



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

**WINDSOR, MAINE
SHORELAND ZONING PERMIT
APPLICATION**

Coopers Mills Road Substation Construction

***Segment 6: Section 254 Transmission Line Construction;
Section 388 Transmission Line Rebuild***

***Segment 10: Sections 258 and 3024 Transmission Line Construction;
Section 67/257 Transmission Line Rebuild***

***Segment 15: Section 3025 Transmission Line Construction;
Sections 60 and 88 Transmission Line Rebuild***

***Segment 35: Section 244 Transmission Line Construction;
Section 80 Transmission Line Rebuild***

Prepared for:

Central Maine Power Company
83 Edison Drive
Augusta, Maine 04336

Prepared by:



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

Submitted September 2009
Revised October 2009

Application Form

Town of Windsor

Shoreland Zoning Permit Application

FOR OFFICE USE ONLY	
Permit #	_____
Issue Date:	_____
Fee Amount:	_____

General Information Please make entries in the appropriate boxes below.

Applicant's Name Central Maine Power Co. c/o Mary Smith	Applicant's Address 83 Edison Drive Augusta, ME 04336	Applicant's Telephone 207-626-4006
Property Owner's Name Central Maine Power Co.	Owner's Address Same as Applicant	Owner's Telephone Same as Applicant
Contractor's Name Agent: TRC c/o Alison Truesdale	Contractor's Address Agent's address: 400 Southborough Drive South Portland, ME 04106	Contractor's Telephone Agent's tel. #: 207-879-1930 x 135
Property Location/Address See the attached EXHIBIT 2 and EXHIBIT 4		Tax Map/Page and Lot Number ¹ R-1, lots 5, 11, 38, 77, 83; R-2, lots 106, 111, 114, 131, 131A; R-3, lots 18, 19, 24, 29, 29A-1, 29A-2, 29A-10, 29A-11, 39, 42, 43; R-6, lots 1, 2, 3, 11, 13, 17, 18, 28A, 28B, 29, 34, 39, 40, 42, 43; R-7, lots 1, 2, 44, R-8, lots 9, 23A, 28, 49, 49A, 52A, 53, R-11, lots 36, 41, 42B, 43, 44, 46, 49, 51, 61, 63

Describe the property and proposed project, including all proposed construction (land clearing, road building, septic systems, wells, etc.). A property sketch is required on Page 3.

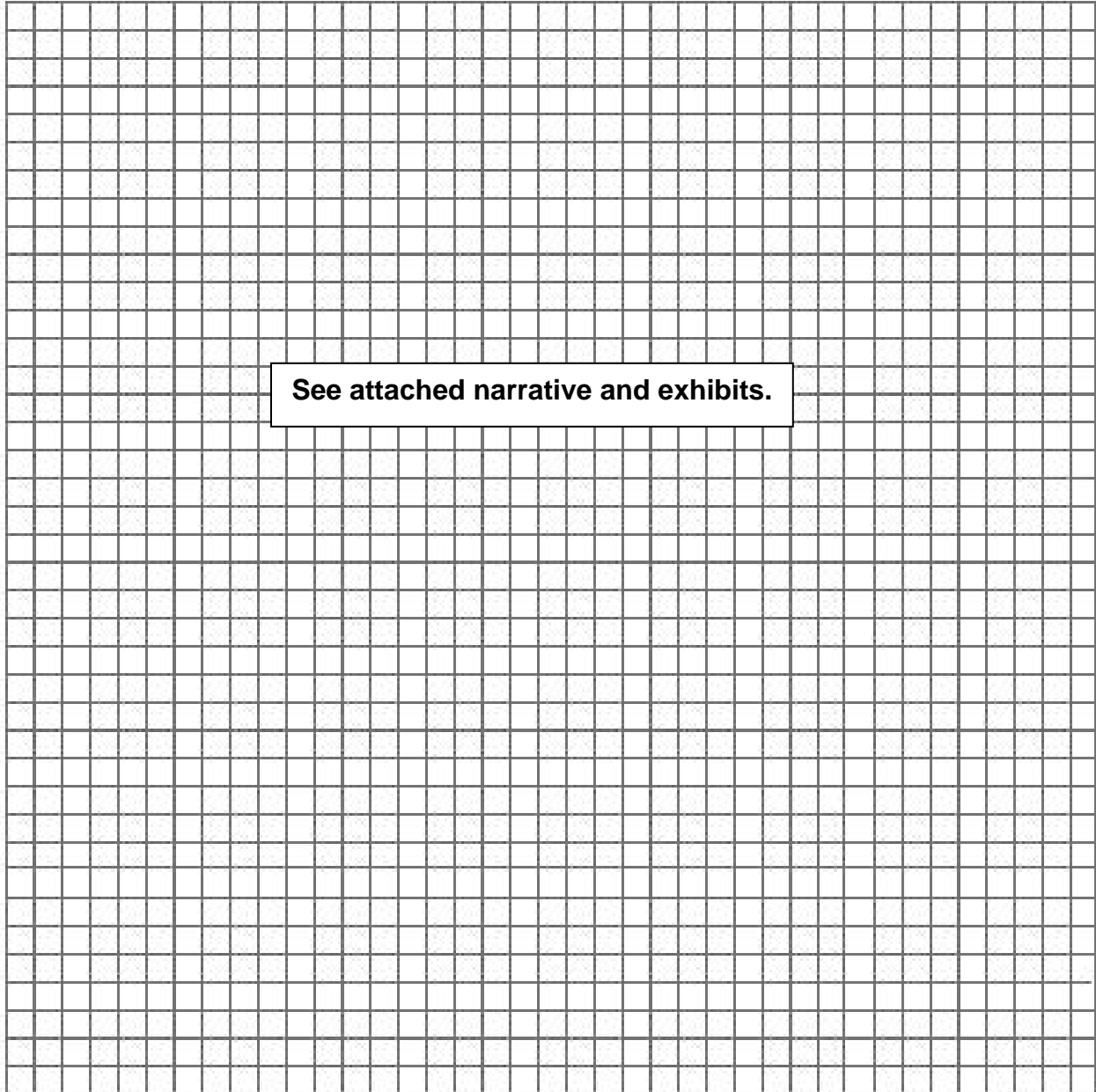
The Maine Power Reliability Program (MPRP) is a project of Central Maine Power Company (CMP) to upgrade the bulk electrical power system throughout much of its service area. In Windsor, the project involves construction of two new 115 kV electrical transmission lines, two new 345 kV lines, and the relocation and expansion of the substation. Property is being acquired, as described in EXHIBIT 8 to this Application, in order to expand two transmission corridors in some places, and to relocate the substation. The proposed construction is more fully described in the attached application narrative and illustrated in a number of exhibits.

Proposed Use of Project when Completed	Estimated Cost of Construction
Upgrade of CMP's electrical transmission grid	\$ 80,572,537.

¹ Highlighted lot numbers are owned by CMP. Others are lots where CMP is acquiring right, title or interest for corridor expansion.

Site Plan Sketch

Please include lot lines; area to be cleared of trees and other vegetation; the exact position of proposed structures (including decks, porches, and outbuildings) with accurate setback distances from the shoreline, side and rear property lines; the location of proposed wells, septic systems, and driveways; and areas and amounts to be filled or graded. If the proposal is for the expansion of an existing structure, please distinguish between the existing structure and the proposed expansion. Use additional paper if necessary.



Scale: _____ = _____ ft.

Please draw a simple sketch showing the front or rear and side elevations of both the existing and proposed structures. Use additional paper if necessary.

Front or Rear Elevation:

See "Typical" existing and "Proposed" transmission line corridor cross sections, EXHIBIT 3, attached.

Side Elevation:

See "Typical" existing and "Proposed" transmission line corridor cross sections, EXHIBIT 3, attached.

Additional Permits, Approvals, and/or Reviews

Check the entries if these are required

- Site plan, subdivision, or other Planning Board review/approval**
- Board of Appeals review/approval**
- Flood Hazard Development permit**
- Exterior Plumbing permit** (Approved HHE 200 Application Form for substation control house outside shoreland zone)
- Interior Plumbing Permit**
- DEP permit (Site Location, Natural Resources Protection Act)** Site Location of Development and Natural Resources Protection Act applications filed June, 2009; pending
- Army Corps of Engineers permit** Sec.404 of Clean Water Act application filed June, 2009; pending

Others

- Maine Public Utilities Commission** (Certificate of Need & Public Convenience, 35-A MRSA Sec 3132) Filed July, 2008; pending

Note: Applicant is advised to consult with the Code Enforcement Officer and appropriate state and federal agencies to determine whether these and/or additional permits, approvals, and reviews are required.

I certify that all information given in this application is accurate. All proposed uses shall be in conformance with this application and the Town of Windsor's Shoreland Zoning Ordinance. I agree to further inspections by the code enforcement officer at reasonable hours.

Applicant's Signature

Date

Agent's Signature (if applicable)

Date

FOR OFFICE USE ONLY

APPROVAL OR DENIAL OF APPLICATION

Map _____ Lot _____

This application is _____ Approved _____ Denied

If denied, reason for denial:

If approved, the following conditions are prescribed:

Note: In approving a shoreland zoning permit, the proposed use shall comply with the purposes and requirements of the Town of Windsor Shoreland Zoning Ordinance.

Code Enforcement Officer _____ **Date** _____

Inspection Checklist	
Prior to Clearing and Excavation	Date:
Prior to Foundation Pour	Date:
Prior to Final Landscaping	Date:
Prior to Occupancy	Date:

Note: This checklist is intended to assist the CEO and/or Planning Board in tracking a Shoreland Zoning permit through the review process.

Shoreland Zoning Permit Checklist

Check off for all structures:

- the submitted Shoreland Zoning permit is complete (pages 1 through 5);
- the appropriate fee has been paid;
- the lot area has been properly identified;
- the percent of lot covered by non-vegetated surfaces has been entered;
- the height of structure has been entered;
- the setback from high water mark has been shown;
- the setback from side and rear lot lines has been entered;
- the percent increase of expansions of the portion of the structure which is less than required setback has been calculated and a value entered;
- copies of interior and exterior plumbing permits have been attached;
- a copy of the deed has been attached;
- the elevation of lowest floor to 100-year flood elevation has been entered;
- copies of additional permit(s), as required, (see page 5 of application) have been attached.

Activity is in:

Resource Protection Stream Protection Limited Residential

Is the Proposed Project an allowable use in the district? Yes No

Review is required by:

CEO LPI Planning Board Board of Appeals

Planning Board Review Criteria

From Windsor Shoreland Zoning Ordinance Section 16 D

After the submission of a complete application to the Planning Board, the Board shall approve an application or approve it with conditions if it makes a positive finding based on the information presented that the proposed use:

- (1) Will maintain safe and healthful conditions;
- (2) Will not result in water pollution, erosion, or sedimentation to surface waters;
- (3) Will adequately provide for the disposal of all wastewater;
- (4) Will not have an adverse impact on spawning grounds, fish, aquatic life, bird or other wildlife habitat;
- (5) Will conserve shore cover and visual, as well as actual, points of access to inland waters;
- (6) Will protect archaeological and historic resources as designated in the comprehensive plan;
- (7) Will avoid problems associated with floodplain development and use; and
- (8) Is in conformance with the provisions of Section 15, Land Use Standards.

Special exemptions exist. Review ordinance thoroughly.

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 with any questions. Thank you.

Sincerely,

Gerry J. Mirabile
Lead Analyst - Compliance

Shoreland Zoning Permit Application

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 more than 30 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 the Independent System Operator for 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. 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 transformer 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 possible solutions. This included 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). The proposed solution is based on various forecasts of future conditions and a number of factors, including electrical performance, cost effectiveness, impacts to landowners, and Maine’s environment . It 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 to 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, and numerous municipalities.

Project Description in Windsor

The part of the program located in Windsor involves work in all five transmission line corridors that traverse the Town, and the relocation and expansion of the existing Maxcy's substation off Maxcy's Mill Road, east of the West Branch of the Sheepscot River.

Maxcy's is a major hub of the transmission grid, providing 115 kV service to most of CMP's northern service territory. CMP evaluated the possibility of expanding the existing substation rather than relocating it, but found that doing so would cause environmental impacts and/or widespread, prolonged power outages to the northern service territory that were impracticable. Two other potential sites for the new substation were also evaluated but rejected due to their greater environmental impacts, visual impacts from the road or residences, and/or the inability to secure the land.

Decommissioning Maxcy's Substation

The substation's control house, microwave tower, transformers, fence and other equipment will be dismantled and removed in accordance with state and federal regulations.² The area will become part of a right-of-way where three transmission corridors converge, carrying eight transmission lines to the new Coopers Mills Road Substation.

Currently, there are six transmission lines that enter Maxcy's Substation from the south, and three from the north. There are two 345 kV lines, six 115 kV lines, one 34.5 kV line, and one 12.5kV distribution circuit, and also an autotransformer to serve these ten transmission lines. All but one of these transmission lines (the 34.5 kV line) will be moved in order to make room for two additional 345 kV lines, and two additional 115 kV lines, and to redirect the lines to the new Coopers Mills Road Substation.

Coopers Mill Road Substation: Map SS-1

The Coopers Mills Road Substation will be located in the area between the Segment 10 and 6 corridors, Maxcy's Mill Road, and Coopers Mill Road. A new permanent access road is planned to come off Maxcy's Mill Road across from the existing substation, within the existing transmission corridor on the north side. The road will follow the corridor for about 1,350 feet, crossing from the west side to the east side, then cross a field on the east side of the corridor, and finally pass through an area of trees along the northwest side of a second field before entering the substation area. The entire access road will be approximately 2,700 feet, constructed of gravel.

The substation area is primarily proposed for the area designated on Town tax map R6 as lots 28-A, 28-B, and 42 as well as map R1, lot 38. It will be between 800 and 1,200 feet west of Coopers Mills Road, with emergency access from that road through the unimproved Segment 6 corridor. In total, there will be 43.5 acres within the new substation project scope and within the shoreland zone. Of this 43.5 acres, the total "disturbed" area (where grading and/or construction will occur) for the road will be one acre.

² See also: *Maine Power Reliability Program, a Central Maine Power Company Program; Maine Department of Environmental Protection Location of Development Act Application, Volume II*, Section 18.3, pp. 18-4 through 18-6.

The substation itself is completely outside the shoreland zone. A new 170-foot microwave tower will be installed at the Coopers Mill Road substation for communications purposes during outages (CMP will be applying for a permit under Windsor's Wireless Telecommunications Facilities Siting Ordinance separately from this application).

Transmission Corridors

The MPRP proposes upgrades to transmission corridors (or “segments”) 6, 10, 15, and 35, running roughly northeast, north, southwest, and southeast from Maxcy’s. No changes are proposed for Segment 11 running south from Maxcy’s to Mason Station in Wiscasset, other than realigning the lines as they enter the new substation.

Each segment includes one or more transmission lines which are called “sections,” and given numbers. The MPRP proposes to permanently remove all or part of three sections; construct all or part of six new sections; and rebuild another three existing sections within Segments 6, 10, 15, and 35 in Windsor. The following table describes the proposal for each of these segments:

General Location	Segment #	No Change	Remove Part or All of Existing Sections:	Construct New Section:	Rebuild (remove and relocate) Sections:
Substation area	Realigned portion of Segment 11				68, 392
Substation area	Discontinued portions of Segments 6 & 10		67, 84, 388		
From substation east	6	388		254	
From substation north	10	67 (renumbered as Section 257 or 258)	84	Portions of 257 and 258; 3024	
From substation west	15			3025	60 and 88
From Substation southeast	35	49		244	80

CMP’s approach to the design of the upgrades to the transmission grid has been to maximize the use of existing rights-of-way and avoid the creation of entirely new transmission corridors in order to minimize impacts on the environment and landowners. Corridor expansions are proposed on Segments 10 and 15 in Windsor. Expansion of the corridor along Segment 10 is necessary primarily to accommodate a new 345 kV transmission line, which will be mounted on

H-frame poles. Where CMP has not been able to secure options to acquire land for corridor expansion, single poles are proposed in order to fit the new transmission line within the existing corridor.

Segment 10 is proposed to be expanded in the following areas:

- North of the intersection with Segment 6, approximately 3.8 acres will be acquired from abutters so that sections 257 and 258 can be brought into the substation from the northeast side (see cross section N5-10-10 in EXHIBIT 3).
- A 50-foot strip will be acquired on the east side of the corridor from where it meets Segment 6, 1.1 miles north to where the corridor turns to the northwest, north of the West Branch of the Sheepscot River (see cross section N5-10-9 in EXHIBIT 3).
- From there, the corridor expansion is 40 feet wide and on the southwest side of the right-of-way, until it turns more northerly again, just south of the Crosby Road (0.65 mile) (see cross section N5-10-8 in EXHIBIT 3).
- From the "elbow" in the corridor south of Crosby Road to where the corridor turns northeast just north of Choate Road (1.3 miles), the corridor will be expanded by 50 feet on the east side (see cross section N5-10-7 in EXHIBIT 3).
- From there, the right-of-way will be expanded on the west side by 40 feet, for a distance of approximately 1 mile, to the China town line (see cross section N5-10-6 in EXHIBIT 3).

The entire length of Segment 15 in Windsor, from the substation to the western corner of Whitefield, will be expanded and/or realigned:

- From the West Branch of the Sheepscot, 2.8 miles to the west, the corridor will be expanded by 40 feet on the north side (see cross sections N5-15-2 in EXHIBIT 3).
- From there, southeast of Moody Pond to the Whitefield town line, the corridor will be widened on the south side by up to 250 feet. This will enable the transmission poles to be placed in straighter alignment, removing an angle in the right-of-way, and avoiding the Alonzo H. Garcelon Wildlife Management Area (see cross section N5-15-3 in EXHIBIT 3).

Specific Areas of Shoreland Zoning Impact

The proposed project will traverse three types of districts in the Shoreland Zone – Resource Protection (RP), Stream Protection (SP), and Limited Residential (LR.). For more information on the nature of the proposed changes, see the sections below: H. Roads and Driveways, page 14, L. Essential Services, page 16, and P. Clearing or Removal of Vegetation for Activities Other than Timber Harvesting, page 19. The following descriptions refer to the lettered areas shown on the Shoreland Zoning Map on the previous page.

Substation Area (including the Maxcy's and Coopers Mills sites):

- Resource Protection district along the West Branch of the Sheepscot River. A portion of Maxcy's substation is currently within this district, but will be removed as part of the decommissioning process. South of Maxcy's, a total of six transmission poles will be removed from the shoreland zone: three transmission poles for Section 392 close to the river will be removed so that this portion of the transmission line can be rebuilt further away from the river (see Maps 15-1 and 35-1 in EXHIBIT 4); two poles each for Sections 60 and 88 will be removed so that the lines can be rebuilt further north (see Map 15-1 in EXHIBIT 4 and cross section N5-15-2 in EXHIBIT 3); and one Section 68 pole to realign this portion of the transmission line (see Map 35-1 in EXHIBIT 4). North of Maxcy's Mill Road, two Section 388 poles within the Resource Protection district will be removed where this Section is discontinued due to the relocation of the substation (see Map SS-2 in EXHIBIT 4).

A total of twelve new poles will be located within the Resource Protection district: five for the Segment 11 corridor entering Maxcy's substation from the south, six for Segment 15, and one for Segment 35.

Approximately 0.8 acres will be cleared within this district in order to create a clear area on the west side of the major corridor to the south of Coopers Mills Road substation. As explained on page 19 of this application, clearing activities consist of removing tree and shrub 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. 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.

An endangered species of freshwater mussel has been found in the West Branch of the Sheepscot River in the vicinity of this shoreland district. The Brook Floater (*Alasmidonta varicosa*) is ranked as endangered or "vulnerable to extirpation or extinction" throughout its range and within the State. The mussels were found in the river near the Maxcy's Mill Road bridge and up to one mile downstream.

No transmission poles will be located in river; in fact, no pole will be located closer than approximately 44 feet from the river. Furthermore, the mussels are apparently surviving in the river where the riparian area has already been impacted due to the proximate location of Maxcy's Mill Road, and the existing substation. Consequently, there are no anticipated impacts to these species.

Overview Map Reference	See Strip Map #	Segment #	District	Total SZ District Area	Cleared subareas within this SZ	Impact from Transmission Poles	Impact from Substation Access Road
				Acres	Acres	Sq. Ft.	Acres
Y	SS-2 15-1 35-1	various	RP	27.7	0.8	955	0.7

- Stream Protection district along a tributary to the West Branch of the Sheepscot River just west and north of the proposed new substation and running south to the river and east across the major corridor south of Coopers Mills Road substation. Three transmission poles are proposed within this district: one for Section 3025 on the west side of the corridor, and one for each of Sections 80 and 49 on the east side of the corridor. Temporary accessways are planned to access sites where new poles will go and where old poles will be removed. All accessways will be removed after construction is complete in this area.

Approximately 0.3 acres will be cleared of capable species within this zone, to the west of the proposed location for Section 3025 and the access road to the new substation, east of the new substation access road around Section 49, and north of the new substation around the proposed location for Section 3024.

Overview Map Reference	See Strip Map #	Segment #	District	Total SZ District Area	Cleared subareas within this SZ	Impact from Transmission Poles	Impact from Substation Access Road
				Acres	Acres	Sq. Ft.	Acres
X	SS-2	various	SP	15.8	0.3	150	0.3

Segment 6 (from the Coopers Mills Substation east to Somerville):

- Limited Residential district associated with a wetland between Piper Road and Wingood Road. One pole is proposed in this district (254-15), with approximately 250 feet of temporary access constructed from Wingood Road in order to access the pole site. About 0.5 acre of land within the existing right-of-way will be cleared of trees in order to construct Section 254.

Overview Map Reference	See Strip Map #	Segment #	District	Total SZ District Area	Cleared subareas within this SZ	Impact from Transmission Poles
				Acres	Acres	Sq. Ft.
A	6-2	6	LR	5.5	0.5	60

- Stream Protection district along a tributary to Dodge Pond. No transmission poles are proposed for this district, but about 0.1 acre will need to be cleared of capable species within the right-of-way, and construction crews will need to establish a temporary crossing at the stream.

Overview Map Reference	See Strip Map #	Segment #	District	Total SZ District Area	Cleared subareas within this SZ	Impact from Transmission Poles
				Acres	Acres	Sq. Ft.
B	6-3	6	SP	1.4	0.1	0

- Limited Residential district west of the Somerville town line associated with a large wetland and tributary to Dodge Pond. Less than 1 acre of the right-of-way is within this district. There will be about 2,200 square feet of clearing of capable species. Up to 150 feet of temporary accessway may need to be constructed to access the pole site, but existing ATV trails will be used to the extent it is practical to do so.

Overview Map Reference	See Strip Map #	Segment #	District	Total SZ District Area	Cleared subareas within this SZ	Impact from Transmission Poles
				Acres	Acres	Sq. Ft.
C	6-3	6	LR	0.8	<0.1	120

Segment 10 (from the Coopers Mills Substation north to the China town line):

- Resource Protection district along the West Branch of the Sheepscot River:
 - west of the Coopers Mill Road and south of the South Belfast Road. There are currently four transmission poles in this district: two for Section 84, and two for Section 67. The Section 84 poles will be removed, and the Section 67 poles will remain. Five new poles are proposed in this district: two for Section 3024, and three for the rebuilt Section 257. Temporary accessways will need to be established to the sites where new poles are proposed and old poles will be removed.

Overview Map Reference	See Strip Map #	Segment #	District	Total SZ District Area	Cleared subareas within this SZ	Impact from Transmission Poles
				Acres	Acres	Sq. Ft.
D	10-1	10	RP	6.3	1.3	210

- east of Pinkham Road. Currently, there are two transmission poles within this district on the north side of the river: one for Section 84, and one for Section 67. Pole 84-274 will be removed; pole 67-407 will be remain, but be renamed 258-407. Two new poles are proposed for the north side of the river: pole 3024-16 and 257-211. Clearing of capable species within the 50-foot acquisition area on the east side of the corridor will be necessary – a total of about 0.6 acre. Temporary accessways to the pole sites on the north side of the river will be constructed.

Two species of freshwater mussels have been found in the river in the vicinity of this shoreland area. The Brook Floater (*Alasmidonta varicosa*) is ranked as endangered or “vulnerable to extirpation or extinction” throughout its range and within the state. The mussels were found in the river approximately 0.5 mile downstream of the Route 105 bridge crossing where transmission lines span the river.

The Creeper (*Strophitus undulatus*) is ranked by the state as a species of “special concern.” This species was found in a portion of the West Branch of the Sheepscot River at the Route 105 crossing and 75 yards upstream – an area not within the corridor, but about 1,800 feet from the nearest proposed transmission pole.

No transmission poles will be located in river and no pole will be located closer than approximately 109 feet from the high water mark of the river. Furthermore, these animals are apparently surviving in the river where the riparian area has already been impacted due to the proximate location of Route 105 and the existing transmission lines spanning the river. Consequently, there are no anticipated impacts to these species

Overview Map Reference	See Strip Map #	Segment #	District	Total SZ District Area	Cleared subareas within this SZ	Impact from Transmission Poles
				Acres	Acres	Sq. Ft.
E	10-2	10	RP	3.8	0.6	90

- northeast of Pinkham Road. Five transmission poles are currently within this district: three for Section 84 (all of which will be removed), and two for Section 67 (which will remain). Three new poles are proposed for Section 258, and two for Section 3024. Temporary accessways are planned to access the new and removed pole sites, and a temporary bridge crossing is planned. Approximately 1.5 acres will be cleared of capable species in this portion of the district where the corridor is being widened.

Overview Map Reference	See Strip Map #	Segment #	District	Total SZ District Area	Cleared subareas within this SZ	Impact from Transmission Poles
				Acres	Acres	Sq. Ft.
G	10-2	10	RP	8.6	1.5	210

- north of where Dearborne Brook enters the river. There are currently two poles within this portion of the district: one on Section 84 and one on Section 67. Pole 84-259 will be removed, pole 258-394 will remain, and three poles are proposed in the district: two for Section 257, and one for Section 3024. Approximately 0.9 acre will be cleared of capable species in this district.

Overview Map Reference	See Strip Map #	Segment #	District	Total SZ District Area	Cleared subareas within this SZ	Impact from Transmission Poles
				Acres	Acres	Sq. Ft.
I	10-3	10	RP	3.6	0.9	120

- Stream Protection district at a tributary to the West Branch Sheepscot River west of Sampson Road. No poles or clearing are proposed for this district, but a temporary accessway is planned for crossing the stream.

Overview Map Reference	See Strip Map #	Segment #	District	Total SZ District Area	Cleared subareas within this SZ	Impact from Transmission Poles
				Acres	Acres	Sq. Ft.
F	10-2	10	SP	0.4	0	0

- Stream Protection district at Dearborn Brook. No poles or clearing are proposed for this district, but a temporary accessway is planned for crossing the stream.

Overview Map Reference	See Strip Map #	Segment #	District	Total SZ District Area	Cleared subareas within this SZ	Impact from Transmission Poles
				Acres	Acres	Sq. Ft.
H	10-3	10	SP	0.8	0	0

- Stream Protection district at a tributary to the West Branch Sheepscot River south of Choate Road. The corridor is proposed to be expanded on the east side within this district, and this area (about 0.2 acre) will need to be cleared of capable species. No poles are proposed within the district, but the temporary accessway is planned to cross the stream.

Overview Map Reference	See Strip Map #	Segment #	District	Total SZ District Area	Cleared subareas within this SZ	Impact from Transmission Poles
				Acres	Acres	Sq. Ft.
J	10-4	10	SP	1.0	0.2	0

- Stream Protection district at Hewitt Brook, just south of the China town line. A small amount of clearing is proposed within this district (approximately 0.04 acre) where the corridor is expanding on the west side, south of the stream. There are no poles proposed for this district, but the temporary accessway is planned so as to cross the brook.

Overview Map Reference	See Strip Map #	Segment #	District	Total SZ District Area	Cleared subareas within this SZ	Impact from Transmission Poles
				Acres	Acres	Sq. Ft.
K	10-5	10	SP	1.9	<0.1	0

Segment 15 (from the Coopers Mills Substation southwest to the Whitefield town line):

- Resource Protection district at the West Branch Sheepscot River, east of Stewart Lane and Griffen Road. There are three transmission poles within this shoreland zone currently: two on Section 88, and one on Section 60. Both of these Sections are being rebuilt, but the relocated transmission lines are designed so that no poles will be located within this district. The new transmission line, Section 3025, will not have any poles within this portion of the district either (see the description of the substation area for the poles located within the district on the east side of the river). Temporary accessways to the existing and proposed poles within the district will enter off the Griffen Road. About one third acre will need to be cleared in this area.

Overview Map Reference	See Strip Map #	Segment #	District	Total SZ District Area	Cleared subareas within this SZ	Impact from Transmission Poles
				Acres	Acres	Sq. Ft.
L	15-1	15	RP	2.0	0.0	0

- Stream Protection district at a tributary to the West Branch Sheepscot River west of the Griffen Road. There are currently three poles within this district: two for Section 88, and one for Section 60. All three of these poles will be removed. Section 60 is proposed to

have one pole within this district, Section 88 will have none. The new line, Section 3025, will have one pole at the edge of the district. Access to the pole sites will be from the south side of the right-of-way, and require crossing the stream at three points, using temporary bridges. Approximately one quarter acre of clearing will be necessary within this district.

Overview Map Reference	See Strip Map #	Segment #	District	Total SZ District Area	Cleared subareas within this SZ	Impact from Transmission Poles
				Acres	Acres	Sq. Ft.
M	15-1	15	SP	4.2	0.3	90

- Limited Residential district associated with a wetland south of the right-of-way, and east of Transfer Way. The three existing poles within this district will be removed (two for Section 60, and one for Section 88). One new pole is proposed on Section 3025. Temporary accessways are planned through this district, but no clearing will be necessary.

Overview Map Reference	See Strip Map #	Segment #	District	Total SZ District Area	Cleared subareas within this SZ	Impact from Transmission Poles
				Acres	Acres	Sq. Ft.
N	15-2	15	LR	2.4	0	60

- Stream Protection district at a tributary to the wetland east of Transfer Way. One pole on Section 88 will be removed from this district. No poles are proposed here, and 0.15 acre of clearing will be necessary. A temporary accessway will cross the district and the stream.

Overview Map Reference	See Strip Map #	Segment #	District	Total SZ District Area	Cleared subareas within this SZ	Impact from Transmission Poles
				Acres	Acres	Sq. Ft.
O	15-2	15	SP	1.0	0.2	0

- Limited Residential district associated with Moody Pond, a group of wetlands east of Moody Pond, and wetlands in the Augusta-Rockland Road area. The corridor crosses this district in three places. The right-of-way is being expanded in this area. Approximately 4 acres within the district will be cleared of capable species. There are 12 poles within the district now: eight poles on Section 88, and four on Section 60; these will be removed. A total of 22 transmission poles are proposed for this district: eight on Section 88, eight for Section 60, and six for Section 3025. Temporary accessways will cross through the district, using existing trails for the most part.

Overview Map Reference	See Strip Map #	Segment #	District	Total SZ District Area	Cleared subareas within this SZ	Impact from Transmission Poles
				Acres	Acres	Sq. Ft.
P	15-3	15	LR	1.0	0.5	60

Overview Map Reference	See Strip Map #	Segment #	District	Total SZ District Area	Cleared subareas within this SZ	Impact from Transmission Poles
				Acres	Acres	Sq. Ft.
R	15-4	15	LR	12.7	1.9	570
S	15-4	15	LR	5.8	1.6	240

- Limited Residential district associated with a wetland north of the Augusta-Rockland Road. There are three existing poles within this district which will be removed: two for Section 88, and one for Section 60. Three poles are proposed: one for each of Sections 88, 60, and 3025. Temporary accessways are planned within the district, and the corridor expansion will require clearing of approximately 0.7 acre of capable species.

Overview Map Reference	See Strip Map #	Segment #	District	Total SZ District Area	Cleared subareas within this SZ	Impact from Transmission Structures
				Acres	Acres	Sq. Ft.
Q	15-3	15	LR	4.0	0.7	120

- Limited Residential district associated with several wetlands just north of the Whitefield town line. Five transmission poles on Section 88 within this district will be removed, along with four Section 60 poles (nine total). Six poles are proposed for Section 88; five for Section 60, and three for Section 3025. This district coincides with the area where the corridor is being realigned to avoid the Wildlife Management Area, so there is relatively more area being cleared for the widening. Approximately 8 acres will be cleared of capable species within the district.

Overview Map Reference	See Strip Map #	Segment #	District	Total SZ District Area	Cleared subareas within this SZ	Impact from Transmission Poles
				Acres	Acres	Sq. Ft.
T	15-5	15	LR	19.1	7.9	510

Segment 35 (from the Coopers Mills Substation southeast to the Jefferson town line):

- Stream Protection district at a tributary to the West Branch of the Sheepscot River east of Coopers Mills Road. There is one pole within this district now, on Section 49. No poles are proposed for the district, but a temporary accessway is planned that will cross the stream, using a temporary bridge. No clearing will be necessary in this district.

Overview Map Reference	See Strip Map #	Segment #	District	Total SZ District Area	Cleared subareas within this SZ	Impact from Transmission Poles
				Acres	Acres	Sq. Ft.
U	35-1	35	SP	0.9	0	0

- Stream Protection district at a tributary to the West Branch of the Sheepscot River southeast of Wingood Road. There are no poles currently within this district, and none are proposed. No clearing is proposed, but a temporary accessway is planned to cross the district at the southwest edge of the right-of-way.

Overview Map Reference	See Strip Map #	Segment #	District	Total SZ District Area	Cleared subareas within this SZ	Impact from Transmission Poles
				Acres	Acres	Sq. Ft.
V	35-2	35	SP	0.7	0	0

- Resource Protection district at the Sheepscot River. There are currently two poles within this district: one for each of Sections 49 and 80; the Section 80 pole will be removed. Two poles are proposed: one for Section 80, and one for Section 244. Both are set well back from the rivers edge and outside the floodplain. Relatively little temporary accessway will need to be established in this district, and crews may be able to utilize existing trails. No clearing is proposed in the district.

This Resource Protection district coincides with a Waterfowl and Wading Bird Habitat (WWH) that is a total of 139.1 acres, and rated as of "moderate" value by the Maine Department of Inland Fisheries and Wildlife (MDIFW). Approximately 1.6 acres of this habitat is within the Segment 15 corridor. Within WWHs, CMP will prohibit clearing and construction activity between April 15 and July 15, pursuant to DEP's Site Location of Development Law (Section 7) and the Natural Resources Protection Act (Chapter 335, Section 3.C.(2)). This restriction will minimize the potential disruption of avian breeding and nesting activity. In addition, because the habitat is associated with wetland areas, the use of herbicides for vegetation maintenance in these areas will be prohibited. Construction of the transmission line poles in these areas is not expected to affect the ecological functionality of these WWHs, as these areas are largely open areas of emergent and shrub vegetation. This condition will continue to exist once the project is completed.

Overview Map Reference	See Strip Map #	Segment #	District	Total SZ District Area	Cleared subareas within this SZ	Impact from Transmission Poles
				Acres	Acres	Sq. Ft.
W	35-3	35	RP	2.5	0	60

Permitted Land Uses

(From Section 14 of the Shoreland Zoning Ordinance)

The MPRP is classified under the Ordinance as “essential services”. Pursuant to Table 1, “other essential services” are a permitted use in the Resource Protection, Stream Protection, and Limited Residential districts with the approval from the Planning Board. “Other essential services” in the Resource Protection and Stream Protection districts are also subject to the specific requirements of Section 15(L)(2) of the Ordinance, which are addressed on page 17, below.

These application materials are organized according to the 20 land use standards, with each segment discussed separately under each applicable standard.

Land Use Standards

A. Minimum Lot Standards

Not applicable.

B. Principal and Accessory Structures

Not applicable.

C. Piers, Docks, Wharves, Bridges and Other Structures and Uses

Not applicable.

D. Campgrounds

Not applicable.

E. Individual Private Campsites

Not applicable.

F. Commercial and Industrial Uses

Not applicable.

G. Parking Areas

Not applicable. No parking areas are proposed.

H. Roads and Driveways

Transmission Corridors

There will be no new permanent roads or driveways associated with the transmission corridors, other than CMP-maintained access points and ways suitable for routine and urgent maintenance by its own vehicles. Temporary accessways, which are not considered roads or driveways and will not add any impervious surface area, will be established for use during the construction phase (see EXHIBIT 4). This will be an ongoing process as access is 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. All accessways are temporary and will be removed and restored once construction is complete.

General access to the corridor will be established for construction purposes. These accessways will be in place for more than one growing season, but will be removed and restored once all aspects of construction in that area are complete. Access to individual pole sites, either for removal or construction, will be achieved by accessways 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 accessways 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-textile fabrics and culverts, when necessary. Appropriate erosion controls will be installed where appropriate. If necessary, mats will be placed parallel to the upland edge as abutments to further protect bank stability and establish 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. 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.

Coopers Mills Road Substation

The new Coopers Mills Road Substation will be located outside of the shoreland zone. A permanent gravel access road will be built from Maxcy's Mill Road, across from the existing substation, to the new Coopers Mills Road substation. The proposed road is approximately 2,780 feet long, or about one half mile.

Part of the road, totaling just under one acre, is within the shoreland zone. The area that will be disturbed in order to build the road includes 29,300 square feet (0.67 acre) in the Resource Protection District, and 12,100 square feet (0.28 acre) in the Stream Protection District. The closest that the disturbed area will come to the West Branch of the Sheepscot River is 156 feet. The road will have a permanent stream crossing at a tributary to the West Branch of the Sheepscot.

The steepest slope along the length of the road within the shoreland zone is 4%. The substation access road is designed to meet the Maine Department of Environmental Protection's (DEP) Chapter 500 standards for stormwater, erosion and sedimentation control. Because the project cannot proceed without DEP approval, and because the Windsor Shoreland Zoning Ordinance's standards are based on Chapter 500 standards, all applicable road standards will be met.

I. Signs

Not applicable. No signs are proposed as part of the project, except for signage associated with the Coopers Mills Road substation, outside of the shoreland zone.

J. Storm Water Runoff

With the exception of the immediate area occupied by the transmission 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 this portion of the project. All new construction will be designed to minimize storm water runoff from the transmission corridors in excess of the natural predevelopment conditions.

The stormwater system for the substation and its access road is being designed to meet Chapter 500 (the Maine Department of Environmental Protection's stormwater regulations). The roadway surface drainage is being treated by vegetated buffers designed using the Chapter 500 general standards for water quality.

K. Septic Waste Disposal

There will be no septic waste disposal system within the shoreland zone.

L. Essential Services

(1) 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. 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, 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.

Within Windsor, the construction of the new transmission line in Segment 6, and the rebuilt and new transmission lines within Segment 35, will occur entirely within CMP's existing right-of-way. To allow for the safe and reliable operation of this new line, some clearing within this right-of-way will be required in order to widen the existing corridor, but CMP will not need to acquire any additional property to accommodate the upgrade. Within Segments 10 and 15, it is not feasible to locate the proposed new 345 kV transmission line along side the existing and rebuilt lines and simultaneously keep them entirely within CMP's existing right-of-way. As a result, CMP will have to widen its right-of-way through the acquisition of between 40 and 50 feet of property adjacent to portions of the existing Segment 10 corridor, and between 40 and 250 feet of property adjacent to portions of Segment 15. Some additional clearing of non-capable species within the expanded rights-of-way also will be required.

(2) The installation of essential services, other than road-side distribution lines, is not allowed in a Resource Protection or Stream Protection 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 MPRP project is considered an essential service and is permitted in both the Stream and Resource Protection districts, pursuant to Table 1 of the Windsor Shoreland Zoning Ordinance. All of the existing Segment 6, 10, 15, and 35 transmission corridors in Windsor pass through Stream Protection and Resource Protection districts, with the exception of Segment 6, which does not pass through a Resource Protection district. The MPRP project seeks to modify the current use of these land areas.

Within these corridors, CMP has, to the greatest extent practicable, sited each individual transmission 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 transmission supports so that none are located within either the Resource Protection or Stream Protection districts. In Windsor, however, due to the fact that the poles cannot be sited in a manner that allows the entire protection district to be spanned, a total of 31 new poles will be located in some of the Stream and Resource Protection districts that the corridors pass through (36 poles are already located in these districts and, of these, 23 will be removed, resulting in a net increase of 8 poles within the Resource and Stream Protection districts town-wide).

There are no reasonable alternatives for locating these poles outside these districts. 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 locating poles within existing transmission corridors which contain poles of a similar bulk and style causes the least overall environmental and visual impacts 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 poles (e.g., steel towers with concrete footings) to achieve the required spans. The overall environmental and visual impacts of either of these alternatives would be greater than the impacts associated with the project as planned. (See the sections related to specific shoreland zone impacts starting on Page 5 for more detailed information.)

CMP evaluated three alternatives to building the substation at the proposed location, but rejected them due to their greater environmental impacts, or their impracticability. See the Substation Alternatives Map, EXHIBIT 5, for the location of these alternative sites.

Alternative A – Expand the Existing Maxcy's Substation

Alternative A was to expand the existing Maxcy's substation. This design alternative would require permanent fill within the channel of the West Branch of the Sheepscot River to accommodate the expanded substation footprint. In addition to these direct impacts to the river channel, impacts to habitat supporting *Alasmidonta varicosa* (brook floater), a rare species of

mussel, and an endangered *Salmo salar* (Atlantic salmon) population would occur. Wetlands would also be impacted by permanent fill.

The first expansion alternative would also require a long-term outage during construction. Since the Maxcy's Substation is a major hub providing 115 kV service to most of CMP's northern service territory, an outage of the Maxcy's Substation would risk blackouts across CMP's northern service territory. Managing such an outage would be technically impracticable, would present an unacceptable level of risk to the region's power supply reliability, and would also be costly.

A second expansion alternative involving expanding the substation away from the West Branch of the Sheepscot River was also evaluated, but was quickly eliminated on the basis of technical constraints. The existing control building and the existing autotransformer would have to be relocated, which would also require an extended substation outage. As discussed, such an outage of the substation would be technically impracticable and costly.

Alternative B – Construct New Substation in a Field North of the Proposed Site

CMP evaluated constructing a new substation in a hayfield approximately 600 feet to the north of the proposed location. CMP estimated that constructing the substation in the field would impact a combined 1,350 linear feet of two stream channels shown on USGS topographic mapping, and riparian wetlands. USDA-NRCS soil mapping indicates that field's soils are somewhat poorly drained and would probably have some hydric soil inclusions which can be quite large. Aerial photography of the site also suggests the site contains wetlands and had been previously ditched to enhance drainage. The Alternative B site would have resulted in significant visual impacts because the site is not visually buffered from Coopers Mills Road, nearby residences, or the Sheepscot River. Finally, the current landowner was not willing to sell the land needed for this alternative. This alternative was eliminated on the basis of having a greater environmental impact, having severe visual impacts, and because the existing property owner was unwilling to sell the land.

Alternative C – Construct New Substation in a Woodlot Northeast of the Proposed Site

CMP evaluated construction of the new substation on forested land located slightly more than one-half mile northeast of the proposed site as Alternative C. A 3.1 acre forested wetland is present at the Alternative C site, and would be directly impacted by permanent fill if a substation were constructed at the site. Alternative C is also highly visible from South Belfast Road/Route 105, which is a state road. Given the visibility of the site and the lack of a visual buffer, constructing the substation at the Alternative C site would result in significant visual impacts.

Utilizing the Alternative C site would also have necessitated the co-location of all of the existing and proposed transmission lines into a single expanded "super corridor" to reach the site. The corridor would need to be an estimated 1,000 feet wide to support the 11 separate transmission lines that would connect to the substation. Creating a new super corridor, rather than using or modestly expanding existing corridors as is currently proposed, would result in additional environmental impacts including stream crossings, forest clearing, and possible wetland impacts. The corridor would also be highly visible from Coopers Mills Road and nearby residences. This

alternative was eliminated on the basis of having a greater environmental impact, and for having significant visual impacts.

Once the location for the substation was chosen, CMP evaluated three alternative access road locations. The first alternative was to locate the access from Coopers Mills Road where the Segment 6 corridor crosses the road, entering the substation area from the northeast. This option required obtaining fee interest or a right-of-way from an abutting landowner who was not willing to allow the access road across his land.

The second alternative considered was to bring the access road in to the substation area from the east, off Coopers Mills Road on CMP's land. This option was rejected because the slopes near Coopers Mills Road would require large amounts of fill in order to create an access road capable of carrying the vehicles that transport the transformers into the substation area.³ The environmental and visual impacts of such a large amount of fill were not considered acceptable.

The third option was to bring the access road in to the substation area from the southwest, off the Maxcy's Mill Road. Although this alternative requires that the road cross a Resource Protection and Stream Protection district, the amount of fill required to create the access road was substantially less than that required by the second alternative road location, and had less impact, both environmentally and visually. This is the alternative location proposed.

M. Mineral Exploration and Extraction

Not applicable.

N. Agriculture

Not applicable.

O. Timber Harvesting

Not applicable.

P. Clearing or Removal of Vegetation for Activities Other than Timber Harvesting

Section 15(P) of the Ordinance provides that vegetation clearing is permitted for the development of permitted uses. 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 (in accordance with P(1) of this standard). 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, which prevents erosion and provides wildlife

³ The access road cannot have slopes greater than 5% in order to accommodate the vehicles carrying the transformers.

habitat. 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.

See attached maps, (EXHIBIT 4), and the sections related to specific Shoreland Zone Districts, starting on page 5, for more detailed information.

Q. Erosion and Sedimentation Control

With the exception of the immediate area around the base of the support poles there will be no increase in impervious surface area associated with the transmission line work. The amount of ground disturbance associated with this portion of the project in Windsor will be limited to the immediate vicinity of the pole placements.

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 the 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) 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 transmission lines.

R. Soils

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 be needed, soil borings will be conducted and the foundations will be designed in accordance with soil characteristics.

S. Water Quality

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. 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.

T. Archaeological Site

Following consultation with the Maine Historic Preservation Commission (MHPC), CMP has conducted comprehensive investigations of cultural resources along the entire scope of the Maine Power Reliability Program (MPRP). Survey reports have been submitted to the State Historic Preservation Officer (SHPO) and findings of effect from the SHPO have been completed for all Phase 0 and Phase IA/ IB reports. There have been three types of Cultural Resource Survey completed along the scope of the MPRP including: pre (European) contact archaeology, post (European) contact (or Historic) archaeology, (both subsurface), and a historic architecture survey which is concerned largely with the visual/ and or physical impacts affecting functioning, historically relevant structures, districts and landscapes.

Prehistoric Archaeology

- The SHPO’s letter dated February 4, 2009 regarding Prehistoric Archaeology surveys at the Coopers Mills Road Substation state that no further surveys are needed, and that there will be no effect on prehistoric archaeological resources from the substation construction.
- The SHPO’s letter for Prehistoric Archaeology within Segment 6 states that there are no prehistoric archaeological sites within Windsor.
- The SHPO’s letter for Prehistoric Archaeology for Segments 10, 15 and 35 refers to one site in Windsor for which they require a Phase III study to remove material.

Historic Archaeology

- The MHPC's State Historic Preservation Officer (SHPO)’s letter, dated January 29, 2009, concerning the Historic Archaeology survey at the Coopers Mills Road

- Substation area states that no significant resources were found. The SHPO recommends that there be no further work done.
- The SHPO's letter for Historic Archaeology for Segment 6, dated November 12, 2008, concludes that there is one site (ME 484-001) in Windsor requiring a Phase II survey. The Phase II field work has been completed, and the report will be submitted to the SHPO by November 29, 2009.
 - The SHPO's letter for Historic Archaeology for Segments 10 and 35, dated January 29, 2009, concludes that a Phase II survey is required for site ME 484-004 in Windsor. The Phase II field work has been completed, and the report will be submitted to the SHPO by November, 2009.
 - The SHPO's letter for Historic Archaeology for Segment 15, dated April 29, 2009, concludes that there are no significant sites in Windsor.

Historic Architecture

- The SHPO's letters regarding Historic Architectural surveys in Segments 6 10, and 35, dated August 12, 2009 and June 3, 2009 (for both segments 10 and 35), state that the Maine Historic Preservation Commission concludes that MPRP will have no adverse effect upon historic [architectural] properties in those segments.
- The SHPO's letter for Historic Architecture in Segment 15, dated June 22, 2009, states, "...we find that there will be no historic [architectural] properties affected by the proposed Segment 15 undertaking."
- The SHPO's letter dated September 30, 2009 regarding Historic Architecture at the Coopers Mills Road Substation area states that "I find that there will be no historic [architectural] properties affected by the proposed Cooper's Mills Substation underatking. "

Phase II, subsurface studies are intended to provide a more thorough contextual understanding of whether a site should be listed on the National Register of Historic Places. Should a Phase II survey produce significant findings and results, a Phase III studies may be required for sites with the potential to be listed on the Register, and involve the removal of artifacts for study or the avoidance of the resource. For all sites requiring a Phase III level survey, a Memorandum of Agreement will be drafted and signed by the consultant, scientist, applicant and regulators and attached to the ultimate state and federal permits that will ensure protection of these sites throughout the construction and maintenance processes. Since the project cannot proceed without the state and federal approvals, this standard for archaeological sites will be met.

Approval Standards

(From Section 16 D of the Shoreland Zoning Ordinance)

The proposed use will:

1. Maintain safe and healthful conditions

The proposed upgrades to the transmission lines will maintain the same safe and healthful conditions which 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.

2. Not result in water pollution erosion or sedimentation to surface waters.

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

3. Adequately provide for the disposal of all wastewater.

There will be no wastewater disposal required for this project within the shoreland zone, and therefore this standard is not applicable.

4. 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 corridors, which have been in place for several decades. In general, given the existing landscape characteristics of the site, construction and maintenance of the project is not expected to create conditions that are not 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 will be avoided and minimized to the extent practicable through careful siting and placement of poles. Once installed, the transmission line poles, due to the minimal amount of ground surface area they occupy, will have no significant impact on these 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 (see the discussion on wildlife impacts, page 6. Thus, this standard has been met. See the attached maps, (EXHIBIT 4), and the sections related to specific Shoreland Zone Districts, beginning on page 5, for more detailed information.

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

The proposed project, where it crosses the shoreland zone, will take place entirely within and immediately adjacent to 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, thereby preserving a similar degree of shore cover which currently exists.

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

As discussed above with respect to Ordinance Section (15)T, the project will not adversely impact any archaeological and historic resources.

7. Will avoid problems associated with flood plain development and use.

As depicted in the attached maps, only 14 of the proposed transmission poles are planned to be within the 100-year flood plains and shoreland zone. 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 flood plain development and use. The Applicant will obtain a Flood Hazard Development Permit from the Windsor Code Enforcement Officer for these poles, as required by local ordinance.

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

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

EXHIBIT 1
MPRP PROJECT SCOPE MAP

EXHIBIT 2
TRANSMISSION LINE CORRIDOR ON TOPO MAP

EXHIBIT 3
TRANSMISSION LINE CONFIGURATION CROSS SECTIONS

EXHIBIT 4
TRANSMISSION LINE CORRIDOR STRIP MAPS

EXHIBIT 5
SUBSTATION ALTERNATIVES MAP

EXHIBIT 6

POLE HEIGHT RANGES

Height Range	Number of Poles Within Height Ranges									
	Segment 6		Segment 10			Segment 15			Segment 35	
	Section 254	Section 388	Section 257	Section 258	Section 3024	Section 88	Section 60	Section 3025	Section 80	Section 244
41-50	0	0	0	3	0	1	1	0	0	0
51-60	2	0	2	2	0	2	1	0	1	1
61-70	4	0	1	9	5	22	30	4	21	2
71-80	5	0	16	11	21	27	24	17	16	19
81-90	12	2	13	5	14	9	5	16	3	9
91-100	2	0	4	0	4	0	0	6	1	6
101-110	0	3	0	0	1	0	1	0	0	1
111-120	0	1	0	0	0	0	0	3	0	0
121-130	0	0	0	0	0	0	0	0	0	0
131-140	0	0	0	0	0	0	0	0	0	0
141-150	0	0	0	0	0	0	0	0	0	0
Total # Poles	25	6	36	30	45	61	62	46	42	38

EXHIBIT 7
LIST OF ABUTTERS

EXHIBIT 8

PROOF OF RIGHT, TITLE, OR INTEREST

In general, CMP is utilizing existing transmission line corridors to the greatest extent possible for the MPRP. As such, CMP already holds adequate right, title, and interest to most lands required for the program. CMP strives to minimize expansions of transmission line corridors to reduce its impact on neighbors and the environment, and to limit the need to acquire land from abutting property owners. However, this is not always possible, especially where new transmission lines need to be built and CMP's existing ownership is not adequate to safely accommodate new lines and/or a substation. In these cases, as in Windsor, CMP makes every effort to acquire right, title, or interest in land abutting the existing corridor through negotiation at fair market value, either through fee acquisition or easement. In many cases, CMP will negotiate options to buy fee interests or easements in advance of permitting. The table below provides a list of lands for which CMP has rights to construct the project in Windsor through fee ownership, easement, or option. This list provides the name of the underlying landowner, the map and lot numbers of the parcels, and the interest CMP has acquired to the land.

In instances where CMP and a landowner are not able to agree on the value of a piece of property, and the PUC has issued a Certificate of Public Convenience and Necessity for the project, CMP will be required to apply to the PUC pursuant to 35-A M.R.S.A. § 3136 to receive approval to take the land by eminent domain and compensate the landowner at fair market value. CMP's statutory eminent domain authority constitutes adequate right, title, or interest to construct the project.

EXHIBIT 9
EROSION AND SEDIMENTATION CONTROL PLAN
(See Exhibit 9 In Original Submission)