup> closest to residential areas ranged from 39 to 49 dBA for daytime and 37 to 42 dBA for nighttime (id.).

The Company states that construction noise levels could reach 101 dBA at 50 feet for intervals of 15 minutes or less (WMECO-RR-2). WMECo stated that these 15 minutes intervals could occur at any point during the construction period, at any time during the day, with any number of recurrences a day (Tr. 3, at 319). However, the Company states that this is the maximum predicted noise level with two or more very noisy pieces of equipment operating simultaneously and would be an exception rather than representative of normal construction noise (id. at 330). The Company states that noisy construction at a particular location could last for up to two weeks each time work is done at that location (id. at 318). The Company also states that it would conduct preconstruction outreach to neighboring landowners and would also have a construction manager on site at all times to address landowner noise concerns (id. at 319).<sup>13</sup>

The Company acknowledges that the proposed project may result in short-term, highly localized impacts on air quality during construction, potentially including demolition and construction activities at substation sites and along the existing ROW (Exh. WMECO-1, at 6-27). To mitigate construction impacts relating to dust, the Company will, depending on the location,

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<sup>12</sup> L<sub>90</sub> noise levels are determined by measuring the sound level exceeded in 90 percent of a specific time period. The Company states that multiple time periods were measured and averaged (Exh. DPU-NO-2).

<sup>13</sup> The Company provided a construction schedule with a start date of March 2010 (Exh. DPU-G-3, Att. 1). Based on the construction schedule, the line stringing and cutover of line 1311 is estimated to be completed in November 2010 and the line stringing and cutover of line 1412 is estimated to be completed in January of 2011 (id.). The schedule estimates completion of the proposed project in May of 2011, based on ROW restoration occurring from April to May of 2011, and punchlist completion work occurring from January to April of 2011 (id.).

sweep streets, utilize crushed stone pads, and water down disturbed soils (id.). With regard to diesel engine emission, construction equipment will be prohibited from idling unnecessarily and WMECo will require its contractors to use high-quality low-sulfur diesel fuel for its off-road equipment (Exh. DPU-G-7). WMECo states it intends to work with its contractors to ensure that construction activities are undertaken in a manner that is consistent with the objectives of the MDEP diesel reduction strategies, as explained in the MADEP Diesel Reduction Retrofits in the Construction Industry: A How to Guide (RR-WMECO-10).

f. EMF

The proposed project would consist of the relocation of overhead 115 kV lines 1311 and 1412 onto separate sets of steel monopoles within an existing ROW (Exh. WMECO-1, at 3-1). The ROW width would remain the same throughout, 100 or 150-feet wide, depending on the location (id.). The Company calculated existing and proposed electric and magnetic fields along the route, divided into nine sections according to the specific configuration at each point along the route (id. at 6-38).

The Company states that the conductors would be configured to allow for the greatest potential cancellation of magnetic fields (Tr. 2, at 167). With the proposed project, electric and magnetic fields would slightly increase, remain the same or decrease, depending on the route section (Exh. WMECO-1, at 6-38). The largest increase in electric field levels at an edge-of-ROW would be 0.9 kV/m, from 0.13 kV/m to 0.22 kV/m (id. at 6-40). The largest increase in magnetic field levels at a ROW edge would be 12.3 milligauss (“mG”), from 3.6 mG to 15.9 mG (id. at 6-41).<sup>14</sup> There are approximately four residences that are within the ROW. For the residence closest to the lines, a residence which falls between the Agawam

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<sup>14</sup> These calculations are based on 2012 annual average loads.

Substation and Walnut Street in Agawam, the increase in magnetic field would be 2 mG, from 13.2 to 15.2 mG (WMECO-RR-5).

g. Analysis and Findings

The Department finds that, with implementation of conditions discussed below, the environmental impacts of the proposed project would be minimized. Land use impacts would be minimal, given that the proposed project would occur almost entirely within an existing transmission line ROW and would involve minimal tree clearing (Exh. WMECO-1, at 6-5). Further, the record shows that there would be no impact to rare species by the proposed project (Exh. DPU-L-3). While the visual impacts of the proposed project may be greater than the existing conditions, the majority of the project does not abut residential land uses and the portion of the project with the greatest visual impact would fall within the Bondi's Island Landfill (Exh. WMECO-1, at 6-11).

There are, however, approximately 10 residences that directly abut or are located within the ROW (Exh. DPU-G-1). While much of this area does not currently have vegetative screening, there would be changes to visual impacts due to the new configuration of the proposed project, which consists of additional lines at taller heights than the existing transmission facilities (id.). Therefore, the Department directs WMECo, upon request of any person owning property located directly abutting or within the ROW, to provide additional off-site screening (such as, but not limited to, shrubs, trees, or window awnings) provided operating and maintenance requirements for all ROW facilities are met. Upon completion of construction, WMECo shall notify in writing all owners of property located on or abutting the ROW of the option to request that the Company provide off-site mitigation. The Company

shall honor all reasonable and feasible requests for mitigation that are submitted by property owners within six months of receipt of the Company's written notification.

With respect to wetlands and water resources, the Company is obtaining necessary permits and orders for work that would impact jurisdictional wetlands and waterways (Exh. DPU-W-2). The Company would implement mitigation measures, to be determined in consultation with the Agawam and West Springfield Conservation Commissions (Exh. WMECO-1, at 6-24). With respect to traffic, the Company has agreed, in MOUs with the Towns, to coordinate necessary traffic control with the appropriate officials within the Towns (Exhs. DPU-Z-2-SP-1 Att. 1, at 7; DPU-Z-1-SP-1 Att. 1, at 7). Additionally, the staging areas would be chosen with possible traffic impacts in mind (Tr. 1, at 129).

With respect to noise impacts, there would be occasions when the construction noise would result in substantial increases above ambient noise levels, even with construction equipment noise mitigation (WMECO-RR-2; DPU-G-7). The Company would engage in pre-construction community outreach to keep nearby residents aware of the construction schedule, and a construction supervisor would be on-site at all times to address noise or other construction related concerns (Tr. 3, at 318-319). In addition, the Company and the Towns have agreed to daily construction work hours in the MOUs (Exhs. DPU-Z-1-Sp.-1, Att. 1; DPU-Z-2-Sp.-1, Att. 1).

However, the Department notes that the Company has not addressed limitations on construction for days outside weekday periods or on holidays. Further, as proposed, WMECo's construction schedule would encroach into the evening hours. Given the substantial

noise levels associated with construction of the facility, the Department finds that the following mitigation measures are warranted.

First, absent unusual circumstances, the Company shall conduct no work on Sundays and holidays. Second, absent unusual circumstances, because a majority of the residences within  $\frac{1}{4}$  mile of the ROW and all of the 16 residences located within 100 feet of the ROW are located in Agawam, WMECo shall limit construction activities in the area between Maple Street in Agawam and the Westfield River to the hours of 7:00 a.m. to 5:00 p.m., Monday through Friday, excluding holidays. Third, absent unusual circumstances, in all other project areas (i.e., between the Westfield River and West Springfield Substation), WMECo shall limit construction activities to the hours of 7:00 a.m. to 7:00 p.m., Monday through Saturday, excluding holidays. Fourth, WMECo shall, in consultation with the Towns of Agawam and West Springfield, develop a community outreach plan for project construction. This outreach plan should, at a minimum, lay out procedures for providing prior notification to affected residents of: (a) the scheduled start, duration, and hours of construction; (b) any construction the Company intends to conduct that, due to unusual circumstances, must take place outside of the hours detailed above; and (c) complaint and response procedures including contact information.

With respect to electric and magnetic fields, the proposed project would result in a slight increase, or decrease, or no change, in the electric and magnetic fields levels, depending on the section of the project route (Exh. WMECO-1, at 6-38). Because the conductors would be configured to allow for the greatest potential cancellation of magnetic fields, any magnetic fields impacts of the proposed transmission line would be minimized (Tr. 2, at 167).

Thus, the Department concludes that with compliance with (1) applicable state and local regulations, (2) the directives herein, and (3) the MOUs entered into with the Towns, the proposed project would include feasible measures to avoid or minimize environmental impacts.

4. Conclusion on Public Convenience and Welfare

Based on the foregoing analysis of: (1) need for or public benefit of use; (2) alternatives explored; and (3) impacts of the proposed use, the Department finds that the benefits of the proposed project exceed any adverse local impacts, and thus, the proposed use is reasonably necessary for the public convenience or welfare.

D. Exemptions Required

1. Introduction

WMECo is seeking both individual ordinance exemptions and a comprehensive exemptions from the Agawam Zoning Ordinance and the West Springfield Zoning Ordinance (Exh. WMECO-2, at 1). WMECo states that it is seeking zoning relief since the proposed project is needed in the immediate time frame in order to maintain reliable transmission service to the greater Springfield area (*id.* at ¶ 42). The Company maintains that transmission line projects, as linear facilities that are typically tall, not within a single town, and not typically on Company-owned land, pose a difficulty being considered under local zoning ordinances (WMECO-RR-6). The Company further notes, that since the project is regional in nature, it is more appropriate for the Department, which has a wider jurisdiction, to review zoning related issues (Tr. 3, at 293).

The Company states that both Agawam and West Springfield support the Department's granting of specific and comprehensive zoning exemptions (Exhs. DPU-Z-1; DPU-Z-2).

WMECo maintains that it is the preference of the Towns for the Department to grant all of the necessary zoning exemptions in order to lessen the burden that otherwise would be placed on the resources of the Towns in the zoning process (Exhs. DPU-Z-1; DPU-Z-2; Tr. 3, at 237).

WMECo provided a zoning support letter from the Town of Agawam and signed Memorandum of Agreements (“MOU”) with both Towns (Exhs. DPU-Z-1, Att.8; DPU-Z-1, Sp.-1, Att. 1; DPU-Z-2, Sp-1, Att. 1).

2. Individual Exemptions

The Company seeks the following individual exemptions from the operation of the Agawam Zoning Ordinance for the Company’s proposed overhead transmission lines and the Agawam Substation:

**Table 2 Agawam Zoning Ordinance Provisions Requiring an Exemption**

|                     | Transmission Line   | Substation           |
|---------------------|---|----------------------|
| Use                 | Article III, § 180-23; Article VI, § 180-31; Article VII, § 180-37; Article VIII, § 180-44; Article IX, § 180-48; Article X, § 180-55 | Article IX, § 180-48 |
| Height              | Article III, § 180-24; Article VI, § 180-32; Article VII, § 180-38; Article VIII, § 180-45; Article IX, § 180-49; Article X, § 180-56 | Article IX, § 180-49 |
| Floodplain Zone     | Article XII, § 180-67   | n/a                  |
| Removal of Topsoil  | Article I, § 180-8 G  | same                 |
| Site Plan Approval  | Article I, § 180-13   | same                 |
| Parking and Loading | n/a   | Article IX, § 180-50 |

See: Exh. WMECO-3

The Company seeks the following individual ordinance exemptions from the operation of the West Springfield Zoning Ordinance for its proposed overhead transmission lines and the West Springfield Substation:

**Table 3 West Springfield Zoning Ordinance Provisions Requiring an Exemption**

|                               | Transmission Line   | Substation                  |
|-------------------------------|---|-----------------------------|
| Use                           | Section V, 5.32 – Table 5-2; Section V, 5.34 – Table 5-3; Section V, 5.35 – Table 5-4 | Section V, 5.34 – Table 5-3 |
| Height                        | Section VI, Table 6-2   | same                        |
| Site Plan Review              | Section XIII, 13.2  | same                        |
| River Protection District     | Section VII, 7.0  | n/a                         |
| Flood Hazard Overlay District | Section VII, 7.3  | n/a                         |

See: Exh. WMECO-4

3. The Company’s Position – Agawam Zoning Ordinance

In addition to the general positions set forth in Section D.1. above, the table below summarizes the Company’s position with respect to the requested individual exemptions from the Agawam Zoning Ordinance:

**Table 4 The Company’s Position – Agawam Zoning Ordinance**

| <b>Individual Zoning Exemption Requested</b>  | <b>Available Relief from Town</b>  | <b>Why Project Cannot Comply: Company’s Position</b>  |
|---|--|---|
| <p><b>Uses</b></p> <p>Article III, § 180-23<br/>                     Article VI, § 180-31<br/>                     Article VII, § 180-37<br/>                     Article VIII, § 180-44<br/>                     Article IX, § 180-48<br/>                     Article X, § 180-55)</p>              | <p>None, Agawam ZBA does not have ability to grant use variances (Exh. WMECO-2, at ¶ 19).</p>  | <p>Public utility uses are not permitted in any of the zoning districts through which the project passes (Residence A-2, Residence B, Business A, Business B, Agricultural, Industrial A) (Exh. WMECO-2, at ¶¶ 19, 24).</p>   |
| <p><b>Height Regulations</b></p> <p>Article III, § 180-24<br/>                     Article VI, § 180-32<br/>                     Article VII, § 180-38<br/>                     Article VIII, § 180-45<br/>                     Article IX, § 180-49<br/>                     Article X, § 180-56</p> | <p>Variance (Tr. 3, at 301-302).</p>   | <p>It is unclear whether the maximum building heights of respective zoning districts apply to the proposed overhead transmission lines and associated structures (Exh. WMECO-2, at ¶ 20). Overhead lines and associated structures and the Agawam Substation structures, exceed the regulations for maximum building height for the respective zoning districts (<i>id.</i>). Obtaining a variance can create delays and is a disfavored form of zoning relief (Tr. 3, at 302).</p> |
| <p><b>Floodplain Zone</b></p> <p>Article XII, § 180-67</p>  | <p>Special Permit if determined to be consistent with the purpose of the zone (Exhs. WMECO-2, at ¶ 21; WMECO-3, at 180:46; Tr. 3, at 249).</p> | <p>Parts of the overhead transmission line and associated structures are located in the Floodplain Zone. The review standards are detailed and such review could result in burdensome or restrictive conditions that may interfere with established utility standards for safety and reliability (Exh. DPU-Z-15).</p>   |
| <p><b>Removal of Topsoil</b></p> <p>Article I, § 180-8 G</p>  | <p>Permit from ZBA (Exh. WMECO-2, at ¶ 22; DPU-RR-7).</p>  | <p>Removal of topsoil, sand and gravel is prohibited except in certain instances (Exh. WMECO-2, at ¶ 22). Company will need to remove topsoil (<i>id.</i> at 22). The conditions for granting a permit are not feasible for the project, and therefore such review could result in burdensome or restrictive conditions that may interfere with established utility standards for safety and reliability (Exhs. DPU-Z-16; WMECO-2, at ¶ 32)</p>                                     |

Table 4 cont.

| <b>Individual Zoning Exemption Requested</b>                       | <b>Available Relief from Town</b>  | <b>Why Project Cannot Comply: Company's Position</b>  |
|--|--|---|
| <p><b>Site Plan Approval</b><br/>Article I, § 180-13</p>           | <p>Site Plan approval from Planning Board (Exhs. WMECO-3, at 180:15; WMECO-2, at ¶ 13)</p> | <p>Site Plan approval by the Planning Board is required for a number of situations (Exhs. WMECO-3, at 180:15; WMECO-2, at ¶ 13). Site plan review provisions appear to be discretionary and therefore such review could result in burdensome or restrictive conditions that may interfere with established utility standards for safety and reliability (Exh. WMECO-2, at ¶ 38; DPU-Z-12; Tr. 3, at 242)</p>                              |
| <p><b>Vehicle Parking and Loading</b><br/>Article IX, § 180-50</p> | <p>Variance</p>  | <p>Parking, loading and unloading space is mandated in the Business B Zoning District (Exh. WMECO-3, at 180:39). The Agawam Substation is in the Business B Zoning District and does not currently have parking, loading or unloading space and none will be added for the proposed project (Exh. WMECO-2, at ¶ 26; Tr. 3, at 251). Obtaining a variance can create delays and is a disfavored form of zoning relief (Tr. 3, at 303).</p> |

4. The Company's Position – West Springfield Zoning Ordinance

In addition to the general positions set forth in Section D.1. above, the table below summarizes the Company's position with respect to the requested individual exemptions from the West Springfield Zoning Ordinance:

**Table 5 The Company’s Position – West Springfield Zoning Ordinance**

| <b>Individual Zoning Exemption Requested</b>  | <b>Available Relief from Town</b>  | <b>Why Project Cannot Comply: Company’s Position</b>  |
|---|--|---|
| <p><b>Uses</b><br/>                     § V, 5.32 – Table 5-2<br/>                     § V, 5.34 – Table 5-3<br/>                     § V, 5.35 – Table 5-4</p> | <p>ZBA has authority to grant use variances (Exh. WMECO-2, at ¶ 30)</p>                | <p>Public utility uses are not permitted in any of the districts in which the project would be built, and obtaining a use variance can create long delays and is a disfavored form of zoning relief (Exh. WMECO-2, at ¶¶ 29, 30, 33).</p>   |
| <p><b>Height Regulations</b><br/>                     § VI, Table 6-2</p>   | <p>Variance (Tr. 3, at 301-302).</p>   | <p>It is unclear whether the maximum building heights of respective zoning districts apply to the proposed overhead transmission lines and associated structures (Exh. WMECO-2, at ¶ 31). Overhead lines and associated structures and the West Springfield Substation structures, exceed the regulations for maximum building height for the respective zoning districts (<i>id.</i>). Obtaining a variance can create delays and is a disfavored form of zoning relief (Tr. 3, at 302).</p> |
| <p><b>Site Plan Review</b><br/>                     § XIII, 13.2</p>  | <p>Site plan approval from Planning Board (Exh. WMECO-4, at 13-1; WMECO-2, at ¶32)</p> | <p>Site Plan approval by the Planning Board is required for a number of situations (Exhs. WMECO-4, at 13-1; WMECO-2, at ¶32). Site plan review provisions appear to be discretionary and therefore such review could result in burdensome or restrictive conditions that may interfere with established utility standards for safety and reliability (Exhs. DPU-Z-13; WMECO-2, at ¶ 38; Tr. 3, at 274-275)</p>  |
| <p><b>River Protection District</b><br/>                     § VII, 7.0</p>   | <p>ZBA has authority to grant use variances (DPU-RR-9)</p>                             | <p>Portions of the proposed project are located in the River Protection District, and public utility uses are not permitted in the River Protection District (Exhs. WMECO-4, at 7-3; DPU-RR-9). Although possible, obtaining a use variance can create long delays and is a disfavored form of zoning relief (DPU-RR-9; Tr. 3, at 302).</p>   |
| <p><b>Flood Hazard Overlay District</b><br/>                     § VII, 7.3</p>   | <p>ZBA has authority to grant use variances (DPU-RR-9)</p>                             | <p>Portions of the proposed project are located in the Flood Hazard Overlay District, and public utility uses are not permitted in the Flood Hazard Overlay District (DPU-RR-9). Although possible, obtaining a use variance can create long delays and is a disfavored form of zoning relief (<i>id.</i>).</p>   |

## 5. Analysis and Findings

The Company has identified the above-described provisions of the Agawam and West Springfield Zoning Ordinances from which it seeks exemption to minimize delay in the construction and ultimate operation of the proposed project. We find that the proposed project may not be an allowable use under either of the Towns' zoning ordinances, and note that use variances are not allowed under the Agawam Zoning Ordinance. Further, while use variances are allowed under the West Springfield Zoning Ordinance, the Department concurs with the Company that obtaining a variance can cause undue delays and subject the project to a difficult legal standard to meet and uphold in court. The Department concludes the same factors apply to the Flood Hazard Overlay District and River Protection District provisions of the West Springfield Zoning Ordinance and the potential necessity for variances under those provisions.

The Department notes that there is uncertainty whether the referenced height and parking and loading regulations apply to the proposed project. If the provisions were to apply to the public utility use, the proposed project would exceed the height regulations and would not meet the parking and loading requirements (Exh. WMECO-2, at ¶¶ 20, 25, 31, 34). While variances for height and parking and loading are not prohibited under the zoning ordinances, obtaining a variance can cause undue delays and subject the project to a difficult legal standard to meet and uphold in court.

With regard to the provisions relating to removal of topsoil, locating in a floodplain zone, and site plan review, the Company maintains that exemptions are required as such reviews could cause delay and could result in burdensome or restrictive conditions that may interfere with established utility standards for safety and reliability. The Department

acknowledges that while these provisions do not on their face prevent the development of the proposed project, there is some likelihood that these provisions would result in one or more of the following: an adverse outcome, a burdensome requirement, or an unnecessary delay as part of zoning review.

The Department finds that the substantive sections of the Agawam and West Springfield Zoning Ordinances included in Table 2 and Table 3 above would or could affect the Company's ability to implement the project as proposed. Accordingly, the Department finds that WMECo has demonstrated that the requested zoning exemptions are required pursuant to G.L. c. 40A, § 3.<sup>15</sup>

#### 6. Conclusion on Request for Individual Zoning Exemptions

As described above, the Department finds that: (i) WMECo is a public service corporation; (ii) the proposed use is reasonably necessary for the public convenience or welfare; and (iii) the specifically named zoning exemptions, as identified by WMECo, are required for purposes of G.L. c. 40A, § 3. Accordingly, we grant the Company's request for the individual zoning exemptions listed above in Table 2 and Table 3.

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<sup>15</sup> The Company filed its Zoning Exemption Petition before the issuance of Russell Biomass, LLC, EFSB 07-4/D.P.U. 07-35/07-36 ("EFSB 07-4"). See NSTAR Electric Company, D.P.U. 08-1, at 34-35 (2009). The Department notes that WMECo's actions with respect to the Towns are consistent with the spirit and intent of EFSB 07-4 regarding communications with municipalities before filing zoning exemption petitions with the Department. For instance, prior to filing the Zoning Exemption Petition, WMECo consulted with each Town, informing each about the project and WMECO's plan to file for zoning exemptions from the Department (Exhs. DPU-Z-1; DPU-Z-2). WMECo made a good faith effort to accommodate the reasonable recommendations of the Towns with respect to the project. Moreover, as evidenced by the execution of the MOUs, each Town has expressed support for the Zoning Exemption Petition (Exhs. DPU-Z-1, Sp.-1, Att. 1; DPU-Z-2, Sp-1, Att. 1).

### III. REQUEST FOR COMPREHENSIVE ZONING EXEMPTIONS

#### A. Standard of Review

The Department has granted requests for a comprehensive zoning exemption on a case-by-case basis. NSTAR Electric Company, D.P.U. 07-60/07-61, at 50-51 (2008), citing Princeton Municipal Light Department, D.T.E./D.P.U. 06-11, at 37 (2007); NSTAR Electric Company, D.T.E./D.P.U. 07-9/07-10, at 37 (2007). The Department will not consider the number of exemptions required as a sole basis for granting a comprehensive exemption. Princeton Municipal Light Department, D.T.E./D.P.U. 06-11, at 37 (2007). Rather, the Department will consider a request for comprehensive zoning relief only when construction of a proposed facility would avoid substantial public harm. Id.; see also NSTAR Electric Company, D.P.U. 07-60/07-61, at 51-52 (2008).

#### B. The Company's Position

In addition to the individual exemptions stated above, the Company requests comprehensive zoning exemptions (Exh. WMECO-2, at 1).<sup>16</sup> WMECo asserts that granting comprehensive exemptions is appropriate because the need for the proposed project is

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<sup>16</sup> The Company identified the following five areas for individual zoning exemptions from the West Springfield Zoning Ordinance, use, height, site plan review, river protection district, and flood hazard overlay district (see Table 5). In addition to the five areas, Section 9.6 of the West Springfield Zoning Ordinance refers to Environmental Performance Standards, which address impacts relating to: dust, dirt, fly ash and smoke; odors; gases and fumes; noise; vibration; wastes; light, glare and heat; and, danger (Exh. WMECO-4, at 9-28). Section 9.6 contains exceptions for noise and vibration associated with construction activities (id.; Exh. DPU-Z-11). The Company asserts that its activities for the proposed project would meet the Environmental Performance Standards during both construction and operation, and therefore it did not request an individual exemption from section 9.6 (Exh. DPU-Z-11).

immediate and any possible delays in project implementation could result in public harm (Exh. WMECO-2, at ¶ 47.) According to WMECo, absent comprehensive zoning exemptions, the project could be delayed for numerous reasons including necessary project changes during construction or differing interpretation of zoning requirements by local officials, either of which could require further zoning review and subsequent court appeals (Tr. 3, at 235, 262-263). WMECo also asserts that project delays could result if a Town changes its Zoning Ordinances during project construction (Exh. WMECO-2, at 26). The Company concludes that the need to commence the construction of the proposed reliability project without undue delay warrants the issuance of comprehensive zoning exemptions (Exh. WMECO-2, at 54).

### C. Analysis and Findings

Here, the record shows that the proposed project is needed to bring the existing system into compliance with reliability standards. WMECo has presented evidence that the current system would be unable to supply customers in the Springfield area in the event of certain contingencies at existing and expected load levels. (Exh. WMECO-1, at 4-11). Specifically, under the conditions that exist today there is a need to prevent the isolation of several substations (and the loss of load associated therewith) under N-1-1 contingency conditions (i.e., outage of WMECo's 1311 and 1412 lines together with that of another system element) (id., at 4-12). By next year (2011), there will be a need to relieve overloading conditions that develop under N-1 contingency conditions which would result in rolling loss of load (i.e., outage of WMECo's 1311 and 1412 lines alone) (id. at 4-11). The Company's analysis shows that the proposed project solves these reliability problems and allows for reliable service to the Springfield area under the current and near term contingency conditions (id., at 4-15).

A possible delay in the project improvements serving to rectify existing and near-term transmission reliability problems and the possibility of the loss of service to thousands of customers in the greater Springfield area support the issuance of comprehensive exemptions. In this regard, the Department notes that the load served by the lines and substations that the project will support includes significant residential load in the greater Springfield area, all of the major municipal buildings in Springfield (including the Police Department and Fire Department), every major hospital and medical center in Springfield, all of the traffic and street lights in downtown Springfield and numerous educational institutions (Exh. WMECO-1, at 4-13, 4-14).

The Department also notes that each Town has expressed support for the Department's issuance of comprehensive zoning exemptions from the Town's Zoning Ordinances (Exhs. DPU-Z-1, Att.8; DPU-Z-1, Sp.-1, Att.1; DPU-Z-2, Sp.-1, Att.1). Such support followed extensive outreach to the Towns by the Company (Exhs. DPU-Z-1; DPU-Z-2; Tr. 3, at 301). Specifically, prior to filing the Zoning Exemption Petition, the Company consulted with each Town, informing each about the project and the Company's plan to seek comprehensive zoning exemptions from the Department, which efforts resulted in the execution of the MOUs (Exhs. DPU-Z-1, Sp-1, Att. 1; DPU-Z-2, Sp-1, Att.1; Tr. 3, at 301). The Department also notes that there is no opposition to the issuance of comprehensive exemptions in this case. Based on the above case-specific circumstances, and the minimal adverse impacts of the proposed project on the local community, the Department finds that moving this reliability-based project forward without delay could avoid substantial public harm and is in the public interest. However, as noted above, the Environmental Performance Standards of the West Springfield Zoning

Ordinance Section 9.6, regulate not only the nature and characteristics of the facility to be constructed, but also the on-going operation of the proposed facility. Were the Department to grant a comprehensive zoning exemption from the West Springfield Zoning Ordinance, local zoning control over relevant environmental considerations listed in Section 9.6 would no longer be applicable to the on-going operation of the proposed facility. See Braintree Electric Light Department, 16 DOMSB at 186-187 (2008). The Company has testified that it is able to meet the requirements of Section 9.6, and further that Section 9.6 contains exceptions for impacts associated with noise and vibration during construction (Exh. DPU-Z-11; Tr. 3, at 237, 238). Accordingly, the Department grants WMECo's request for comprehensive exemptions from the Zoning Ordinances of the Town of Agawam and the Town of West Springfield, with the exception related to the enforcement of Section 9.6 of the West Springfield Zoning Ordinance. These comprehensive exemptions shall apply to the construction and operation of the proposed facility as described herein, to the extent applicable. See Planning Bd. of Braintree v. Department of Public Utilities, 420 Mass.

IV. REQUEST FOR AUTHORITY TO CONSTRUCT AND USE TRANSMISSION LINE PURSUANT TO G.L. c. 164, SECTION 72

A. Standard of Review

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.<sup>17</sup>

The Department, in making a determination under G.L. c. 164, § 72, considers all aspects of the public interest. Boston Edison Company v. Town of Sudbury, 356 Mass. 406, 419 (1969). Among other things, Section 72 permits the Department to prescribe reasonable conditions for the protection of the public safety. 356 Mass. at 419-420.

In evaluating petitions filed under G.L. c. 164, § 72, the Department examines: (1) the need for, or public benefits of, the present or proposed use; (2) the environmental impacts or any other impacts of the present or proposed use; and (3) the present or proposed use and any alternatives identified. New England Power Company d/b/a/ National Grid, D.T.E. 06-37, at 2-3 (2007); Boston Edison Company d/b/a NSTAR Electric, D.T.E. 04-71, at 2-4 (2005); Commonwealth Electric Company d/b/a NSTAR Electric, D.T.E. 05-1, at 2-3 (2005); Massachusetts Electric Company, D.T.E. 03-130, at 2-3 (2004). The Department then balances the interests of the general public against the local interests and determines whether the line is necessary for the purpose alleged and will serve the public convenience and is consistent with the public interest.<sup>18</sup>

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<sup>17</sup> 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, and estimate showing in reasonable detail the cost of the line, and such additional maps and information as the Department requires.

<sup>18</sup> In addition, the Massachusetts Environmental Policy Act 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” (“Section 61 findings”). G.L. c. 30, § 61. Pursuant to 301 C.M.R. §11.12(5), these findings are required if the Secretary of Energy and Environmental Affairs has required an Environmental Impact Report (“EIR”) for the project. Here, on February 6, 2009 the Executive Office of Energy and Environmental Affairs issued an Advisory Opinion, which states that

B. Analysis and Findings

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 in Section II.C.3, compliance with the directives to (1) provide requested off-site screening; (2) restrict hours of and days of project construction, and (3) develop an outreach plan, and compliance with applicable state and local regulations, the Department finds pursuant to G.L. c. 164, § 72, that the proposed transmission lines are necessary for the purpose alleged, will serve the public convenience, and are consistent with the public interest.

The Department directs the Company to serve a copy of this decision, within five business days of issuance, on the Agawam City Council, the Agawam Zoning Board of Appeals, the West Springfield Town Council, and the West Springfield Zoning Board of Appeals. The Department further directs WMECo to certify to the Secretary of the Department within ten business days of issuance of this order that such service has been made.

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WMECo's proposed project constitutes a Replacement Project, pursuant to 301 CMR 11.01(2)(b)(3), and that no MEPA review is therefore required. Accordingly, Section 61 findings similarly are also not required in this proceeding.

V. ORDER

Accordingly, after due notice, hearing, and consideration, it is hereby

ORDERED : That the petition of Western Massachusetts Electric Company seeking the specific exemptions set forth in Tables 2 and 3 above from the operation of the Town of Agawam Zoning Ordinances and the Town of West Springfield Zoning Ordinances pursuant to G.L. c. 40A, § 3 is allowed; and it is

FURTHER ORDERED: That the petition of WMECo seeking comprehensive exemptions from the operation of the Town of Agawam Zoning Ordinances and the Town of West Springfield Zoning Ordinance is allowed, with the exception related to the enforcement of Section 9.6 of the West Springfield Zoning Ordinance; and it is

FURTHER ORDERED: That the petition of WMECo seeking approval to construct and operate a transmission line pursuant to G.L. c. 164, § 72 is allowed; and it is

FURTHER ORDERED: That to help mitigate visual impacts WMECo shall, upon request of any person owning property located directly abutting or within the ROW, provide additional off-site screening (such as, but not limited to shrubs, trees or window awnings) provided operating and maintenance requirements for all ROW facilities are met. Upon completion of construction, the Company shall notify in writing all owners of property located on or abutting the ROW of the option to request that the Company provide off-site mitigation. The Company shall honor all reasonable and feasible requests for mitigation that are submitted by property owners within six months of receipt of the Company's written notification; and it is

FURTHER ORDERED: That to help mitigate noise impacts from construction, absent unusual circumstances, WMECo shall conduct no work on Sundays and holidays; and it is

FURTHER ORDERED: That to help mitigate noise impacts from construction, absent unusual circumstances, WMECo shall limit construction activities in the area between Maple Street in Agawam and the Westfield River to the hours of 7:00 a.m. to 5:00 p.m., Monday through Friday, excluding holidays; and it is

FURTHER ORDERED: That to help mitigate noise impacts from construction, in all other project areas (i.e., between the Westfield River and West Springfield Substation), absent unusual circumstances, WMECo shall limit construction activities to the hours of 7:00 a.m. to 7:00 p.m., Monday through Saturday, excluding holidays; and it is

FURTHER ORDERED: That to help mitigate noise impacts from construction, WMECo shall, in consultation with the Towns of Agawam and West Springfield, develop a community outreach plan for project construction. This outreach plan should, at a minimum, lay out procedures for providing prior notification to affected residents of: (a) the scheduled start, duration, and hours of construction; (b) any construction the Company intends to conduct that, due to unusual circumstances, must take place outside of the hours detailed above; and (c) complaint and response procedures including contact information; and it is

FURTHER ORDERED: That WMECo work cooperatively with municipal and state officials and affected property owners in Agawam and West Springfield to minimize any traffic, noise, visual or other local impacts associated with the proposed project; and it is

FURTHER ORDERED: That WMECo and its contractors and subcontractors shall comply with all applicable state and local regulations for which the Company has not received

an exemption, including those pertaining to noise, emissions, blasting, herbicides, and hazardous materials; and it is

FURTHER ORDERED: That WMECo notify the Department of any significant changes in the planned timing, design, or environmental impacts of the proposed project; and it is

FURTHER ORDERED: That WMECo shall obtain all other governmental approvals necessary for the proposed transmission project; and it is

FURTHER ORDERED: That the Secretary of the Department shall transmit a certified copy of this Order to the Town of Agawam and the Town of West Springfield, and that WMECo shall serve a copy of this Order on the Agawam City Council, the Agawam Zoning Board of Appeals, the West Springfield Town Council and the West Springfield Zoning Board of Appeals within five business days of its issuance and shall certify to the Secretary of the Department within ten business days of its issuance that such service has been accomplished.

By Order of the Department:

/s/ \_\_\_\_\_  
Paul J. Hibbard, Chairman

/s/ \_\_\_\_\_  
Tim Woolf, Commissioner

/s/ \_\_\_\_\_  
Jollette A. Westbrook, Commissioner

An appeal as to matters of law from any final decision, order or ruling of the Commission 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 Commission be modified or set aside in whole or in part. Such petition for appeal shall be filed with the Secretary of the Commission within twenty days after the date of service of the decision, order or ruling of the Commission, or within such further time as the Commission 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. G.L. c. 25, § 5.