

Development and Management Plan

for Construction of the

Manchester to Meekville Junction Project

prepared for

Connecticut Siting Council Review

Volume I

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prepared by

The Connecticut Light & Power Company

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1.0 INTRODUCTION

The Connecticut Light and Power Company (CL&P) and the Burns & McDonnell Engineering Company, Inc. (Burns & McDonnell) jointly prepared this Development and Management (D&M) Plan for the construction of the Manchester to Meekville Junction Project (MMP or the Project) in accordance with the Connecticut Siting Council (Council) Decision and Order for Docket No. 370A-MR of July 20, 2010 (Appendix A), and pursuant to Sections 16-50j-60 through 16-50j-62 of the Regulations of Connecticut State Agencies, *Requirements for a right-of-way development and management plan*. This D&M Plan covers all overhead line construction and substation improvements for the Project, as well as distribution line relocations.

CL&P will construct approximately 2.7 miles of new 345-kV transmission line within an existing right-of-way (ROW) from Manchester Substation to Meekville Junction in Manchester, Connecticut. MMP will also include additions at Manchester Substation.

1.1 PROJECT DESCRIPTION¹

With the construction of the new 345-kV overhead transmission line between Manchester Substation and Meekville Junction, an existing 3-terminal 345-kV line connecting the Manchester Substation to North Bloomfield Substation and Barbour Hill Substation will be changed to two 2-terminal lines, Manchester Substation to North Bloomfield Substation and Manchester Substation to Barbour Hill Substation. The new 345-kV line will be supported by steel monopoles with a typical height of 155 feet, as shown in Volume II, Typical Cross Sections.

The space currently available for the construction of this new line is in between existing transmission lines on the ROW, but in several locations, existing 115-kV line structures must be relocated to provide the necessary spacings between the new 345-kV line and this existing line. Additionally, sections of overhead 23-kV distribution circuits currently occupy the corridor near the proposed 345-kV line. These distribution lines will typically be relocated on the ROW between the existing double-circuit 115-kV line and the proposed 345-kV line. At the western end of Meekville Junction, the existing 395 line segment heading west to North Bloomfield Substation will be disconnected at structure 20022 and reconnected to the newly constructed 345-kV line from Manchester to Meekville Junction. The portion of the 395 line from structures 20020 to 20022, currently occupying both sides of these towers, will be bundled together

¹ Per the Council's Decision and Order (Reconsideration) in Docket 370A-MR

to operate as a single, split-phase section of the 345-kV Manchester to Barbour Hill Line. The southern terminal of the new line will connect to the existing 395 line position (between circuit breakers 20T and 21T) at Manchester Substation. The existing 395 line will then be relocated to a newly completed bay position (between circuit breakers 23T and 24T) in the 345-kV switchyard at Manchester Substation.

Improvements at Manchester Substation will include a new 345-kV line position. This new line position will require installation of a circuit breaker (24T) in the existing third bay, and associated line position equipment (switches, capacitance coupled-voltage transformers (CCVTs), line trap, and surge arresters) between the existing 23T and new 24T circuit breakers and completion of the terminal structure. These improvements will be constructed within the existing fenced area of the substation. Protection and control equipment related to the new line will be installed within the existing control enclosure. See Appendix B for a layout drawing of the Manchester Substation.

The above information is a high-level summary of the proposed construction. See Volume II for specific structure locations and configurations.

1.2 REGULATORY APPROVALS AND CONSULTATIONS FOR PROJECT CONSTRUCTION

In addition to the *Requirements for a right-of-way development and management plan* found in Sections 16-50j-60 et seq. of the Regulations of Connecticut State Agencies, the Council stipulated certain requirements for the D&M Plan in Condition 2 of its Decision and Order. A copy of the Decision and Order is provided in Appendix A. Those requirements have been incorporated into this D&M Plan either directly or by reference.

The Project requires an Individual Permit from the U.S. Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act (permit application sent on June 19, 2009), a 401 Water Quality Certification from the Connecticut Department of Environmental Protection (CT DEP) (permit application sent on June 30, 2009), and a Stream Channel Encroachment Line (SCEL) Permit (permit application sent on June 5, 2009) from the CT DEP.

CL&P's CT DEP and USACE permit applications were amended on August 19, 2010 to include the changes to wetland impacts resulting from the Council's Decision and Order and constructability reviews. The CT DEP's General Permit for the Discharge of Stormwater and Dewatering Wastewaters from

Construction Activities (DEP PED REG 015) will also be required for the Project. Project construction will not start in Connecticut until these permit approvals are received.²

The construction Contractor is responsible for complying with the requirements and conditions in the siting and permitting approvals detailed above. Burns & McDonnell has been retained by CL&P as the Construction Manager. Burns & McDonnell will monitor the construction Contractor's performance on a daily basis during construction. CL&P will also hire an Independent Environmental Consultant, subject to the Council's approval (see Section 3.15), to monitor the construction Contractor's performance and report to the Council and the Chief Elected Official of the Town of Manchester on a bi-weekly frequency (see Section 4.3).³

² Condition Number 6 in the Council's Decision and Order (Reconsideration) in Docket 370A-MR

³ Condition Number 7 in the Council's Decision and Order (Reconsideration) in Docket 370A-MR

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