MAINE POWER RELIABILITY PROGRAM

A CENTRAL MAINE POWER COMPANY PROGRAM

PROSPECT, MAINE
SHORELAND ZONING APPLICATION

Section 86 Transmission Line Reconstruction

Prepared for:

Central Maine Power Company
83 Edison Drive
Augusta, Maine 04336

Prepared by:

TRC

TRC Engineers, LLC
214 Gabriel Drive
Augusta, Maine 04330

February 2010

Application Form

Town of Prospect

Shoreland Zoning Permit Application

FOR OFFICIAL USE ONLY:	
PERMIT NO.	
ISSUE DATE:	
FEE AMOUNT:	

General Information

1. Applicant Central Maine Power Co. c/o Mary Smith	2. Applicant's Address 83 Edison Drive Augusta, ME 04336	Applicant's Tel. # 207-626-4006
4. Property Owner Same as Applicant	5. Owner's Address Same as Applicant	6. Owner's Tel. # Same as Applicant
7. Contractor To be announced	8. Contractor's Address To be announced	9. Contractor's Tel. # To be announced
10. Location/Address of Property Property is the existing CMP transmission line corridor that extends through Prospect from the Penobscot River in the north to the Prospect/Stockton Springs town line in the south.	11. Tax Map/Page & Lot # Tax Map 10, Lot 9	12. Zoning District • Resource Protection District (RPD) • Stream Protection District (SPD)

13. Description of the property including a description of all proposed construction, E.G. Land Clearing, Road Building, Septic Systems, and wells (Please Note That a Site Plan Sketch is required on page 3.)

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 Prospect, the project involves relocating and reconstructing an existing 115 kV transmission line (Section 86) within the existing CMP corridor. The existing line will be removed and reconstructed within approximately 15 to 25 feet of its current location. The existing two-pole structures, typically 45 feet tall, will be replaced by single-pole structures, typically 75 feet tall.

The reconstructed line will cross three Prospect Shoreland Zoning Districts: South Branch Marsh River Resource Protection District; Hawes Stream Stream Protection District west of Bangor Road; and Hawes Stream Stream Protection District west of Partridge Road. This application seeks approval the project within these shorelands.

The project is more fully described in the attached application narrative and exhibits.

Shoreland and Property Information

16. Lot Area Not applicable. Nevertheless, the CMP corridor areas in the Shoreland Zoning districts are: • So Branch Marsh River RPD, east shore: 1.5 acres; west shore: 1.5 acres; • Hawes Stream SPD west of Bangor Rd, north shore: 0.3 acres; south shore: 0.3 acres; • Hawes Stream SPD west of Partridge Rd, north shore: 0.4 acres; south shore: 0.4 acres; (Note: These are not lot sizes, but rather the area of the corridor within the shoreland districts.)	17. Frontage on road (ft) There is no known CMP corridor frontage on a public road within the shoreland zone.
18. Sq. ft of lot covered by non-vegetated surfaces Two single-pole structures @ 13 sq. ft. per structure = 26 square feet (total across all shoreland districts).	19. Elevation above 100 year flood Like the one existing structure to be removed from the shoreland floodplain, the rebuilt structure (pole) will be embedded in the flood plain. The structure has no floors or openings.
20. Frontage on Waterbody (ft): Not applicable. Nevertheless, waterbody frontages are: • So Branch Marsh River RPD, east shore: 260 feet; west shore: 265 feet; • Hawes Stream SPD west of Bangor Rd, north shore: 190 feet; south shore: 190 feet; • Hawes Stream SPD west of Partridge Rd, north shore: 200 feet; south shore: 200 feet;	21. Height of proposed structure The two rebuilt structures in the South Branch Marsh River Resource Protection District will be 74.5 feet tall (height above ground).
22. Existing use of property Electrical power transmission lines.	23. Proposed use of structure Electrical power transmission lines.

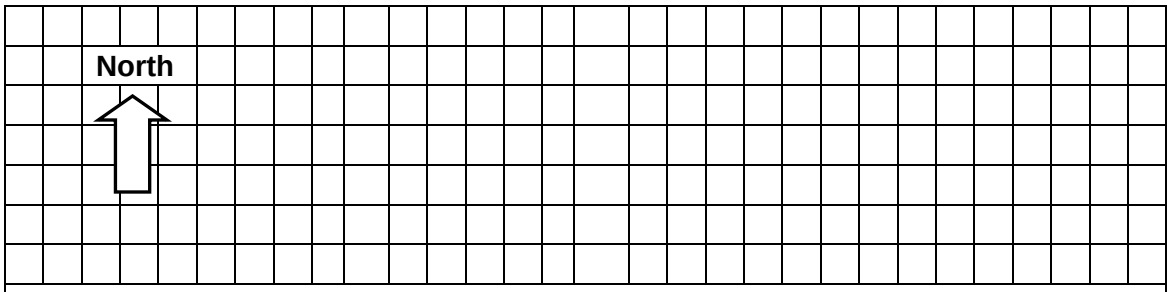
Note: Questions 24 & 25 apply only to expansions of portions of existing structures which are less than the *required* setback.

24. A) Sq. ft. of the portion of the structure which is less than the requires setback as of 1/1/89 There will be no expansion of existing structures.	25. A) Cu. Ft. portion of structure which is less than the required setback as of 1/1/89 There will be no expansion of existing structures.
B) Sq. ft. of the expansion of the portion of the structure which is less than the required setback from 1/1/89 to	B) Cu. ft. of the expansion of the portion of the structure which is less than the required setback from 1/1/89 to
C) Sq. ft. of proposed expansion of portion of the structure which is less than required setback	C) Cu. ft. of proposed expansion of portion of the structure which is less than required setback
D) % increase of sq. ft. of actual and proposed expansions of portion of structure which is less than the required setback since 1/1/89 $\left(\% \text{ increase} = \frac{B + C \times 100}{A} \right)$	D) % increase of cu. ft. of actual and proposed expansions of portion of structure which is less than the required setback since 1/1/89 $\left(\% \text{ increase} = \frac{B + C \times 100}{A} \right)$

Note: It is imperative that each Municipality define what constitutes a structure, floor area and volume and apply those definitions uniformly when calculating existing and proposed sq. ft. and cu. ft.

Site Plan

Please include: Lot lines; Area to be cleared of trees and other vegetation; The exact position of proposed structures, including decks, porches, and other out buildings 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.



See Attached Text and Exhibits, in particular:

Exhibit 2, Existing and Proposed Transmission Line Cross Sections
Exhibit 3, Reconstructed Transmission Line Structure Information
Exhibit 6, MPRP Project Scope Natural Resources Maps for Prospect Shorelands

Front or Rear Elevation

Side Elevation

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

See Exhibit 2, Existing and Proposed Transmission Line Cross Sections

Additional Permits, Approvals, and/or Reviews Required

Check if required

- ☐ **Planning Board Review/approval**
  (e.g., Subdivision, Site Plan Review)
- ☐ **Board of Appeals Review/approval**
- ☐ **Flood Hazard Development Permit**
- ☐ **Exterior Plumbing Permit**
  (Approved HHE 200 Application Form)
- ☐ **Interior Plumbing Permit**
- ☒ **DEP Permit**
  (Site Location of Development Act, Natural Resources Protection Act) Filed June 2009.
- ☒ **Army Corps of Engineers Permit**
  (e.g., Sec.404 of Clean Water Act) Filed June 2009
  Others
- ☒ **Maine Public Utilities Commission**
  Certificate of Need & Public Convenience Filed July 2008.
- ☒ **Prospect Building Notification** To be filed following Shoreland Zoning approval.
- ☐ _____
- ☐ _____
- ☐ _____

Note: Applicant is advised to consult with the Code Enforcement Officer and appropriate State and Federal Agencies to determine whether 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 Prospect Shoreland Zoning Ordinance. I agree to future inspections by the Code Enforcement Officer at reasonable Hours.

_____ _____
Applicant's Signature Date

Cynthia A. Bastey 1/27/10
Agent's Signature (if Applicable) Date

Approval or Denial of Application **Map** _____ **Lot** _____
(For Office use Only)

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 Shoreland Zoning Ordinance for the Town of Prospect.

_____ _____
Code Enforcement Officer Date

Inspection Check List

- ☐ Prior to Clearing and excavation
- ☐ Prior to Foundation Pour
- ☐ Prior to Final Landscaping
- ☐ Prior to Occupancy

Permit # _____

Fee Amount _____

CMP Corporate Certificate

State of Maine

Department of the Secretary of State

I, the Secretary of State of Maine, certify *that according to the provisions of the Constitution and Laws of the State of Maine, the Department of the Secretary of State is the legal custodian of the Great Seal of the State of Maine which is hereunto affixed and of the reports of organization, amendment and dissolution of corporations and annual reports filed by the same.*

I further certify *that CENTRAL MAINE POWER COMPANY, formerly THE MESSALONSKEE ELECTRIC COMPANY is a duly organized business corporation under the laws of the State of Maine and that the date of incorporation is July 20, 1905.*

I further certify *that said business corporation has filed annual reports due to this Department, and that no action is now pending by or on behalf of the State of Maine to forfeit the charter and that according to the records in the Department of the Secretary of State, said corporation is a legally existing business corporation in good standing under the laws of the State of Maine at the present time.*

In testimony whereof, I have caused the Great Seal of the State of Maine to be hereunto affixed. Given under my hand at Augusta, Maine, this sixth day of January 2009.

MATTHEW DUNLAP

Secretary of State

Authentication: 1374-715

Tue Jan 06 2009 14:44:46

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

An equal opportunity employer

83 Edison Drive | Augusta, ME 04336
tel (207) 623-3521
S:\Compliance\Shared\Environmental\Projects\Transmission Lines\Maine Power Reliability Program [MPRP]\Agent Authorization Letter.doc
www.cmpco.com

An Energy East Company

PROJECT DESCRIPTION

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 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.

CMP's 345 kV transmission system was built and put into service in 1971. Since then power consumption has more than doubled. In recent years, both CMP and ISO-NE have identified certain reliability issues with the 345 kV system that need to be assessed and addressed.

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

After completing the needs assessment, the MPRP team went to work to study possible solutions. This included both transmission and non-transmission alternatives, before designating its preferred solution.

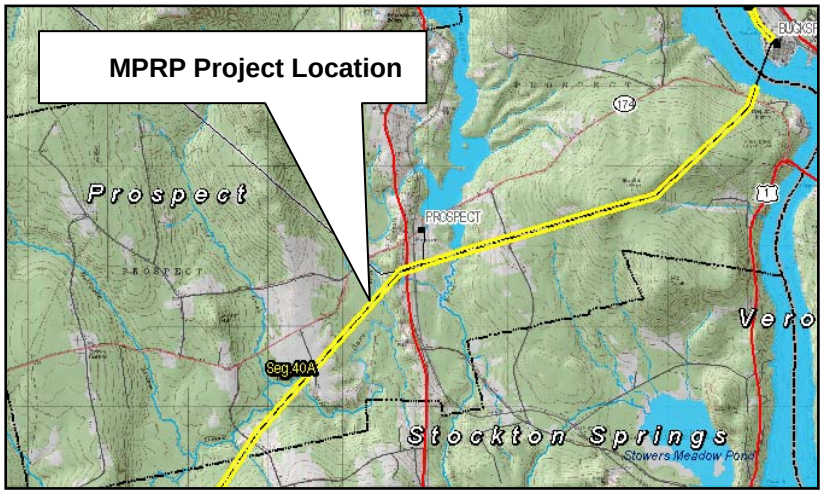
CMP ultimately selected a primarily transmission solution (a small geographic area know as the South Portland loop will be addressed through non-transmission alternatives) based on a number of factors, including electrical performance, cost effectiveness, impacts to landowners, and Maine's environment under various forecasts of future conditions. The proposed solution consists of a network of 345 kV and 115 kV transmission lines and associated substations throughout CMP's service territory where particular needs were identified. The proposed transmission solution ranges from Eliot in the south, Rumford in the west, Warren and Searsport in the east, and Orrington and Pittsfield 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 (MDEP), and numerous municipalities.

See Exhibit 1, MPRP Project Scope Map.

The proposed upgrades in Prospect, outlined below, are a part of the MPRP and are intended to help improve the reliability, safety, and security of the bulk power transmission system in Maine, while at the same time meeting the increasing demands for electrical power.

Project Description in Prospect

In Prospect, as part of the MPRP, CMP proposes to upgrade one 115 kV transmission line, Section 86, over approximately five miles of the existing CMP transmission line corridor that runs from the Prospect/ Stockton Springs town line to Fort Knox Road near the Penobscot River. There will be no transmission line removal or reconstruction between Fort Knox Road and the Penobscot River.



The upgrade includes removing the existing Section 86 transmission line, which now operates on 64 two-pole (H-frame) wood structures typically 45 feet tall, and reconstructing the line from 15 to 25 feet south of its current location within the same corridor on 62 new single pole wood structures that are typically 75 feet tall. This line is being updated and will carry a larger conductor, which will increase capacity in terms of amperage. The existing structures are proposed to be replaced with single pole structures, which will be designed to support the larger mechanical loadings and sag characteristics of the larger conductor.

The following exhibits, located at the end of this document, illustrate the scope of the project in the Town of Prospect:

- *Exhibit 2, Existing and Proposed Transmission Line Cross Sections*
- *Exhibit 3, Reconstructed Transmission Line Structure Information*
- *Exhibit 5, Project Scope and Natural Resources Maps for the Town of Prospect*

From Fort Knox Road near the Penobscot River west approximately 2.7 miles to the existing 34.5 kV transmission line that parallels the railroad track, Section 86 runs along the south side of the corridor. Section 86 will be reconstructed about 25 feet closer to the southern corridor boundary. *See Exhibit 2, Cross-Sections N5-40A-1, N5-40A-2, and N5-40A-3.*

From the existing 34.5 kV line west approximately 0.4 miles to the village cemetery, Section 86 occupies the middle of the corridor, with the existing 34.5 kV line (Section 70) located on the south side of the corridor and a second 115 kV line (Section 203) located on the north side. Section 86 will be reconstructed about 15 feet closer to the southern corridor boundary. *See Exhibit 2, Cross-Sections N5-40A-4.*

From the village cemetery southwest approximately 1.9 miles to the Prospect/Stockton Springs town line, Section 86 runs along the north side of the corridor. Section 86 will be reconstructed about 20 feet closer to the southern corridor boundary. *See Exhibit 2, Cross-Sections N5-40A-5.*

The project includes:

- Removing the existing Section 86 transmission line;
- Reconstructing the Section 86 transmission line in a new location;
- Creating temporary equipment access ways needed to carry out the work; and
- Restoring the site to pre-construction conditions as needed.

The work schedule for the project is highly dependent on securing all necessary permits and construction contracts. At this time, work in Prospect is expected to begin in the second half of 2010.

Prospect Ordinances

The project requires filings with the Town of Prospect under two (2) ordinances:

- Under the Prospect Shoreland Zoning Ordinance, amended in June 2009, Planning Board approval is required for project elements located within the shoreland zone adjacent to three water bodies: South Branch Marsh River, Hawes Stream and Main Stream.
- Under the Prospect Building Notification Ordinance, an "Intention to Build Notification Form" filed with the Town Clerk may be required prior to construction. The form requires information about proposed structures and evidence of Shoreland Zoning approval, if required.

This application is intended to satisfy the information requirements of both ordinances.

SHORELAND ZONING

Permitted Land Uses

Under Prospect's Shoreland Zoning Ordinance[1], the proposed transmission line improvements are "essential services" (Ordinance Section 17) which, according to the Table of Land Uses (Ordinance Section 14), are a permitted use in the Resource Protection and Stream Protection districts with the approval of the Planning Board. Essential services are also subject to the specific land use standards of Section 15(L) (2), of the Ordinance, addressed below.

[1] Prospect Shoreland Zoning Ordinance, amended June 16, 2009. Prospect Shoreland Zoning Map, amended March 27, 2004.

MPRP Development in Shoreland Zoning Districts

Between Fort Knox Road near the Penobscot River and the Prospect/Stockton Springs town line, the CMP transmission line corridor crosses Shoreland Zoning districts in following locations:

- the 250 foot Resource Protection District on the South Branch of Marsh River;
- the 75 foot Stream Protection District on Hawes Stream west of Bangor Road;
- the 75 foot Stream Protection District on Hawes Stream west of Partridge Road; and
- the 75 foot Stream Protection District on Main Stream

The Shoreland Zoning districts are illustrated in the following exhibits:

Exhibit 4, Prospect Shoreland Zoning Map with MPRP Transmission Line Corridor

Exhibit 5, MPRP Project Scope and Natural Resources Maps for the Town of Prospect

Exhibit 6, MRPP Project Scope and Natural Resources Maps for Prospect Shorelands

The CMP corridor overlaps a very small portion of the Stream Protection District on Main Stream. Neither existing nor proposed transmission lines actually cross the district, and no project work is proposed in the district. (See Exhibit 6, Map 4)

While the transmission lines span the remaining shoreland zoning districts on the South Branch of Marsh River and Hawes Stream, structure removal or reconstruction will occur in only two of the districts, as summarized in the following table.

MPRP Development Summary by Shoreland Zoning District

Shoreland Zoning District	Structures Removed	Rebuilt Structures	Temporary Access Ways
South Branch Marsh River Resource Protection District	2	2	Yes
Hawes Stream Stream Protection District west of Bangor Road	0	0	No
Hawes Stream Stream Protection District west of Partridge Road	1*	0	Yes

*Structure is located approximately 75 feet from the stream on the edge of the shoreland zoning district boundary.

South Branch Marsh River Resource Protection District *(Exhibit 6, Maps 1A and 1B)*

This district includes land within 250 feet of the edge of the tidal wetlands that abut the river. The existing transmission line will be removed and rebuilt about 20 feet south of its current location.

On the east side of the river, one existing two-pole structure will be removed and one new single pole structure will replace it. The new structure will be set back approximately 195 feet from the wetland edge, farther from the wetland than the existing structure. A temporary access way will provide access to the pole sites from the east.

One the west side of the river one existing two-pole structure will be removed and one new single pole structure will replace it. The new structure will be set back approximately 110 feet from the wetland edge. A temporary access way will provide access to the pole sites from the west.

As explained in the discussion of Ordinance, Section 15(L) below, transmission line poles are specifically allowed in the Resource Protection District, and there is no reasonable alternative location for the structures on either side of the river.

Hawes Stream Stream Protection District west of Bangor Road *(Exhibit 6, Map 2)*

This district includes land within 75 feet of Hawes Stream. While the rebuilt transmission line will span the district about 20 feet farther south than the existing line, no transmission line structures will be removed or rebuilt within the district.

Hawes Stream Stream Protection District west of Partridge Road *(Exhibit 6, Map 3)*

This district includes land within 75 feet of Hawes Stream. The existing transmission line will be removed and rebuilt about 20 feet south of its current location.

On the north side of the stream one existing two-pole structure located about 75 feet from the stream will be removed. The new single pole structure will be set back approximately 95 feet from the stream and outside of the shoreland zone. A temporary access way will provide access to the pole sites from the north.

On the south side of the stream, no transmission line structures will be removed or rebuilt within the district.

Shoreland Zoning Land Use Standards

(Section 15 of the Shoreland Zoning Ordinance)

A. Minimum Lot Standards

Not applicable.

B. Principal and Accessory Structures

Not applicable.

C. Piers, Docks, Wharfs, Bridges, etc.

Not applicable.

D. Campgrounds

Not applicable.

E. Individual Private Campsites

Not applicable.

F. Commercial and Industrial Uses

Not applicable.

G. Parking Areas

There will be no parking areas associated with the project.

H. Roads and Driveways

There will be no new permanent roads or driveways associated with the project, although CMP will continue to maintain access points and ways suitable for routine and urgent maintenance by its own vehicles. Temporary access ways, which are not considered roads or driveways, and will not add any impervious surface area, will be established for use during the construction phase. This will be an ongoing process as access will be established to areas undergoing immediate construction. Determinations surrounding the exact nature of the construction of these temporary access ways will be made by the contractor in consultation with an environmental representative. All access paths are temporary and will be removed once construction is complete.

Temporary access way will be established for general access to the corridor for construction purposes. These temporary access ways will be in place for more than one growing season, but will be removed once all aspects of construction in that area are complete. Access to pole sites, either for removal or construction, will be achieved by temporary access ways which will be in place for no more than one growing season. Areas where soils have been disturbed will then be mulched with hay. Vegetation will be allowed to reestablish itself once the temporary access ways have been removed.

Exhibit 6, MRPP Project Scope and Natural Resources Maps for Prospect Shorelands illustrates the location of proposed temporary access ways.

Measures will be taken to avoid and minimize the impact of access ways on streams and wetlands through the use of crane mats, temporary bridges, geo-textile fabrics, and

culverts, when necessary. Appropriate erosion controls will be installed. There will be no routine grubbing (removal of root systems) within wetland crossings; however, occasional root removal and minor grading may be required to ensure mat stability and construction access safety. 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 are avoided.

Access ways will be installed in accordance with CMP's, *Environmental Guidelines for Construction and Maintenance Activities on Transmission Line and Substation Projects (Exhibit 7)*. The Environmental Guidelines provide greater detail about the standards and practices used to meet resource protection standards and address the construction of access ways; stream and wetland crossings (bridges, culverts, mats, etc.); surface water diversions; structural and nonstructural erosion control measures (water bars, mulch, etc.); and site restoration standards.

I. Signs

There will be no signage associated with the project.

J. Storm Water Runoff

The permanent conversion of vegetated areas to impervious surfaces in the corridor will be limited to the transmission line poles themselves. Most single pole structures have a cross sectional area of approximately 13 square feet. Because the reconstructed transmission line employs single-pole rather than two-pole structures, the impervious area will be reduced.

Vegetation in the corridor will continue to be maintained every 4-5 years to promote the "brush" type of cover that currently exists.

K. Septic Waste Disposal

Not applicable.

L. Essential Services

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

A guiding principle in the design of the MPRP transmission line upgrades has been to utilize existing transmission line corridors to the maximum extent possible. Co-location of transmission lines has multiple benefits, including minimizing impacts to communities, individual property owners and the environment. In Prospect, the reconstruction of Section 86 will occur entirely within the existing right-of-way and within approximately 25 feet of the transmission line that it replaces. No additional acquisition is required to accommodate the upgrade.

(2) Installation of essential services in a Resource Protection or Stream Protection District is permitted where no reasonable alternative exists and where facilities are located to minimize adverse impacts on surrounding uses and resources.

The reconstruction of Section 86 in a new location will require rebuilding two structures in the South Branch Marsh River Resource Protection District to replace two existing structures located in the district. CMP has attempted to site structures so that none are located within resource protection areas. However, because of the size and location of the river and wetlands to be spanned and the desire to locate the reconstructed transmission line within the existing corridor, these structures cannot be sited outside of this shoreland district.

There are no reasonable alternatives for locating the two structures outside of these areas without considering a new corridor or considerably taller structures, which would have greater impacts. In each case, the new single pole structure will occupy a smaller ground area than the two-pole structure being replaced: 13 square feet compared to 25 square feet. The poles will be located as follows:

- New structure # 86-35, set back 195 feet from the wetland, will replace existing structure #86-39, set back 165 feet from the wetland.
- New structure # 86-36, set back 110 ft. from the wetland, will replace existing structure #86-40, set back 120 feet from the wetland.

No rebuilt structure will be located within the important plant and animal habitat located in the area, as illustrated in Exhibit 6, Maps 1A and 1B. All construction will be dome in accordance with CMP's Environmental Guidelines (Exhibit 7) to ensure that sensitive resources are protected.

In terms of visual impacts, a visual assessment for the MPRP applications to the Maine Department of Environmental Protection, copies of which have been provided to the Town of Prospect, concluded that the proposed transmission line upgrade should not unreasonably interfere with existing scenic and aesthetic uses of scenic resources within its viewshed and should not have an unreasonable adverse effect on the scenic character of the surrounding area.[2]

The tops of some of the new taller structures may be visible from the South Branch Marsh River in the Howard L. Mendall Wildlife Management Area; however, these should be screened by the surrounding topography and vegetation.

There will be no expansion of the corridor. As such, additional clearing of trees to make use of an expanded corridor is not necessary, and increased visibility of the corridor is not anticipated. In most situations, the transmission line structures will be seen in the context of 50 to 70 foot trees that line the corridor. The change from two-pole to single-pole structures will also decrease the overall number of poles seen in the transmission line corridor.

[2] Maine Power Reliability Program Site law Application, Chapter 6, Visual Quality and Scenic Character

M. Mineral Exploration and Extraction

Not applicable.

N. Agriculture

Not applicable.

O. Timber Harvesting

Not applicable.

P. Clearing of Vegetation for Development

The corridor has already been cleared of mature trees and woody vegetation that could encroach on the conductor safety zone and no additional clearing of this type is required. Clearing activities will include the removal of capable saplings within the ROW and danger trees (e.g., dead or dying trees or trees oriented in a manner that poses a threat to the safety and reliability of the transmission lines) along the edge of the existing maintained corridor. The removal of other vegetation and ground cover will occur only as needed to install a structure, to create access to the corridor, and for puller/tensioner sites. Restoration work following construction is designed to ensure that areas disturbed during construction will be revegetated as required by CMP's Environmental Guidelines (Exhibit 7).

Q. Erosion and Sedimentation Control

Except for the immediate area at the base of transmission line structures, there is no impervious surface area associated with the transmission line reconstruction. Because the reconstructed Section 86 will use single pole rather than two-pole structures, the amount of impervious area will be reduced. The amount of ground disturbance associated with the MPRP project will be limited to the immediate sites of structure placement and temporary equipment access routes needed to carry out the project.

CMP's Environmental Guidelines (Exhibit 7) provide the written soil erosion and sedimentation control plan for transmission line projects. The guidelines include specifications for the installation and implementation of soil erosion and sedimentation control measures for CMP personnel, their representatives and contractors with a single, cohesive set of erosion control specifications for the MPRP. The goals of these measures are to minimize soil movement and loss, preserve the integrity of environmentally sensitive areas, and maintain existing water quality. The manual, 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.

All bid packages and contracts for work performed on the MPRP will include these guidelines. CMP representatives will ensure that the procedures contained in this manual

are followed by regularly inspecting all work and requiring corrective action when necessary.

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 structures need to be constructed, soil borings will be conducted and the foundations will be designed in accordance with soil characteristics on site.

S. Water Quality

In addition to the erosion and sedimentation control measures that prevent siltation of waters, CMP observes restrictions on the use of fuels and herbicides within transmission corridors.

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. All contractors and subcontractors working on behalf of CMP are required to comply with CMP's *Environmental Control Requirements for Contractors and Subcontractors – Oil and Hazardous Material, Exhibit 8*. These require that storage, transport, and use of oil, hazardous materials and wastes be in accordance with best management practice and applicable local, state, and federal regulations; that uncontrolled spills or releases to the environment be avoided; and that sufficient spill cleanup and containment supplies be maintained on-site to control releases of oil, hazardous materials or wastes. The requirements also include specific procedures for spill reporting.

CMP does not use herbicides within 25 feet of any waterbody or wetland with standing water. 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. Crew forepersons are certified by the Maine Pesticide Control Board, and all herbicides are EPA registered. The selective use of herbicides within the transmission line corridor does not pose a threat to water quality.

T. Archaeological and Historic Resources

Following consultation with the Maine Historic Preservation Commission (MHPC), CMP conducted extensive surveys of potential pre-historic and historic archaeological sites and historic architectural sites along the project corridor. No sites eligible for the National Register of Historic Places were identified in areas of transmission line reconstruction in Prospect shoreland zones.

Shoreland Zoning Planning Board Approval Criteria

(From Section 16 D of the Shoreland Zoning Ordinance)

The proposed use will:

1. Maintain safe and healthful conditions

The proposed project will maintain the same safe and healthful conditions which are already present in the transmission line corridor. The transmission line corridor and the structures 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 structures 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.

A health concern that is sometimes expressed revolves around the electric and magnetic fields (EMF) produced by transmission lines. These fields are produced by any electric equipment or anything that carries electric current. The World Health Organization and numerous other scientific agencies around the world have studied the issue extensively. These studies have been unable to establish that electric and magnetic fields produced by transmission lines such as those being proposed as part of the MPRP cause any adverse health effects. There is no scientific basis to project any adverse health effects as a result of the electric and magnetic fields produced by transmission lines associated with this project.

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

Because of the standards and practices CMP employs in the construction and maintenance of transmission lines, described above in relation to each Land Use Standard and supported by CMP's Environmental Guidelines (Exhibit 7), the transmission line project will not result in water pollution, erosion, or sedimentation of surface waters.

3. Adequately provide for the disposal of all wastewater.

There will be no wastewater disposal required for this project.

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

The transmission line corridor crosses the upstream limit of the South Branch of the Marsh River, which is characterized by tidal wetlands, mudflats, and open water. The area includes both tidal and inland wading bird and waterfowl habitat as well as unusual and rare plant communities

associated with brackish water: spongy arrow-head *(Sagittaria calycina var. spongiosa);* estuary bur-marigold *(Bidens hyperborean);* and marsh bulrush *(Bolboschoenus novae-angliae).* The corridor abuts the southern end of the Howard L. Mendall Wildlife Management Area (WMA), which is managed by the Maine Department of Inland Fisheries and Wildlife (MDIF&W) for migratory waterfowl, recreational boating, trapping, hunting, and wildlife observation.

No transmission line structures will be removed from or reconstructed within these habitats, and there will be no temporary access ways located within these habitats.

Wetlands are associated with many fish and wildlife habitat, and wetlands occur within each of the freshwater stream shorelands crossed by the transmission line corridor. The wetland on the south shore of Hawes Stream west of Bangor Road also includes a vernal pool, a portion of which is located in the shoreland zone.

No transmission line structures will be removed from or reconstructed within wetlands in the shoreland zoning districts, and there will be no temporary access ways located within these wetlands.

The entire Marsh River watershed is considered critical habitat for the Gulf of Maine Distinct Population Segment of Atlantic salmon (GOM DPM), a federal endangered species. The transmission line corridor crosses this habitat at the South Branch of Marsh River, Hawes Stream and Main Stream.

All project work within the corridor will be done in accordance with the CMP's Environmental Guidelines (Exhibit 7) and Environmental Control Requirements (Exhibit 8), which will prevent adverse impacts to the river and streams. In addition, consultation with fish and wildlife management agencies (Maine Department of Inland Fisheries and Wildlife, National Marine Fisheries Service, US Fish and Wildlife Service) will continue throughout the federal and state environmental permitting process to ensure protection of this habitat.

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

The project will take place entirely within the existing corridor, which has already been substantially cleared of capable vegetation. The corridor will continue to be maintained for the type and degree of cover that currently exists. Shore views may be enhanced from some viewpoints by the change from two-pole to single-pole structures. Thus the project will not significantly affect visual points of access to waters, and will have no impact on actual points of access to waters.

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

As indicated under Land Use Standard T above, CMP conducted extensive surveys of potential pre-historic and historic archaeological sites and historic architectural sites along the project corridor. No sites eligible for the National Register of Historic Places were identified in areas of transmission line reconstruction in Prospect shoreland zones.

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

Transmission line structures include no floors or openings that require a one-foot elevation above the floodplain. One existing two-pole transmission line structure (#86-40) will be replaced by one single-pole structure (#86-36) in the flood plain on the west shore of the South Branch of Marsh River. The rebuilt structure will be setback approximately 295 feet from the nearest point on the river, and 190 feet from the nearest point on Carley Brook. Because the rebuilt structure will occupy a smaller area than the existing structure, it offers less interference with flood flow than the current structure.

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, Land Use Standards.

EXHIBITS

Exhibit 1

Maine Power Reliability Program Project Scope Map

Exhibit 2

Existing and Proposed Transmission Line Cross Sections

Exhibit 3

Reconstructed Transmission Line Structure Information

Exhibit 4

Prospect Shoreland Zoning Map with CMP Transmission Line Corridor

Exhibit 5

MPRP Project Scope and Natural Resources Maps for the Town of Prospect

Exhibit 6

MRPP Project Scope and Natural Resources Maps for Prospect Shorelands

Exhibit 7

CMP Environmental Guidelines for Construction and Maintenance Activities on Transmission Line and Substation Projects

Exhibit 8

Environmental Control Requirements for Contractors and Subcontractors of Central Maine Power Company – Oil and Hazardous Material

Exhibit 9

Right, Title or Interest in Transmission Line Corridor

Exhibit 10

Transmission Line Corridor Abutters