



MAINE POWER RELIABILITY PROGRAM

A CENTRAL MAINE POWER COMPANY PROGRAM

CHINA, MAINE CONDITIONAL USE PERMIT APPLICATION

**Section 3024 Transmission Line Construction
Section 258 Transmission Line Rebuild
and
Section 257 Transmission Line Partial Relocation**

Prepared for:

Central Maine Power Company
83 Edison Drive
Augusta, Maine 04336

Prepared by:



TRC Engineers, LLC
249 Western Avenue
Augusta, Maine 04330

May, 2011

DRAFT

Agent Authorization Letter

Application Form

TOWN OF CHINA
APPLICATION FOR A PERMIT FROM THE PLANNING BOARD

APPLICANT Central Maine Power Company PHONE (HOME) NA
MAILING ADDRESS c/o Douglas Herling (WORK) (207) 626-9547
83 Edison Drive,
Augusta, ME 04330

PROPERTY OWNER Central Maine Power Company PHONE (HOME): NA
MAILING ADDRESS c/o Douglas Ide, TRC (WORK): (207) 620-3836
14 Gabriel Dr.
Augusta, ME 04330
PROPERTY ADDRESS CMP Transmission Line Corridor. See Exhibits 1 and 3.

EXISTING USE OF PROPERTY Transmission of bulk electricity

PROPERTY IS ZONED AS: X RESOURCE PROTECTION X SHORELAND X RURAL
X OTHER X (STREAM PROTECTION)

IS THIS PROPERTY PART OF A SUBDIVISION? No NAME OF SUBDIVISION NA

PROPOSED USE(S): PLEASE (X) OR () ALL THAT APPLY.

- SUBDIVISION
- MULTI-FAMILY RESIDENCE
- COMMERCIAL STRUCTURE - PROPOSED USE: _____
- DOCK (TEMPORARY, PERMANENT)
- TIMBER HARVEST (PLEASE MARK ALL THAT APPLY)
- RESOURCE PROTECTION, SHORELAND, STREAM PROTECTION,
EXCEEDS 40%
- FILLING OR OTHER EARTH-MOVING ACTIVITIES OF **LESS THAN** 100 CUBIC
YARDS
- FILLING OR OTHER EARTH-MOVING ACTIVITIES OF **GREATER THAN** 100
CUBIC YARDS
- OTHER Construction of one new transmission line, rebuild of an existing line, and partial
relocation of sections of existing line.

TYPE OF SEWAGE DISPOSAL (NA EXISTING, NA PROPOSED)

LOT INFORMATION:

| | |
|---|-------------------|
| <u>320</u> ACRES X 43,560 SQUARE FEET = TOTAL SQUARE FEET OF LAND (A) | <u>14,341,536</u> |
| PRESENT SQUARE FEET OF ALL BUILDINGS (SEE TAX CARD) | <u>0</u> |
| SQUARE FOOTAGE OF PROPOSED STRUCTURE | <u>4,186</u> |
| TOTAL SQUARE FEET (PRESENT AND PROPOSED) (B) | <u>4,186</u> |
| PERCENT OF COVERAGE (B DIVIDED BY A) | <u>0.0003%</u> |

ON THE REVERSE OF THIS APPLICATION, YOU MUST SKETCH YOUR PLANS.

See Exhibits D and E, beginning at page **Error! Bookmark not defined.****Error! Bookmark not defined.**, for cross sections and maps of the proposed project.

THE APPLICANT HEREBY CERTIFIES THAT ALL INFORMATION CONTAINED IN THIS APPLICATION IS TRUE AND CORRECT.

DATE: _____ SIGNATURE: _____

REVISED 6/2005

THE FOLLOWING IS A LIST OF OTHER INFORMATION THAT YOU **MUST** FURNISH. IF YOU DON'T KNOW THE SETBACKS AND/OR DIMENSIONS, **YOU MUST GO OUT AND MEASURE** BEFORE COMPLETING THIS APPLICATION!

| | | | |
|---------------|---------------|----------------|-------|
| ROAD SETBACK | _____ | ROAD FRONTAGE | _____ |
| SIDE SETBACKS | _____ & _____ | WATER FRONTAGE | _____ |
| REAR SETBACK | _____ | WATER SETBACK | _____ |

See #15, page 13.

PLEASE SKETCH YOUR LOT WITH ALL DIMENSIONS, SHOWING ANY BUILDINGS AS THEY APPEAR ON THE LOT, ALONG WITH PROPOSED ADDITIONS, DECKS, ACCESSORY BUILDINGS, OR GARAGES. IN ADDITION TO THE ABOVE LIST, PLEASE SHOW WHERE ANY OF THE FOLLOWING ARE LOCATED ON THE PROPERTY: WELL & SEPTIC, ANY WETLANDS, RIGHTS-OF-WAY, DRIVEWAYS, NORTH ARROW, AND ANYTHING ELSE WHICH MIGHT ASSIST THE PLANNING BOARD IN DETERMINING WHERE YOUR NEW BUILDING/ADDTION WILL BE LOCATED ON YOUR PROPERTY.

No buildings, wells, or septic are proposed. See the cross sections and maps in Exhibits 2, 3, and 4 for the information requested.

PLEASE BE SURE TO SUBMIT THE FOLLOWING WITH YOUR COMPLETED APPLICATION: THE NAMES AND ADDRESSES OF ABUTTING PROPERTY OWNERS, A COPY OF YOUR HHE-200, A COPY OF ANY OFFICIAL DECISION (OR NOTE PENDING APPLICATION) OF OTHER FEDERAL, STATE OR LOCAL AGENCIES REGARDING THE USE OF THIS PROPERTY, AND ATTACH ANY OTHER SUPPLEMENTAL INFORMATION OR EXPLAIN ANY POINT THAT NEEDS CLARIFICATION.

The list of names and addresses of abutting property owners is attached as Exhibit 7.

The MPRP has received permits from the Maine Department of Environmental Protection (Site Location of Development and Natural Resource Protection Act), the Maine Public Utilities Commission (Certificate of Public Convenience and Necessity), and the U.S. Army Corps of Engineers. A CD containing copies of these approvals is included with this submittal.

FOR CEO USE ONLY:

FEE(S) COLLECTED: _____

DATE COLLECTED: _____

Town of China, Maine Conditional Use Application Maine Power Reliability Program

Introduction

The project described in this application requires Conditional Use Approval from the Planning Board. The project passes through the Rural District and the Shoreland Zone. The application is divided into the following parts.

- Part A: Project Overview and Description, beginning on page 1.
- Part B: Conditional Use Permit Application Standards, starting on page 6.
- Exhibits: Beginning on page 18.

The Maine Public Utilities Commission has issued a Certificate of Public Convenience and Necessity (CPCN) and The Maine Department of Environmental Protection has issued a Site Location of Development and Natural Resources Protection Act permit for the proposed project. The United States Army Corps of Engineers has also issued a permit for the project.

Part A: Project Overview and Description

The Maine Power Reliability Program

The Maine Power Reliability Program (MPRP) is a project by Central Maine Power Company (“CMP”) to upgrade Maine’s bulk power system. The vast majority of Maine’s bulk power transmission system was placed into service in the early 1970s and is now reaching the limits of its ability to meet the growing electrical demand of Maine customers. Since the last major transmission infrastructure was completed almost 40 years ago, the patterns of both available generation and customer load have shifted significantly. For example, population has become more concentrated in the southern part of the state, while the generation needed to serve that load is now more distant and dispersed. When these pattern changes are combined with the increasing peak demand, the current transmission infrastructure in Maine will, in very few years, become inadequate. In addition, the reliability and security standards mandated by law and administered by the North American Electric Reliability Corporation (NERC), the Northeast Power Coordinating Council, Inc. (NPCC), and ISO New England (ISO-NE) have changed significantly in recent years. Central Maine Power Company must upgrade its bulk power system with this proposed project in order to meet the mandatory standards and to provide reliable electric service to Maine customers into the future.

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

After completing the needs assessment, the MPRP team went to work to study potential transmission and non-transmission solutions. CMP ultimately selected a primarily transmission solution (a small geographic area known as the South Portland loop will be addressed through non-transmission alternatives) based on a number of factors, including electrical performance under various forecasts of future conditions, cost effectiveness, and impacts to landowners and Maine's environment. The proposed solution consists of a network of 345 kV and 115 kV transmission lines and associated substations throughout CMP's service territory where particular needs were identified. The proposed transmission solution ranges from Eliot in the south, Rumford in the west, Searsport in the east, and Orrington and Pittsfield to the north. In all, MPRP will encompass nearly 75 Maine towns. The project has been exhaustively reviewed and been approved by the Maine Public Utilities Commission (PUC), the Maine Department of Environmental Protection (DEP), and the United States Army Corps of Engineers (ACOE). Copies of these approvals (on CD) have been sent to the Town along with this application.

Description of the Project in China

Existing Conditions

CMP's existing transmission corridor in China runs roughly parallel to, and east of, Routes 32 and 202. The right-of-way covers approximately 10 miles and 288 acres, extending from Albion southwesterly through China and into Windsor.

Currently there are two transmission lines within the corridor: Sections 67 and 84. Section 67 is a 115 kV line mounted on wooden single poles, which typically are 75 feet tall and 50 feet from the east side of the corridor. Section 84 is also a 115 kV line, mounted on wooden H-frame structures, which typically are 45 feet tall. Section 84 runs down the west side of the corridor, typically centered 75 feet from the edge of the right-of-way. The right-of-way itself is 225 feet wide for its entire length through China. Cross sections for the existing transmission lines are included in Exhibit 2.

Proposed Project

The project in China involves:

- Purchasing an additional 50 feet of right-of way on the east side of the corridor from the Albion town line to a point south of the Alder Park Road, increasing the width of the right-of-way in this area from 225 feet to 275 feet (see Exhibits 2 & 3). CMP has purchased or has options to purchase all of the needed right-of-way in this area (see Exhibit 6).
- Purchasing an additional 40 feet of right-of-way on the west side of the corridor from a point south of the Alder Park Road to the Windsor town line, increasing the width of the right-of-way in this area from 225 feet to 265 feet (see Exhibits 2 & 3). CMP has purchased or has options to purchase all of the needed right-of-way in this area (see Exhibit 6).
- Removing Section 84, a 115 kV transmission line.

- Constructing a new 345 kV line, to be known as Section 3024, on the west side of the corridor in the approximate location of the existing Section 84 (which, as noted above, will be removed to accommodate the new Section 3024). 93 new structures will be installed. The structures will be made of wood and have an “H-frame” design. They will be typically 75 feet above ground (see Exhibit 2).
- Rebuilding Section 67, a 115 kV transmission line located roughly in the center of the corridor, and renaming it Section 258. Section 258 will utilize 41 of the existing Section 68 structures. The rest of Section 258 will be installed on 66 new wooden single-pole structures which will typically be 75 feet above ground (see Exhibit 2)..
- Constructing a new 115kV transmission line, to be known as Section 257, on the eastern side of the corridor. Section 257 will use 44 of the existing Section 67 structures and will otherwise be installed on 66 new single-pole wooden structures, which will be typically 75 feet above ground (see Exhibit 2). .
- In all a total of 225 new structures will be installed, 129 existing structures will be removed, and 85 existing structures will remain in place and be re-used. In the end there will be a total of 310 transmission line structures within the corridor in China.

Clearing and Accessways

Clearing of vegetation will be required within the expanded portions of the corridor to ensure that the project meets federal reliability and safety standards. The amount of clearing will be limited to that which is necessary for development of the project, and is generally limited to the removal of trees and saplings that are capable of growing tall enough to interfere with the transmission lines (so-called “capable species”). In all approximately 60 acres of land will be cleared of trees within the project area.

Occasionally more mature trees located adjacent to the right-of-way may have to be removed if they are large enough and positioned in such a manner that they could fall onto the conductor, thereby posing a severe reliability risk. These instances, however, are relatively rare.

During utility line construction, trees are removed using traditional forest harvesting equipment. Non-capable species are then allowed to grow to ensure that the corridor is vegetated, which prevents erosion and provides wildlife habitat. No grubbing (i.e., stump removal) will take place. Over a relatively short period of time (generally within one year), the newly cleared portion of the right-of-way will resemble the early-successional habitat type that currently exists in the right-of-way.

Existing accessways will be used by construction crews to the extent possible, but new, temporary accessways will need to be built in some areas. These accessways will be located in order to avoid or minimize impacts on wetlands. They will be removed after construction is complete, and the native shrubs will be allowed to regenerate.

Zoning Districts Impacted

The proposed project will traverse the Resource Protection, Shoreland, Stream Protection, and Rural Districts. The MPRP requires a Conditional Use Permit from the Planning Board in all districts in which it is located.

Shoreland Zoning Districts

- 1. W43N, a wetland and waterfowl and wading bird habitat associated with the inlet of Dutton Pond: 250' Resource Protection and 250' Shoreland District (Exhibit 4, Maps 1 & 2).**

Six structures will be removed from this district. Three of them are associated with Section 84 and three are associated with Section 67. Two Section 3024 structures, three Section 258 structures, and three Section 257 structures (for a total of eight new structures) will be installed within the District. Within the wetland itself one Section 84 structure will be removed while one Section 3024 and one Section 257 structure will be installed.

- 2. W44N, a wetland just south of the Dutton Road: 75' Resource Protection District and 175' Shoreland District (Exhibit 4, Maps 2 & 3).**

Shoreland District: Install two Section 257 structures and one Section 3024 structure; reuse one Section 67 structure, to become Section 258. Resource Protection District: Remove one Section 84 structure. Within the wetland itself, there are four existing structures. Three of these will be removed (one from Section 67 and two from Section 84). One existing Section 67 structure (#285) will remain and become part of Section 257. Three new structures will be installed within the wetland, two for Section 3024, one for Section 257, and one for Section 258.

- 3. A Stream Protection District at Hunter Brook (Exhibit 4, Map 4).**

There are no structures existing or proposed within 75 feet of Hunter Brook. A temporary accessway will be created within the district, crossing Hunter Brook. See Exhibit 8 for accessway construction and stream crossing practices.

- 4. W32N, a wetland just west of Evans Pond: 75' Resource Protection District (Exhibit 4, Map 5).**

There are two existing structures within this district. One, associated with Section 84, will be removed and one Section 67 Structure will be re-used as part of Section 258. One new structure will be installed within the district, associated with Section 257 (#108). One new structure, Section 257 #109, will be installed within the wetland.

5. W23N, a wetland midway between the Cross Road and the Alder Park Road: 75' Resource Protection and 175' Shoreland District (Exhibit 4, Maps 7 & 8).

There are no existing or proposed structures within the Resource Protection District. Two existing Section 67 structures are within the Shoreland District. These two structures will remain and become part of Section 258. One Section 3024 structure (#95) will be installed within the Shoreland District. One Section 257 structure (#120) will also be installed within the Shoreland District. Two Section 84 structures will be removed from the wetland. One Section 3024 structure and two Section 257 structures will be installed within the wetland. One Section 67 structure will remain within the wetland and become part of Section 258.

6. A Stream Protection District just south of the Alder Road. (Exhibit 4, Map 9)

There is one Section 84 structure within this district which will be removed (#182). There will be no structures installed within this district. A temporary access way will cross the stream. Please see Exhibit 8 for stream crossing practices.

7. W15N, a wetland associated with a tributary of Meadow Brook: 75' Resource Protection District (Exhibit 4, Maps 10, 11, & 12).

There are five existing structures within this district, three of which will be removed as part of the removal of Section 84. The other two existing structures within the district are Section 67 structures which will remain and become part of Section 257. Two new structures for Section 3024 will be installed within the district. Within the wetland area itself two Section 84 structures will be removed, and one Section 3024 structure and two Section 258 structures will be installed.

8. A Stream Protection District at a tributary of Meadow Brook (Exhibit 4, Map 12).

Two existing Section 84 structures within this district will be removed. One Section 258 structure will be installed. One Section 67 structure will remain and become part of Section 257. Temporary accessways will be created within the district, and will cross the stream. See Exhibit 8 for accessway construction and stream crossing practices.

9. A 250' Shoreland District associated with a tributary of the West Branch of the Sheepscot River (Exhibit 4, Maps 14, 15, & 16).

There will be seven structures removed from this district, all associated with the removal of Section 84. There are five existing structures associated with Section 67 within this district, all of which will become part of Section 257. Three Section 3024 structures and four Section 258 structures will be installed within the district.

The remainder of the project is located within the Rural District. Within this district a total of 109 structures will be removed and 196 structures will be installed.

Part B: Conditional Use Permit Application Standards

Town of China Conditional Use Permit Application

Conditional Use Permits: The Planning Board shall approve a Conditional Use Application unless it makes one or more of the following written findings with respect to the proposed use:

- 1. The proposed use does not meet the definition or specific requirements set forth in this Ordinance or will not be in compliance with applicable State or Federal laws.**

Findings and statement of reasons: The proposed use is permitted in accordance with the *China Land Development Code, Chapter 2, Land Use Ordinance, Section 4, USES, Item# 22*, regarding the Essential Services for the purposes of electric power transmission. The property is located in a Rural and Shoreland Zoning District at the location of CMP transmission line corridor (see Exhibits 1, 3, & 4) in China, Maine. China Tax Map 3, Lot 13 *et seq.* identifies the property. The proposal is permitted with a conditional use permit from the Planning Board.

Response:

Pursuant to a letter from China Planning Board Chair Ronald Breton, dated February 28, 2011, the project is an allowed use requiring a Conditional Use Permit from the town. A copy of the letter is attached as Exhibit 9. The MPRP has received permits from the United States Army Corps of Engineers and Maine Department of Environmental Protection (Site Location of Development and Natural Resource Protection). The Maine Public Utilities Commission (MPUC) has issued a Certificate of Public Convenience and Necessity (CPCN) for the MPRP.

- 2. The proposed use will create fire safety hazards by not providing adequate access to the site, or to the buildings on the site, for emergency vehicles.**

Response:

No buildings are proposed within the corridor. In general, the transmission corridor will not require access by emergency vehicles. Nonetheless, CMP maintains access points and ways suitable for routine and urgent maintenance by its own vehicles and if necessary by emergency vehicles. The company provides training to local emergency responders on request. As a practical matter, there is no difference in safety procedures for incidents with the existing lines and the proposed upgrades; the standards and practices are the same.

- 3. The proposed exterior lighting will create hazards to motorists traveling on adjacent public streets, or is inadequate for the safety of occupants or users of the site, or will damage the value and diminish the usability of adjacent properties.**

Response:

As with the existing service corridor, there will be no exterior lighting associated with the project.

- 4. The provisions for buffers and on-site landscaping do not provide adequate protection to neighboring properties from detrimental features of the development.**

Response:

The primary means by which the project will provide adequate protection to neighboring properties is through the use of the existing service corridor, which already contains structures of a similar bulk and style and is in general heavily vegetated.

In order to maintain required minimum operational safety clearances, vegetation within the corridor will be managed to ensure that it generally does not grow taller than ten feet. Natural buffering between the corridor and abutting properties, consisting primarily of native scrub-shrub non-capable species (i.e., species not capable of growing greater than ten feet in height, typically trees), will be maintained. Any areas that are cleared of capable species will be characterized by the same scrub-shrub environment that exists today. This natural vegetation will provide adequate buffering between the project area and neighboring properties, while also meeting CMP's and industry standards for safety and reliability.

- 5. The proposed use will have a significant detrimental effect on the use and peaceful enjoyment of abutting property as a result of noise, vibrations, fumes, odor, dust, glare or other cause.**

Response:

There will be no noise, vibrations, fumes, odors, dust, glare or other impacts generated by the site, which would have a significant detrimental effect on the use and peaceful enjoyment of abutting property owners.

Dust

During construction, dust will be controlled with calcium chloride as conditions warrant.

Noise and Vibration

The transmission line conductors (wires) can give rise to "audible noise" (AN). The levels at the edges of rights-of-way in fair weather are below the noise standard established by the Maine Department of Environmental Protection. While higher levels can occur during foul

weather, those levels will still be below DEP standards, and will be masked by the sound of wind and rain.

Fumes and Odors

The clearing and construction phases of the project will not create odors noticeable beyond the property lines. Exhaust generated from construction equipment will be temporary. There are no odors associated with the operation of an electrical transmission line.

Glare

As noted above, there will be no exterior lighting associated with the project, and there are no reflective materials associated with the project.

- 6. The provisions for vehicular loading and unloading and parking, and for vehicular and pedestrian circulation on the site and onto adjacent public streets will create hazards to safety.**

Response:

There will be no new permanent roads or driveways associated with the project, other than CMP-maintained access points and ways suitable for routine and urgent maintenance by its own vehicles. Once construction is completed, there will be no additional traffic generated by the project. The CMP-maintained access points and ways used by the company for maintenance of the proposed lines are similar to those CMP currently uses for maintenance of its existing 115 kv transmission lines in China, and will not create hazards to safety.

- 7. The proposed use will have a significant detrimental effect on the value of adjacent properties which could be avoided by reasonable modification of the plan.**

Response:

The MPRP does not represent a new use and therefore will not have a significant effect on the value of adjacent properties. CMP acquired the property for the existing transmission line corridor in 1940 and 1955. The corridor and its associated infrastructure have been in place for several decades, and has therefore had a long association with adjacent properties. The proposed structures are of a similar bulk and style to the existing structures. As a result impacts, if any, to the value of adjacent properties will be minimal.

- 8. The design of the site will result in significant flood hazards or flood damage or is not in conformance with applicable flood hazard protection requirements.**

Response:

As depicted in the attached maps, only 15 of the proposed structures are planned to be within the 100-year floodplain. In addition, 6 structures will be removed from the 100-year

floodplain. This represents an increase of less than 200 sq. ft. of additional impervious surface area to floodplain areas, each pole representing roughly the equivalent of a mature tree. Because of the dispersed nature of the transmission lines and the minimal additional impervious surface associated with the project, it will not cause or increase flooding and will not pose a flood hazard to any neighboring structures. Any grading or other construction activity on the site will not affect the natural drainage ways or negatively impact current hydrological systems. Furthermore, the project will not affect runoff/infiltration relationships. An application for a floodplain permit is included as part of this application.

9. Adequate provision has not been made for disposal of wastewater, or solid waste, or for the prevention of ground or surface water contamination.

Response:

Disposal of Wastewater

No wastewater will be generated by the project.

Disposal of Solid Waste

As described below, CMP has made adequate provisions for the disposal of solid waste.

The existing wooden 115 kV H-frames will either be donated to private entities or shipped to an approved special waste landfill for disposal. CMP requires recipients of surplus treated wood to sign a Pole Transfer Agreement, in which they agree to utilize the treated wood beneficially in accordance with Maine Regulations Chapter 418 (Beneficial Reuse), as well as any other applicable federal, state, and local laws. This Agreement also obliges recipients to accept full responsibility for the use and proper disposal of these treated wood items. In this way, CMP alerts treated wood recipients of management requirements so that this material is utilized in a way that does not adversely affect any natural resources.

Wood cut and cleared from the MPRP right of way will be limited to capable species, i.e., tree species that grow tall enough that they are capable of growing into the safety zone beneath conductors (wires). All merchantable wood will be hauled off and sold for lumber or firewood. All other woody material will be managed in compliance with the Maine Slash Law (12 M.R.S.A. § 9331-9336). All other wood waste generated in the process of land clearing will be shipped offsite to be used as fuel at an appropriate licensed boiler, provided to a licensed chip processing plant, or donated to a facility to be utilized in the production of erosion control mulch.

Construction will generate other types of debris. Waste electrical system and construction process components such as scraps of cable, cable spools, and ceramic insulators will be generated. Most of these materials will be recycled or reused. Construction equipment will generate small amounts of waste plastic containers for oils and lubricants, broken filters and belts, and damaged tires. Construction and managerial staff will generate some waste such as

paper, bottles, cans, plastics, and food scraps. All of these materials will be recycled or shipped to a licensed landfill, transfer station, or incinerator. Please refer to the table below.

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

Prevention of ground water and surface water contamination

As described below in 10, 11, and 15(E)-15(G), the MPRP will not result in water pollution, including contamination to ground water or surface water.

10. Adequate provision has not been made to control erosion or sedimentation.

Response:

CMP has made adequate provisions to control erosion and sedimentation. With the exception of the immediate area around the base of the support structures, there will be no increase in impervious surface area associated with the transmission line. The amount of ground disturbance associated with this project will be limited to the immediate vicinity of the pole placements. CMP has developed a standard manual, *Environmental Guidelines for Construction and Maintenance Activities on Transmission line and Substation Projects*, which it uses as a routine part of all transmission and substation projects. (A copy of the manual is attached in Exhibit 8.) 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, which was developed in consultation with Maine Department of Environmental Protection (DEP) and is largely based

on the 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 transmission lines.

11. Adequate provision has not been made to handle storm water runoff or other drainage problems on the site.

Response:

CMP has made adequate provision to handle storm water runoff. With the exception of the immediate area around the base of the support structures there is no increase in disturbed or impervious surface area associated with the transmission line. Any accessways that must be constructed in order for vehicles to access structure sites will be temporary and the area stabilized with erosion and sedimentation control measures. Once the accessways are removed, the area will be stabilized again and allowed to revert to scrub-shrub habitat. As a result of these measures, there will be no significant storm water run-off or other drainage issues generated from the project.

12. The proposed water supply will not meet the demands of the proposed use or for fire protection purposes.

Response:

No water supply is needed for the construction and maintenance of the proposed transmission lines. The new infrastructure will be protected from fire in the same way as the current infrastructure.

13. Adequate provision has not been made for the transportation, storage, and disposal of hazardous substances and materials as defined by State law.

Response:

Construction and maintenance of the transmission corridor will not entail the use of any significant or unusual amounts of hazardous substances or materials, and CMP's activities will be conducted to minimize the potential for any materials to impact the surrounding environment. During the construction phase, to minimize spill potential, no vehicles will be fueled or maintained within 100 feet of wetlands, streams or other sensitive natural resources. Where poles are removed, treated wood will be disposed of according to all applicable federal, state, and local laws.

After construction, the transmission line corridor is maintained to encourage the growth of scrub-shrub vegetation that will not present safety or reliability problems. 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 in accordance with all applicable federal and Maine laws (using a backpack applicator) to capable species to prevent growth (or re-growth) of individual plants. No broadcast application is used, and

CMP does not use herbicides within 25 feet of any waterbody or wetland with standing water. Applicators of herbicides are certified by the Maine Pesticide Control Board, and will transport, store, use, and dispose of herbicides according to Maine law.

14. The proposed use will have an adverse impact on significant scenic vistas or on significant wildlife habitat which could be avoided by reasonable modification of the plan.

Response:

Significant Scenic Vistas

The project area is not located in or near any of the Scenic Areas identified in the town's 2008 Comprehensive Plan. As set forth in paragraph no. 4 above, there will be minimal changes to the landscaping and buffering features of the site. Because the project uses the existing service corridor, which already contains structures of a similar bulk, height, and design, the project will not result in an adverse impact on significant scenic vistas.

Significant Wildlife Habitat

Impacts to significant wildlife habitat will be largely avoided through the use of the existing service corridor, which has been in place for several decades. In general, given the existing landscape characteristics of the site, construction and maintenance of the project is 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 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.

There are three significant wildlife habitats (as defined by the Natural Resources Protection Act) within CMP's right-of-way in China. These habitats will be avoided to the greatest extent practicable during construction, including measures that are taken to ensure any impacts will be minimal and temporary.

There is a Waterfowl and Wading Bird Habitat (WWH) adjacent to Dutton Pond located in the Rural Protection District (RPD) through which the CMP right-of-way passes. This wetland is rated by the Maine Department of Inland Fisheries and Wildlife as a habitat of moderate value which, in turn, is considered "significant" by the Maine Department of Environmental Protection. For this area, CMP will prohibit clearing and construction activity between April 15 and July 15. This restriction will minimize the potential disruption of avian breeding and nesting activity. In addition, because WWHs are associated with wetland areas, the use of herbicides for vegetation maintenance in the area of the WWH will be prohibited. Construction of the transmission line structures is not expected to affect the ecological functionality of this WWH, as WWHs are largely open areas of emergent and shrub vegetation, and contain relatively few trees. This condition will continue to exist once the project is completed.

There is also a significant vernal pool within the right-of-way, adjacent to the abandoned railroad bed north of and parallel to the Weeks Mills Road. It is about 801 square feet, and meets Maine DEP's definition of a significant wildlife habitat. This vernal pool is located in the RPD.

A second significant vernal pool is located on the east edge of the proposed right-of-way approximately 895 feet south along the corridor from where a trail crosses the right-of-way from the juncture of Hanson and Bog Brook Roads. This vernal pool is about 368 square feet. This vernal pool also is located in the RPD.

The project will have no significant impact on the functionality of the pools. No transmission structures or accessways will be located within any significant vernal pools, and the pools will not be crossed by construction equipment.

15. When located in the Resource Protection District, Stream Protection District, Shoreland District, the proposed use does not meet the standards in Section 5 of this Ordinance.

SECTION 5: LAND USE STANDARDS

A. Dimensional Requirements for Principal Structures

B. Dimensional Requirements for Accessory Structures for any District in Which Allowed.

These standards do not apply to the proposed transmission structures because, pursuant to item no. 22 on China's Land Use Table, they are essential services accessory to permitted uses, such as public utilities (rather than principal or accessory structures pursuant to items 15, 16a 16aa, or 16aaa). Please also see Exhibit 10.

C. Sanitary Standards

Not applicable.

D. Soils

As described in paragraphs 8-11 and 13-14 above, the proposed project will be located, constructed, and maintained so as to avoid adverse environmental impacts, including severe erosion, mass soil movement, and water pollution. Also as described above, adequate provisions have been made to control and prevent erosion and sedimentation, stormwater runoff and other drainage issues, and flooding. No subsurface wastewater disposal systems are required for the project.

The applicant has analyzed the Soil Survey Geographic Database compiled by the United States Department of Agriculture – Natural Resources Conservation Service, and has determined that those soils 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 foundations for specific poles need to be constructed, borings will be conducted to verify the suitability of the soils at the precise location of the transmission structure.

Because the proposed use is not a commercial or industrial development and is not an intensive land use, a soils report prepared by a State certified soil scientist or geologist and based on an on-site investigation is not required.

E. Stormwater Management

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

The amount of ground disturbance associated with this project will be limited to the immediate vicinity of the pole placements and the impacts associated with temporary access ways. As described in paragraph nos. 9 and 10, CMP has made adequate provisions to handle storm water runoff and CMP's standard manual, *Environmental Guidelines for Construction and Maintenance Activities on Transmission line and Substation Projects* (2010) 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 limits the construction of accessways across slopes; defines the width of filter strips; requires the use of water bars, broad-based dips or turnouts on the upland side of filter strips; and prohibits crossing methods that will impair the natural flow of water through streams or wetlands. CMP also will rely on natural drainage systems, filter strips and structural and nonstructural erosion control measures to handle stormwater runoff.

F. Erosion and Sedimentation Control

I. Filling, grading, lagooning, dredging, earth-moving activities, and other similar land use activities shall be conducted in such manner as to prevent, to the maximum extent possible, erosion and sedimentation of surface waters. On slopes greater than 25 percent, there shall be no grading or filling within 100 feet of the normal high water mark except to protect the shoreline and prevent erosion. Furthermore, any activity which occurs within 100 feet of the normal high water mark shall be subject to the State's Natural Resource Protection Act, including its Permit by Rule procedures.

There are no slopes greater than 25% within CMP's transmission corridor in China. CMP is in the process of obtaining a permit from the Maine DEP under the Natural Resources Protection Act for the MPRP project, and no construction will proceed without first having obtained all required federal, state and local permits.

II. During any construction of any permitted structures on any lot, or during any filling or earthmoving, the owner and any contractor employed thereby shall employ sediment and erosion control practices as set forth by the Maine Erosion and Sedimentation Control Handbook for Construction, Best Management Practices, as prepared by the Cumberland County Soil and Water Conservation District and the Maine DEP. Said practices should include but not be limited to (a) staked hay bales, (b) velocity reduction dams (hay bales and siltation fences) and temporary mulching of all disturbed soil with permanent ground cover seeding occurring within seven (7) days of final grading.

As stated above, CMP's Best Management Practices are based on DEP's *Maine Erosion and Sediment Control BMPs*, dated March 2003, and DEP's Chapter 500. Specific erosion control measures are determined by CMP environmental personnel on site, and with the agreement of contractors and third party inspectors. Erosion and sedimentation control measures are installed before construction activities begin and immediately after any ground disturbance.

III. Earth-moving, filling and/or soil disturbances related to the removal of fuel storage tanks and/or the recovery of toxic/hazardous materials must comply with applicable state and federal laws in addition to the requirements of this Ordinance.

Not applicable.

G. Water Quality Protection

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 surface water or groundwater quality and will not impair designated uses or the water classification of any water body.

H. Agriculture

Not applicable.

I. Clearing

There will be no clearing required for MPRP in those areas where the right-of-way will not be widened, including the area in the Resource Protection district adjacent to Dutton Pond.

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 subsection I 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 habitat. No grubbing (i.e., stump removal) will take place. 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.

J. Signs

There will be no signage associated with the project.

K. Piers, Docks, Wharves, Breakwaters, etc.

Not applicable.

L. Beach Construction

Not applicable.

M. Commercial Campgrounds and/or Individual Private Campsites

Not applicable.

N. Road Construction

There will be no new permanent roads or driveways associated with the project, other than CMP-maintained access points and ways suitable for routine and urgent maintenance by its own vehicles. Temporary access ways, which are not considered roads or driveway 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.

In general “temporary long-term access ways” will be established for general access to the corridor for construction purposes. These access ways will be in place for more than one growing season. Access to individual pole sites, either for removal or installation, will be over “temporary access ways” which will be in place for no more than one growing season.

All access paths will be removed once construction is complete. Areas where soils have been disturbed will then be mulched with hay. Vegetation will be allowed to reestablish itself once the access ways have been removed.

Measures will be taken to avoid and minimize impacts to streams and wetlands through the use of crane mats, temporary bridges, geo-textile fabrics, and culverts, when necessary. Where culverts are needed, they will be installed at or below the natural stream bottom to allow for fish passage. If necessary, mats will be placed parallel to the upland edge as abutments to preserve bank stability. No extensive grubbing (removing stumps) 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. Where culverts and bridges are installed, they will be designed and sized appropriately. In all cases, appropriate erosion controls will be installed either before or immediately after soils are exposed.

O. Timber Harvesting

Not applicable.

P. Hazardous and/or Solid Waste

No hazardous or solid waste will be deposited, stored, or allowed to remain within the right-of-way. As described in paragraph no. 9, all solid waste will be recycled or shipped to a licensed landfill, transfer station, or incinerator.

Q. Mineral Exploration, Extraction and Gravel Pits.

Not applicable.

R. Canopies over Fuel Pump Islands

Not applicable.

Exhibit 1
Project Area Map

Exhibit 2
Project Cross Sections

Exhibit 3
Project Maps Showing Natural Resources

Exhibit 4
Project Area Maps: Shoreland Zone

Exhibit 5
Table Showing Structure Types and Heights

Exhibit 6
Proof of Title, Right, or Interest

Exhibit 7
Table of Project Abutters

Exhibit 8

**CMP's "Environmental Guidelines for Construction and
Maintenance Activities on Transmission Line and Substation
Projects**

Exhibit 9
Letter from Town of China Planning Board Chair Ronald Breton

Exhibit 10
Material Safety Data Sheets

Exhibit 11
Environmental Control Requirements for CMP Contractors