



**MAINE POWER  
RELIABILITY PROGRAM**  
A CENTRAL MAINE POWER COMPANY PROGRAM

**LEEDS, MAINE  
SHORELAND ZONING, SITE PLAN REVIEW,  
AND FLOODPLAIN MANAGEMENT PERMIT  
APPLICATION**

**Section 251 Transmission Line Construction**

***Prepared for:***

Central Maine Power Company  
83 Edison Drive  
Augusta, Maine 04336

***Prepared by:***



TRC Engineers, LLC  
14 Gabriel Drive  
Augusta, Maine 04330

November 2009

## **Agent Authorization Letter**



Central Maine Power

August 15, 2008

Bureau of Land & Water Quality  
Division of Land Resource Regulation  
Maine Department of Environmental Protection  
17 State House Station  
Augusta, ME 04333-0017

Municipalities (various)

Federal Agencies (various)

RE: Central Maine Power Company - Maine Power Reliability Program (MPRP)  
Agent Authorization

To Whom It May Concern:

Central Maine Power Company hereby authorizes TRC Engineers, Inc. and TRC staff to act as its agent for all activities associated with the acquisition of Federal, state and local permits related to the above referenced project.

Please call me at 626-9557 or email me at [gerry.mirabile@comco.com](mailto:gerry.mirabile@comco.com) with any questions. Thank you.

Sincerely,

Gerry J. Mirabile  
Lead Analyst - Compliance

An equal opportunity employer

83 Edison Drive | Augusta, ME 04336

tel (207) 623-3521

[www.cmpco.com](http://www.cmpco.com)

S:\Compliance\Shared\Environmental\Projects\Transmission Lines\Maine Power Reliability Program [MPRP]\Agent Authorization Letter.doc  
  
An Energy East Company

## **Introduction**

The Maine Power Reliability Program (MPRP) is a project by Central Maine Power Company (CMP) to upgrade Maine's bulk power transmission system. As described in more detail below, the proposed project consists of a network of 345 (kilovolt) kV and 115 kV transmission lines and associated substations to be constructed throughout CMP's service territory where particular needs have been identified. In Leeds, the MPRP proposes to add a new 115 kV single pole<sup>1</sup> line in the existing transmission line corridor along an approximately 8.5 mile section in the western portion of town that traverses the Town from north to south.

The project described in the following application materials is located in the Town of Leeds's Prime Agricultural and Rural Residential Districts, as well as within the Shoreland Zone. The project activities within the Prime Agricultural and Rural Residential Districts are classified as permitted essential services, and are not subject to Site Plan Review according to the Town of Leeds Zoning Ordinance at Article 1, Section 3 (E). Those portions of the project within the Shoreland Zone require approval under the Shoreland Zoning Ordinance. In addition, all activities within the Shoreland Zone are to be reviewed by the Planning Board as a Site Plan Review according to Article II, Section 14 of the Leeds Shoreland Zoning Ordinance. These application materials are divided into the following parts:

- Part A: Project Overview and Description, beginning on page 1.
- Part B: Shoreland Zoning Permit Application, beginning on page 4.
- Part C: Site Plan Review Application, beginning on page 16.
- Part D: Flood Hazard Development Permit Application, beginning on page 30.
- Exhibits: Beginning on page 40.

## **Part A: Project Overview and Description**

### **Maine Power Reliability Program**

The MPRP is being proposed to upgrade Maine's bulk power transmission system. A majority of this system was placed into service in the early 1970s and is now reaching the limits of its ability to reliably meet the growing electrical demand of Maine customers. Since the completion of the current system nearly forty years ago, changes in both the patterns of available generation and customer loads have occurred in Maine. For example, the population has become more concentrated in the southern part of the State, while the generation needed to serve that load is more distant and dispersed. When these pattern changes are combined with the increasing peak demand, the current transmission infrastructure in Maine will be inadequate within a few years to meet the needs of Maine customers. In addition, reliability and security standards mandated by law and administered by the North American Electric Reliability Corporation (NERC), the Northeast Power Coordinating Council, Inc. (NPCC), and ISO New England (ISO-NE) have

---

<sup>1</sup> Two Dead End poles associated with the project in Leeds will be constructed using a 3-pole, H-frame structure. Please see Exhibit 5 for details.

changed significantly in recent years. CMP must upgrade its bulk power transmission system with this proposed project in order to meet the mandatory standards and to provide reliable electric service to Maine customers in the future.

In January of 2007, the MPRP began a comprehensive needs assessment of CMP's bulk power transmission system. The study included a 10-year forecast to evaluate the system in Maine, including a review of system reliability and performance under various system conditions and operating scenarios, as well as a needs assessment to ensure a reliable transmission system in the most cost-effective manner possible. The study identified a number of significant reliability issues with Maine's bulk transmission system, including insufficient 345 kV transmission capacity, insufficient 115/345 kV transformation capacity, and insufficient transmission support and/or infrastructure in all regions served by CMP. After completing the needs assessment, the MPRP studied potential solutions, including both transmission and non-transmission alternatives, before designating its preferred solution.

CMP ultimately selected a primarily transmission solution (a small geographic area known as the South Portland loop will be addressed through non-transmission alternatives) based on a number of factors, including electrical performance, cost effectiveness, and impacts to landowners and Maine's environment under various forecasts of future conditions. The proposed solution consists of a network of 345 kV and 115 kV transmission lines and associated substations throughout CMP's service territory where particular needs were identified. The proposed transmission solution ranges from Eliot in the south, Rumford in the west, Warren and Searsport in the east, and Orrington and Pittsfield in the north. In all, MPRP will encompass nearly 80 Maine towns, and will require approvals from the Maine Public Utilities Commission, the Maine Department of Environmental Protection, the Army Corps of Engineers, and numerous municipalities.

### **Project Description in Leeds**

The proposed upgrades in Leeds are an important part of the program to improve the reliability, safety, and security of the bulk power transmission system in Maine, while at the same time meeting the increasing demands for electrical power. In Leeds, the MPRP proposes to add a new 115 kV single pole line in the existing transmission line corridor that traverses the Town from north to south in the western portion of town. The length of the corridor is approximately 8.5 miles. (See Exhibit 2 for a project overview and Exhibit 3 for a view of the corridor cross section).

The project involves:

- Installing a new 115 kV transmission line, Section 251. The new Section 251, 115 kV transmission line will run on single-pole structures adjacent to the existing Section 200 through the entire north-south corridor that traverses Leeds.<sup>2</sup> The new structures will be different from what is currently found in the corridor, in that they will be single-pole

---

<sup>2</sup> Two Dead End poles associated with the project in Leeds will be constructed using a 3-pole, H-frame structure. Please see Exhibit 5 for details.

wooden structures with a typical above ground height of 75 feet<sup>3</sup> as opposed to H-frame structures with a typical height of 45 feet.

Additional clearing in some portions of the existing corridor is required. Permanent clearing, as explained in more detail later in these application materials, is limited to the selective removal of so-called “capable species” that are capable of reaching unsafe heights within the transmission corridor. CMP will not need to acquire additional lands in Leeds; rather this portion of the MPRP will be built entirely on land that CMP already owns in fee.

---

<sup>3</sup> Please note that pole heights will vary due to varying terrain and the need to achieve spans that will avoid or minimize impacts to natural resources. While typical above-ground heights have been provided above, some poles may exceed those heights due to terrain differences and the existence of sensitive natural resources. See the attached table (Exhibit 5) for specific information on the heights and types of each proposed pole.

FOR OFFICE USE ONLY:	
PERMIT NO:	
ISSUE DATE:	
FEE AMOUNT:	

## PART B: TOWN OF LEEDS SHORELAND ZONING APPLICATION GENERAL INFORMATION

<b>1. APPLICANT</b> Central Maine Power Co. c/o Mary Smith	<b>2. APPLICANTS ADDRESS</b> 83 Edison Drive Augusta, Maine 04336	<b>3. APPLICANTS TEL. #</b> 207-626-4006
<b>4. PROPERTY OWNER</b> Central Maine Power Co.	<b>5. OWNER'S ADDRESS</b> Same as Applicant	<b>6. OWNER'S TEL. #</b> Same as Applicant
<b>7. CONTRACTOR (agent)</b> TRC c/o Deirdre Schneider	<b>8. CONTRACTOR'S (agent) ADDRESS</b> 14 Gabriel Drive Augusta, Maine 04330	<b>9. CONTRACTOR'S (agent) TEL. #</b> 207-620-3851
<b>10. LOCATION/ADDRESS OF PROPERTY</b> Existing transmission corridor running north from Livermore Falls, south towards Greene in the western portion of the Town of Leeds	<b>11. TAX MAP/PAGE &amp; LOT# AND DATE LOT WAS CREATED</b> Map 13, Lot 41 Map 13, Lot 45 Map 13, Lot 23 Map 13, Lot 18 Map 11, Lot 6 Map 8, Lot 26 Map 2, Lot 6 Map 2, Lot 5	<b>12. ZONING DISTRICT</b> Resource Protection Stream Protection Limited Residential
<b>13. DESCRIPTION OF PROPERTY INCLUDING A DESCRIPTION OF ALL PROPOSED CONSTRUCTION, (E.G. LAND CLEARING, ROAD BUILDING, SEPTIC SYSTEMS, AND WELLS – PLEASE NOTE THAT A SITE PLAN SKETCH IS REQUIRED ON PAGE 3)</b>  The Maine Power Reliability Program (MPRP) is a project by Central Maine Power Company (CMP) to upgrade Maine's bulk power transmission system. In Leeds, the MPRP proposes to add a new 115 kilovolt (kV) single pole line in the existing transmission line corridor along an approximately 8.5 mile section that traverses the Leeds from north to south in the western portion of town.  The proposed construction is more fully described in the attached text, drawings and maps.		
<b>14. PROPOSED USE OF PROJECT</b> Essential Services- Electric Power Transmission	<b>15. ESTIMATED COST OF CONSTRUCTION</b> Approximately \$7.67 million	

<b>SHORELAND AND PROPERTY INFORMATION</b>															
<p><b>16. LOT AREA</b></p> <p>Approximately 410 acres</p>	<p><b>17. FRONTAGE ON ROAD (FT.)</b></p> <p>The transmission line corridor crosses six (7) public roadways.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">North Line Road</td> <td style="width: 50%;">Approximately 74 ft</td> </tr> <tr> <td>Churchill Road</td> <td>Approximately 413 ft.</td> </tr> <tr> <td>Campbell Road</td> <td>Approximately 410 ft.</td> </tr> <tr> <td>Knapp Road</td> <td>Approximately 414 ft.</td> </tr> <tr> <td>Fish Street</td> <td>Approximately 1161 ft.</td> </tr> <tr> <td>River Road</td> <td>Approximately 400 ft.</td> </tr> <tr> <td>Route 219</td> <td>Approximately 549 ft.</td> </tr> </table>	North Line Road	Approximately 74 ft	Churchill Road	Approximately 413 ft.	Campbell Road	Approximately 410 ft.	Knapp Road	Approximately 414 ft.	Fish Street	Approximately 1161 ft.	River Road	Approximately 400 ft.	Route 219	Approximately 549 ft.
North Line Road	Approximately 74 ft														
Churchill Road	Approximately 413 ft.														
Campbell Road	Approximately 410 ft.														
Knapp Road	Approximately 414 ft.														
Fish Street	Approximately 1161 ft.														
River Road	Approximately 400 ft.														
Route 219	Approximately 549 ft.														
<p><b>18. SQ. FT. OF LOT TO BE COVERED BY NON-VEGETATED SURFACES</b></p> <p>The transmission line poles will occupy less than 0.1% of the project area. The remainder will remain vegetated.</p>	<p><b>19. ELEVATION ABOVE 100 YR. FLOOD</b></p> <p>See application text and attached map at Exhibit 4 and Exhibit 11.</p>														
<p><b>20. FRONTAGE ON WATERBODY (FT.)</b></p> <p>See attached maps (Exhibit 4)</p>	<p><b>21. HEIGHT OF PROPOSED STRUCTURE</b></p> <p>Single pole structures will range from 56.5' to 89'. (See Exhibit 5)</p>														
<p><b>22. EXISTING USE OF PROPERTY</b></p> <p>Electric power transmission</p>	<p><b>23. PROPOSED USE OF PROPERTY</b></p> <p>Electric power transmission</p>														
<p><i>Note: Questions 24 &amp; 25 apply only to expansions of portions of existing structures which are less than the required setback.</i></p>															
<p><b>24. A) SQ. FT. OF PORTION OF STRUCTURE WHICH IS LESS THAN REQUIRED SETBACK AS OF 1/1/89:</b></p> <p style="text-align: center;">Not applicable (A-D)</p> <p><b>B) SQ. FT. OF EXPANSION OF PORTION OF STRUCTURE WHICH IS LESS THAN REQUIRED SETBACK FROM 1/1/89 TO PRESENT:</b></p> <p><b>C) SQ. FT. OF PROPOSED EXPANSION OF PORTION OF STRUCTURE WHICH IS LESS THAN REQUIRED SETBACK:</b></p> <p><b>D) % INCREASE OF SQ. FT. OF ACTUAL AND PROPOSED EXPANSIONS OF PORTION OF STRUCTURE WHICH IS LESS THAN REQUIRED SETBACK SINCE 1/1/89:</b></p> <p style="text-align: center;">(% INCREASE = <math>\frac{B + C}{A} \times 100</math>)</p>	<p><b>25. A) CU. FT. OF PORTION OF STRUCTURE WHICH IS LESS THAN REQUIRED SETBACK AS OF 1/1/89:</b></p> <p style="text-align: center;">Not applicable (A-D)</p> <p><b>B) CU. FT. OF EXPANSION OF PORTION OF STRUCTURE WHICH IS LESS THAN REQUIRED SETBACK FROM 1/1/89:</b></p> <p><b>C) CU. FT. OF PROPOSED EXPANSION OF PORTION OF STRUCTURE WHICH IS LESS THAN REQUIRED SETBACK:</b></p> <p><b>D) % INCREASE OF CU. FT. OF ACTUAL AND PROPOSED EXPANSIONS OF PORTION OF STRUCTURE WHICH IS LESS THAN REQUIRED SETBACK SINCE 1/1/89:</b></p> <p style="text-align: center;">(% INCREASE = <math>\frac{B + C}{A} \times 100</math>)</p>														
<p><i>Note: It is imperative that each municipality define what constitutes a structure, floor area and volume and apply those definitions uniformly when calculating existing and proposed sq. ft. and cu. Ft.</i></p>															



**Front or Rear Elevation**

**Please see the attached Exhibit for transmission line corridor cross sections showing existing and proposed structures and their typical above-ground heights**

**Side Elevation**

Draw a simple sketch showing the existing and proposed structures and dimensions.

## **Shoreland Zoning Districts Impacted**

The proposed project will have very limited impacts within the Shoreland Zoning Districts. It will involve the addition of only 4 new transmission poles in the shoreland zone, passing through all three districts as designated in the Town of Leeds Shoreland Zoning Ordinance as follows:

- **Resource Protection District at the Dead River**

- Within the Resource Protection District in the vicinity of the Dead River, the installation of two transmission poles associated with the new Section 251 will take place. Pole # 107 will be placed approximately 200 feet from the bank of the Dead River and Pole # 108 will be set back approximately 100 feet from the River. In addition, less than 0.5 acres of capable species will be cleared in this district. Construction vehicles will not cross the river.

- **Stream Protection District by Allen Stream (a tributary of the Androscoggin River)**

- One new transmission pole is proposed within this district, Pole #164. No construction vehicles will cross the stream. Approximately 0.75 acres of land will be cleared of capable species within this district.

This area of clearing is also within a mapped Deer Wintering Area (DWA). The Maine Department of Inland Fisheries and Wildlife (MDIF&W) classifies this DWA as being “indeterminate in value,” meaning its value has not yet been evaluated in the field. The deer yard is approximately 322 acres in size. The MPRP will not have a significant impact on the DWA within this district because the clearing of vegetation will be minimally limited to capable species. The remaining portion of the DWA associated with the transmission line corridor will continue to be characterized by scrub-shrub growth, thereby maintaining its current character.

- **Limited Residential District west of Fish Street (near where the corridor bisect Fish Street)**

- One new transmission pole associated with Section 251, pole #135, is proposed in this district. Approximately 2 acres of land will be cleared of capable species within this district.

## **Permitted Land Uses**

The MPRP is an “essential services” project as defined in Article X of the Town of Leeds Ordinance. According to Section 14 (21)(D) of the Leeds Shoreland Zoning Ordinance, essential services projects are permitted in all three Shoreland Zoning districts with the approval of the Planning Board. Essential Services projects are also subject to the specific requirements of Section 15 (M)(2) of the Ordinance, which is addressed below.

**Land Use Standards** (From Section 15 of the Shoreland Zoning Ordinance)

**A. Minimum Lot Standards**

The new poles will be placed within an existing transmission corridor in Leeds. Minimum lot standards are not applicable to the MPRP because the transmission poles associated with this project are not residential dwelling units, principle structures, nor public/private recreational facilities.

**B. Principal and Accessory Structures**

Not applicable.

**C. Conversion of Seasonal residences to Year-Round Residences**

Not applicable.

**D. Piers, Docks, Wharfs, Bridges, and Other Structures and Uses Extending Over or Below the Normal High-Water Line of a Water Body or Within a Wetland**

Not applicable.

**E. Campgrounds**

Not applicable.

**F. Individual Private Campsites**

Not applicable.

**G. Commercial and Industrial Uses**

Not applicable.

**H. Parking Areas**

Not applicable. There will be no parking areas associated with the MPRP.

**I. Roads and Driveways**

There will be no new permanent roads or driveways associated with the MPRP. Existing CMP-maintained access points and ways suitable for routine and urgent maintenance by its own vehicles will remain within the corridor. The MPRP will involve only the creation of temporary access ways for the purpose of constructing the new Section 251.

Temporary access ways, which do not meet the definitions of roads or driveways pursuant to Article X of the Town's ordinances, will not add any impervious surface area, and will be established only for use during the construction phase (see Exhibit 4). This will be an ongoing process as access will be established to areas undergoing immediate construction. Determinations surrounding the exact nature of the construction of these temporary access ways will be made by the contractor in consultation with an environmental representative. These temporary access ways will be in place for no more than one growing season, and will be removed once all aspects of construction in that area are complete. Access to pole sites, either for removal or construction, also will be achieved by temporary access ways which will be in place for no more than one growing season. Areas where soils have been disturbed will then be mulched with hay. Vegetation will be allowed to reestablish itself once the temporary access ways have been removed.

Measures will be taken to avoid and minimize impacts to streams and wetlands through the use of crane mats, temporary bridges, geo-textiles fabrics, and culverts, when necessary. Appropriate erosion controls will be installed wherever necessary. If necessary, mats will be placed parallel to the upland edge as abutments to establish and further protect bank stability. No extensive grubbing (grading to remove root systems) within wetland crossing areas will be done prior to mat placement. However, some minor grading may be required to ensure mat stability and construction access safety. Streams that are too wide to cross with crane mats or temporary bridges will be avoided.

#### **J. Signs**

Not applicable. There will be no signage associated with the MPRP in Leeds.

#### **K. Storm Water Runoff**

With the exception of the immediate area occupied by the support poles, there is no increase in impervious surface area associated with the transmission line; therefore, there will be no significant storm water run-off generated from the project. All new construction will be designed to minimize storm water runoff from the site in excess of the natural predevelopment conditions. See also Section Q and Section R beginning on page 12.

#### **L. Septic Waste Disposal**

There will be no wastewater generated from the project site; therefore the requirements of this section are not applicable.

#### **M. Essential Services**

**(1) Where feasible, the installation of essential services shall be limited to existing public ways and existing service corridors.**

Within the Town of Leeds, the construction of the new 115 kV transmission line will

occur entirely within the existing transmission line corridor. Some additional clearing of capable species with the existing corridor will be required.

A guiding principle on the design of the MPRP transmission line upgrades has been to utilize the existing transmission line corridors to the maximum extent possible. Only where existing corridors cannot accommodate the proposed upgrades while meeting safety and reliability standards is CMP seeking to widen the existing corridors. Creating an entirely new corridor is a last resort. As a result, a vast majority of the transmission line upgrades proposed as part of the MPRP are located within or immediately adjacent to existing corridors. Co-location of the transmission line upgrades, as opposed to the creation of new corridors, has multiple benefits, including the minimization of impacts to communities, individual property owners, and the environment.

**(2) The installation of essential services other than road-side distribution lines, is not permitted in a Resource Protection or Stream Protection District, except to provide services to a permitted use within said district, or except where the applicant demonstrated that no reasonable alternative exists. Where allowed, such structures and facilities shall be located so as to minimize any adverse impacts on surrounding uses and resources, including visual impacts.**

The corridor along which the new transmission line will run crosses the Resource Protection (RPD) and Stream Protection Districts (SPD) in only two locations, involving three proposed transmission poles. Installation of essential services in these districts is allowed where no reasonable alternative exists.

Within the corridor, CMP has to the greatest extent practicable, sited each individual single pole so as to avoid, and where unavoidable, to minimize adverse impacts on surrounding uses and resources. As part of this avoidance and minimization effort, CMP has attempted to site the poles so that none is located within either the Resources Protection or Stream Protection Districts. In Leeds however, the existing corridor already crosses the RPD and SPD; therefore the single poles associated with the MPRP cannot be sited in a manner that allows the entire district to be spanned. This leaves CMP with no reasonable alternative, making the location of 2 poles within the Resource Protection District and one pole within the Stream Protection District necessary.

There are no reasonable alternatives for locating these poles outside of these areas. The amount of ground disturbance associated with the planned poles will be small, (*i.e.*, limited to the immediate vicinity of the pole placements), and since the project is co-located within the existing transmission line corridor, which already contains transmission poles, locating poles within the previously impacted RPD and SPD causes the least overall impact when compared with the alternatives. Avoiding these districts would require expanding or moving the existing transmission line corridor or erecting much taller and much more substantial structures (e.g., steel towers with concrete footings) to achieve the required spans. The overall environmental and visual impacts of these alternatives would be greater than the impacts associated with the project as planned. (See the sections related to specific Shoreland Zone Districts starting on page 8 for more detailed information.)

**N. Mineral Exploration and Extraction**

Not applicable.

**O. Agriculture**

Not applicable.

**P. Timber Harvesting**

Not applicable. Clearing of vegetation will be limited to that which is necessary to construct the permitted project, as explained below.

**Q. Clearing or Removal of Vegetation for Activities Other Than Timber Harvesting**

Some clearing of vegetation will be required within the existing service corridor to accommodate the project and ensure that the project meets federal reliability and safety standards. The amount of clearing in all Shoreland Zoning Districts will be limited to that which is necessary for development of the project, and is generally limited to removal of species that are capable of growing tall enough to interfere with the transmission lines (so-called "capable species"). Non-capable species are allowed to remain to ensure that the corridor is vegetated, which prevents erosion and provides wildlife habitat. No grubbing (*i.e.*, stump removal) will take place.

Equipment typical of logging operations, such as cable and hook skidders, forwarders, tree movers, chain saws and logging trucks may be utilized to remove vegetation. In general, all trees, saplings of capable species, and sometimes tall shrubs are cut at ground level. All root systems are left intact, as the ground is not grubbed. All slash (such as limbs, tree trunks, wood chips, etc.) from the cutting operation is disposed of in accordance with the Maine Slash Law (12 M.R.S.A. § 9333). The vegetation that remains is typically a scattered growth of small shrubs and herbaceous plants. Initially, the condition of these newly cleared areas resembles that of a high quality forestry operation. While very little height structure to the vegetation remains, great care is taken to prevent rutting and erosion. (See also Exhibit 9)

After construction is completed, non-capable species are allowed to grow to ensure that the corridor is vegetated to the greatest extent allowable, which helps prevent erosion and provides wildlife habitat. Over a relatively short period of time (generally within one year), the newly cleared portions of the corridors will exhibit the early-successional habitat type that is typical of existing transmission line corridors in Maine.

See attached maps (Exhibit 4), and the sections related to specific Shoreland Zone Districts, starting on page 8, for more detailed information.

**R. Erosion and Sedimentation Control**

With the exception of the immediate area surrounding the base of the support poles, there will be no increase in the impervious surface area associated with the transmission line. The

amount of ground disturbance associated with this project will be limited to the immediate vicinity of the pole placements and the impacts associated with temporary access roads. CMP has developed a standard manual, "Environmental Guidelines for Construction and Maintenance Activities on Transmission Line and Substation Projects" (2007), which it uses as a routine part of all transmission and substation projects. (A copy of this manual is attached as Exhibit 9). This manual contains erosion and sedimentation control requirements, standards, and methods that will be used to protect soil and water resources during construction of the various MPRP components. The manual was developed in consultation with the Maine Department of Environmental Protection (DEP) and is largely based on DEP's *Maine Erosion and Sediment Control BMP's*, dated March 2003, and DEP's Chapter 500, and contains specific Best Management Practices appropriate for electric transmission line and substation construction. These guidelines will be followed in the construction of transmission lines.

### **S. Soils**

Based on the applicants' analysis of the Soil Survey Geographic Database compiled by the United States Department of Agriculture, Natural Resources Conservation Services, soils within the transmission line corridor will accommodate the proposed MPRP construction activities. Soil constraints within the transmission line corridor will be managed and mitigated through implementation of erosion and sediment control measures, proper site and project design, and special construction procedures. If concrete foundations for specific poles should be constructed, soil borings will be conducted and the foundation will be designed in accordance with soil characteristics.

### **T. Water Quality**

The proposed project will not pose a threat to water quality or impair the water classification of any water body. To minimize spill potential during construction, no fueling or maintenance of vehicles will be performed within 25 feet of protected natural resources or identified critical habitat area or other areas of special significance as identified by MDEP, MDIF&W or MNAP. After construction, the electrical transmission line corridor will be maintained to encourage the growth of scrub-shrub vegetation. Trees within the corridor that are capable of growing up into the line and/or conductors ("capable species") must be removed for safety and reliability reasons. CMP uses a selective herbicide program on all transmission corridors to treat an area once every four years to maintain an early successional stage of growth. Herbicide is selectively applied (using a low-pressure backpack applicator) to capable species to prevent growth (or re-growth of a cut plant) of individual plants. CMP does not use herbicide within 25 feet of any waterbody or wetland with standing water. Crew forepersons are certified by the Maine Pesticide Control Board, and all herbicides are EPA registered. The selective use of herbicides within the transmission line corridor does not pose a threat to water quality.

### **U. Archaeological Sites**

Following consultation with the Maine Historic Preservation Commission (MHPC), CMP has conducted extensive investigations of potential pre-historic archaeological, historic

archaeological and historic architectural surveys along the project corridor. Survey reports have been submitted to the MHPC. There will be neither structural development nor soil disturbance on or adjacent to sites listed on, or eligible to be listed on either the National Register of Historic Places or the Maine Historic Resources Inventory within the Shoreland Zone in Leeds.

**Approval Standards** (From Section 16 (D)(5) of the Shoreland Zoning Ordinance)

**The proposed use will:**

**a. Maintain safe and healthful conditions.**

The proposed project will maintain the same safe and healthful conditions that are already present in the transmission line corridor. The transmission line corridor and the poles within it are maintained to established industry standards so as to ensure the safety of utility workers and the general public. Maintaining sufficient clearances around the conductors is paramount to the safe operation of the line. These clearances are achieved through appropriate siting of the poles themselves and through vegetation maintenance practices as described above. All construction will be in accordance with CMP's transmission standards, general industry standards, and "Good Utility Practice," including all necessary liveline working clearances, strength factors, and reliability factors as governed by the National Electrical Safety Code (NESC). In all instances, the line will be designed to meet or exceed the NESC and other standards, as applicable. The transmission line and all facilities will be operated in full compliance with CMP safety standards, which fully comply with Federal Occupational Safety & Health Administration requirements.

**b. Not result in water pollution, erosion, or sedimentation to surface waters.**

As described above with respect to Ordinance Sections 15(K), 15(R), and 15(T), the MPRP will not result in water pollution, erosion, or sedimentation to surface waters.

**c. Adequately provide for the disposal of all wastewater.**

There will be no wastewater disposal required for this project; therefore this standard is not applicable.

**d. Not have an adverse impact on spawning grounds, fish, aquatic life, bird, or other wildlife habitat.**

Impacts to spawning grounds, fish, aquatic life, or other wildlife habitat will be largely avoided through the use of the existing service corridor, which has been in place for several decades. In general, given the existing landscape characteristics of the site, construction and maintenance of the project is expected to result in conditions that are already common to the project area. It is fully anticipated that local wildlife populations will adapt and respond to any additional alterations much as they already do to ongoing land uses within the vicinity of the proposed project. Therefore, impacts to wildlife are expected to be minimal to non-existent.

Identified significant wildlife habitats and natural areas, such as vernal pools and rare

plant locations, will be avoided and minimized to the extent practicable through careful siting and placement of poles.

In deer wintering areas (DWA), where clearing is required, the percentage of habitat removed will not be significant. There is a small significant vernal pool between poles #181 and #183 where some clearing of vegetation will take place; however, this too will represent a small amount of clearing. In addition, no poles will be placed in any vernal pool in the Town of Leeds. Transmission poles will be located within wetlands only when avoidance would cause a greater impact (such as taller structures impacting visual and aesthetic values, or the creation of a new corridor). Once installed the transmission line poles, due to the minimal amount of ground surface area they occupy, will have no significant impact on these critical natural areas.

Significant wildlife habitats and natural areas will be avoided to the greatest extent practicable during construction, including measures that are taken to ensure any impacts will be minimal and temporary. All access ways will be temporary. Thus, this standard has been met. See attached maps, (Exhibits 4), and the sections related to specific Shoreland Zone Districts, beginning on Page 8, for more detailed information.

**e. Conserve shore cover and visual, as well as actual, points of access to inland waters.**

The proposed project will take place entirely within the existing corridor, and since the corridor already contains poles of a similar nature, the proposed project will not significantly affect visual points of access to inland waters, and will have no impact on actual points of access to inland waters. The corridor will continue to be maintained in a vegetated state with non-capable species, thereby preserving a similar degree of shore cover which currently exists.

**f. Protect archaeological and historic resources as designated in the comprehensive plan.**

The Comprehensive Plan lists eight sites of historic significance within the Town. The MPRP will not impact any of these sites.

**g. Will avoid problems associated with flood plain development and use.**

As depicted in the attached maps, only four of the proposed transmission poles are planned to be within the 100-year floodplain. Because of the nature of a transmission line and the minimal additional impervious surface associated with the project, construction and maintenance of the proposed transmission line will not cause or increase flooding or cause a flood hazard to any neighboring structures. Furthermore, the program will not affect runoff/infiltration relationships. Thus, the project will avoid problems associated with floodplain development and use. Please see Flood Hazard Development Permit, starting on page 30 for more details.

**h. Be in conformance with the provisions of Section 15, Land Use Standards.**

As discussed above with respect to Ordinance Sections 15(A) through (U), this project complies with all of the provisions of Section 15 of the Ordinance.

**PART C: TOWN OF LEEDS  
SITE PLAN REVIEW APPLICATION**

**Project Name: Maine Power Reliability Program (MPRP)**

**APPLICANT INFORMATION:**

- 1. Name of Applicant:** Central Maine Power Company

**Address:** 83 Edison Drive  
Augusta, Maine 04336

**Telephone Number:** (207) 626-9574
  
- 2. Name of Property Owner:** Central Maine Power Company

**Address:** 83 Edison Drive  
Augusta, Maine 04336

**Telephone Number:** (207) 626-9574
  
- 3. Name of Owner's Authorized Agent:** Deirdre Schneider

**Address:** TRC  
14 Gabriel Drive  
Augusta, Maine 04330

**Telephone Number:** (207) 620-3851
  
- 4. Name of person and address to which all correspondence regarding this application should be sent:**

TRC c/o Deirdre Schneider, 14 Gabriel Drive, Augusta, Maine 04330
  
- 5. If the applicant is a corporation, check if licensed in Maine:  X  Yes;   No. If yes, attach a copy of State registration. See Exhibit 1.**

**6. List below the names and mailing addresses of property owners within 500 feet of the proposed project:**

Please see attached Exhibit 7 for a table showing all abutters who are within 500 feet of the entire project area, even though the Board is only reviewing that portion of the project that is within the Shoreland Zone and Floodplain.

**7. What legal interest does the applicant have in the property to be developed (ownership, option, purchase and sales, contract, other)? Attach evidence of interest**

Central Maine Power Company owns the entire corridor in fee. See attached, Exhibit 8.

**8. What interest does the applicant have in any abutting property?**

No, Central Maine Power Company does not have any interest in any abutting property.

**9. Nature of the Project: Please describe the nature of the proposed project including: total floor area, type of materials/products to be handled, hours of operation and other information to familiarize the Board with your application. (Attach additional pages in necessary)**

The Maine Power Reliability Program (MPRP), is a Central Maine Power Company project to upgrade Maine's bulk power transmission system. In Leeds, the MPRP proposes to add a new Section 251, 115 kV transmission line which will run on single-pole structures adjacent to the existing Section 200 through the entire north-south corridor that traverses the town of Leeds. The new poles will be different from what is currently found in the corridor, in that they will be single-pole wooden structures with a typical above-ground height of 75 feet<sup>4</sup> as opposed to H-frame structures with a typical height of 45 feet.<sup>5</sup> Additional clearing in some portions of the existing corridor is required. Permanent clearing, as explained in more detail elsewhere in these application materials, is limited to the selective removal of so-called "capable species" that are capable of reaching unsafe heights within the transmission corridor. CMP will not need to acquire additional lands in Leeds; rather this portion of the MPRP will be built entirely on land that CMP already owns outright. Please see the application narrative and exhibits for more detailed information.

---

<sup>4</sup> Individual pole heights will vary due to varying terrain and the need to achieve spans that will avoid or minimize impacts to natural resources. While typical above-ground heights have been provided above, some poles may exceed those heights due to terrain differences and the existence of sensitive natural resources. See the attached table (Exhibit 5) for specific information on the heights and types of each proposed pole.

<sup>5</sup> Two Dead End poles associated with the project in Leeds will be constructed using a 3-pole, H-frame structure. Please see Exhibit 5 for details.



However, the projected cost for the entire project upon completion in the Town of Leeds is estimated at approximately \$7.67 million

**Attach a statement on how you plan to finance the project**      See Section 21, page 27.

## DEVELOPMENT INFORMATION

1. Gross floor area or developed area: There is no floor area associated with this project. However, the poles will account for approximately 1,446 square feet of developed area.
2. Percentage of lot to be covered by structures and parking: There will be no parking areas associated with the MPRP. This essential services project, will add poles to the existing transmission corridor. These poles represent less than 0.1% of the parcel acreage.
3. Method of infrastructure:
  - a. water supply      NA
  - b. sewage disposal      NA
  - c. fire protection      The Applicant provides safety training to local fire departments upon request. As a practical matter, there is no difference in safety procedures for incidents within the existing Section 200 115kV line, or the proposed new Section 251; the standards and practices are the same.
  - d. electricity      NA
  - e. solid waste disposal      See attached narrative, Section 19, page 25-26.
4. Type of on-site signs:      NA
5. Number of parking spaces:      NA
6. Describe the proposed erosion and sedimentation control methods to be employed during construction and maintenance of the proposed project. See Section R of Shoreland Zoning Application on page 12, and Exhibit 9.

## OTHER INFORMATION

1. Evidence of notification to abutting property owners: Letters have been sent, and proof will be presented to the Board at the next Planning Board Meeting on November 16<sup>th</sup>.
2. Written comments from the Fire Chief and Road Foreman upon adequacy of their departments existing capacity to service the proposed project. An application with a request for comments has been submitted to both the Fire Chief and Road Foreman.

- 3. List any waivers necessary before the proposal may proceed: The applicant asks that the requirement to provide the breakdown of costs associated with this project be waived. In addition, the applicant is seeking a waiver of the requirement that a reproducible stable base transparent original of the development plan be submitted.
  
- 4. Proposed construction schedule: Construction is proposed to begin in the first half of 2010.
  
- 5. The application must be accompanied with the following information.
  - a. A development plan drawn on a reproducible stable base transparent original indicating the nature of the project.  
  
The applicant requests that this submission requirement be waived. The applicant has included numerous detailed maps in this application that can be found at Exhibits 4 and 11.
  
  - b. A location map showing the general location of the project.

See Exhibit 2.

To the best of my knowledge, all information submitted in this application is true and correct.

\_\_\_\_\_  
Signature of Applicant

\_\_\_\_\_  
Date

This application form provides the Planning Board with general information. Applicants are encouraged to review Section 5 of the Town of Leeds Zoning Ordinance for specific requirements.

## **General Review Standards** (Section 5 (F))

### **1. Preserve and Enhance the Landscape**

The co-location of the proposed Section 251 in the existing corridor aides in the protection of the landscape in Leeds. In fact, the poles associated with the MPRP in Leeds have been sited in a manner that leaves a large portion of the corridor untouched. The western portion of the corridor will remain heavily vegetated, while the new section will be in an area where less clearing is needed in places due to prior clearing associated with Section 200. The clearing itself will apply only to capable species, allowing non-capable species to remain, thus reducing the possibility of erosion and providing wildlife habitat. Over a relatively short period of time (generally within one year), the newly cleared portions of the corridors will exhibit the early-successional habitat type that is typical of existing transmission line corridors in Maine.

There will be instances in which poles will need to be placed in environmentally sensitive areas. CMP has to the greatest extent practicable, sited each single pole structure so as to avoid, and where unavoidable, minimize adverse impacts on surrounding uses and resources. Even in sensitive areas where poles may be placed, the impacts will be minimal because the amount of ground disturbance associated with the planned poles will be small, (*i.e.*, limited to the immediate vicinity of the pole placements). The MPRP has been designed to not only be cost effective, but to minimize impacts on neighboring properties as well as resources. This is why approximately 98% of the project has been designed to be located either within or adjacent to the existing transmission corridor. The selected design option has the least overall impact when compared with the alternatives. Avoidance of all resources and sensitive areas is not feasible and would either require erecting much taller, substantial structures, such as steel lattice towers, or building a new transmission corridor, which would mean more clearing and most likely greater impacts to not only the environment but also aesthetic values and neighboring land uses.

See also Section M (2) of the Shoreland Zoning Application on page 11.

### **2. Relation of Proposed Buildings to Environment**

As stated above, the new Section 251 will be co-located in the existing transmission corridor which already contains 115 kV, H-frame poles associated with Section 200. The addition of a single-pole, 115 kV transmission line will not create any significant impacts to the environmental and aesthetic qualities of neighboring areas.

### **3. Vehicular Access**

During the construction phase of the MPRP, there will be a small amount of construction vehicle access; however there will be no permanent traffic generated or affected by this project. See Section I of the Shoreland Zoning application on page 9.

#### 4. Internal Vehicular

1. There will be no internal vehicular circulation nor parking associated with this project, other than CMP-maintained access points and ways suitable for routine and emergency maintenance by its own vehicles.
2. There is no need for off-street parking in association with the MPRP.
3. There is no need for internal vehicular connections with abutting parking areas because there is no need for parking associated with this project.
4. As there is no need for parking areas associated with this project, this provision is not applicable.

#### 5. Conservation, Erosion and Sediment Control

See Section R of the Shoreland Zoning application on page 12 and Exhibit 9.

#### 6. Site Conditions

- a. See Section Q, page 12 of the Shoreland Zoning Application for plans concerning the removal of vegetation.

The potential for emission of fugitive dust is very limited, given the minimal pole-installation work proposed for the project. Emissions of fugitive dust is influenced by such factors as soil properties (*e.g.*, moisture content, volume of spoils, and soil fines content), meteorological variables, and construction practices employed. Best management construction practices will be employed to minimize emissions of fugitive dust, including:

1. Use of water or other wetting agents on areas of exposed and dry soils;
  2. Use of covered trucks for transport of soils or other dry materials;
  3. Controlled storage of spoils on the construction site which may include mulching storage piles with hay or covering with tarps in concert with containing the piles with erosion control mix and or silt fencing
  4. Final grading and landscaping of exposed areas as soon as practical.
- b. As no occupancy permit is required for the MPRP this section is not applicable. However, CMP plans to properly handle any waste generated during construction, as described in Section 19, page 25-26 below. As stated above in Section Q, page 12 of the Shoreland Zoning Application, stumps will not be removed from the site. Leaving the stumps is beneficial as it provides more protection against erosion.
  - c. There will be no significant changes made to the elevation or contour of the existing corridor as a result of the MPRP.

## **7. Advertising Features**

Not applicable.

## **8. Special features**

The poles associated with this essential services project in Leeds will be of a similar type and size as has existed within the transmission corridor for decades, and permanent clearing of vegetation will be limited to the removal of capable species within the corridor, as discussed in Section Q of the Shoreland Zoning application on page 12. Therefore, the MPRP will not include features that are incongruous with the existing surroundings of the property.

## **9. Exterior Lighting**

Not applicable. There will be no exterior lighting associated with the MPRP.

## **10. Emergency Vehicle Access**

CMP has maintained access points and ways suitable for routine and urgent maintenance by its own vehicles. As a practical matter there is no difference in safety procedures for incidents within the existing section 200, 115 kV line, and the new section 251, 115 kV line. The access that currently exists will be sufficient to deal with any emergencies associated with the addition of the new transmission line in Leeds.

## **11. Municipal Services**

The MPRP will not have an unreasonable or adverse impact on the municipal services in the Town of Leeds. There will be no permanent increase in traffic as a result of the MPRP; therefore municipal road systems will not be burdened. CMP provides safety training to local fire, police and EMT departments upon request. As a practical matter there is no difference in safety procedures for incidents within the existing section 200, 115 kV line, and the new section 251, 115 kV line. The standards and practices are the same. No solid waste will be generated from this project other than some debris from construction; however this will not have an unreasonable or adverse impact on the municipal solid waste program (See Section 19 below, pages 25-26). As the MPRP involves solely the addition of non-inhabitable transmission poles to an existing transmission corridor, this project will not impact schools, open spaces, and recreational programs and facilities.

## **12. Surface Water**

The MPRP will not result in undue surface water pollution. There will be no permanent conversion of vegetated areas to impervious surface other than the small area around the transmission poles themselves. The removal of vegetation within the corridor will be limited to capable species only, and any removal of other vegetation or understory will only occur where necessary to install a pole, to create temporary access to the corridor, and for puller/tensioner sites. After construction is complete, any cleared areas will be allowed to revegetate with non-capable species. See also Section K, page 10, Section R, page 12 and section T, page 13 in the Shoreland Zoning application.

### 13. Phosphorus Export

The MPRP is not within the direct watershed of any of the lakes or ponds listed within this section of this ordinance; therefore this standard is not applicable.

### 14. Ground Water

There will be no undue effect on the quality or quantity of ground water as a result of the MPRP. In addition there are no sand and gravel aquifers located within the transmission corridor.

- a. The MPRP will not increase the contaminant concentration in ground water. CMP's standard procedures for handling materials such as fuel and hydraulic and lubrication oils for construction machinery, will minimize the risk of groundwater degradation during the construction phase.

Once the project is completed, CMP will employ its standard, selective herbicide program to treat areas once every four years to maintain an early successional (scrub-shrub and herbaceous) stage of vegetation, in accordance with standard practices already in use in the transmission corridor. All herbicide usage will be in compliance with all label requirements and standards established by the Maine Board of Pesticide Control (MBPC). Herbicides will be selectively applied (using a low-pressure backpack applicator) to capable species to prevent growth of individual plants (or re-growth of a cut plant). No broadcast application will be used, and CMP will not use herbicides within 25 feet of any waterbody or standing water. In addition, CMP will not use herbicides within 100 feet of a known well or spring. Furthermore, CMP will not store, mix or load any herbicide within 50 feet of any surface water. Only trained applicators working under the supervision of MBPC licensed supervisors will apply herbicides. Finally, herbicides will be applied only during periods when potential for rain wash off is minimal. The selective use of herbicides on the MPRP's transmission line corridor does not pose a threat to groundwater quality.

- b. There will be no above ground fuel storage, nor chemical and industrial waste associated with the MPRP. All concrete used will be reinforced and has been designed by a professional engineer.
- c. There will be no underground petroleum tanks installed in association with the MPRP.

Construction and maintenance of MPRP transmission lines will not require use of groundwater; therefore, there will be no impact to groundwater quantity.

### 15. Air Pollution

No degradation of air quality is expected to result from construction and operation of the proposed Maine Power Reliability Program (MPRP). Given the limited duration of activities at any one location, the generally rural nature of the MPRP area and the existing uses of unpaved roads along the transmission line corridors (*e.g.*, logging and associated trucking),

any influences on air quality resulting from temporary construction activities will be insignificant.

See Section 6, page 22.

## **16. Odor**

The clearing and construction phases of the MPRP will not create significant odors. Short term odors will be limited to temporary exhaust from tree harvesting and construction equipment, as is typical with any construction project.

Clearing of vegetation will be performed utilizing standard forestry equipment under controlled conditions. A construction supervisor and environmental inspector will be onsite to ensure that any brush burning that may occur will be conducted in a closely supervised situation. All burning will be conducted in compliance with local and state open burning permit requirements.

There will be no odors generated by operation of the electrical transmission line.

## **17. Noise**

Noise levels generated by the project will not adversely affect abutting and nearby residents. For electric transmission lines, audible noise (AN) is related to conductor (wire) size. Audible noise is produced when protrusions on the conductor surface, particularly water droplets on or dripping off the conductors, cause the electric field intensity at the conductor surface to exceed the breakdown strength of air thus creating a hissing or crackling sound. CMP has selected conductor sizes that under ideal, dry conditions are designed to be noise free. Under adverse weather conditions (e.g., very high humidity and storm conditions) these same conductors will emit only a slight crackling sound, usually quieter than the sound of the adverse weather conditions. Therefore, AN from transmission lines is typically a minor, foul-weather/wet conductor phenomenon.

Noise associated with construction will occur during the hours of 6:30 a.m. and 8:00 p.m., which according to Article I, Section F (17)(c)(1) of the Town of Leeds Ordinance is exempt from the sound pressure level regulations found at Article I, Section F (17)(a). This noise will be typical of any similarly sized construction project.

## **18. Sewage Disposal**

There will no sewage generated by the MPRP.

## **19. Waste Disposal**

The completed MPRP will not generate any waste. CMP anticipates that solid waste generated from the proposed project in Leeds will be limited to minimal land clearing and construction debris. This debris is inert, non-hazardous material that will be handled in accordance with the Maine State Solid Waste Management and Recycling Law (38 M.R.S.A. § 2101 et seq.).

Wood cut and cleared from the MPRP corridor will be limited to capable species, (i.e., species that grow tall enough that they are capable of growing into the safety zone beneath conductors (wires)). All merchantable wood will be hauled off and sold for lumber or firewood. All other woody material will be managed in compliance with the Maine Slash Law (12 M.R.S.A. § 9331-9338). All other wood waste generated in the process of land clearing will be shipped off site to be used as fuel at an appropriate licensed boiler, provided to a licensed chip processing plant, or donated to a facility to be utilized in the production of erosion control mulch.

During the construction phase the MPRP will generate other construction-related debris. Waste electrical system and construction process components such as scraps of cable, cable spools, and ceramic insulators will be generated. Most of these materials will be recycled or reused. Small amounts of waste plastic containers for oils and lubricants, broken filters and belts, and damaged tires, etc., will be generated from the use of construction equipment. Construction and managerial staff will generate some incidental waste such as paper, bottles, cans, plastic, and food scraps. All of these materials will be recycled or shipped to a licensed waste management company for the collection and disposal or recycling of such incidental waste. Please see table below for more information.

<b>Material</b>	<b>Disposition</b>
Wood (timber, slash, stumps, etc.)	Chipped on site or hauled off site to boiler, chip plant, or mulch production facility
Treated wood (poles, crossarms)	Donated or landfilled in licensed special waste landfill
Galvanized Steel	Maine Metals Recycling (Auburn)
Porcelain Insulators	Commercial Paving Recycling Corporation, Scarborough (CPRC), crushed and used as road sub-base material
Food waste, plastics, common trash	Shipped to licensed MSW landfill, transfer station, or incinerator
Redeemable drink containers	Redeemed for recycling
Ferrous Metals	Maine Metals Recycling
Wooden Cable Spools & Pallets	Stuart C. Irby Company (Waterville) for reuse
Wooden Insulator Crates	Shipped to licensed MSW landfill, transfer station, or incinerator
Paper	Recycled thru FCR Goodman (various Maine locations)
Scrap Cable	Maine Metals Recycling
Aluminum	Maine Metals Recycling
Concrete Debris	CPRC for use in road sub-base

## 20. Setback and Screening

Setback requirements are not applicable. Screening of the new transmission poles will be consistent with their location within the existing transmission corridor in Leeds. All MPRP transmission line corridors will be continuously vegetated with herbaceous plants and shrubs, but restrictions on the clearing and maintenance within resource areas will allow a greater density of non-capable vegetation to remain and will avoid disturbance to the greatest extent practicable. Buffers bordering streams and rivers will be protected and maintained by selective clearing during construction and reduced cutting of vegetation during maintenance of the transmission line. All tree species capable of growing into the conductor safety zone must be removed from the proposed buffers during construction, and prevented from re-establishing during periodic scheduled vegetation maintenance operations. These species are known as “capable species” and include oaks, pines, maples, birches, poplar, elm, beech, and basswood. Selective transmission line corridor management techniques are discussed in Section Q, page 12 of the Shoreland Zoning application.

## 21. Financial and Technical Capacity

CMP will be responsible for the operation and maintenance of all transmission lines and other facilities associated with the Maine Power Reliability Program (MRPR) project, and has the technical capacity to meet all applicable standards, as discussed in these application materials. CMP delivers more than 9 billion kilowatt-hours of electricity yearly to more than 600,000 retail electric customers in an 11,000 square-mile service area in central and southern Maine. This service territory contains about 78 percent of Maine’s population as well as the major commercial, manufacturing, and recreational areas of the State.

CMP is responsible for operating and maintaining the transmission and distribution system, including functions such as service connections, outage restoration, and system improvements and upgrades as required. CMP’s delivery system comprises 2,288 miles of overhead transmission lines, 23,463 pole-miles of distribution line, and 155 miles of underground or submarine cable. CMP has high-voltage connections with other electric systems at the New Hampshire and New Brunswick borders. Facilities also include over 200 substations above 10 million Volt-Amperes capacity for routing energy and regulating voltage, service centers, garages, offices, and other property. Peak power demand on the CMP system has reached 1,682 megawatts. The utility employs an estimated 1,200 people.

The project will be funded by CMP using a combination of debt and equity. Equity will come from retained earnings and equity infusions from the corporate parent. CMP estimates the entire MPRP will cost approximately \$1.5 billion. CMP is a member of ISO New England (ISO-NE), which operates the region’s bulk power system and oversees the regional bulk power marketplace. Under the ISO-NE tariff agreement, most bulk transmission projects are considered regional investments. The costs of construction and maintenance are shared with other participating New England utilities and their customers. Under the current ISO-NE formula, CMP customers would bear approximately 8 percent of eligible program costs as well as the costs of any special conditions imposed by State and local agencies that are determined by ISO-NE to be localized costs (*e.g.*, underground lines or excessive mitigation/compensation). The remaining 92 percent will be borne by ratepayers in the other

five New England states.

## **22. Comprehensive Plan**

The MPRP is in conformance with the Comprehensive Plan of the Town of Leeds. By co-locating the MPRP within the existing transmission corridor, this project encourages development in an appropriate area within the community, and helps preserve the rural character of Leeds. In addition, the location of the MPRP further enhances the protection for natural resources and habitat, as well as preservation of farmland. While the MPRP does cross Campbell Road, and is in the vicinity of other scenic resources listed on page 76 of the Comprehensive Plan, the impacts to these resources will be minimal because the additional poles are within an existing transmission line corridor. This project has been planned with the utmost attention to minimizing impacts not only to the environment, but to the people living in those communities in which the MPRP traverses.

### **Specific Standards** (Section 5 (G))

#### **1. Sand and Gravel Pits**

Not applicable.

#### **2. Ground Water Protection**

Not applicable - see Section 14 above, page 24.

#### **3. Conditions/Standards**

- a. Not applicable - there will be no waste water generated as a result of the MPRP.
- b. Not applicable - there will be no storage of hazardous materials, wastes or other liquids that can threaten water quality associated with the MPRP.
- c. CMP employees follow the procedures outlined in CMP's Spill Management and Prevention section of CMP's Environmental Procedures Manual for response to any spills of oil, gasoline, hydraulic oil, or other similar substance. These procedures are similar to those outlined for contractors, and cover reporting, immediate response, cleanup, and documentation. Employees operating construction vehicles will be trained to promptly contain, report, and clean up any spill in accordance with standard procedures.

#### **4. Small Enterprises**

Not applicable.

#### **5. Junkyards and Automobile Graveyards**

Not applicable.

**6. Standards for Professional Offices in the General Residential, Rural Residential and Prime Agricultural Districts**

Not applicable.

## PART D: FLOOD HAZARD DEVELOPMENT APPLICATION

### Leeds, Maine

(All applicants must complete entire application)  
[60.3(c&d)]

Application is hereby made for a Flood Hazard Development Permit as required under Article II of the Floodplain Management Ordinance of Leeds, Maine for development as defined in said ordinance. This permit application does not preclude the need for other municipal permit applications.

Owner: Central Maine Power Co. Address: 83 Edison Drive  
 Phone No.: (207) 626-4006 Augusta, Maine 04336  
 Applicant: Same as owner Address: \_\_\_\_\_  
 Phone No.: \_\_\_\_\_  
 Contractor: (agent) Deirdre Schneider Address: 14 Gabriel Drive  
 Phone No.: (207) 620-3851 Augusta, Maine 04330

### LEGAL DESCRIPTION

Is this part of a subdivision?  Yes  No If yes, give the name of the subdivision and lot number:

Subdivision: NA Lot #: NA

Tax Map: Maps 13 / 11 / 8 / 2 Lot #: Lots 41, 45, 23, 18 / 6 / 26 / 6, 5

Address: Existing transmission corridor running north from Livermore Falls, south towards Greene in the western portion of the Town of Leeds

#### Street/Road Name

Zip Code: 04263

General explanation of proposed development:

The Maine Power Reliability Program (MPRP) is a project by Central Maine Power Company (CMP) to upgrade Maine's bulk power transmission system. In Leeds, the MPRP proposes to add a new 115 (kV) single pole line in the existing transmission line corridor along an approximately 8.5 mile section that traverses the Leeds from north to south in the western portion of town.

Estimated Value of Proposed Development: Approximately \$7.67 million  
Proposed Lowest Floor elevation [for new substantially improved structure]: NA

**OTHER PERMITS**

Are other permits required from State or Federal jurisdictions?  Yes  No

If yes are these permits attached?  Yes  No\*

\*Currently, the Applicant is awaiting a decision on their pending applications with the Maine PUC, the Maine Department of Environmental Protection and the Army Corps. of Engineers. In addition, the Applicant is currently pursuing permits in numerous other municipalities.

*Federal and State Permits may include but are not limited to: ME/DEP/Natural Resource Protection act, Site Location of Development Act, Metallic Mineral Exploration, Advanced Exploration and Mining; USACE/Section 9 & 10 of the Rivers and Harbors Act/ Section 404 of the Clean Water Act; Federal Energy Regulation Commission.*

**SEWER AND WATER**

Sewage Disposal:  Public  Private

Existing  Proposed  Not Applicable Type \_\_\_\_\_

Water Supply:  Public  Private  Not Applicable

(This section to be completed by Municipal Officials)

**Location**

Flooding source (name of river, pond, ocean, etc.): \_\_\_\_\_

AE Zone  A1-30 Zone  A Zone  FRINGE  FLOODWAY (width of floodplain in A Zone)

Base Flood Elevation (bfe) at the site \_\_\_\_\_ NGVD [required for New Construction or Substantial Improvement]

Lowest floor elevation of proposed or existing structure \_\_\_\_\_ NGVD [Required for New Construction of Substantial Improvement]

If proposed development is in an AE or A1-30 Zone and cross section data is available in the Flood Insurance study, please not the nearest cross section reference letter and elevation of base flood at nearest cross section above and below site.

Cross Section Letter	Base Flood Elevation
Above Site _____	Above Site _____
Below Site _____	Below Site _____

Basis of unnumbered A Zone bfe determination:

- From a Federal Agency:  USGS  USDA/NRCS  USACE  Other \_\_\_\_\_
- From a State Agency  MDOT  Other \_\_\_\_\_
- Established by a Professional Land Surveyor
- Established by Professional Engineer  HEC/RAS  HEC II  HY 7  TR 20  TR55  Quick-2  Other \_\_\_\_\_
- Highest Known Water Level
- Other (Explain) \_\_\_\_\_

**VALUE**

If the development involves work on an existing structure, enter the **Market Value** of existing structure before improvements: \$ \_\_\_\_\_

New Construction or Substantial Improvement  Minor improvement or minor addition to existing development

**TYPE OF DEVELOPMENT**

Check the appropriate box to the left of the type(s) of development requested and complete information for each applicable line:

- |   |   |
|---|---|
| <p><input type="checkbox"/> 1. Residential Structure _____ Dimensions _____</p> <p>    <input type="checkbox"/> 1a. New Structure _____</p> <p>    <input type="checkbox"/> 1b. add to Structure _____</p> <p>    <input type="checkbox"/> 1c. Renovations/repairs/maintenance _____</p> <p><input type="checkbox"/> 2. Non-Residential Structure _____</p> <p>    <input type="checkbox"/> 2a. New Structure _____</p> <p>    <input type="checkbox"/> 2b. Add to Structure _____</p> <p>    <input type="checkbox"/> 2c. Renovations/repairs/maintenance _____</p> <p>    <input type="checkbox"/> 2d. Floodproofing _____</p> <p><input type="checkbox"/> 3. Accessory Structure _____</p> <p><input type="checkbox"/> 4. Functionally Dependant Use: _____</p> <p>    <input type="checkbox"/> 4a. Dock _____</p> <p>    <input type="checkbox"/> 4b. Pier _____</p> <p>    <input type="checkbox"/> 4c. Boat Ramp _____</p> <p>    <input type="checkbox"/> 4d. Other _____</p> <p><input type="checkbox"/> 5. Paving _____</p> <p><input type="checkbox"/> 6. Conditional Use (Lobster/Fish Shed seaward of mean High tide)</p> | <p>_____ Cubic Yards</p> <p><input type="checkbox"/> 7. Filling<sup>6</sup> _____</p> <p><input type="checkbox"/> 8. Dredging _____</p> <p><input type="checkbox"/> 9. Excavation _____</p> <p><input type="checkbox"/> 10. Levee _____</p> <p><input type="checkbox"/> 11. Drilling _____</p> <p>_____ Number of Acres</p> <p><input type="checkbox"/> 12. Mining _____</p> <p><input type="checkbox"/> 13. Dam: Water Surface to be created _____</p> <p><input type="checkbox"/> 14. Water Course Alteration _____</p> |
|---|---|

**Note:** Conditional Use requires add'l information due to specific standards, public hearing, and Planning Board review.

**Note:** Detailed description must be attached with Copies of all applicable notifications, state and Federal permits.

- 15. Storage of equipment materials
- 16. Sewage Disposal System
- 17. Water Supply System
- 18. Other: Explain The MPRP is considered an essential services project and does not fit the definition of structure for purposes of the Floodplain Management Ordinance, as defined in Article X.

<sup>6</sup> Certain prohibitions apply in Velocity Zones

Attach a Site Plan – Draw to scale with north arrow

- Show property boundaries, floodway, and floodplain lines.
- Show dimensions of the lot.
- Show dimensions and location of existing and/or proposed development on the site.
- Show areas to be cut and filled

**Attach Statement** – describing in detail how each applicable development standard in Article VI will be met.

**For New Construction or Substantial Improvement also show:**

- Existing and proposed grade elevations adjacent to the walls of the structure done by a Professional Land Surveyor, Architect, or Engineer.
- Location and elevation of temporary elevation reference marks on the site.

**Special Note:**

**Substantial Improvement** is defined as any reconstruction, rehabilitation, addition or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the start of construction of the improvement. Please refer to the floodplain management ordinance, Article XIV, for more complete definitions of New Construction and Substantial Improvement.

**Structures in Velocity Zones** are not permitted on fill or excavations. Structures must be built on open foundation systems, i.e., columns, piles, posts. Certification of structural design, specifications, plans and construction methods completed by a Professional Engineer or Architect shall accompany the application as required in Article VI.L.3. of the floodplain management ordinance.

**The applicant understands and agrees that:**

- The permit applied for, if granted is issued on the representations made herein;
- Any permit issues may be revoked because of any breach of representation;
- Once a permit is revoked all work shall cease until the permit is reissued or a new permit is issued;
- Any permit issued on this application will not grant any right or privilege to erect any structure or use any premises described for any purpose or in any manner prohibited by the ordinances, codes, or regulations of the municipality;
- The applicant hereby gives consent to the Code Enforcement Officer to enter and inspect activity covered under the provisions of the Floodplain Management Ordinance;
- If issued the permit form will be posted in a conspicuous place on the premises in plain view; and
- If issued, the permit will expire if no work is commenced within 180 days of issuance.

I hereby certify that all the statements in, and in the attachments to this application are a true description of the existing property and the proposed development project.

Owner: \_\_\_\_\_ Date: \_\_\_\_\_

Or

Authorized Agent: \_\_\_\_\_ Date: \_\_\_\_\_

(this section to be completed by Municipal Official)

Date Submitted: \_\_\_\_\_; Fee Paid \_\_\_\_\_; Reviewed by CEO \_\_\_\_\_;  
Reviewed by Planning Board \_\_\_\_\_

Permit # \_\_\_\_\_ Issued by: \_\_\_\_\_ Date: \_\_\_\_\_

## Town of Leeds: Floodplain Management Ordinance

### Areas Impacted

The proposed Maine Power Reliability Program (MPRP) project will traverse four floodplain areas as depicted on the Flood Insurance Rate Map and developed by the Federal Emergency Management Agency (FEMA). However, the addition of poles will only occur within two of these areas in Leeds as follows:

#### **1. Dead River (Exhibit 11, see also Exhibit 10)**

The project area traverses Zone AE in the vicinity of the Dead River. The project will add three poles to this floodplain, and account for less than one acre of vegetation clearing to remove “capable species,” or those trees that are capable of being a safety hazard because they reach heights that come into contact with transmission lines. No poles are within any mapped or unmapped floodway.

#### **2. Allen Stream**

The project area traverses Zone AE in the vicinity of Allen Stream. One pole will be placed just outside of the floodplain, but has been included because of its proximity to the floodplain. In this area less than two acres of vegetation clearing to remove “capable species,” or those trees that are capable of being a safety hazard because they reach heights that come into contact with transmission lines will occur. No poles are within any mapped or unmapped floodway.

### **Section 2: Permit Required**

According to the Town of Leeds Floodplain Management Ordinance, before any construction or other development begins within any areas of special flood hazard, a Flood Hazard Development Permit must be obtained from the Planning Board.

### **Section 3: Application for Permit**

A-G.: All the information required in A-G of section three can be found in the Town of Leeds Floodplain Management Application, as well as the Shoreland Zoning Application and Site Plan Review Application, submitted simultaneously herewith.

H: According to the Town of Leeds Zoning and Land Use Definitions, a structure for the purpose of the Floodplain Management Ordinance is defined as a walled and roofed building or a gas or liquid storage tank that is principally above ground. The poles associated with the MPRP are not structures as defined in Article X. Therefore the requirements of this section are not applicable.

I: Not applicable

- J: Not applicable
- K: Not applicable
- L: Not applicable
- M: See Section 6 below and Exhibit 10.

**Section 5:** Review Standards

Under Section 5 (F)(3), the MPRP is considered Minor Development.

**Section 6:** Development Standards

A. **All Development** – All development shall:

1. be designed or modified and adequately anchored to prevent flotation (excluding piers and docks), collapse or lateral movement of the development resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy;

The transmission line poles will be adequately anchored to prevent flotation, collapse or lateral movement during a flood. All construction will be in accordance with CMP’s transmission standards, general industry standards, and “Good Utility Practice,” including all necessary live line working clearances and strength and reliability factors as governed by National Electrical Safety Code. In addition, poles that already exist within the floodplain are a prime example that the addition of the MPRP will not be problematic in this area.

See Exhibit 9 and Engineer’s Statement at Exhibit 10.

2. use construction materials that are resistant to flood damage;

See above and Exhibit 10.

3. use construction methods and practices that will minimize flood damage; and,

See above and Exhibit 10.

4. use electrical, heating, ventilation, plumbing, and air conditioning equipment, and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during flooding conditions.

Not applicable as the project will not involve the installation of service facilities.

- B. **Water Supply** – All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system

Not applicable

- C. **Sanitary Sewage System** – All new and replacement sanitary sewage systems shall be designed and located to minimize or eliminate infiltration of flood waters into the system and discharges from the system into flood waters.

Not applicable

- D. **On site Waste Disposal Systems** – On site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during floods.

Not applicable

- E. **Watercourse Carrying Capacity** – All development associated with the altered or relocated portions of a watercourse shall be constructed and maintained in such a manner that no reduction occurs in the flood carrying capacity of the watercourse.

Not applicable

- F. **Residential** – New construction or substantial improvement of any residential structure . . .

Not applicable

- G. **Non Residential** – New construction or substantial improvement of any non-residential structure . . .

Not applicable because poles associated with the MPRP are not structures.

- H. **Manufactured Homes**

Not applicable

- I. **Recreational Vehicles**

Not applicable

- J. **Accessory Structures**

Not applicable

**K. Floodways**

Not applicable

**L. Enclosed Area Below the Lowest Floor**

Not applicable

**M. Bridges**

Not applicable

**N. Containment Walls**

Not applicable

**O. Wharves, Piers and Docks**

Not applicable

**Conclusion**

The MPRP represents an important investment in Maine’s electrical infrastructure. In order to meet the local demands for electricity, as well as mandatory federal reliability standards, the MPRP is a necessary project. The construction proposed in Leeds is an integral part of the MPRP as it is a link between the proposed substation in Lewiston and the existing substation in Livermore Falls.

The applicant appreciates the Planning Board taking the time to consider this application and believes that all components of their ordinance have been thoroughly addressed, and that the MPRP meets all standards found within the Zoning and Land Use Code of Leeds. We will gladly answer any lingering questions you may have at subsequent Planning Board meetings regarding this project as it pertains to the Shoreland Zoning Ordinance, the Site Plan Review standards, and the Floodplain Management Ordinance.