



**MAINE POWER
RELIABILITY PROGRAM**
A CENTRAL MAINE POWER COMPANY PROGRAM
WWW.MAINEPOWER.COM

Mitchell Garnett, Chair
Washington Planning Board
40 Old Union Rd.
PO Box 408
Washington, ME 04574

September 24, 2010

Dear Mr. Garnett,

I am submitting nine copies of a new permit application for a new transmission line through Washington. As we discussed at the Board's August 11th meeting, the changes in both the design of the Maine Power Reliability Program (MPRP) in Washington's northern transmission corridor, and in Washington's Land Use Ordinance since the Board's approval of a Conditional Use permit for the project on July 14, 2009, warrant an entirely new application. The permit that I am now requesting will address the design changes in relation to the new ordinance standards and districts.

Design Changes

There have been two significant changes to the design of the MPRP in Washington since last year. As I mentioned in my letter to the Board and Selectmen on June 23, 2010, the PUC did not approve the portion of MPRP as it was originally proposed. This portion of the project has been dropped entirely, and now there are no changes proposed within this corridor.

The other significant design change involves the structures for Section 254 in the transmission corridor through northern Washington. In October, 2009, the Independent System Operator for the New England electrical grid (ISO-NE) determined that a smaller structure using bundled conductors was appropriate for this transmission line. Accordingly, this section has been redesigned using the smaller structures. As a result, the spans will be shorter, requiring more structures overall. In Washington, the number of permitted Section 254 structures was 35; there are now 43 proposed structures.

New Ordinance and Zoning Map

Washington's land use ordinance and zoning map have changed in significant ways since last year, with new districts and standards. The enclosed application will address the new Resource Protection districts at wetlands within the corridor, and the corresponding standards for essential services.

Since our discussion at the Board's August 11th meeting, I have looked into the possibility of moving structures out of wetlands designated as Resource Protection districts. There are three proposed structures in RP districts. Two of these cannot be moved due to the fact that they are located at point at which the transmission line changes direction. I am still waiting to hear from CMP about moving the last of these three structures, near Davis Stream. Moving the structure out of the wetland would mean moving it closer to the stream and extending the temporary accessway. The maps in Exhibit 3 show the currently planned location for this structure. We can discuss this further during your review of the application.

Finally, I have enclosed a receipt for payment of the \$50 review fee. I understand that additional fees for notices will be assessed.

I look forward to meeting with the Board to address any questions you have about this new application.

Sincerely,

Alison Truesdale
TRC

cc: Bob Temple, Code Enforcement Officer
John Titus, Burns & McDonnell
Steve Walker, Power Engineers
David Foss, Central Maine Power Company

enclosures application for land use permit
compact disk of state and federal permits
receipt for fee



**MAINE POWER
RELIABILITY PROGRAM**
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**WASHINGTON, MAINE
LAND USE PERMIT APPLICATION**

Section 254 Transmission Line Construction

Prepared for:

Central Maine Power Company
83 Edison Drive
Augusta, Maine 04336

Prepared by:



TRC Engineers, LLC
400 Southborough Drive
South Portland, Maine 04106

October, 2010

Application Form

Town of Washington Land Use Permit

Applicant Copy

Town Copy

2010

6 Permit #: 10-06 Map and Lot # : 1-12A, 15-15, 17-11 911 Address: _____

Book _____ Page _____ Subdivision Name: _____

Owner Information

Company: Central Maine Power Co.
 Name: c/o Douglas Herling
 Mailing Address: 83 Edison Drive
 City: Augusta
 State: Maine
 Zip: 04336
 Phone: (207) 626-4006

Applicant Information

Name: same as owner
 Company: _____
 Mailing Address: _____
 City: _____
 State: _____
 Zip: _____
 Phone: _____

Land Use District (Check all that apply)

- Conservation/Resource Protection
- Shoreland Limited Residential
- Farm Forest
- Village
- Rural
- Rural Commercial
- Planned Unit Development
- Historical Preservation
- Watershed

Existing Use(s) (Check all that apply)

- Forested
 - Farmland
 - Year Round Residential
 - Home Occupation
 - Seasonal
 - Commercial
 - Industrial
 - Mineral Extraction
- Uses Not Listed: Essential Services

Building Permit

Type of Building Permit
 Residential New Building
 Residential Addition
 Commercial New
 Commercial Addition
 Number of stories: _____
 Height (ft): _____
 Exterior Dimension (l x w): _____
 Area: _____
 Setback Road (Front Yard): _____
 Setback Lot Line #1: _____
 Setback Lot line #2: _____
 Setback Rear Lot Line: _____

Plumbing Permits Issues as Part of Application

- Subsurface Waste Water Disposal System
 Subsurface Waste Water Disposal Permit # _____
- Internal Plumbing Permit
 Internal Plumbing Permit #: _____

Shoreland Zoning

- Supplemental Shoreland Zoning Application Attached

CEO Permit / Use

- Use Permit CEO
- Proposed Use: _____

Planning Board Permit / Use

- Use Permit Planning Board
- Proposed Use Additional transmission line

Driveway Entrance / 911 Address

- Driveway Entrance Proposed
- Permit Attached
- 911 Address Permit needed
- State Road Entrance Permit Required
- State Permit Attached

Mobile Home / Manufactured Home

- Housing Unit Year: _____
- Housing Unit Model: _____
- Housing Unit Size (l x w): _____
- Housing Unit Serial #: _____
- Provisions of Article XI Met

Applicant's Certification

I hereby certify that the information contained herein is true and accurate.

Applicant's Signature _____ Date _____

Official Use Only

CEO Action: _____

Planning Board Action: _____

CEO Action Date: _____

Planning Board Action Date: _____

Project Description:

Conditions:

Additional Conditions:

Permit Expiration:

Fee

CEO Signature _____

Agent Authorization



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 with any questions. Thank you.

Sincerely,

Gerry J. Mirabile
Lead Analyst - Compliance

We request your attention to the following:

83 Edison Drive | Augusta, ME 04336

tel (207) 623-3521

www.cmppo.com

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

An Energy East Company

LAND USE PERMIT APPLICATION

The Washington Planning Board approved a Conditional Use permit for Central Maine Power Company's Maine Power Reliability Program (MPRP) on July 14th, 2009. Since that time, several significant events have taken place.

First, the MPRP has obtained approval from all state and federal agencies. The Certificate of Public Convenience and Necessity was issued by the Maine Public Utilities Commission on June 10, 2010. The CPCN did not include approval of CMP's proposed upgrades in the corridor in southern Washington. This portion of CMP's right-of-way will now remain as it is. The Maine Department of Environmental Protection's permits under the Natural Resources Protection Act and the Site Location of Development Act include conditions that will affect how the project is constructed. The information relevant to Washington is included below. Copies of the state and federal permits are enclosed with this application on computer disk.

Secondly, there has been a significant change to the design of Section 254, in CMP's right-of-way running east and west in the northern part of Washington. The Independent System Operator for New England (ISO-NE) determined that a smaller structure with bundled conductors was appropriate for this transmission line. Section 254 has been redesigned -using these structures.

Thirdly, Washington has adopted a revised Land Use Ordinance and Washington Districts Map since CMP obtained its Conditional Use permit. Because the permit approved in 2009 was for a design that has subsequently changed in significant ways, and because the amended Ordinance and Districts Map also differ significantly from the districts and standards that were applied to the 2009 application, the new proposal warrants a new application rather than a permit amendment.¹

Applicability of the Washington Land Use Ordinance

Article IV, Section 2 of the Washington Land Use Ordinance (hereafter, "the Ordinance") states that "a permit . . . shall be required for all buildings or other structures to be erected, moved, altered, retrofitted, or added to . . ." CMP's proposal is to erect new transmission structures within the existing right-of-way, and so requires a permit.

The project described in these application materials is defined as an Essential Service and is located in the Farm and Forest, Shoreland Limited Residential, and Resource Protection districts. Essential Services are an allowed use within these three districts, with approval from the Washington Planning Board.² These application materials address the General Standards for all districts and the Shoreland Zoning Standards.³ Following the description of the MPRP generally and in Washington in particular, these application materials are organized as follows:

¹ See the Washington Planning Board meeting minutes of August 10, 2010.

² Town of Washington Land Use Ordinance, Amended March 26, 2010; Table of Land Uses, Article VI, § 10, page 69; and Article VI, §§ 1 (D)(4) and (5), 2 (D)(4) and (5), and 7 (D)(2) and (11).

³ Article XI – Site Plan Review does not apply, as the proposal does not include the "construction or placement of any new building or structure for a nonresidential use . . . greater than one thousand two hundred (1,200) base square feet within any five (5) year period" (§B(1)), or the "establishment of a new nonresidential use" (§B(4)), as the use of the transmission corridor for essential services is already established.

Zoning Districts, page 4

Permitted Land Uses, page 7

Dimensional Standards, page 7

Shoreland Zoning Standards, page 18.

Maine Power Reliability Program Description

The Maine Power Reliability Program (MPRP) is a project by Central Maine Power Company (“CMP”) to upgrade Maine’s bulk power system. The vast majority of Maine’s bulk power transmission system was placed into service in the early 1970s and is now reaching the limits of its ability to meet the growing electrical demand of Maine customers. Since the last major transmission infrastructure was completed almost 40 years ago, the patterns of both available generation and customer load have shifted significantly. For example, population has become more concentrated in the southern part of the state, while the generation needed to serve that load is now more distant and dispersed. When these pattern changes are combined with the increasing peak demand, the current transmission infrastructure in Maine will, in very few years, become inadequate. In addition, the 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 changed significantly in recent years. Central Maine Power Company must upgrade its bulk power system with this proposed project in order to meet the mandatory standards and to provide reliable electric service to Maine customers into 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 the transmission system is upgraded 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 team went to work to study potential transmission and non-transmission solutions. 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 under various forecasts of future conditions, cost effectiveness, and impacts to landowners and Maine’s environment. 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, Searsport in the east, and Orrington and Pittsfield to the north. In all, MPRP will encompass nearly 75 Maine towns. The project has been exhaustively reviewed and been approved by the Maine Public Utilities Commission (PUC), the Maine Department of Environmental Protection (DEP), and the United States Army Corps of Engineers (ACOE).

Description of Project in Washington

The part of the program located in Washington involves work in one of the three transmission line corridors that traverse the Town. This corridor, located in the northern part of Town, contains a transmission line that runs between Windsor and Orrington (see the Project Scope Map, Exhibit 1). The corridor extends for approximately four miles from Hibberts Gore and Somerville easterly into Liberty and encompasses approximately 131.5 acres.

There is currently one transmission line, Section 388, within the northern corridor. This is a 345 kV line, mounted on wooden, double-pole structures called H-frames. The structures are typically⁴ 75 feet tall. The right-of-way itself is 270 feet wide, with the H-frames 85 feet from the southern edge (measured from the edge of the right-of-way to the center of the H-frame structure). A natural gas pipeline and telephone cable are also buried within the right-of-way (see the “Existing” sketch at the top of the cross-section in Exhibit 2).

The MPRP project involves installing a new 115 kV transmission line, Section 254, within the existing corridor. This line will be carried on wooden double-poled H-frames that are typically⁴ 55 feet high, and will be centered 95 feet from the northern edge of the right-of-way. This will leave 90 feet between the two lines, measured from the centers of the structures.

Five proposed transmission structures will have foundations. These structures are designed to withstand additional stresses where the right-of-way changes direction or where there are long spans between structures (see Maps 3 and 5, Exhibit 3). These structures will have three wooden poles each, set in concrete.

Clearing is planned in some portions of the existing right-of-way. Only species capable of growing tall enough to reach into the safety zone under the conductors (so-called “capable species”) will be cleared. A total of 1.4 acres of capable species will be removed from the middle of the corridor; shrubs will be left intact.

Zoning Districts

The proposed project will traverse three different zones – Farm and Forest, Shoreland Limited Residential, and Resource Protection. The extent of the Shoreland Limited Residential and Resource Protection districts are defined by natural resources. In the case of the Shoreland Limited Residential district, the district is defined as “all land areas within 250 feet, horizontal distance, of the normal high water mark of [Davis Stream].”⁵ In the case of the Resource Protection district, the district is defined as “all State numbered wetlands as identified on the “Town of Washington Tax Map” as defined by Section 2 of this Article as shaded areas, as well

⁴ Please note that structure heights will vary due to the terrain and the need to achieve spans that will avoid or minimize impacts to natural resources. “Typical” above-ground structure heights are described below, although individual structures may be taller or shorter than what is typical. See the attached table (EXHIBIT 5) for a description of the height and type of each structure associated with the project.

⁵ Article III, § 5(G)(1), page 6.

as any additional wetlands which the Town accepts as such in the future.”⁶ The Resource Protection district also includes “wildlife habitats and deer wintering yards specifically designated for protection by the Maine Department of Inland Fisheries and Wildlife,”⁷ however, the three deer wintering areas within the corridor are rated as of “Indeterminate” value by the Maine IF&W, and therefore are not designated for protection.⁸

Interpretation of District Boundaries

Section 4 of Article III deals with the interpretation of the district boundaries. Subsections D and E read as follows:

D. Boundaries indicated as following shorelines shall be construed to follow the normal high water line, and in the event of natural change in the shoreline shall be construed as moving with the actual shoreline;

E. Boundaries indicated as approximately following the center line of streams or other water bodies shall be construed to follow such center lines . . .

“Normal high water line” according to the definition in Article XIV § 2, includes the upland edge of wetlands as defined by soils and wetland vegetation. Consequently, where wetlands have been delineated on-site according to soils and wetland vegetation, the Resource Protection district boundaries shown on the Land Use Map are interpreted to follow the site-delineated upland edge rather than the mapped district boundary.⁹ Likewise, the Shoreland Limited Residential district boundary is interpreted as measured from the actual, site delineated center of Davis Stream, rather than from the stream as shown on the USGS topographic map, on which the Town’s zoning map is based. The maps in Exhibit 3 show these interpreted boundaries within the transmission corridor; outside the corridor, the district boundaries are shown according to the Land Use Map.

Shoreland Zones

Map 1, Resource Protection District: The large wetland at the head of Crummett Brook is zoned as a Resource Protection district. This area is also part of a 119-acre deer wintering area. No structures are proposed within this district, and no vehicles will cross it. Approximately 0.4 acre will be cleared of capable species within the district.

Map 3, Resource Protection District: There is a Resource Protection district at a wetland associated with a tributary to Davis Stream, where the transmission corridor changes direction. This district is within a 207-acre deer wintering area. There is one structure (#254-82) proposed within this Resource Protection district, at the “elbow” of the transmission line. Because this is an angle structure, with tension on the structure pulling at different angles, it will be reinforced

⁶ Article III, § 5(A)(1), page 4. Section 2 of Article III states that the Land Use Map is adopted as part of the Ordinance; the shaded areas referenced in the description of the Resource Protection district are interpreted to refer to the areas on the Land Use Map shown in light green and indicated as Resource Protection districts.

⁷ Article III, § 5(A)(4), page 4.

⁸ See page 46 of the MDEP permit, Order L-24620, found on the compact disk accompanying this application.

⁹ The credentials of the wetland scientists who delineated the wetlands and the third party verification of the wetland delineations are discussed in EXHIBIT 10.

by the use of three poles set in concrete foundations. A temporary accessway will cross the district so that vehicles can access the pole sites. Approximately 0.2 acre will be cleared of capable species within the district.

Map 4, Resource Protection Districts: There is a Resource Protection district at a wetland associated with another tributary to Davis Stream, southeast of Mountain Road. No structures are proposed within this district; a temporary accessway will cross the stream at the southern side of the right-of-way to avoid most of the wetland. Approximately 0.1 acre will be cleared of capable species within the district.

Another Resource Protection district is at a wetland complex associated with Davis Stream. The portion of the wetland within the right-of-way is approximately 6.2 acres. There are no structures proposed within this district, although the temporary accessway will have to cross the stream and the wetland in two locations. This area is also part of a 222-acre deer wintering area. Approximately 0.2 acre will be cleared of capable species within the district.

Map 4, Shoreland Limited Residential District: This district covers areas within 250 feet of the center of Davis Stream, excluding the Resource Protection districts (because the Resource Protection district is more restrictive, it supersedes the Shoreland Limited Residential district where the two districts would otherwise overlap). 3.3 acres of the district are within the corridor. This area is part of the same 222-acre deer wintering area as the Resource Protection district described above. One transmission structure is proposed within this district. Pole 254-94 will be located approximately 95 feet from the intermittent stream. The temporary accessway will go through this district in order to avoid going through the Resource Protection district to the extent possible. Approximately 0.4 acre within the district will be cleared of capable species.

Map 5, Resource Protection Districts: There are two Resource Protection districts at the east end of the transmission corridor that coincide with wetlands. The westernmost district covers about 2.8 acres within the corridor. There is one structure proposed within this wetland (#254-102), located at the “elbow” of the right-of-way where the line changes direction. A temporary accessway will cross the wetland along the southern side of the right-of-way, avoiding most of the wetland. Approximately 0.2 acre will be cleared of capable species in this district.

The easternmost Resource Protection district covers 0.6 acres within the corridor. There are no structures within the wetland, and the temporary accessway will cross along the southern boundary, at the narrow section of the wetland. Approximately 0.1 acre will be cleared of capable species within this district.

Farm and Forest District:

The Farm and Forest District covers all other areas within the corridor not covered by the Shoreland Limited Residential or Resource Protection districts. Forty structures are proposed for this district in the right-of-way. Thirty-seven of the H-frame structures will have two poles, each of which will require disturbing approximately 30 square feet of ground. There are three structures in the Farm and Forest district that will have three poles each and will require foundations. Each of the poles will require approximately 40 square feet of ground disturbance, for a total of 120 square feet of disturbance per structure. Some minor clearing (approximately 15.8 acres spanning this district) will be required, and new temporary accessways will be necessary when existing paths cannot be utilized.

One existing structure, 388-75, will have a “phase raiser” installed. This device acts as an insert on the poles of the structure to make them longer and raise the conductors higher off the ground. This work will not involve any impacts on the ground.

See Maps 1-5, Exhibit 3 for the Segment 6 project area within the Farm and Forest District.

Impacts per District (west to east)				
District	District Within Corridor, Acres	Acres Cleared Within District	# of Structures	Total Impact, Sq. Ft.
RP	5.9	0.4	0	0
RP	2.2	0.2	1	120
RP	1.3	0.1	0	0
RP	6.1	0.2	1	60
SLR	3.3	0.4	1	60
RP	2.8	0.2	1	90
RP	0.6	0.1	0	0
FF	107.6	14.7	40	2,580

Permitted Land Uses

The MPRP is classified under the Ordinance as “essential services,”¹⁰ which, according to the Table of Land Uses and Article VI, Sections 1.D.4 and 5, 2.D.5, and 7.D.11, are permitted in all three land use districts in which the transmission upgrades are proposed.

Article VI sets out the performance, review, space and bulk standards for each district. Article VII sets out the general standards that apply to all uses. Article VIII sets out the shoreland zoning requirements that apply to activities in Shoreland Areas (i.e., areas within the Shoreland Limited Residential District or Resource Protection District). The applicable standards from Articles VI through VIII are discussed below.

Dimensional Standards

(From Article VI of the Washington Land Use Ordinance)

Resource Protection District:

Structures in this district shall be set back:

- a. 75 feet from the upland edge of wetlands.**
- b. 100’ from the Normal High Water Mark.**

¹⁰ “. . . the construction, alteration or maintenance of . . . electrical . . . facilities; . . . electric power . . . transmission or distribution lines, towers and related equipment . . .” Article XIV, Section 2 of the Washington Land Use Ordinance.

- c. 75' from Tributary Streams.
- d. 25' from the lot line(s) opposite the shore.
- e. 25' from private road centerlines.
- f. 50' from public road rights-of-way.
- g. 10' from all other lot lines.

There are three structures proposed to be located within Resource Protection districts: 82, 94 and 102. As with all the structures, they will be centered 95 feet from the nearest edge of the right-of-way, putting the closest pole 88 feet from the edge, and so meets standard (g). There are no streams, or private or public roads near structures 82 and 102, so standards (b) through (f) do not apply in those cases. Structure 94 is approximately 96 feet from Davis Stream at the nearest point, and so meets standard (c) in this location. Because the structures are in the wetlands, they do not meet the 75-foot setback in standard (a), but are allowed under Article VIII, Section 8 (B). See the discussion on page 20.

Farm and Forest District standards:

- 3.
 - a. Minimum lot area within 500' measured from the property line nearest a public road 3 acres
 - b. Minimum lot area outside 500' measured from the property line nearest a public road 5 acres
 - c. Minimum lot area per dwelling structure within 500' measured from the property line nearest a public road 3 acres
 - d. Minimum lot area per dwelling structure outside 500' measured from the property line nearest a public road 5 acres
 - e. Minimum road frontage 300 feet
 - f. Minimum setbacks from:
 - Public or private road right-of-way 50 feet
 - All other lot lines 25 feet
 - g. Minimum setback from normal high water mark as defined in the Shoreland Zoning provisions of this Ordinance.

There are forty structures proposed within this district. Standards (a) through (e) are not applicable, as they are intended to apply to dwellings and residential lots.

The only public or private right-of-way that crosses the corridor is Mountain Road. The structure closest to the edge of the road right-of-way is 117 feet away. As mentioned above, all the proposed structures will be 88 feet from the edge of the right-of-way, and thus from the nearest lot lines, so standard (f) is met.

Standard (g) is addressed under the section of this application dealing with shoreland districts; see page 18.

Shoreland Limited Residential District standards:

	<u>Lakes & Ponds</u>	<u>Rivers & Streams</u>
3.		
a. Minimum lot area	1 acre	3 acres
b. Minimum lot per dwelling structure	1 acre	3 acres
c. Minimum shore frontage	200 feet	300 feet
d. Minimum setback from:	100 feet	100 feet
High water mark		
Tributary streams	75 feet	75 feet
Upland Edge of Wetlands	75 feet	75 feet
e. Minimum setbacks from:	25 feet	25 feet
side(s) opposite shore frontage		
private road centerline	25 feet	25 feet
All other lot lines	10 feet	25 feet
Public road right-of-way	50 feet	50 feet
4. Land below the normal high-water line of a water body or upland edge of a wetland and land beneath roads serving more than two (2) lots shall not be included toward calculating minimum lot area.		
5. The maximum footprint of structures and non-vegetated surfaces shall be 20% of lot area.		

CMP's right-of-way in Washington covers approximately 131.5 acres, and so meets standard (a). Standards (b) and (c) refer to dwellings and therefore do not apply.

There is one structure within the Shoreland Limited Residential district: structure 95. This structure will be approximately 140 feet from Davis Stream, and so meets standard (d).

The setbacks from roads in standard (e) do not apply, as there are no roads within the Shoreland Limited Residential district in this location. Structure 95 will be approximately 88 feet from the nearest edge of the right-of-way, and so meets the 10- and 25-foot setbacks from lot lines.

The General Standards in Article VII apply to all districts and are addressed below.

General Standards

(From Article VII of the Washington Land Use Ordinance)

Section 1. Environmental

A. General Requirements

- 1. In all districts, if the building will have a septic tank and disposal field, the applicant shall provide evidence of adequate soil conditions for subsurface wastewater disposal by presentation of a completed Maine Department of Human Services Bureau of Health Engineering Site Evaluation Form, commonly referred to as a “plumbing permit.”**
- 2. The Maine State Plumbing Code requirements shall be met.**

Standards 1 and 2 refer to septic systems. The MPRP project in Washington does include any septic disposal, and therefore the standards are not applicable.

- 3. The applicable requirements and standards of the Maine Department of Environmental Protection (MDEP) shall be met and required permits acquired prior to construction.**

CMP obtained a Land Use permit from the Maine Department of Environmental Protection under the Natural Resources Protection Act and the Site Location of Development Act on April 5, 2010. A copy of the permit is included with this application.

B. Water Quality

No activity shall deposit on or into the ground or discharge to the waters of the state any pollutant that, by itself or in combination with other activities or substances, will impair designated uses such as neighboring wells or the water classification of a water body in accordance with State and Federal regulations or violates State Drinking Water Standards.

To minimize spill potential during construction, no fueling or maintenance of vehicles will be performed within 100 feet of wetlands, streams or other sensitive natural resources. After construction, the transmission corridor is maintained to encourage the growth of scrub-shrub vegetation. Trees within the corridor that are capable of growing up into the conductors (“capable species”) must be removed for safety and reliability reasons. CMP uses a selective herbicide program 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 herbicides 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 impose a threat to groundwater quality and will not impair designated uses or the water classification of any water body.

C. Aquifer Protection

- 1. To provide an adequate buffer for ground water and allow for filtration of impurities from surface water, except for temporary digging for foundation work, development excavation shall not be any closer than five (5) feet above the maximum seasonal high water level. The applicant shall provide documentation of the groundwater table. Monitoring of groundwater levels and quality to ensure there are no adverse impacts to any water supplies or wells within 500 feet of the site may be required.**

The digging required to set the transmission structures is “temporary foundation work.” As such, the structures do not have to meet the requirement that excavation be limited to a depth of 5 feet above the water table.

The transmission poles are wooden, and will be treated to prevent insect infestation and rot. Studies have shown that wood treatment chemicals do not migrate more than a few feet from a pole, and that the potential for migration of these chemicals to a water supply source are minimal. However, to provide added protection, it is CMP’s policy that an untreated pole must be used when the pole is to be sited within 50 feet of the following drinking water sources: shallow well, dug well, driven point well, or spring.

- 2. Any new or expansion of non-residential land use activity situated over any part of any sand and gravel aquifer identified in the most recent Town of Washington Comprehensive Plan or by MDEP or Maine Geologic Survey (MGS), hereinafter referred to as “the aquifer”, shall develop and follow a written management plan for any contaminants that might pollute the groundwater.**

The Maine Geological Survey has identified a sand and gravel aquifer which coincides with the corridor and proposed structures 77 through 81. In addition to the policy regarding the treatment of poles cited above, CMP has Environmental Control Requirements of all contractors and subcontractors working on the MPRP project to prevent contamination of groundwater (see Exhibit 9 for the Environmental Control Requirements for Contractors and Subcontractors of Central Maine Power Company).

- 3. No potential pollutant shall be stored above the aquifer unless placed in an approved retention system.**

Not applicable. No potential pollutants will be stored within the project area.

D. Storm Water Control

- 1. All new construction and development shall be designed to reflect or resemble, as nearly as possible, natural runoff conditions in terms of volume, velocity and location of runoff. All storm water control (SWC) systems shall be designed so as to have no significant adverse effect on neighboring properties, downstream water quality, soil stability, or public drainage systems. Where possible, existing natural features such as berms, swales, terraces, and wooded areas shall be retained in order to control runoff and encourage infiltration of storm water.**

With the exception of the area occupied by the transmission structures, 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 post-construction areas will be graded to reflect or resemble, as nearly as possible, natural runoff conditions in terms of volume, velocity and location of runoff. Wooded areas within the corridor will be cleared of trees and other vegetation capable of growing tall enough to interfere with the safe and reliable operation of the transmission line. However, shrubs will not be cleared, and the resultant shrub-scrub habitat will have an ability to take up stormwater that is at least as great, if not greater, than the that of a wooded habitat. No storm water runoff control systems are necessary or proposed. In fact, the MDEP did not require stormwater plans for any of the transmission lines in the MPRP.

- 2. The following stormwater standards shall apply to development that exceeds 3,000 square feet of building footprint or has more than 20,000 square feet of impervious area. Agricultural activities and single family dwellings are exempt from these standards.**

Not applicable. The project will not include the development of any buildings or more than 20,000 square feet of impervious surface.

E. Phosphorus Control

The following standard shall apply to all development that exceeds 3,000 square feet of building footprint or has more than 20,000 square feet of impervious area and is within the Watershed Overlay District. . . .

Not applicable. The project will not include the development of any buildings or more than 20,000 square feet of impervious surface.

F. Floodplain

All development shall comply with the Town of Washington Floodplain Ordinance.

The Washington Floodplain Ordinance applies to “any construction or other development (as defined in Article XIII), . . . within any areas of special flood hazard established in Article I”. (Article II) “Development” in Article XIII refers to “the construction of buildings or other structures”. “Structures,” in turn, are defined in Article XIII as “a walled and roofed building. A gas or liquid storage tank that is principally above ground is also a structure.” Since the transmission structures are neither walled and roofed buildings nor gas or liquid storage tanks, the Floodplain Ordinance does not apply to the MPRP project in Washington.

G. Natural Resource Protection

Any proposed development shall identify areas as referenced below which shall be examined and the results certified in writing as a part of the application.

- 1. If any portion of the parcel to be developed has been identified as a Critical Natural Area by the Maine Natural Areas Program or as containing threatened or endangered species of plants or animals by the Maine Department of Inland Fisheries and Wildlife, these areas should not be developed. If development of these areas is proposed because no other reasonable alternative exists, the applicant shall develop a mitigation plan in cooperation with the Maine Department of Conservation (MDOC) and/or the Maine Department of Inland Fisheries and Wildlife (MDIFW) and/or the Maine Department of Environmental Protection (MDEP) and/or the Army Corps of Engineers (ACOE) as appropriate. The Code Enforcement Officer or the Planning Board shall incorporate the provisions of the mitigation plan as conditions of the permit.**

Central Maine Power has consulted with the Maine Natural Areas Program and the Maine Department of Inland Fisheries and Wildlife and determined that there are no Critical Natural Areas or threatened or endangered species of plants or animals within the project area in Washington.

- 2. If any portion of the parcel to be developed includes areas mapped or identified by the MDIFW as Deer Wintering Areas, the applicant shall consult with the Department or a qualified wildlife biologist on means to limit the impact of the development on the habitat and incorporate those recommendations into the plan.**

There are three deer wintering areas (DWAs) identified by the Maine Department of Inland Fisheries and Wildlife that intersect the transmission corridor. All have been rated as being of “indeterminate” value by the Department. CMP consulted with the Maine DEP regarding DWAs. In its permit, DEP states:

The Department . . . finds that the proposed project will not unreasonably harm any DWAs that are regulated under the NRPA or the Site Law and that impacts to unregulated DWAs can be minimized by constructing and maintaining the project in accordance with the Amended VMP [Vegetated Management Practices].¹¹

The Vegetative Management Practices referenced above will be followed in Washington, and are attached to this document as Exhibit 8. Therefore, the requirements of standard VII.G.2 have been met.

- 3. If any portion of the development contains a wetland as identified by the Town of Washington, the MDEP or listed on the most recent map edition of the National Wetland Inventory Maps, the applicant shall avoid, minimize, or mitigate impacts on the wetland both during and after construction. The applicant shall comply with all applicable state and federal regulations per the Natural Resources Protection Act (NRPA). No person shall perform any act or use of the land in a manner which would cause erosion that results in soil or other material reaching a water body or which would have a significant adverse affect on the property of another land owner.**

The wetlands identified by the Town of Washington, the MDEP, and the most recent map edition of the National Wetland Inventory Maps are shown on the maps in Exhibit 3 as Resource Protection districts.

CMP has developed a construction methodology that is designed to avoid, minimize, or mitigate impacts on wetlands both during and after construction, and to prevent erosion that results in soil or other material reaching a water body or which would have a significant adverse affect on the property of another land owner. In general, poles and accessways are located so as to avoid wetlands to the extent possible, and where this is not possible, to minimize impacts. For example, where accessways must cross a wetland, they are sited at the narrowest and driest part of a wetland, and construction mats are used to prevent rutting.

CMP has developed detailed protocols for the prevention of impacts to wetlands and erosion and sedimentation control. Please see Exhibit 7 for the *Environmental Guidelines for Construction and Maintenance Activities on Transmission Line and Substation Projects* (2010) (the *Guidelines*) for details. The *Guidelines* have been developed in consultation with the MDEP and are based on DEP's *Maine Erosion and Sediment Control BMPs*, dated March 2003, and DEP's Chapter 500, and contain specific Best Management Practices appropriate for electric transmission line and substation construction. These guidelines will be followed in the construction of transmission lines.

H. Erosion Control

- 1. All soil disturbance must be conducted in a manner which avoids sediment leaving the property. Development must employ erosion control best management practices. Temporary and permanent erosion control measures shall be selected for the development according to "Maine Erosion and Sediment Control BMPs" (Bureau of Land and Water Quality, MDEP, March 2003, DEPLW0588) or latest revised version thereof, and the provisions of this section.**

¹¹ Maine Department of Environmental Protection Finding of Fact and Order dated April 5, 2010; page 46.

2. All proposals for development shall submit and follow a written erosion control plan unless the Code Enforcement Officer certifies in writing that the nature of the site and the proposed development poses minimal risk of erosion.
3. The Code Enforcement Officer may establish additional erosion control requirements based upon site conditions and the nature and extent of the construction. These requirements shall be listed on the permit.
4. All temporary erosion control measures shall be installed prior to any digging, soil removal, stripping of vegetation, or soil disturbance. The measures may be installed in phases to match the construction schedule.
5. Additional measures must be installed by the owner in order to address the failure or limited effectiveness of any measure previously installed. These additional measures shall be made a part of the permit.

Standards H.1 through H.5 are addressed by the *Guidelines* in Exhibit 7. CMP will comply with these standards.

I. Sanitary and Liquid Waste

Not applicable. There will be no sanitary or liquid wastes associated with the project.

J. Material Storage

1. All outdoor storage areas including areas used for the storage or collection of solid waste, junk automobiles, auto parts, tires, building materials, machinery, sand and gravel, or other such items, shall have screening sufficient so that it cannot be seen from a public way, any residence except the owner's, or any regulated body of water. Walls, fencing, dense plant material, or a combination of material can be used to achieve this intent.

This standard applies to permanent storage areas. There will be no such storage areas associated with the project, so this standard does not apply.

2. Areas designed for the outdoor display of items sold on the premises including but not limited to, vehicle sale lots, greenhouse items, and similar activities shall provide for a buffer from the public road right-of-way. The buffer width in the Village District shall be five (5) feet; the buffer width elsewhere shall be a minimum of ten (10) feet.

Not applicable.

3. No material, merchandise, or vehicles may be stored or displayed in the buffer area.

Not applicable.

K. Air Pollution

1. All air pollution control shall comply with minimum Federal, State and local requirements.

Not applicable. There will be no emissions from the normal operation of the transmission lines.

2. Emission of dust, dirt, fly ash, fumes, vapors, or gases which could damage human health, animals, vegetation, or property, or which could soil or stain persons or property, at any point beyond the lot line of the commercial or industrial establishment creating that emission shall be prohibited.
3. No land use or development shall be permitted to produce offensive or harmful odors perceptible beyond their lot lines either at ground or habitable elevation. Agricultural uses are exempt from this provision.

CMP uses a selective herbicide program to treat an area once every four years to maintain an early successional stage of growth. Herbicide is selectively applied (using a backpack applicator) to capable species to prevent growth (or re-growth of a cut plant) of individual plants. No broadcast application is used, and CMP does not use herbicides 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 impose a threat to air quality.

Minimal, temporary influences on air quality (odor, dust, fumes, vapors or gases) as a result of construction activities may occur, arising from construction personnel commuter traffic; exhaust from clearing and construction equipment or vehicles; and temporary dust generated by construction activities along unpaved routes. Given the limited duration of activities at any one location, the generally rural nature of the project area, any influences on overall air quality should be insignificant. Dust that may be created during the construction process is controlled by the use of calcium chloride or nonpotable water.

CMP may deploy one or more temporary, portable (trailer-mounted) two MW distributed power generation (DG) units during and immediately following construction to provide local voltage support. Units are fueled with low or ultra-low sulfur diesel fuel. Maine Department of Environmental Protection Air Emission License #A-952-71-A-N, issued to CMP on November 2, 2006, regulates air emissions from these DG units. This license also prescribes emission controls, heat output, fuel sulfur content, and maximum fuel consumption (runtime) of these units.

No degradation of air quality is expected to result from construction and operation of the project. There will be no emissions that cause damage to human or animal health or safety, vegetation, or property.

L. Timber Harvesting

Not applicable.

Section 2. Abutter Protection

The disposal of industrial waste waters shall comply with laws of the State of Maine and the Town of Washington concerning water pollution.

Not applicable.

- 1. All air pollution control shall comply with minimum Federal, State and local requirements.**
- 2. Emission of dust, dirt, fly ash, fumes, vapors, or gases which could damage human health, animals, vegetation, or property, or which could soil or stain persons or property, at any point beyond the lot line of the commercial or industrial establishment creating that emission shall be prohibited.**
- 3. No land use or establishment shall be permitted to produce offensive or harmful odors perceptible beyond their lot lines either at ground or habitable elevation.**

See the response to Section 1.K above, page 15.

A. Glare

Not applicable. There will be no lighting associated with, or glare produce by, the project.

B. Outdoor Lighting

Not applicable. There will be no lighting associated with the project.

C. Buffers

1. **Any non-residential, non-agricultural space abutting a residential area shall maintain a buffer strip to prevent adverse effects on environmental or aesthetic qualities of abutting properties. Natural features such as topography, stands of trees, shrubbery, and rock outcroppings shall be maintained to provide a break between the proposed development and abutting properties. When natural features do not exist or are insufficient buffers, the yard shall be landscaped with vegetation, fenced, or screened so the space cannot be seen from the abutting properties.**
2. **All buffers shall be properly maintained to meet the preceding standard and the conditions of the permit.**

Not applicable. The corridor is in a remote area of Washington. There are only two residences off Mountain Road whose lots abut the corridor. However, the corridor's edge in this area is not treed. Both abutting properties have trees between the houses and the corridor that will screen the structures, so there will be no significant change in the visual buffering that currently exists as a result of the project. Buffers are not needed, as there will be no adverse effects on environmental or aesthetic qualities of abutting properties.

D. Noise

The following standards shall apply to all commercial uses over 3,000 square feet, industrial uses, mineral extraction operations junkyards, and commercial outdoor Recreation Facilities.

Not applicable. The proposed use is not a commercial use over 3,000 square feet, industrial use, mineral extraction operation, junkyard, or commercial outdoor Recreation Facility.

E. Signs

Not applicable. There will be no signage associated with the project.

Section 3. Lot Access

Not applicable. The only access to the right-of-way by vehicles will be from public roads, and this access is maintained only for maintenance and emergency personnel. Access will consist of paths across unimproved ground.

Section 4. Historic and Archeological Sites

- A. **If any portion of a development has been identified as a site of historic, prehistoric or archeological importance by the Town of Washington Comprehensive Plan, this Ordinance, Maine Historic Preservation Commission or the National Register of Historic Places, appropriate measures for the protection of those resources shall be included in any development design.**
- B. **Any proposed development of sites listed by one of the above listed sources shall require review and comment by the Maine Historic Preservation Commission prior to the issuance of a permit. The Code Enforcement Officer or the Planning Board shall consider any comments and recommendations received from the commission prior to rendering a decision on the permit application.**

During the past several years, CMP has engaged in extensive consultation with the Maine Historic Preservation Commission (MHPC) regarding the investigation of precontact archeological, postcontact archeological, and historic architectural resources, within the MPRP area of potential effect (APE), that are listed on or eligible for listing on the National Register of Historic Places (NRHP).

During the period 2008-2010, CMP's consultants conducted reconnaissance level precontact and postcontact cultural resource surveys to identify resources that might be impacted by project related activities within the MPRP APE. After consultation with the MHPC regarding the results of the reconnaissance level surveys, CMP conducted more intensive level surveys to determine site significance (eligibility for listing in the National Register of Historic Places) on a number of potentially eligible archaeological sites within the APE.

Similarly, during the period 2008-2010, CMP's consultants conducted architectural surveys in accordance with MHPC guidelines to identify any potential historic above-ground structures that are listed on or eligible for listing on the NRHP that are located within the APE and to determine any adverse impacts on those properties from MPRP.

As a result of these surveys, the MHPC determined that there are no eligible or potentially eligible precontact or postcontact archaeological sites in Washington that would be adversely impacted by MPRP. The MHPC also determined that there are no eligible or potentially eligible historic architectural structures in Washington that would be adversely impacted by MPRP.

Shoreland Zoning Standards

Shoreland Zoning Standards (from Article VIII)

The Shoreland Limited Residential and Resource Protection districts are shoreland areas and so structures within these districts are subject to the Shoreland Zoning standards.

Utility structures and services and essential services are all permitted uses with the approval of the Planning Board within the Resource Protection and Shoreland Limited Residential districts (see Article VI Section 1.D.4 and 5; 2.D.4 and 5, 7.D.2 and 11 and the Table of Land Uses, page 67). In addition, Article VIII Section 8.B states that:

“[t]he installation of essential services . . . is not allowed in a Resource Protection or Shoreland Limited Residential District, except to provide services to a permitted use within said district, or except where the applicant demonstrates 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.” (page 90)

Since utility structures and services are allowed *uses* in the Resource Protection and Shoreland Limited Residential districts, utility *structures* are allowed within these districts through this provision, as they provide services to an allowed use.

The Washington Land Use Ordinance also makes a distinction between “structures” and “utility structures” in its definitions (see Article XIV Section 2, pages 157 and 159). The proposed transmission poles fit the definition of “utility structures,” as they are “electric power . . . transmission . . . lines, towers and related equipment . . .”

Because the poles are utility structures and not “structures,” and because utility structures are allowed within all three applicable districts, the dimensional standards for “structures” in the Resource Protection district (including setbacks) do not apply. The discussion below explains how the proposal meets the standard of minimizing adverse impacts.

Structure 254-95: This structure is located within the Shoreland Limited Residential district. Structure 95 is approximately 140 feet from the stream, and therefore meets the 75-foot setback standard. It is not possible to relocate structure 95 out of the Shoreland Limited Residential district without eliminating it altogether. This would create such a large span between structures 94 and 96 that each of these structures would have to be taller, and the potential swing of the conductor under windy conditions would violate the safety code for the separation of wires. Erosion and sedimentation prevention measures will prevent adverse impacts to the stream, so there will be no adverse impacts to placing 95 at the proposed location.

Structures 254-82 and -102: These structures are located within the Resource Protection district. Both are angle structures, located at the “elbow” of the corridor where it changes direction. There are no reasonable alternatives to locating these structures where they are proposed without either expanding or moving the entire transmission corridor or violating the safety codes that require minimum distances between conductors (wires).

Section 1. Structures

A. The lowest floor elevation or openings of all buildings and structures, including basements, shall be placed in accordance with the standards of the Washington Flood Plain Ordinance.

Not applicable. The transmission structures do not have floors, basements or openings.

- B. The total footprint area of all structures, parking lots and other non-vegetated surfaces, within the shoreland zone shall not exceed twenty (20) percent of the lot or a portion thereof, located within the shoreland zone, including land area previously developed.**

The total footprint area of all proposed structures within the shoreland zone is approximately 330 square feet. The existing structures within the shoreland zone cover approximately 197 square feet. Together, the existing and proposed structures will cover 0.05% of the 966,904 square feet within the shoreland zone. This is well below the 20% threshold for the allowable coverage of the property within the shoreland zone.

- C. Retaining walls . . .**

Not applicable.

- D. Notwithstanding the requirements stated above, stairways or similar structures may be allowed with a permit from the Code Enforcement Officer . . .**

Not applicable.

Section 2. Campgrounds and Campsites

Not applicable.

Section 3. Parking Areas

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

Section 4. Roads and Driveways

There will be no new permanent roads or driveways associated with the project, other than CMP-maintained access points and ways suitable for routine and urgent maintenance by its own vehicles. Construction crews will utilize existing trails and paths where doing so will not cause undue impact to wetlands, streams, or other sensitive areas. New access will be created in these cases, but all new accessways will be temporary, and will be removed when construction is complete.

The proposed accessways are shown on Maps 1-6, EXHIBIT 3. Measures will be taken to avoid and minimize impacts to resources such as streams and wetlands through the use of crane mats, temporary bridges, geo-textile fabrics, and culverts when necessary (no accessways are proposed within the Conservation District). Erosion controls will be installed wherever appropriate. If necessary, mats will be placed parallel to the upland edge as abutments to further protect bank stability and establish stability. There will be no extensive grubbing (grading to remove root systems) within wetland crossing areas prior to mat placement, however, some minor grading may be required to ensure safety and mat stability. All such grading will be performed on a limited basis and only with prior approval by CMP's environmental representatives. Streams that are too wide to cross with crane mats or temporary bridges will be avoided. (See *Environmental Guidelines for Construction and Maintenance Activities on Transmission Line and Substation Projects*, Exhibit 7.)

Section 5. Signs

Not applicable. There will be no signs associated with the project.

Section 6. Storm Water Runoff

- A. All new construction and development shall be designed to minimize storm water runoff from the site in excess of the natural predevelopment conditions. Where possible, existing natural runoff control features, such as berms, swales, terraces and wooded areas, shall be retained in order to reduce runoff and encourage infiltration of stormwaters.**

With the exception of the area occupied by the transmission structures, 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. No storm water runoff control systems are necessary or proposed.

Section 7. Septic Waste Disposal

Not applicable. There will be no septic waste disposal associated with the project. During construction, construction crews will be provided porta-potties.

Section 8. Essential Services

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

A guiding principle in the design of the MPRP transmission line upgrades has been to utilize the existing transmission line corridors to the maximum extent possible. CMP is only seeking to widen the existing corridors where existing corridors cannot accommodate the proposed upgrades while meeting safety and reliability standards. Creating an entirely new corridor is a last resort. As a result, the 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.

The construction of the transmission line within CMP's right-of-way in northern Washington will occur entirely within CMP's existing right-of-way. To allow for the safe and reliable operation of the new and rebuilt lines, some clearing within the right-of-way will be required. This will widen the existing opening, but CMP will not need to acquire any additional property to accommodate the upgrade.

- B. The installation of essential services, other than road-side distribution lines, is not allowed in a Resource Protection or Shoreland Limited Residential District, except to provide services to a permitted use within said district, or except where the applicant demonstrates 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 existing right-of-way runs through a Shoreland Limited Residential District and several Resource Protection districts. Essential services are a permitted use within these districts. The proposed Section 254 transmission line is designed to use the existing corridor in order

to minimize environmental, abutter, and visual impacts. However, by using the existing corridor, two structures will have to be located within Resource Protection districts.

There are no reasonable alternatives for locating these structures outside the Resource Protection districts. These two structures are located at points where the corridor and transmission line change direction. These locations allow the transmission line to be maintained at a safe distance from the Section 388 line. Relocating the structures further away from the Section 388 line and out of the Resource Protection districts would mean widening the corridor significantly by acquiring land from abutters.

The amount of ground disturbance associated with the planned structures will be small (210 square feet and limited to the immediate vicinity of the pole placements), and since the project is co-located with the existing transmission line corridor which contains structures of a similar bulk and style, locating structures within the Resource Protection districts causes the least overall impact when compared with the alternatives. The overall environmental and visual impacts of this alternative would be greater than the impacts associated with the project as planned. (See the sections related to specific Shoreland Zone Districts starting on page 5 for more detailed information.)

C. Damaged or destroyed public utility transmission and distribution lines, towers and related equipment may be replaced or reconstructed without a permit.

Not applicable.

Section 9. Agriculture

Not applicable.

Section 10. Timber Harvesting

Not applicable.

Section 11. Clearing or Removal of Vegetation for Activities Other Than Timber Harvesting

Some clearing of vegetation will be required within the service corridor to accommodate the project and ensure that the project meets federal reliability and safety standards. The amount of clearing 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, preventing erosion and providing wildlife habitat. A vegetated buffer is left in place adjacent to streams and wetlands as a filter strip. No grubbing (i.e., stump removal) will take place. See the Typical ROW Vegetation Clearing/Maintenance (115kV and 345 kV Corridors), Exhibit 8.

The cutting work will be performed using equipment typical of logging operations, including cable and hook skidders, forwarders, tree movers, chain saws, and logging trucks. 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 or graded. All slash (i.e., 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 remaining vegetation is typically composed of scattered growth of small shrubs of non-capable species and herbaceous plants. After initial clearing, the

condition of these cleared areas generally resembles that of a high-quality forestry operation. Specifically, although there is very limited height structure to the vegetation, great care is taken to prevent rutting and erosion.

After construction is completed, non-capable species are allowed to grow to ensure that the corridor is vegetated, which prevents erosion and provides wildlife habitat. Over a relatively short period of time (generally within one calendar 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.

For areas that will be cleared, see the attached maps (Exhibit 3).

- A. In a Resource Protection District abutting a great pond, there shall be no cutting of vegetation within the strip of land extending 75 feet, horizontal distance, inland from the normal high-water line, except to remove safety hazards. Elsewhere, in any Resource Protection District the cutting or removal of vegetation shall be limited to that which is necessary for uses expressly authorized in that district.**

The clearing described above which will take place within Resource Protection districts is necessary for the use expressly authorized in those districts; that is, essential services. The proposed cutting will only remove vegetation which can pose a safety and reliability risk. A total of 1.2 acres of capable species will be removed from the Resource Protection districts, but these areas will not be “cleared” in the sense that all vegetation will be removed – shrubs and scrub will remain.

- B. Except in areas as described above in this subsection, and except to allow for the development of permitted uses . . .**

Essential Services are a permitted use in the Resource Protection district, and therefore this provision does not apply.

Section 12. Erosion and Sedimentation Control

With the exception of the immediate area around the base of the transmission structures, there will be no increase in 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 accessways. CMP has developed a standard manual, *Environmental Guidelines for Construction and Maintenance Activities on Transmission Line and Substation Projects* (2010)(the *Guidelines*), which it uses as a routine part of all transmission and substation projects. (A copy of the manual is attached as Exhibit 7.) 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) is largely based on DEP’s Maine Erosion and Sediment Control BMPs, 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 the proposed transmission lines.

- A. All activities which involve filling, grading, excavation or other similar activities which result in unstabilized soil conditions and which require a permit shall also require a written soil erosion and sedimentation control plan. The plan shall be submitted to the permitting authority for approval and shall include, where applicable, provisions for:**

1. **Mulching and revegetation of disturbed soil.**
2. **Temporary runoff control features such as hay bales, silt fencing or diversion ditches.**
3. **Permanent stabilization structures such as retaining walls or rip-rap.**

The *Guidelines* in Exhibit 7 contain provisions for mulching and revegetation of disturbed soil, temporary runoff control features, and permanent stabilization.

- B. In order to create the least potential for erosion, development shall be designed to fit with the topography and soils of the site. Areas of steep slopes where high cuts and fills may be required shall be avoided wherever possible, and natural contours shall be followed as closely as possible.**

CMP will comply with this standard. The project is designed to minimize the need for grading by avoiding steep slopes and fitting with the topography and soils. The only time grading may be needed is when temporary accessways must be made more level in order for construction vehicles to pass over them safely. In these cases, the ground contours will be restored to their original grade when the access is no longer needed.

- C. Erosion and sedimentation control measures shall apply to all aspects of the proposed project involving land disturbance, and shall be in operation during all stages of the activity. The amount of exposed soil at every phase of construction shall be minimized to reduce the potential for erosion.**

CMP will comply with this standard. The amount of exposed soil is minimized at every stage of construction, and any exposed soil is stabilized to prevent erosion.

- D. Any exposed ground area shall be temporarily or permanently stabilized within one (1) week from the time it was last actively worked, by use of riprap, sod, seed, and mulch, or other effective measures. In all cases permanent stabilization shall occur within nine (9) months of the initial date of exposure. In addition:**

1. **Where mulch is used, it shall be applied at a rate of at least one (1) bale per five hundred (500) square feet and shall be maintained until a catch of vegetation is established.**
2. **Anchoring the mulch with netting, peg and twine or other suitable method may be required to maintain the mulch cover.**
3. **Additional measures shall be taken where necessary in order to avoid siltation into the water. Such measures may include the use of staked hay bales and/or silt fences.**

Section 7.0 Nonstructural Erosion Control Measures of the *Guidelines* describes the temporary and permanent soil stabilization measures that CMP will take during the construction process (see Exhibit 7). “Temporary nonstructural measures such as hay or straw mulch should be spread on exposed soils within 100-feet of water resources within 48 hours of initial soil disturbance, or before any predicted storm event.”¹²

Mulch will be used at a rate of at least 1 bale per five hundred square feet on slopes less than 8%, between April 16 and October 31. At other times, the rate of application is about double that (2.5 bales per 500 square feet). On slopes exceeding 8% and within 100 feet of streams, mulch will be anchored during the winter months using Curlex, jute matting, or similar mulch netting.¹³

¹² See page 19 of the *Guidelines*.

¹³ See page 23 of the *Guidelines*.

Structures erosion control measures such as hay bales or silt fences will be used in some instances. Silt fences are the preferred measure, as they are more effective and last longer than hay bales. In general, silt fences will be installed, prior to soil disturbance, at the edge of any planned work area.¹⁴

- E. Natural and man-made drainage ways and drainage outlets shall be protected from erosion from water flowing through them. Drainageways shall be designed and constructed in order to carry water from a twenty five (25) year storm or greater, and shall be stabilized with vegetation or lined with riprap.**

Temporary bridges are the preferred method for crossing streams, as they cause the least amount of disturbance to the bed and embankments.

Section 13. Soils

All land uses shall be located on soils in or upon which the proposed uses or structures can be established or maintained without causing adverse environmental impacts, including severe erosion, mass soil movement, improper drainage, and water pollution, whether during or after construction. Proposed uses requiring subsurface waste disposal, and commercial or industrial development and other similar intensive land uses, shall require a soils report based on an on-site investigation . . .

Based on the applicants' analysis of the Soil Survey Geographic Database compiled by the United States Department of Agriculture – Natural Resources Conservation Service, 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 need to be constructed, soil borings will be conducted and the foundations will be designed in accordance with soil characteristics.

The proposed use is not intensive, and therefore does not require an on-site investigation of soil conditions.

Section 14. Water Quality

No activity shall deposit on or in to the ground or discharge to the waters of the State any pollutant that, by itself or in combination with other activities or substances, will impair designated uses or the water classification of the water body, tributary stream, or wet land.

To minimize spill potential during construction, no fueling or maintenance of vehicles will be performed within 100 feet of wetlands, streams or other sensitive natural resources. After construction, the electrical transmission line corridor is maintained to encourage the growth of scrub-shrub vegetation. Trees within the corridor that are capable of growing up into the conductors (“capable species”) must be removed for safety and reliability reasons. CMP uses a selective herbicide program 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 herbicides within 25 feet of any waterbody or wetland with standing water.

¹⁴ See page 14 of the *Guidelines*.

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 impose a threat to groundwater quality and will not impair designated uses or the water classification of any water body.

Section 15. Archaeological Sites

Any proposed land use activity involving structural development or soil disturbance on or adjacent to sites listed on, or eligible to be listed on the National Register of Historic Places, as determined by the permitting authority, shall be submitted by the applicant to the Maine Historic Preservation Commission for review and comment, at least twenty (20) days prior to action being taken by the permitting authority. The permitting authority shall consider comments received from the Commission prior to rendering a decision on the application.

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. The MHPC agrees with the reports that there are no sites within the corridor in Washington that are listed on, or eligible to be listed on, the National Register of Historic Places.

EXHIBIT 1: WASHINGTON PROJECT SCOPE MAP

**EXHIBIT 2: TRANSMISSION LINE CONFIGURATION
CROSS SECTIONS**

EXHIBIT 3: NATURAL RESOURCES MAPS

EXHIBIT 4: STRUCTURE HEIGHT RANGES

Section 254	
# of Structures	Height of Structure
3	40.1-50
16	50.1-60
19	60.1-70
5	70.1-80
1	80.1-90
44	Total

EXHIBIT 5: LIST OF ABUTTERS

Town of Washington – Abutters

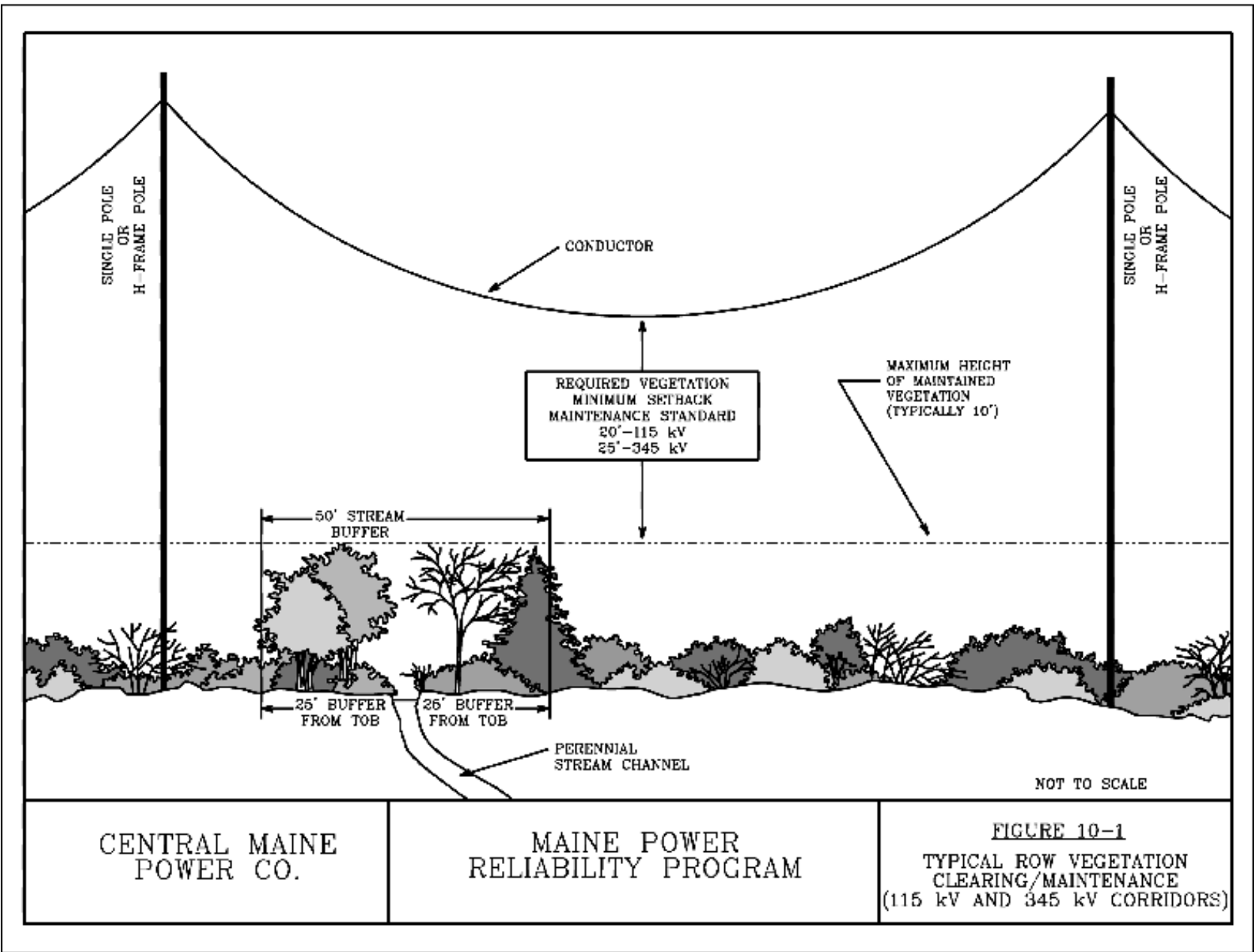
Map/ Lot	Owner Name 1	Owner Name 2	Mailing Address 1	Mailing Town	State	Zip
15-10	Chapman, Estate of Victor L.		6 Raven Rd	Augusta	ME	04330
17-1	Ronald	Boucher	17 Boucher Rd	Vassalboro	ME	04989
15-27	Richard and Josette	Burke	94 South Street	Walpole	MA	02081
15-8	John A.	Chitro	9 Michael Rd	No. Beverly	MA	01915
15-13	Mountain Road Realty Trust	Chitro, Michael A. Trustee	5 Patton Drive	South Hamilton	MA	01982
17-24	Nancy L.	Esancy	86 Mountain Rd	Washington	ME	04574
17-5	Roy	Garnett	105 Youngs Hill Road	Washington	ME	04574
15-17	Alfred	Holz	101 Orchard Road	Fleetwood	PA	19522
17-17a	Sonja	Howard	374 Medomac Road	Bremen	ME	04551
15-6	Christopher J.	Jensen	215 Mountain Rd	Washington	ME	04574
17-17	Stanley	Klock	1460 North Bel Air Drive	Mesa	AZ	85201
15-4	Linda M.	McCullough	325 Mountain Road	Washington	ME	04574
15-3	Joan H.	Melonis	305 Mountain Road	Washington	ME	04574
17-4	Michael	Pease	950 Collinstown Road	Appleton	ME	04862
15-7	Mark W.	Porter	227 Mountain Road	Washington	ME	04574
15-24	Emily B.	Retch	84 Gave Road	Liberty	ME	04949
15-14	Frederick	Sweet	6343 Somerset Drive	North Olmsted	OH	44070
15-6A		Town of Washington	PO Box 408	Washington	ME	04574
17-10	Larry C.	Werner	PO Box 241, Mountain Road	Washington	ME	04574
1-8	Lawrence A	Brooks	213 Beechwood St.	Thomaston	ME	04861
1-12	Mary Ann	Morse	103 Ocean Point Road	Boothbay Harbor	ME	04538

EXHIBIT 6: PROOF OF RIGHT, TITLE, OR INTEREST

CMP Parcel #	Grantor	Grantee	Date	Book/Page	Dimensions	Type
153.1	Lunn, Baldwin H.	Central Maine Power Co	26-Jan-1970	500/166	Var. width	Fee
153	Brann, Harold E. Jr. and Diane	Central Maine Power Co	9-Dec-1969	498/576	Var. width	Fee
154	Farrington, Milton H.	Central Maine Power Co	26-Jan-1970	500/168	Var. width	Fee
155	Brann, Clifton J. and Bradley	Central Maine Power Co	22-Dec-1969	499/290	270'	Fee
156	Cooley, Cleber Jr.	Central Maine Power Co	22-Dec-1969	499/292	270'	Fee
157	Viking Inc.	Central Maine Power Co	19-Jan-1970	500/173	270'	Fee
158	Ludwig, Thurlow E.	Central Maine Power Co	7-Jan-1970	499/495	270'	Fee
159	Schmalzried, George C.	Central Maine Power Co	19-Nov-1969	498/353	270'	Fee
160	Chapman, Geneva	Central Maine Power Co	23-Jan-1970	500/170	Triangle	Fee
161	Smith, David	Central Maine Power Co	26-Jan-1970	500/172	270'	Fee
162	Meservey, Avis	Central Maine Power Co	23-Dec-1969	499/299	270'	Fee
163	Chitro, John A. and Michael	Central Maine Power Co	15-Jan-1970	500/174	270'	Fee
164	Farrar, Evelyn	Central Maine Power Co	23-Jan-1970	500/261	Var. width	Fee
165	Gilbert, Rejean J.	MEPCO	24-Feb-1970	501/146	All within 270'	Q.C.
166	Chapman, Forest	Central Maine Power Co	23-Jan-1970	500/176	270'	Fee
167	Williams, J. Vance and Ruby F.	Central Maine Power Co	2-Jan-1970	499/370	270'	Fee

EXHIBIT 7: EROSION AND SEDIMENTATION CONTROL PLAN

EXHIBIT 8: VEGETATION CLEARING AND MAINTENANCE SKETCH



**EXHIBIT 9: ENVIRONMENTAL CONTROL REQUIREMENTS FOR
CONTRACTORS**

EXHIBIT 10 : QUALIFICATIONS OF WETLAND DELINEATORS

Wetland Delineation within CMP's Right-of-Way

As part of its due diligence for its applications to the Maine Department of Environmental Protection (MDEP) and the Army Corp of Engineers (ACOE), Central Maine Power Company (CMP) contracted with specialists to delineate wetlands within the project area. MDEP, in turn, contracted with Normandeau Associates to verify these delineations. The following text is from MDEP's April 2010 permit for the MPRP:

Because of the size and nature of the project, the Department contracted with a consultant to perform an independent review of the natural resources and significant wildlife habitats found along the transmission line corridor. In accordance with its contract, Normandeau Associates reviewed 80% of the proposed transmission line corridor project, approximately 289 miles. The contract specified that it verify resource delineations, specifically, the size and location of freshwater wetlands, the regulatory status of streams/drainage ways and whether a wetland meets the definition of a wetland of special significance. Normandeau Associates submitted reports describing the discrepancies and their location along the transmission line corridor. The applicant received a copy of these reports and conducted subsequent field visits and site surveys. In most instances, the applicant agreed with the Normandeau determination and made the necessary adjustments on its resource maps. In instances where Normandeau Associates and the applicant disagreed, Department staff used information generated by both parties supplemented with site visits to resolve the discrepancy.¹⁵

Wetlands in the Town of Washington were delineated by staff members of Boyle Associates and Kleinschmidt. Both of these companies specialize in environmental assessments, including wetland delineations. The staff members of these firms hold the following positions: Wetland Scientist, Senior Wetland Scientist, Wetland Mitigation Specialist, Senior Scientist, and Biologist.

As noted above, the wetland delineations shown on the maps in Exhibit 3 have been verified by the MDEP's contractor.

¹⁵ Department Order in the Matter of Central Maine Power Company, Maine Power Reliability Program, L-24260-L6-E-N (approval), April 2010; page 44.