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February 13,2009

CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS
ON THE
DRAFT ENVIRONMENTAL IMPACT REPORT

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:	January 7,2009

As Secretary of Energy and Environmental Affairs, I hereby determine that the Draft Environmental Impact Report (DEIR) submitted on this project **adequately and properly complies** with the Massachusetts Environmental Policy Act (G. L. c. 30, ss. 61-621) and with its implementing regulations (301 CMR 11.00). The proponent may prepare and submit for review a Final Environmental Impact Report (FEIR).

Project Description

As described in the DEIR, 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. The 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 Northern Route (aka the 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 and review, the Proponent has evaluated the Preferred Northern Route Alternative, a Noticed-Alternative Southern Route, and Noticed 115-kV Alternatives. The Proponent's Preferred Northern 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 removed and rebuilt. New segments of single 115-kV circuits will share 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 required 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 exceeded 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, 301 CMR 11.03(1)(b)(3) because it may result in the conversion of land held for natural resources purposes

in accordance with Article 97, and 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 (USACE);
- 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 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 (M.G.L. c.40A, Section 3) and eminent domain authority (M.G.L. c.164, Section 72) 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
- Potential approval in accordance with Article 97 by the Division of Capital Asset Management (DCAM).

Because the proponent is not seeking financial assistance from the Commonwealth for the project, MEPA jurisdiction is limited to those aspects of the project that are likely to directly or indirectly cause Damage to the Environment as defined in the MEPA regulations and that are within the subject matter of required or potentially required state permits or agency actions. However, given the numerous State agency actions required and the broad scope of the EFSB review, MEPA jurisdiction extends to virtually all aspects of the project.

Project Changes since the Expanded Environmental Notification Form (EENF)

Since the filing of the EENF and after consultation with the MEPA office, the Proponent has decided to file a separate DEIR and FEIR in lieu of the previously approved Single EIR process. I acknowledge that the Secretary's Certificate on the EENF issued on August 1,2008 outlined a comprehensive scope for a Single EIR. However, given the new two-step EIR review process, I anticipate that some items outlined in the scope on the EENF may not be thoroughly

addressed until the FEIR stage of review.

Additionally, the DEIR notes that the only significant change to the Preferred Alternative is the reconductoring of existing transmission lines using existing line structures from Orchard Junction to Orchard Substation. Furthermore, in accordance with the scope on the EENF, the Proponent has refined the Preferred Alternative design to reduce environmental impacts from the project. Notably, the Proponent has reduced the amount of permanent wetland impact associated with the project; however, temporary impacts to wetland resource areas has increased in comparison to the numbers presented in the EENF. The Proponent will be required to mitigate both permanent and temporary wetland impacts.

Review of the DEIR

In addition to the primary response document, the DEIR included a number of appendices that provided supporting documentation to address items listed in the scope on the EENF. These documents included an inventory of vernal pools, surveys of State-listed salamanders, representative construction photographs, a draft Stormwater Pollution Prevention Plan (SWPPP), a Rights-of-way Vegetation Management Plan, and a Best Management Practices Manual.

The DEIR included a complete project description, providing project context within the larger electric system grid, a discussion of the 345-kV Preferred Northern Route, re-building 115-kV lines and distribution lines, and requirements for new or modified switching stations and substations. The DEIR presented a construction methodology, describing land requirements, construction equipment and procedures for both overhead line construction and substation and switching station construction. A preliminary sequencing and projected construction schedule was presented along with a description of vegetation management, herbicide usage and impacts from maintenance operations. The DEIR provided a summary of each required or potentially required State agency action or permit. Finally, the DEIR provided a discussion demonstrating how the project will meet applicable statutory and regulatory performance standards.

The DEIR summarized the general location and amount of land acquisition and easements necessary to achieve the Preferred Alternative. While the Project will be constructed on existing WMECO ROW, some expansion is required to meet design standards. Modifications at the existing Agawam and Ludlow substations will be accomplished within existing WMECO property line, but outside the existing substation fence line. Modifications to other substations will be accommodated within the existing fence lines. The new Fairmount Switching Station will be constructed in the Town of Chicopee on land proposed for acquisition from Holyoke Gas and Electric. The new Caldwell Switching Station will be constructed in the Springfield Work Center, which is currently owned and maintained by WMECO.

The DEIR presented comprehensive information on an additional alternative not contemplated in the EENF. The "Noticed 115-kV Underground Alternative" was requested as part of the EFSB review process. The DEIR compared the environmental impact, cost and reliability factors of an underground versus overhead 115-kV alternative (as described in the Preferred Alternative). Based upon the information presented in the DEIR, the Proponent has

concluded that this Noticed 115-kV Underground Alternative is inferior to the Preferred Northern Route. 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 (NPC), to further evaluate impacts and mitigation with a Noticed Alternative Route.

Alternative construction methodologies were considered in the DEIR to reduce impacts to environmentally sensitive areas. Construction techniques proposed include custom-sized construction pads or locating access roadways in a manner that result in the fewest impacts to wetland resource areas, rare species habitats. or other sensitive environmental receptors. The use of helicopters for demolition and construction of the project was considered, but rejected due to potential conflicts with existing structures in the ROW. However, the DEIR did note that helicopters may be used to string rope for conductor installation.

The DEIR presented revised wetland impact estimates including:

- BVW and Isolated Vegetated Wetland (IVW): 5,980 square feet (sf) of permanent impact, conversion of 1.5 acres due to overstory clearing, and 12.1 acres of temporary disturbance:
- Bank: 40 linear feet of permanent impact and 360 linear feet of temporary impact;
- Riverfront Area: 0.7 acres of permanent impact and 11.8 acres of temporary impact; and
- Bordering Land Subject to Flooding (BLSF): 0.03 acres of permanent impact and 1.9 acres of temporary impact.

The DEIR contained a summary table and accompanying narrative that broke down wetland impacts by community, wetland resource area category, types of alteration (permanent and temporary), and by what type of construction activity (i.e., tree clearing, crane pads, existing access road improvements, new access roads, and structures). Temporary impacts were generally characterized as impacts associated with access roads and construction envelopes for crane pad usage. Permanent impacts include new utility poles, installation of an access road and new culvert to access utility pole #2300 in Agawam, and conversion of forested wetlands to shrub and emergent types in association with ROW widening. Construction access roads are anticipated to be 15 to 20 feet wide and roads may be graveled or consist of wood mats, using culverts or crushed stone to maintain drainage patterns across the ROW.

The DEIR included an assessment of potential impact to State-listed rare, endangered, or special concern flora and fauna within and immediately adjacent to project routes. The Preferred Alternative is located within mapped habitat of the following State-listed species:

- 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)

The DEIR described the various field studies and correspondence with NHESP since the filing of the EENF. At the request of NHESP, multiple Eagle Tree Surveys will occur prior to implementing the project. Also, field studies were conducted in Spring 2008 for the blue-spotted salamander along the Preferred Northern Route. The Proponent was unable to confirm presence of blue-spotted salamanders and will conduct an additional survey in Spring 2009. The DEIR included a summary of additional Rare Species concerns related to time-of-year (TOY) restrictions and Best Management Practices (BMPs) for the Eastern Worm Snake and Eastern Box Turtle, as well as a determination that no surveys would be necessary for the Four-Toed Salamander.

The DEIR contained an update on efforts by the Proponent to address potential historic or archaeological impacts associated with the project. The DEIR noted that a Phase 1A Reconnaissance survey was performed for the project to verify data in the field for the portions of the GSRP 345-kV network and additional 115-kV segments identified in modeling reports to have moderate or high probability of unrecorded archaeological resources. This Phase 1A survey identified archaeologically sensitive areas and provided recommendations for a Phase 1B intensive/locational survey. The DEIR indicated that the field work for the Phase 1B survey has been completed and a report will be prepared for submission to the Massachusetts Historical Commission (MHC).

Though not specifically addressed in the scope on the EENF, the Proponent also included a discussion of the quality of soils and possible contamination which may be encountered during construction of the project, air quality and noise impacts, and a description of scenic areas, open space and recreational resources crossed or adjacent to the project route.

Proposed mitigation measures for potential environmental impacts were outlined in the DEIR as they pertain to wetland resource areas, vernal pools, rare species, and historic and archaeological resources. Additional mitigation measures were presented to address potential impact to soils, non-rare species habitat, air quality and noise, sites regulated under the Massachusetts Contingency Plan (MCP), scenic areas, open spaces, recreational resources, and transportation. A draft template of Section 61 Findings was included in the DEIR.

SCOPE

While I am allowing the proponent to proceed to the preparation of an FEIR, I note the requests for additional information to assist State agencies with future permitting processes. I anticipate that the FEIR will respond to the scope outlined below with sufficient detail to address the requests of State agencies. I retain my authority to require further review in the form of a Supplemental Final Environmental Impact Report if issues outlined in this Scope and in

comments are not thoroughly addressed in the FEIR.

The FEIR should follow Section 11.07 of the MEPA regulations for outline and content, as modified by this Certificate.

Land

A portion of the project will be located in an existing ROW through an eastern section of the Department of Conservation and Recreation's (DCR) Robinson Park in Agawam. The Proponent has proposed formalizing and improving an existing DCR road to facilitate access to the site for construction equipment and ongoing maintenance activities. This access road is located outside of the WMECO 150-foot ROW. DCR has indicated that formalizing the use of the access road and making the necessary upgrades would constitute a change of use for public conservation land, triggering a review and approval in accordance with Article 97 of the Amendments to the Massachusetts Constitution.

The FEIR should address how the project will meet the criteria set forth in the EEA Article 97 Land Disposition Policy. Furthermore, the Proponent should contact the Land Protection Staff at DCR for more information on the land disposition process and present a summary of this consultation in the FEIR. The FEIR should also include a draft of any Article 97 legislation that may be required for the land disposition.

Wetlands and Waterways

The FEIR should discuss the feasibility of utilizing open bottom box culverts at the proposed new stream crossing and for the proposed culvert replacements within the existing ROW. This evaluation should be provided with consideration of the *Design Standards for Culvert Replacement, Stream Crossing Standards (March 1, 2006).* The FEIR should confirm that the type of alternative analysis that had been presented in association with the EENF is commensurate with the scope and detail required to meet the alternatives analysis standards under Section 404 and 401 of the Clean Water Act.

The DEIR notes that the goal is to provide compensatory mitigation for the project via a variety of methods including: 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 continue to consult with the relevant Federal, State and local wetlands regulatory agencies in advance of submitting the FEIR, and should outline the proposed wetlands mitigation strategy in the FEIR. The Proponent must demonstrate that it is able to adequately mitigate the impacts of the proposed project to the satisfaction of wetlands regulators. The FEIR should also discuss mitigation requirements for all other resource area impacts, including feasibility of accommodating incremental compensatory mitigation for BLSF in accordance with the Wetlands Protection Act.

Rare Species

The NHESP comment letter acknowledges the ongoing consultation and coordination between NHESP and the Proponent regarding potential rare species impact and rare species survey data gathering. The NHESP has indicated that they preliminarily anticipate that a "take" will occur for the *Eastern Wormsnake* and the *Eastern Box Turtle* as defined in the MESA regulations. If the Proponent is unable to develop an acceptable plan that avoids the "take," then the project could only proceed by meeting the performance standard for issuance of a MESA Conservation and Management Permit (MESA Permit) pursuant to 321 CMR 10.23. As part of the avoidance and minimization of impacts required by 321 CMR 10.23, the Proponent will be required to prepare a plan to protect each of the species.

The NHESP has also indicated that field surveys will continue for the *Jefferson Salamander* in the Ludlow segment of the Preferred Alternative to determine if a MESA Permit will be necessary. The FEIR should report on the status of these surveys and any conclusions reached regarding the need for an additional MESA Permit. If a MESA Permit will be required, the FEIR should present information on how the project meets the permitting performance standards and outline a protection plan. The FEIR should provide an update on the ongoing *Bald Eagle* surveys and potential habitat impacts associated with the project. The NHESP has also noted that they preliminarily anticipate that a "take" to the species located in the Westfield and Connecticut Rivers will be avoided through the avoidance of wetland impacts and the use of adequate sedimentation and erosion control measures.

As recommended by NHESP, the FEIR should detail the elements of each MESA permit for all impacts species and specifically describe how the project can demonstrate that impacts to State-listed species have been avoided, minimize and mitigated in a manner consistent with applicable performance standards. These performance standards include:

1. the Proponent has adequately assessed alternatives to both temporary and permanent impacts to State-listed species;
2. an insignificant portion of the local population would be impacted by the project; and
3. the Proponent agrees to carry out a conservation and management plan that provides a long-term Net Benefit to the conservation of State-listed wildlife.

The FEIR should include an updated outline of a proposed Conservation and Management Plan given the ongoing rare species surveys and discussions with NHESP. As part of its comment letter, NHESP has provided recommendations associated with the development of site stabilization and site restoration plans. The Proponent should incorporate these recommendations into project plans.

Historic and Archaeological Resources

The MHC comment letter on the DEIR noted that the MHC has previously commented on Project Notification Forms (PNFs) for the GSRP. As indicated in the DEIR, the Proponent has committed to continue to coordinate with and provide copies of archaeological surveys to MHC. Summary results of the Phase 1B report should be included in the FEIR; however, as recommended by MHC, the document should not include sensitive archaeological site locational information to protect the sites. At the direction of MHC, for significant sites that can be avoided, WMECO should consider the development and implementation of archaeological site avoidance and protection plans for significant sites in consultation with MHC and the USACE. The Proponent has indicated in the DEIR that if avoidance of a National Register-eligible site is not possible, mitigation will be accomplished through completion of a Phase 3 data recovery program. If necessary, further work through Phases 2 (significance testing) and Phase 3 (mitigation) should be designed and performed through consultations with the MHC. The FEIR should present summary information and updates on any additional archaeological testing performed under Phases 2 or **3** in compliance with Section 106 of the National Historic Preservation Act of 1996, as amended (36 CFR 800) and M.G.L., c.9, Sections 26-27C (950 CMR 71).

Construction Period

The FEIR should include an update on proposed construction phasing and methodology, if different from that presented in the DEIR. The FEIR should include an updated discussion of potential impacts associated with construction activities, and propose feasible measures to avoid or eliminate these impacts based upon any modifications made to the Preferred Alternative since the filing of the DEIR.

Mitigation

The FEIR should include a separate chapter updating and summarizing proposed mitigation measures. This chapter should also include separate permit-specific updated and expanded draft Section 61 Findings for each State agency that will issue permits for the project. The draft Section 61 Findings should contain clear commitments to implement mitigation measures, estimate the individual costs of each proposed measure, identify the parties responsible for implementation, and contain a schedule for implementation. The FEIR should specifically address how potential environmental impacts will be mitigated on DCR properties.

Comments/Circulation

The FEIR should contain a copy of this Certificate and a copy of each comment letter received. In order to ensure that the issues raised by commenters are addressed, the FEIR should include a response to comments. This directive is not intended to, and shall not be construed to,

enlarge the scope of the FEIR beyond what has been expressly identified in the initial scoping certificate or this certificate.

The FEIR should be circulated in cotnpliance with Section 11.16 of the MEPA regulations; to those who commented on the DEIR; to municipal officials in each municipality affected by the project; to any State or federal agency from which the Proponent will potentially seek permits or approvals; and the public library of each affected community.

February 13,2009
Date

Ian A. Bowles

Comments received:

01/27/2009	Massachusetts Historical Commission
02/03/2009	Division of Fisheries and Wildlife, Natural Heritage and Endangered Species Program
02/06/2009	Department of Environmental Protection - Western Regional Office
02/05/2009	Connecticut River Watershed Council
02/06/2009	Department of Conservation and Recreation
02/09/2009	Stockbridge-Munsee Tribal Historic Preservation Office

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