

The Commonwealth of Massachusetts

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August 1, 2008

CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS ON THE EXPANDED ENVIRONMENTAL NOTIFICATION FORM

PROJECT NAME: Greater Springfield Reliability Project

PROJECT MUNICIPALITY: Springfield, West Springfield, Agawam, Chicopee and

Ludlow (Preferred Route)

PROJECT WATERSHED: Connecticut, Chicopee, Westfield

EOEA NUMBER: 14271

PROJECT PROPONENT: Western Massachusetts Electric Company (WMECO)

DATE NOTICED IN MONITOR: June 25, 2008

Pursuant to the Massachusetts Environmental Policy Act (G. L. c. 30, ss. 61-62H) and Section 11.03 of the MEPA regulations (301 CMR 11.00), I hereby determine that this project **requires** the preparation of an Environmental Impact Report (EIR).

Project Description

As described in the Expanded Environmental Notification Form (EENF), the Greater Springfield Reliability Project (GSRP) involves proposed improvements to the Western Massachusetts Electric Company (WMECO) electric transmission system in the Greater Springfield area. The improvements are needed to provide safe, reliable and economic transmission service in the Greater Springfield geographic area and north central Connecticut, and to ensure that the Greater Springfield portion of the transmission system complies with mandatory federal and regional reliability standards. The GSRP improvements will also advance a comprehensive longer-term regional plan for improving electric transmission in New England, through extensive coordinated improvements in Connecticut, Massachusetts and Rhode Island.

The existing transmission system serving the Greater Springfield area consists largely of 115-kilovott (kV) lines originally constructed in the 1940s through the early 1970s, and does not

meet current national and regional mandatory reliability criteria. WMECO is proposing an extensive reconstruction of the 115-kV system in the Springfield area, and the Connecticut Light & Power Company (CL&P) and WMECO together propose to construct 35 miles of new 345-kV transmission lines to complete a 345-kV loop through north-central Connecticut and western Massachusetts. In the Proponent's preferred alternative, the 345-kV lines needed to complete the loop would be built between WMECO's Ludlow Substation and its Agawam Substation, and between the Agawam Substation and CL&P's North Bloomfield Substation in Connecticut. These new lines would form a loop back to Ludlow Substation via an existing 345-kV line between the North Bloomfield Substation, CL&P's Barbour Hill Substation and WMECO's Ludlow Substation. In accordance with Energy Facilities Siting Board (EFSB) requirements, the Proponent has designated one transmission line route as a "noticed alternative" to the preferred alternative presented in the EENF. The Proponent's preferred transmission line route involves fewer environmental impacts and greatly decreases conflicts with state-listed species.

In Massachusetts, the project includes the construction of approximately 23 miles of new overhead 345-kV transmission lines, to be located on double-circuit steel poles averaging approximately 130 feet in height, along existing rights-of-way (ROWs) that are currently occupied by 115-kV overhead transmission lines. Along these ROWs, the existing 115-kV transmission lines will be rebuilt with a single 115-kV circuit sharing the steel poles with the new 345-kV lines and all other 115-kV circuits will be rebuilt on new steel monopole structures. Certain existing 115-kV lines on other ROWs, which intersect with the primary 345-kV/115-kV route, will also be rebuilt. The additional 115-kV upgrade work is proposed to occur on three spurs, from 1) the Exit 6 Junction to a new Cadwell Switching Station, 2) from East Springfield Junction to the Fairmont Switching Station, and 3) from Orchard Junction to Orchard Substation. Portions of these spurs would pass through the towns of Chicopee, Ludlow and Springfield.

In addition to work associated with the transmission lines, the project includes improvements and an expansion at the existing Agawam Substation. Two new switching stations will also be constructed: the Fairmont Switching Station in Chicopee and the Cadwell Switching Station on Springfield. Fairmont will be constructed within an existing overhead utility ROW and Cadwell will be constructed at an existing developed portion of a WMECO Service Center.

Jurisdiction and Permitting

The project is undergoing MEPA review and requires the preparation of an EIR pursuant to the following sections of the MEPA regulations: 301 CMR 11.03(1)(a)(1) because it will result in the alteration of more than 50 acres of land and 301 CMR 11.03(3)(a)(1)(a) because it will result in the alteration of more than one acre of Bordering Vegetated Wetlands (BVW). The project also exceeds the following MEPA thresholds for the preparation of an ENF: 301 CMR 11.03(7)(b)(4) because it requires the construction of more than one mile of new transmission line with a capacity of more than 69 kV along new, unused or abandoned ROWs, and possibly 301 CMR 11.03(2)(b)(2) because the project may result in a "take" of a state-listed species protected pursuant to the Massachusetts Endangered Species Act (MESA).

The project as proposed in the Proponent's preferred alternative requires the following permits and/or approvals:

- An Individual Clean Water Act Section 404 Permit and a Section 10 of the Rivers and Harbors Act of 1899 Permit from the U.S. Army Corps of Engineers (ACOE);
- A National Pollutant Discharge Elimination System (NPDES) General Permit from the U.S. Environmental Protection Agency (EPA);
- An Individual Section 401 Water Quality Certificate and a possible Chapter 91 Waterways License from the Department of Environmental Protection (MassDEP);
- Review and a possible Conservation and Management Permit from the Division of Fisheries and Wildlife (DFW) Natural Heritage and Endangered Species Program (NHESP);
- Review from the Massachusetts Historical Commission (MHC);
- A Petition for Public Convenience/Public Interest and Necessity and a possible Petition for Zoning Exemption from the Department of Public Utilities (DPU);
- A Petition for Approval of Construction form the Energy Facilities Siting Board (EFSB);
- A Railroad Crossing Lease and/or Permit from the Executive Office of Transportation (EOT);
- A Highway Right-of-Way Encroachment Permit from the Massachusetts Highway Department (MassHighway);
- Approval for an aerial crossing of the Turnpike from the Massachusetts Turnpike Authority (MTA);
- Orders of Conditions from the Ludlow, Chicopee, Agawam, West Springfield and Springfield Conservation Commissions; and
- Possible Special Permits and/or Site Plan Review from the Ludlow, Chicopee, Agawam,
 West Springfield and Springfield Planning Boards and/or Zoning Boards of Appeal.

Because the Proponent is not seeking financial assistance from the Commonwealth for the project, MEPA jurisdiction extends to those aspects of the project that may cause significant Damage to the Environment and that are within the subject matter of required or potentially required state permits. In this case, MEPA jurisdiction extends to energy, wetlands, rare species and historic resources.

Request for a Single EIR

In accordance with Section 11.05(7) of the MEPA regulations, the Proponent has submitted an Expanded ENF (EENF) with a request that I allow it to fulfill its EIR obligations under MEPA with a Single EIR, rather than require the usual two-step Draft and Final EIR process. The EENF received an extended public comment period pursuant to Section 11.06(1) of the MEPA regulations. I have reviewed the Proponent's request for a Single EIR in accordance with Section 11.06(8) of the MEPA regulations and have consulted with the relevant public agencies, and I hereby find that the EENF meets the regulatory standards. I will therefore allow the Proponent to prepare a Single EIR in fulfillment of the requirements of Section 11.03 of the MEPA regulations.

While I am allowing the preparation of a Single EIR, I note that there are several unresolved issues related to wetlands mitigation, rare species impacts and historic resources that that must be addressed completely by the Proponent in order to receive a finding of adequacy on the Single EIR. If the Single EIR is not responsive to the Scope outlined in this Certificate, the

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Proponent may be required to submit a Supplemental Single EIR pursuant to 301 CMR 11.08(8)(d).

SCOPE

General

As modified by this Certificate, the Proponent should prepare the Single EIR in accordance with the general guidelines for outline and content found in Section 11.07 of the MEPA regulations. The Single EIR should include a copy of this Certificate and of each comment letter submitted on the EENF. In order to ensure that the issues raised by commenters are addressed, the Single EIR should include responses to comments. This directive is not intended to and shall not be construed to enlarge the scope of the Single EIR beyond what has been expressly identified in this Certificate.

The Proponent should circulate the Single EIR in accordance with Section 11.16 of the MEPA regulations; to those who commented on the EENF; to municipal officials in the each municipality potentially affected by the project; and to any state and federal agencies from which the Proponent will potentially seek permits or approvals. The Proponent should consult with the MEPA office for further guidance on the circulation of the Single EIR.

Permitting and Project Description

The Single EIR should include a brief description of each state permit or agency action required or potentially required, and should demonstrate that the project will meet applicable performance standards. The Single EIR should contain sufficient information to allow the permitting agencies to understand the environmental consequences of their official actions related to the project.

The Proponent should provide a discussion of easements or land acquisitions that will be needed to achieve the desired ROW width for the preferred alternative. The Proponent should specifically address that portion of the project that is located in an existing ROW in the eastern section of Robinson State Park, which is owned by the Massachusetts Department of Conservation and Recreation (DCR). The Single EIR should demonstrate that the Proponent is able to legally access and maintain the ROW through the pertinent section of the park. The Proponent should clarify whether an Article 97 land disposition is required for the portion of the project in the state park.

The Single EIR should present a general discussion of maintenance activities associated with the proposed transmission line corridor, and outline potential impacts to wetland resource areas, rare species habitat and state land caused by maintenance activities. The Proponent should discuss the use of herbicides along the transmission line route.

Alternatives

The EENF presented a discussion of project and transmission line route alternatives that the Proponent has considered to date in the planning and design process. The no-action alternative was rejected in the EENF as it would leave the Greater Springfield area in violation of national and regional electric reliability standards. According to the Proponent, the reliability problems in the Greater Springfield area outlined in the EENF are caused by the limited number of adequately-sized pathways available to deliver power to customers when one or more important paths become blocked. As outlined in the EENF, the extent of the problem is too pervasive to be solved by a limited number of local or remote sources of power and adding numerous generators in many locations is not considered practical by the Independent System Operator – New England (ISO-NE). The Proponent's examination of non-transmission alternatives to the project resulted in the conclusion that there are no practical or feasible alternatives to the GSRP. The following non-transmission alternatives were considered:

- Adding large amounts of power sources in and around Greater Springfield, which would not alleviate the need for adequate pathways for flow from CT under contingent conditions;
- Conservation in the Greater Springfield area would also not affect the need for new and adequate pathways to CT under contingent conditions;
- Implementing Demand-Side Management (DSM), Distributed Generation (DG) and/or adding bulk generation in CT and Greater Springfield is not considered by the Proponent to be a realistic solution to existing problems.

Further analysis of possible solutions to improving transmission reliability in the project area was provided by ISO-NE in the Southern New England Transmission Reliability Report 1: Needs Analysis (January 2008) and the Southern New England Transmission Reliability Report 2: Options Analysis (March 2008). The Proponent provides a discussion of these two reports in the EENF.

Once it was determined that the construction of new transmission lines was the only feasible solution, the Proponent undertook an evaluation of possible transmission corridor routes to develop a preferred alternative. To identify and evaluate alternative line routes for the new 345-kV lines, the Proponent considered environmental, social, engineering and economic factors and applied a set of established routing objectives. The Proponent identified and evaluated existing ROWs and other potential routes or route segments within the project region. The Proponent used field reconnaissance, aerial photography and baseline data in these analyses. For each potentially viable route alternative, the Proponent then applied numeric data metrics to obtain a numerical score or ranking for each alignment based on evaluation criteria. This analysis resulted in the development of two potentially viable project route alternatives, referred to in the EENF as the Northern Route (preferred alternative) and the Southern Route (noticed alternative). The development of a noticed alternative route is required as part of the Energy Facilities Siting Board review process.

The preferred Northern Route extends north from the Agawam Substation on existing ROWs to the Ludlow Substation, passing adjacent to the Piper and Chicopee Substations and the Shawinigan Switching Station. The noticed alternative Southern Route would extend from the

Agawam Substation south to South Agawam Junction, and then east, following existing ROWs generally paralleling the CT/MA border, before turning north at Hampden Junction to reach the Ludlow Substation. The noticed alternative Southern Route would require approximately 61 miles of existing overhead transmission line to be disturbed for activities such as vegetation clearing, access roads for use during construction, excavation for structure foundations, and other construction tasks. The Northern Route alternative would result in 39 miles of transmission line ROW disturbance. The reconstruction of the 115-kV line along the Northern Route will occur regardless of which 345-kV route is chosen as the preferred alternative. Therefore, the consolidation of the 345-kV and 115-kV line construction along the Northern Route would result in reduced impacts cumulatively, compared to a scenario in which work occurred on two corridors, and would also require fewer construction support and staging areas.

I find the Proponent's analysis of non-transmission line alternatives in the EENF and the comparison of impacts between the preferred alternative and the noticed alternative in the EENF to be adequate. The EENF has demonstrated that the impacts associated with the preferred alternative will be far less than impacts in the noticed alternative scenario. The Proponent does not intend to seek permits for the noticed alternative route at this time. If the EFSB determines that the Proponent must proceed with the noticed alternative, the Proponent will be required to file a Notice of Project Change, to further evaluate impacts and mitigation with the noticed alternative route. In the Single EIR, the Proponent should focus on possible opportunities to avoid, minimize or mitigate the environmental impacts associated the preferred alternative to the maximum extent feasible.

The preferred alternative is anticipated to result in impacts to 131.4 acres of upland, mostly due to the improvement and construction of access roads and the creation of crane pads. Only 5.5 acres of upland will be altered as a result of ROW widening. The majority of wetland impacts are also associated with construction access. In the Single EIR, the Proponent should provide additional information regarding the state of existing access roads to the current 115-kV transmission line and justify the need for the proposed improvements. The Proponent should consider alternative construction methodologies that could result in fewer impacts such as the use of aerial equipment to install the monopoles and lines. The Proponent should also examine opportunities to access the transmission line corridor through abutting properties and/or temporary easements in areas where proposed construction access will traverse wetlands and/or rare species habitat. The Single EIR should also incorporate any alternatives analyses that may be required under Section 404 and 401 of the Clean Water Act.

Wetlands

The project area is located within three different watersheds: the Connecticut River Basin, the Chicopee River Basin, and the Westfield River Basin. The following resource areas have been identified at the project site: Bordering Vegetated Wetlands (BVW), Land Under Waterbodies and Waterways (LUW), Isolated Wetlands (IVW), Riverfront Area, Bank, and Bordering Land Subject to Flooding (BLSF). The preferred transmission line route crosses twenty-six streams or rivers.

The Proponent's preferred alternative is anticipated to result in the following resource area impacts:

- BVW and IVW: 18,456 sf of temporary impacts and 579,645 sf of permanent impacts;
- BLSF: 7,751 sf of temporary impacts and 126,443 sf of permanent impacts;
- Riverfront Area: 401,063 sf of temporary and permanent impacts.

The Proponent has elected for the purpose of MEPA review to consolidate BVW and IVW impacts into one total for BVW. The Proponent acknowledges that all impacts and mitigation must comply with the general performance standards for BVW. The Proponent should address MassDEP's comment that the Wetlands Protection Act (WPA) does not differentiate between temporary and permanent BVW impacts.

Anticipated wetland impacts from the project are associated with vegetation removal, the placement of timber mats to allow heavy machinery to cross wetlands, the placement of equipment staging pads, grading and filling necessary to improve access roads, and the installation of new transmission lines and/or structures within wetlands. The Proponent intends to file Notice of Intent (NOI) applications with the Conservation Commissions in the municipalities affected by the preferred transmission line route. As outlined in MassDEP's comment letter on the EENF, portions of the project may be exempt from the Wetlands Protection Act (WPA) regulations while other portions of the project may qualify as a Limited Project pursuant to 301 CMR 10.53(3)(d). The Single EIR should clarify which portions of the project are exempt and which qualify as a Limited Project. Limited Project status requires the Proponent to demonstrate compliance with the General Performance Standards in the WPA if possible; the Proponent should clarify in the Single EIR which performance standards it will not be able to meet.

The Single EIR should outline the project's compliance with performance standards for other resource areas, including BLSF and Riverfront Area. The Proponent should provide additional information regarding the placement of permanent structures in the floodplain and impacts to, and mitigation for, compensatory storage. The Single EIR should outline the construction process for stringing a new power line over a river or stream. Any permanent stream crossings associated with access road improvements must adhere to the Massachusetts River and Stream Crossing Standards.

The project requires a Water Quality Certificate from MassDEP. The Proponent should demonstrate in the Single EIR that the project will comply with the applicable regulations at 314 CMR 9.00. The Proponent should note that cumulative impacts as calculated for the Water Quality Certificate may include activities that are exempt under the Wetlands Protection Act. The Proponent should seek guidance from MassDEP regarding the need for a wildlife habitat evaluation pursuant to 310 CMR 10.60. If required, the Proponent should present the results of the evaluation in the Single EIR.

The EENF provided an overview of measures that would be implemented to minimize wetland impacts. In addition to Best Management Practices that will be used to avoid and reduce wetland impacts, the Proponent will also be required to restore wetlands to their pre-construction

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state to the extent practicable and provide compensatory mitigation to offset permanent wetland impacts. The Proponent states in the EENF that compensatory mitigation for the project may include on-site wetlands restoration and/or enhancement, mitigation banking, on- or off-site wetlands creation, off-site wetlands restoration, wetlands preservation, and/or in-lieu of fees. The Proponent should consult with the relevant federal, state and local wetlands regulatory agencies in advance of submitting the Single EIR, and should outline the proposed wetlands mitigation strategy in the Single EIR. The Proponent must demonstrate that it is able to adequately mitigate the impacts of the proposed project to the satisfaction of wetlands regulators. The Single EIR should also discuss mitigation requirements for all other resource area impacts.

Rare Species

NHESP has identified Priority and Estimated Habitats for the following state-listed rare species within or near the project site for both the preferred and noticed transmission line route alternatives. The species listed below and their habitats are protected pursuant to the MESA (MGL c. 131A) and its implementing regulations (321 CMR 10.00).

Preferred Alternative:

- Spine-crowned Clubtail (Endangered)
- Stygian Shadowdragon (Special Concern)
- Arrow Clubtail (Threatened)
- Yellow Lampmussel (Endangered)
- Triangle Floater (Special Concern)
- Tidewater Mucket (Special Concern)
- Bald Eagle (Endangered)
- Shortnose Sturgeon (Endangered, also federally listed pursuant to the Endangered Species Act)
- Jefferson Salamander (Special Concern)
- Eastern Worm Snake (Threatened)
- Eastern Box Turtle (Special Concern)

Noticed Alternative:

- Riverine Clubtail (Endangered)
- Arrow Clubtail (Threatened)
- Triangle Floater (Special Concern)
- Narrow-leaved Spring Beauty (Endangered)
- Climbing Fern (Special Concern)
- Green Dragon (Threatened)
- Gray's Sedge (Threatened)
- Bristly Buttercup (Threatened)
- Bald Eagle (Endangered)
- Shortnose Sturgeon (Endangered, also federally listed pursuant to the Endangered Species Act)
- Jefferson Salamander (Special Concern)

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- Eastern Worm Snake (Threatened)
- Eastern Spadefoot (Threatened)
- Wood Turtle (Special Concern)
- Eastern Box Turtle (Special Concern)

The Proponent has initiated consultation with NHESP in order to design and construct the project to avoid and/or minimize impacts to rare species habitat. In its comments on the EENF, NHESP states that the Proponent should be able to avoid a "take" for several species through adherence to timing and other construction-related conditions along the preferred alternative route. In the Single EIR, the Proponent should outline and commit to any conditions that will be required by NHESP during or after construction. Impacts to Eastern Box Turtle, the Eastern Wormsnake and the Eastern Spadefoot Toad along the preferred transmission line route may result in a "take", and therefore may require a Conservation and Management Permit. If after further consultation with NHESP it is determined that a Conservation and Management Permit is required for the preferred alternative, the Single EIR should include an outline of a proposed Conservation and Management Plan.

NHESP indicates in its comments that the noticed alternative route will result in far greater impacts to state-listed species and that the Proponent may not be able to meet the performance standards for a Conservation and Management Permit without significant changes to the project. The Proponent has conducted field surveys along the noticed alternative route for a number of state-listed species and additional surveys will continue during the growing season. The Single EIR should include a discussion of the Proponent's ongoing survey efforts and consultation with NHESP on the noticed alternative route.

The Proponent should also provide a discussion in the Single EIR of measures that will be implemented during project construction to ensure that impacts to cold and warm water fisheries in rivers and streams in the project area are avoided and/or minimized.

Historic Resources

The Proponent retained Archaeological Services at the University of Massachusetts-Amherst (UMass) to conduct predictive modeling studies for the project area to determine possible impacts to historic and/or archaeological resources. The results of the UMass studies were submitted as an appendix to the EENF. MHC has reviewed the associated Project Notification Form (PNF) and the above-mentioned studies. As requested in its comment letter on the EENF, the Proponent should provide additional information regarding the preferred transmission line route alternative to MHC. MHC has also directed the Proponent to conduct a reconnaissance cultural resource survey for the project and has provided guidance regarding the survey in its comments on the EENF.

Summary results of the study and a report on the Proponent's ongoing consultation with MHC should be presented in the Single EIR. A discussion of measures that will be implemented to avoid, minimize or mitigate possible impacts to significant historic or archaeological resources should be provided.

Construction Period Impacts

The EENF included an overview of proposed construction phasing and methodology. The Single EIR should include a discussion of potential impacts associated with construction activities, and propose feasible measures to avoid or eliminate these impacts. I encourage the Proponent to consider participating in MassDEP's Diesel Retrofit Project consisting of an engine retrofit program and/or use of low sulfur fuel to reduce exposure to diesel exhaust fumes and particulate emissions during construction.

Mitigation

The Single EIR should contain a separate chapter on mitigation measures. It should include Draft Section 61 Findings for all state permits that include clear commitments to mitigation, estimates of the individual costs of the proposed mitigation, and identification of the parties responsible for implementing the mitigation. The Single EIR should provide a schedule for the implementation of the mitigation, based on the construction phases of the project.

August 1, 2008 Date

Ian A. Bowles

Comments received:

7/8/2008	Massachusetts Historical Commission
7/24/2008	Division of Fisheries and Wildlife, Natural Heritage and Endangered Species
	Program
7/25/2008	Department of Environmental Protection, Western Regional Office
7/25/2008	Department of Conservation and Recreation
7/25/2008	Connecticut River Watershed Council

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