



MAINE POWER RELIABILITY PROGRAM

A CENTRAL MAINE POWER COMPANY PROGRAM

DURHAM, MAINE CONDITIONAL USE PERMIT APPLICATION

Segment 17, Section 3026 Transmission Line Construction

Prepared for:

Central Maine Power Company
83 Edison Drive
Augusta, Maine 04336

Prepared by:



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

April 2010

Application Form

Town of Durham
Conditional Use Application*

Applicant (s) Central Maine Power Company c/o Mary Smith

Address 83 Edison Drive Date: April 26, 2010

Town Augusta State ME Zip 04336 Phone 207-626-4006

Property – Map & Lot #: Map 12, lot 25; Map 13, lot 12; Map 9, Lot 16

Copy of Deed is required! See Exhibit 12

Conditional Use Proposed – Bulk electrical transmission

Directions – Read the Durham Land Use Ordinance esp. Articles VII & VIII.

Download at: www.durhamme.com/townhall/3-twon_documents.htm

Assistance in completing this application can be obtained by contacting planning board chairman, Russell Jabaut at 784-2261 or by attending a Planning Board meeting.

You are expected to appear in person to discuss your application with the Board, which normally meets on the first Wednesday of the month at 7:00 pm in the Town Office.

1. Describe in writing your proposed conditional use, including at least:

- 1.a. What specifically do you need a permit for? **See Project Description in Durham, p. 6.**
- 1.b. Times of operation. (*days of the week and hours*) **See page 4.**
- 1.c. Traffic generated – volume and type of vehicles involved. **See E, page 16.**
- 1.d. Noise exported & new outdoor lighting. **See p. 9**
- 1.e. Fumes, dust & odors emitted. **See A. Air Emissions, page 8.**
- 1.f. Proposed sign design size & location. **See G. Limitation on Types and Locations of Signs, p. 10.**
- 1.g. Impact on abutters & neighbors. **See pages 15 through 17, and 20.**
- 1.h. Impact on the natural environment. **See H, page 15.**
- 1.i. Visual impact on abutters. (*visual screening type and location*) **See F. Landscaping, p. 9.**
- 1.j. Compatibility with and overall impact on the neighborhood. **See A. Air Emissions page 8, B. Buffer Areas page 9, and F. Landscaping page 9.**
- 1.k. Additional Town services required. **See pages B page 15, G page 16, and P page 20.**
- 1.l. Applicant's knowledge of and experience with this type of activity. **See J, page 18.**
- 1.m. How will this proposed use be financed? **See J, page 18.**

2. Prepare a Site Plan. This must include the owner's name(s) and address. **See Exhibit 7: Site Plan, Proposed.**

✓ 2.a. Name and address of the surveyor or engineer. *(if used)* **See #1, page 2.**
✓ 2.b. Names and addresses of all abutting property owners. **See Exhibit 10.**
✓ 2.c. Sketch map showing the general location of site within town boundaries. **See Exhibit 4: Location Map.**

✓ 2.d. Boundaries of all contiguous property under control of owner or applicant regardless of development plans for other property. **CMP does not own any parcels that are contiguous with the project area.**

✓ 2.e. Zoning classification and groundwater protection boundaries indicated. **See Exhibit 7: Site Plan, Proposed**

✓ 2.f. Bearings & distances indicated for all property lines to be developed & the sources of this information. **Applicant requests waiver. See #6 page 3.**

NA 2.g. Location of all building setbacks. **Not applicable.**

✓ 2.h. Location, dimensions and ground floor elevation of all existing and proposed buildings and structures, along with location & dimensions of any proposed driveways, walkways, parking & loading areas. **See Exhibit 7: Site Plan, Proposed.**

✓ 2.i. Location of intersecting roads or driveways within 450 feet of the proposed conditional use. **See Exhibit 7: Site Plan, Proposed.**

NA 2.j. Location & dimensions of all provisions for water supply and waste water disposal. Supply copies of site test (form 200, or latest). Provide evidence of distance between water supply and wastewater disposal. **Not applicable.**

✓ 2.k. Location of open drainage courses, wetlands, stands of trees & other natural features to be retained and any new landscaping planned. **See Exhibit 7: Site Plan, Proposed.**

✓ 2.l. Direction of existing and proposed drainage across the site. Also include contour lines at 10 ft intervals. **Drainage will not be affected; see Exhibit 7: Site Plan, Proposed for contours.**

NA 2.m. Location type, and size of existing and proposed signs and lighting. **Not applicable.**

✓ 2.n. Existing easements, to whom they are granted, location & dimensions. **See Exhibit 12: Proof of Right, Title, or Interest.**

3. Copy of entire recorded Deed with attachments & easements, as well as copies of applicable State and Federal Approvals and permits, including pending applications.

See Exhibit 12: Proof of Right, Title, or Interest for a summary of deeds and easements. CMP can provide a complete copy of the deeds upon request. A Certificate of Public Convenience and Necessity from the Public Utilities Commission and a Clean Water Act Section 404 permit from the Army Corps of Engineers are pending; copies of these applications have been sent to the Town Office. See #17, page 4. A Site Location of Development Act and Natural Resources Protection Act permit has been issued by the DEP on April 5th, 2010.

4. Written list of abutters & proof of their notification. *(see LUO Section II Procedure, B.)*
See Exhibit 10: List of Abutters, and Exhibit 11: Proof of Notification.
5. Schedule of development and or construction. **See #18, page 4.**
6. Draft maintenance agreement for private road. **Not applicable.**
7. Quantity, location, storage & containment of any current and or proposed hazardous materials in excess of 50 gallons. **Not applicable.**
8. Applicant may be required to submit a basic site plan to the State Historic Preservation Commission for review.
The Maine Power Reliability Program proposed by CMP has obtained a permit under the Site Location of Development Act (SLODA), and therefore was reviewed by the Maine Historic Preservation Commission (MHPC). A Memorandum of Agreement (MOA), that sets forth the conditions for the protection, avoidance, or mitigation of MPRP's potential adverse impacts to historic properties eligible for listing on the National Register of Historic Places has been signed by the United States Army Corps of Engineers (ACOE), the Maine State Historic Preservation Officer (SHPO) and CMP (see Exhibit 9, C1. Cemeteries page 9, and P. Historic Resources page 13.

For your application to be judged ready to be reviewed by the Planning Board, You Must address each item listed above. Your response need not be long or complicated. If you feel that that a particular item does not apply to your application, you may ask the full Planning Board to waive the item; But first you must address it somehow!

To be placed on the agenda **You must submit the applicable fee and 9 copies** (5 site plan copies reduced to: 11" x 17") of all application materials to the attention of the Planning Board at the Town office at the latest by Monday (**9 days**) prior to the Planning Board's meeting.

I hereby state that I understand and have to the best of my ability executed the requirements for a Conditional Use Permit in the Town of Durham:

Signature(s) of Applicant(s) _____ ***Date*** _____
 _____ ***Date*** _____

Fees: \$100 initial review.

[Depending on the conditional use(s) involved, additional fees may apply.]
[Checks are to be made payable to the Town of Durham]

Completed applications are due at the Town Office by Monday

(9 days) prior to the meeting date.

** Note #1: This application may also be used for lot changes in subdivisions.*

** Note #2: If an applicant wishes to make any changes to his/her previously approved Conditional Use Permit, then the applicant must meet all the current requirements for a Conditional Use Permit for that changed part of the conditionally permitted use. The applicant will go through the Conditional Use Permit process only for the section of the permit they want changed.*

** Note #3: This application may not include all necessary information required. By law, the Planning Board has the right to require additional information not indicated above.*

Agent Authorization Letter

Conditional Use Permit Application

Applicability of the Durham Land Use Ordinance

Article VI. District Regulations of the 2005 Durham Land Use Ordinance contains a list of land uses requiring a permit. Although electric transmission lines, public utilities, or essential services are not specifically listed, we understand from discussions with the Code Enforcement Officer that an electric transmission line would fall under the use category of “all other commercial uses not otherwise listed.” These “other commercial uses” require a conditional use permit within the Southwest Bend/Growth district and the Rural Residential/Transitional district. Most of CMP’s right-of-way in Durham where the company is proposing upgrades as part of the Maine Power Reliability Program is in a district called “Rural” on the Zoning Map created by the Androscoggin Valley Council of Governments (AVCOG) in 2004.¹ Thus, it appears that it was the intent of the ordinance² to require conditional use approval for MPRP.

The State of Maine imposed its model Shoreland Zoning Ordinance and map in Durham in 1994 (see Exhibit 2). This ordinance defines the Resource Protection districts at Runaround and Libby Brooks as 75 feet from the normal high water mark of the streams. The 2005 Durham Land Use Ordinance, however, defines the shoreland area adjacent to these streams as extending 100 feet from the high water mark (see Section II, page 11). Both the AVCOG zoning map and the Durham tax maps show Runaround and Libby Brooks as Resource Protection districts.

In addition to the definition of the shoreland area adjacent to streams, the Town’s Land Use Ordinance also differs from the state’s model shoreland zoning ordinance in terms of the Resource Protection/Rural district *standards*. As stated above, under the Town’s Ordinance, “other commercial uses” are not an allowed use in the Resource Protection/Rural District. In contrast, under the state’s ordinance, which classifies transmission lines as “essential services,” the MPRP is an allowed use within Resource Protection Districts (DEP Regs., Ch. 1000(15)(L)(2)).

Durham’s Land Use Ordinance is more restrictive, both in terms of the area defined as the shoreland zone adjacent to streams, and in terms of the Resource Protection/Rural district standards, than the state-imposed Shoreland Zoning Ordinance. In conformance with Article X, Section II of the Town’s Land Use Ordinance, the stricter of the regulations apply.³

Under this interpretation of Durham’s ordinance and zoning maps, CMP’s right-of-way crosses Resource Protection/Rural districts at Libby Brook and at Runaround Brook. As noted above, “other commercial uses” are currently prohibited within the Resource Protection/Rural district, but given that the existing corridor was developed in the late 1960s, prior to the adoption of the Ordinance, the current use of the transmission corridor is a legally existing, non-conforming use.

¹ The Durham 2005 Land Use Ordinance refers to this district as the “Rural Residential/Transitional District”. We understand that the Zoning Map may have been rescinded by a vote of Town Meeting, but in a letter dated January 20, 2010, the Town’s attorney states that, in accordance with Article X, Section I of the Ordinance, the district and corresponding standards are still in effect, in accordance with the intent of the ordinance. (See Exhibit 1: Letter from Town of Durham’s Attorney.)

² As provided by Article X, Section 1 of the Ordinance.

³ It does not appear that the Department of Environmental Protection ever approved the Town’s current shoreland zoning standards, as required by 38 M.R.S.A. § 438-A(3), and thus it is unclear whether they are in effect. For purposes of this application, however, and reserving the right to argue otherwise, we will assume, for purposes of this application, that the local shoreland zoning standards in the Ordinance are applicable.

Section III. D of the Ordinance states that “[a] non-conforming use may be expanded by up to 30 percent of the area which it occupied at the time it became non-conforming, upon issuance of a Conditional Use Permit.” Furthermore, the “Board of Appeals may approve an expansion of a non-conforming use of more than 30 percent of the area which it occupied at the time it became non-conforming, if (1) the use will conform to all other requirements of this Ordinance; and (2) the expansion will not have an adverse impact on the groundwater” (see Section III.D.1 and 2.)

In summary, CMP is applying for a Conditional Use permit for the proposed uses throughout the corridor, and the Town’s Resource Protection District/Rural standards are assumed to apply to areas within 100 feet of Runaround and Libby Brooks. Since the corridor has been used for utility transmission for decades, and because CMP is not proposing to expand the corridor, the project is an existing, non-conforming use in the Resource Protection/Rural District.

Conditional Use Application Content

(from Article VII, Section III.B)

- 1. Owners name and address, the name of the engineer(s) or surveyor(s) or both preparing the plan.**

Owner and Applicant:

Central Maine Power Company
c/o Mary Smith
83 Edison Drive
Augusta, ME 04336
207-626-4006

Engineer:

Steve Walker
Power Engineers
303 US Route One, Suite 2A
Freeport, ME 04032
(207) 869-1200

Environmental Consultant and Agent for Applicant:

TRC
c/o Alison Truesdale
400 Southborough Drive
South Portland, ME 04106
(207) 879-1930 x 135

- 2. Names and addresses of all abutting property owners. The applicant shall also include a copy of the abutters signed return receipt notices, or shall submit a signed acknowledgement of receipt by the abutter(s).**

See Exhibit 10: List of Abutters and Exhibit 11: Proof of Notification.

- 3. Sketch map showing general location of the site within the Town as required in (1) above.**

See Exhibit 4: Location Map.

- 4. Boundaries of all contiguous property under the control of the owner or applicant regardless of whether all or part is being developed at this time.**

There are no contiguous properties under control of the owner/applicant.

- 5. Zoning classification(s) of the property and the location of zoning district boundaries if the property is located in two or more zoning districts or abuts a different zone, and of any aquifer protection district or resource protection/rural district boundaries.**

See Exhibit 7: Site Plan, Proposed for the boundaries of the Rural Residential/Transitional and Resource Protection/Rural Districts.

- 6. The bearings and distances of all property lines of the property to be developed and the source of this information. The Board may require a formal boundary survey when sufficient information is not available to establish, on the ground, all property boundaries or zoning classifications as set forth in Section 5 above.**

The applicant requests a waiver of the requirement that bearings and distances of property lines be shown. The industry standard for surveying linear projects (such as transmission corridors and highways) is to conduct a centerline survey, not a boundary survey. A centerline survey of the property is shown in Exhibit 6: Site Plan, Existing, and zoning district boundaries are shown in Exhibit 7: Site Plan, Proposed.

The existing corridor was originally established by surveying and staking the corridor centerline. The lateral limits of the corridor were established on the ground by measuring from the staked centerline. Prior to the start of construction, the corridor centerline will be re-surveyed and staked, and the lateral limits of the MPRP corridor will be located on the ground by measuring from the staked centerline.

The proposed transmission structures will be installed based on construction drawings stamped by a Professional Engineer, and will be a known distance from the corridor centerline.

- 7. The location of all building setbacks required by this Ordinance.**

Not applicable; no buildings are proposed.

- 8. The location, dimensions, and ground floor elevations of all existing and proposed buildings on the site.**

Not applicable; no buildings are proposed.

- 9. The location and dimensions of driveways, parking and loading areas, and walkways, existing and proposed.**

Not applicable; there are no existing or proposed buildings, walkways, parking, or loading areas.

- 10. Location of intersecting roads or driveways within 450 feet of the site.**

See Exhibit 7: Site Plan, Proposed.

- 11. Location and dimensions of all provisions for water supply and wastewater disposal.**

Not applicable; no water supply or waste water disposal facilities are proposed.

- 12. The location of open drainage courses, wetlands, stands of trees, and other natural features, with a description of such features to be retained and of any new landscaping planned. Any buffer areas required by this ordinance will also be shown on such plan.**

Wetlands, trees, other natural features and buffers are shown in Exhibit 7: Site Plan, Proposed. See also B. Buffer Areas, page 8 for a description of the buffer areas.

- 13. The direction of drainage across the site, both existing and proposed.**

The applicant requests a waiver of the requirement to show drainage across the site, as the natural drainage patterns will not be altered as part of the project. Topographic contours are shown in Exhibit 7: Site Plan, Proposed. Central Maine Power Company's erosion and sedimentation control plan for transmission corridors is attached as Exhibit 13: CMP's *Environmental Guidelines for Construction and Maintenance Activities on Transmission line and Substation Projects*.

- 14. Location and dimensions of existing and proposed signs.**

Not applicable; no permanent signage is proposed.

- 15. Location and dimensions of any existing easements and copies of existing covenants or added restrictions.**

See Exhibit 11: Proof of Right, Title, or Interest.

- 16. Location and type of exterior lighting.**

Not applicable; no exterior lighting is proposed.

- 17. Copies of applicable State approvals and permits including but not limited to any applicable State Highway entrance permit; provided, however, that the Board may approve conditional uses subject to the issuance of specific State approvals and permits where it determines that it is not feasible for the applicant to obtain them at the time of conditional use review.**

CMP received a Site Location of Development Act permit and a Natural Resources Protection Act permit from the Maine Department of Environmental Protection on April 5, 2010. An application is pending with the Maine Public Utilities Commission (PUC) for a Certificate of Public Convenience and Necessity (filed July 2008).⁴ Given that final approval from the PUC is not expected for a month or more, CMP requests that the Conditional Use permit be conditioned on receipt of the PUC approval, which CMP would forward to the Code Enforcement Officer upon issuance.

- 18. A schedule of construction, including anticipated beginning and completion dates.**

Clearing within the transmission corridor in Durham is currently slated to begin during the winter of 2011-2012, with construction beginning in late summer or early fall, 2012.

⁴ CMP also has pending an application (filed June 2009) for a federal permit from the U.S. Army Corps of Engineers for a Clean Water Act § 404 approval and a Rivers and Harbors Act § 10 approval.

However, the construction schedule is subject to change, depending on a complex set of circumstances as CMP coordinates the need to depower sections and reroute electrical service in order for crews to work on transmission lines. Should the planned initiation of construction be changed to a later date so that the Conditional Use permit expires, CMP will apply to the Code Enforcement Officer for a one-year extension.

Once construction begins, CMP anticipates activities in Durham to conclude within 6 to 9 months. Generally, construction will occur only during daylight hours. Once completed, the transmission line will operate continuously.

19. The quantity, location, storage, and containment of any hazardous materials or petroleum products in excess of fifty (50) gallons, intended to be stored or used on the site.

CMP does not anticipate the need to store or use on-site any hazardous materials or petroleum products in excess of 50 gallons.

20. A brief description of the proposed conditional use, how it will operate, and any facts the applicant wishes to bring to the attention of the Planning Board including information on financial capacity, neighboring water supplies, design of the project, and other information needed to demonstrate compliance with approval criteria guidelines, and standards set forth below. The description will indicate how the proposed use will meet each of the general applicable performance standards of this Land Use Ordinance.

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 electricity 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, making the system more susceptible to outages.

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

Project Description in Durham

The part of the program located in Durham involves work in one of the two transmission line corridors that traverse the Town: the corridor running roughly north and south in the western part of the Town. This corridor is called Segment 17, and runs between substations in Lewiston and Pownal. Approximately 4.5 miles of Segment 17 are within Durham, running from the town border with Pownal (near the junction with New Gloucester) to Auburn (south of the Androscoggin River). The corridor is 400 feet wide over its entire length in Durham.

Currently, there are three essential services within the corridor: electric, telephone, and gas service. CMP has two 115 kV transmission lines, Maritimes and Northeast has a gas pipeline, and AT&T has a cable within the right-of-way. Maritimes and Northeast and AT&T operate in CMP's corridor under a license agreement. The cable is located approximately 22.5 feet from the east edge of the corridor; the pipeline's location within the corridor varies.

The existing electric transmission lines are called Sections 62 and 64. Both these lines are mounted on double-poled wooden structures that are typically 45 feet above ground. Section 62 is centered 67.5 feet from the east side of the right-of-way; Section 64 is centered 183.5 feet from the east side and 116 feet from the Section 62 structures. There are no changes proposed for Sections 62 and 64. See the "Existing" sketch in Exhibit 5: Transmission Corridor Cross Section.

CMP proposes to install a new 345 kV transmission line adjacent to the existing 115 kV lines. The new Section 3026 will be mounted on double-pole wooden structures that are typically⁵ 75 feet high and centered 273.5 feet from the eastern edge of the corridor and

⁵ Please note that actual structure heights vary due to topography and the need to achieve spans that will avoid or minimize impacts to natural resources. Actual heights may be greater or less than "typical," due to site-specific

126.5 feet from the western edge. No expansion of the transmission corridor will be necessary for the installation of Section 3026; rather this portion of the MPRP will be built entirely on land that CMP already owns.

Clearing is planned inside of the corridor in order to make room for the new transmission line. Trees and tall shrubs that are capable of growing tall enough to reach into the safety zone (so-called “capable species”) under the conductors will be removed from a swath of land roughly 100 feet wide, leaving a forested buffer strip along the western side of the corridor approximately 41.5 feet wide wherever there are trees there now. See Exhibit 5: Transmission Corridor Cross Section and Exhibit 7: Site Plan, Proposed. The clearing will create a safety zone around the transmission line that is required under the National Electrical Safety Code. Non-capable species (species that are not capable of growing tall enough to reach the safety zone) will largely remain in place, although there may be some temporary disturbance directly related to construction activities. The natural vegetation along the edge of the corridor that will be left in place will act as a buffer.

There will be no new permanent roads or driveways associated with the project. There will be CMP-maintained access points and ways suitable for routine and urgent maintenance by its own vehicles. Accessways will be established for use during the construction phase, but are not considered roads or driveways, and will not add any impervious surface area. All access paths will be temporary and will be restored to existing conditions once construction is complete. Determinations of the exact location of these temporary accessways will be made by the contractor in consultation with an environmental representative. The tentative location of the accessways is shown on the maps in Exhibit 7.

Temporary accessways established for general access to the corridor for construction purposes may be in place for more than one growing season, but will be removed and restored once all aspects of construction in that area are complete. Accessways to individual pole sites will be in place for no more than one growing season, then removed and restored. Areas where soils have been disturbed will be mulched with hay, and vegetation will be allowed to reestablish itself.

Measures will be taken to avoid and minimize impacts to streams and wetlands through the use of crane mats, temporary bridges, geo-textile fabrics, and culverts, when necessary. Appropriate erosion controls will be installed before construction begins. If necessary, mats will be placed parallel to the upland edge as abutments to further protect bank stability and establish stability. No extensive grubbing (grading to remove root systems) within wetland crossing areas will be done prior to mat placement. However, some minor grading may be required to ensure mat stability and construction vehicle 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.

How the proposal will meet the applicable standards of Durham’s ordinances is addressed below.

conditions. See the strip maps in Exhibit 5: Site Plan for individual structure heights, and Exhibit 8: Structure Height Ranges for a summary of structure heights.

Uniform Performance Standards

(From Article VIII, Section 1 of the Land Use Ordinance)

A. Air Emissions - No emission of dust, ash, smoke or other particulate matter, or of gases and chemicals shall be allowed which can cause damage to human or animal health, vegetation, or property by reason of concentration or toxicity, which can cause soiling beyond the property boundaries, or which fail to meet or cannot meet the air emission standards set by the Maine Department of Environmental Protection which were in effect at the time of adoption of this Ordinance.

There will be no air emissions as a result of the operation of the new transmission line. During construction, dust on accessways will be controlled, if needed, through the use of water or another approved wetting agent. There will be no broadcast application of herbicides either during construction or for maintenance of the corridor.

Construction and operation of the transmission lines will not impact ambient air quality and will not detrimentally increase the concentration of any gases, particulate matter, odor, or other substrates in the air.

As part of the Site Location of Development Act approval, DEP has concluded that the project will not have an unreasonable effect on air quality. No other air emissions license from DEP will be required.

B. Buffer Areas - No industrial or commercial buildings or uses shall be established in, or about (defined as any closer than 1000 feet), a residential use unless a landscaped Buffer Strip is provided to visually screen the building or uses.

Screening shall be defined as eliminating any view to humans standing at ground level of the residential use, or from the windows of a two story building within such location. Where no natural vegetation can be maintained or due to varying site conditions natural vegetation can not provide screening, the landscaped buffer may consist of fences, walls, tree planting, hedges or combinations thereof.

The buffering shall be sufficient to minimize the impacts of any kind of potential use such as: 1) loading and unloading operations, 2) outdoor storage areas, 3) vehicle parking, 4) mineral extraction, 5) waste collection and disposal areas.

Where a potential safety hazard to small children would exist were they to enter the area of commercial or industrial use, physical screening/barriers shall be used to deter entry to such premises. The buffer areas shall be maintained and vegetation replaced as necessary to insure continuous year round screening.

Clearing of capable species only is planned inside the corridor to make room for the new transmission line, leaving a forested buffer strip along the western side of the corridor approximately 41.5 feet wide. The corridor is already cleared to the eastern edge of the right-of-way, so there will be no change in the visibility of the transmission lines from that side. See Exhibit 6: Site Plan. Non-capable species will largely remain in place, although there may be some temporary disturbance directly related to construction activities. The natural vegetation along the western edge of the corridor that will be left in place will act as a buffer to shield the residences along Auburn Pownal Road and Stackpole Road.

There will be no loading or unloading operations conducted on the site, no outdoor storage areas, no vehicular parking, no mineral extraction, no waste collection or disposal areas, and no safety hazards to small children within the right-of-way.

C1. Cemeteries - There shall be no construction or excavation done within a twenty-five (25) feet zone around burial sites and from all boundaries of an established graveyard . . .

Not applicable; there are no cemeteries known to be within CMP's right-of-way. A cemetery on Stackpole Road is at least 223 feet away from the corridor at its closest point, across the road.

C2. Construction and Plumbing Standards

Not applicable; there are no buildings or plumbing proposed.

D. Explosive Materials - No flammable, explosive or combustible liquids, solids or gases shall be stored in bulk (defined as greater than the liquid equivalent of 200 gallons) above ground unless they are located at least 75 feet from any lot line, or in bulk stored below ground unless they are located at least 40 feet from any lot line, and all such materials shall be stored in a manner and location which is in compliance with the rules and regulations of the Maine Department of Environmental Protection rules and regulations of the Maine Department of Public Safety, and any other applicable federal state and local regulations then in effect.

Should blasting be necessary in order to remove ledge or break up boulders where structures are to be set, all explosive materials will be stored in accordance with the Maine Department of Environmental Protection's and Maine Department of Public Safety's rules and regulations. Otherwise, no flammable, explosive or combustible liquids, solids or gases in excess of 200 gallons shall be stored on site.

E. Glare

Not applicable; there will be no source of glare from the transmission corridor.

F. Landscaping - The landscape shall be preserved in its natural state insofar as possible when constructing buildings and accessory structures, parking lots, and drives or roadways, by minimizing tree removal and grade changes. Landscaping shall be designed to soften, screen, or enhance the physical design of structures and parking areas to avoid the encroachment of the proposed use on abutting land uses.

The existing vegetation and grades will be preserved in their natural state insofar as possible. Capable species within the existing cleared right-of-way are already maintained to meet safety standards. Further, as described above, additional clearing of capable species inside of the right-of-way will be needed to make room for the new transmission line. An approximately 41.5 foot stand of natural vegetation along the western boundary of the right-of-way will be left in place. Non-capable species will be preserved, as is the case currently, as long as they do not pose a hazard to construction vehicles. Any shrubs that do pose such a risk will be cut at ground level, then allowed to regrow naturally once construction is complete. No additional plantings are proposed.

G. Limitation on Types and Locations of Signs

Not applicable. No permanent signage is proposed.

H. Soils - No activity shall be permitted in any area where the soil is rated severe or very severe for the proposed activity, according to the County Soil Survey of the U.S.D.A. Soil Conservation Service, unless evidence is presented to the Code Enforcement Officer or Planning Board as the case may be, within the application for a permit, that construction methods will overcome any pertinent soil inadequacies.

Soils with severe or very severe ratings are limiting due to wetness, erodibility, or shallowness to bedrock. Due to the linear nature of the project, CMP has anticipated encountering poor soils within the right-of-way and designed the structures and construction procedures to manage for these limitations.

Where wet areas are encountered, construction mats will be used or work will be done when the ground is frozen and ‘ice roads’ can be made with compacted snow. Accessways will not be located on steep slopes, highly erodible soils, or silty surface textures if at all possible. In all cases, erosion and sedimentation control best management practices and environmental construction practices will be followed, and environmental inspectors will ensure there are no erosion problems (see Exhibit 13: CMP’s *Environmental Guidelines for Construction and Maintenance Activities on Transmission line and Substation Projects*) and Exhibit 14: Construction Plan).

During the construction of transmission lines, shallow bedrock and subsurface boulders may be encountered occasionally. In these instances, blasting may be required in order to place transmission line support structures. Blasting will be performed by licensed companies/employees in accordance with the blasting plan approved in the MPRP Site Location of Development permit.

I. Soil Erosion Control - Erosion of soil, and sedimentation of any water course and water bodies shall be minimized by the following erosion control management practices:

- 1. The stripping of vegetation, removal of soil, regrading or other development of the site shall be accompanied by limiting the duration of exposure and area of the site to be disturbed. Dust control methods shall be employed during dry conditions.**

While capable species, such as trees and tall shrubs, will be removed from within the right-of-way, the land will not be “stripped,” as non-capable species, such as smaller shrubs and grasses, will be left intact. In some areas that have topographic irregularities, site-specific grading may be necessary to create safe access for construction vehicles. These areas will be restored to original grade once construction in the area is complete, and the disturbed areas will be mulched and allowed to revegetate naturally. Dust will be controlled through the use of water or another approved method, as conditions warrant.

- 2. Temporary vegetation, mulching, and/or siltation fabrics shall be used to protect critical areas during the development. Critical areas shall include all watercourses, waterbodies, wetlands, and any areas of fragile vegetation which is listed on any federal or state endangered species list, and areas within 250 feet thereof. Sedimentation of run-off waters shall be trapped by debris basins, silt traps, sediment basins or other methods certified as acceptable by a registered soil scientist or registered professional engineer.**

CMP has developed a standard manual, *Environmental Guidelines for Construction and Maintenance Activities on Transmission Line and Substation Projects* (2010), which it uses as a routine part of all transmission and substation projects. A copy of the manual is provided in Exhibit 13. This manual contains erosion and sedimentation control requirements, standards, and methods that will be used to protect soil, water, and sensitive environmental resources (e.g., rare, threatened, or endangered species and significant natural communities) during construction of the various MPRP components. The manual was developed in consultation with the Maine DEP, is largely based on DEP's *Maine Erosion and Sediment Control BMPs*, dated March 2003, and DEP's Chapter 500, and contains specific Best Management Practices appropriate for electric transmission line and substation construction.

3. Permanent vegetation and/or other erosion control measures should be installed prior to completion of the construction, but no later than six months after completion of the construction.

Where poles must be installed in wetland areas, CMP will ensure that topsoil is removed and replaced following construction to encourage the natural revegetation of these areas. Wherever practicable, topsoil will be separated from mineral soil and stockpiled for reuse in close proximity to its origin to promote natural revegetation. This will ensure that the seed base naturally present in topsoil is replaced in such a manner that natural vegetation can re-grow quickly.

In addition, CMP will also utilize permanent seeding as necessary to stabilize areas prone to erosion. Generally, seeding can be done between April 16th and October 31st when the ground has not frozen. During frozen ground conditions, seeding is not necessary. All appropriate erosion control measures are taken before, during, and immediately after construction activities in the vicinity.

4. The top or bottom of a cut or fill shall not be closer than ten feet to a property line unless otherwise mutually agreed to by the affected landowner and applicable Town Board or official granting the permit in question but in no instance shall said cut or fill exceed a 3 to 1 slope. This section does not relieve a gravel pit operator from compliance with the Town Excavation Ordinance.

There will be no cut and fill areas within ten feet of the property lines.

J. Spatial Requirements

	Standards		CMP ROW
	Rural Residential /Transitional	Resource Protection/Rural	
1. Minimum lot size (all other structures)	90,000 sq. ft	90,000 sq. ft	9,452,520 sq. ft. (217 acres)
2. Minimum Road Frontage	300 ft	300 ft	Durham Rd.: 440' Auburn-Pownal Rd.: 604' Stackpole Rd.: 843' Bowen Rd.: 432 ft.
3. Minimum Setback Front Lot Line, Commercial ***	100 ft.	100 ft.	Not applicable

	Standards		CMP ROW
4. Minimum setbacks Side Lot Line, Commercial ***	100 ft.	100 ft.	100.5' west side; 53.5' east side (ROW edge to conductor)
5. Minimum Setback Rear Lot Line, Commercial ***	100 ft.	100 ft.	Not applicable
6. Maximum Structure Height*	35 ft.	20 ft.	Not applicable
8. Maximum Lot Coverage for all structures	10%	5%	0.01% (925 sq. ft.)
9. Maximum Coverage for impervious surface	25%	5%	0.01% (925 sq. ft.)

* Features of structures such as chimneys, towers, spires and structures for electric power transmission and distribution lines may exceed the maximum structure height requirement.

*** These setbacks shall be increased in any Conditional Use Permit if the proposed use, and traffic might intrude by noise, vibrations, dust, or other fugitive emissions on abutting properties.

K. Storage of Materials - All materials stored outdoors shall be stored in such a manner as to prevent the breeding and harboring of insects, rats or other vermin. This shall be accompanied by enclosures in containers, raising materials above the ground, separation of materials, prevention of stagnant water, extermination procedures or other means.

There will be no long-term storage of materials within the right-of-way.

L. Storage of Hazardous Materials

1. Outdoor Storage Facilities

There will be no outdoor storage facilities for fuel, chemicals, or chemical or industrial waste.

2. Underground Petroleum Storage

There will be no underground petroleum storage.

M. Structures - All principal structures shall be set back at least 250 feet from the normal high water mark of the Androscoggin River, the East Branch of the Royal River, Chandler River, Gerrish Brook, Newell Brook, Meadow Brook, Dyer Brook, or Runaround Pond, and at least 100 feet from any pond, river, or water body.

There are no transmission structures proposed within 250 feet of the Androscoggin River, the East Branch of the Royal River, Chandler River, Gerrish Brook, Newell Brook, Meadow Brook, Dyer Brook, or Runaround Pond (the structure closest to Runaround Pond is over 600 feet away). Furthermore, there are no transmission structures within 100 feet of Libby Brook or Runaround Brook, although there are three structures within 100 feet of intermittent and perennial streams. Because of the nature of an electrical transmission line, pole placements within 100 feet of these waterbodies could not be avoided entirely and have been located as far away as practicable.

N. Vibrations - No activity shall, as a result of normal operations, cause or create a vibration at or beyond a lot line or a boundary line which is in excess of that indicated . . .

There will be no vibrations created by the project.

O. Water Quality Impacts - No activity shall locate, store, discharge, or permit the discharge of any treated, untreated or inadequately treated liquid, gaseous, or solid materials of such nature, quality, obnoxiousness, toxicity, or temperature that run-off may seep, percolate, or wash into surface or groundwaters so as to contaminate, pollute, or harm such waters or cause nuisances, such as objectionable shore deposits, floating or submerged debris, oil or scum, color, odor, taste, or unsightliness, or be harmful to human, animal, plant, or aquatic life.

There will be no discharges of any treated, untreated or inadequately treated liquid, gaseous, or solid materials of any kind from the project. 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. 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 and nozzles to minimize drift) to capable species to prevent growth (or re-growth) of individual plants. In sensitive resource areas, CMP uses only products with low potential for mobility and low persistence in the environment. CMP does not use herbicides within 25 feet of any waterbody, wetland with standing water, significant vernal pool depressions, or certain other sensitive resource areas. In addition, CMP does not use herbicide within 100 feet of springs and known private wells and intakes, or within 200 feet from public water supply wells and intakes. No herbicides are stored, mixed, or loaded within 100 feet of any wetland or surface water. Crew forepersons are certified by the Maine Pesticide Control Board, and all herbicides are EPA registered and DEP approved. The selective use of herbicides within the transmission line corridor does not pose a threat to groundwater quality. For more information, see the Vegetation Management Plan for MPRP at Exhibit 16.

P. Historic Resources - No stone walls or granite posts, abutments or markers older than 100 years of age will be torn down unless relocated on the property, no cemetery or grave marker will be disturbed, no archeological site identified by the Maine Historic Preservation Commission will be disturbed, no structure listed on the National Register of Historic places will be torn down or its exterior facade altered except to restore it in accordance with the standards of the Secretary of the Interior, and no churches or school buildings older than 100 years of age will be torn down or altered except to restore them in accordance with their original design. The design of any remodeled existing structure, or of any new structure to be constructed in any District or any new use in any District, which is to be located within 1500 feet of all lot lines of, or which are visible from any portion of a public way adjacent to,

1. any structure, site or archaeological site or other property listed on, or deemed eligible by the Maine Historic Preservation Commission for listing on, the National Register of Historic Places, or
2. which has been identified by the Maine Historic Preservation Commission as
 - a. a structure, site, archaeological site, or property of national, statewide or local historic significance, or
 - b. a structure, site, archaeological site, or property whose exterior appearance is worthy of protection from incompatible uses due to its historically aesthetic qualities (such properties meeting the criteria in sections 1. and 2. will be on file at the Town Office for review) shall be compatible with such historic properties, in terms of mass, scale, design, building material, and height. Appropriate Buffer Strips of 25 feet shall be maintained at all lot lines of property abutting such historic properties.

Stone walls within the right-of-way are shown on the plans in Exhibit 6. Portions of stone walls may be temporarily moved in order for construction vehicles and crews to access the work site. In these instances, the stone will be stockpiled and replaced as soon as construction access to the area is no longer required.

Following consultation with the Maine Historic Preservation Commission (MHPC), CMP has conducted comprehensive investigations of archaeological resources along the entire scope of the Maine Power Reliability Program (MPRP). These surveys included Phase 0, Phase I, and where required by the MHPC, Phase II pre-European contact archaeology and post-European contact (or Historic) archaeology (both subsurface) surveys. CMP also conducted surveys to identify historic architectural structures that are listed, or are eligible for listing, on the National Register of Historic Places (NRHP). The MHPC has reviewed CMP's reports and has made the following determinations.

The MHPC has determined that there are no listed or eligible pre-contact archaeological resources or historic architectural structures within the project area in Durham. Consequently, MPRP will not have an undue adverse effect on pre-contact archaeological resources or historic architectural structures in Durham that are listed or eligible for listing on the NRHP.

The MHPC has determined that there is one eligible post-contact archaeological site located within CMP's right-of-way. In consultation with the MHPC, CMP has developed a Memorandum of Agreement (MOA) regarding the avoidance, protection, and mitigation of eligible historic sites potentially impacted by MPRP. CMP has designed MPRP in Durham so that all transmission structures and temporary accessways are located outside the boundaries of the eligible site. The Agreement requires that CMP prohibit any tree or shrub removal or clearing within the site that involves the mechanical taking down, grubbing, or bush-hogging of trees and shrubs. The Agreement prohibits the use of vehicles within the site boundaries during construction of MPRP and requires the use of protective matting if vehicles are needed for maintenance activities. The Agreement also requires CMP to retain a qualified professional to inspect the eligible site upon completion of construction and within two and four years after completion of construction to ensure that the terms of the Agreement are followed. Consequently, CMP has designed, and will construct and maintain, the MPRP so as to avoid and minimize any potential impacts on listed or eligible archaeological resources in Durham.

Q. Temporary Activity – An activity that is of a decidedly temporary nature or of short duration which will, because of unusual circumstances, be unable to meet the minimum requirements of these performance standards, may be allowed under the provisions of a Special Permit issued by the Code Enforcement Officer.

Not applicable. The MPRP will meet the performance standards of the Durham Land Use Ordinance.

Approval Criteria

(From Article VII, Section V of the Durham Land Use Ordinance)

Construction and operation of the Maine Power Reliability Program in Durham:

A. Will not result in undue water or air pollution.

The multiple methods, plans, and procedures to prevent water pollution during construction, operation, and maintenance of the proposed transmission line are incorporated in CMP's Environmental Control Requirements for Contractors and Subcontractors - Oil and Hazardous Material Contingency Plan (see Exhibit 15). These procedures establish a set of minimum requirements for spill prevention and response. The procedures incorporated into the plan have proven successful for preventing spills and for addressing spills if they occur. CMP's environmental inspectors will ensure that all personnel working on the site follow these procedures.

In addition, CMP employees follow the procedures outlined in CMP's Spill Management and Prevention section of CMP's Environmental Procedures Manual for response to any spills of oil, gasoline, hydraulic oil, or other similar substance. These procedures are similar to those outlined in Exhibit 15 for contractors, and cover reporting, immediate response, cleanup and documentation. Employees operating construction vehicles will be trained to promptly contain, report and clean up any spill in accordance with standard procedures. 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.

There are no air emissions associated with the operation of the transmission line.

B. Has sufficient water available for the reasonably foreseeable needs of the proposed use, including fire protection.

Operation of the transmission line does not require any water supply, and none is proposed. Currently, CMP offers training to local fire departments on request in procedures for fighting fires within transmission corridors. This practice will continue after the new transmission line is installed, so there will be no change in the existing ability of local fire departments to control fires within the right-of-way.

C. Will not cause an unreasonable burden on an existing water supply, if one is to be utilized. This criteria shall include use of an aquifer and the applicant must show that its use will not harm the wells of those currently relying upon said aquifer.

No water supply will be utilized in the construction or operation of the transmission line.

D. Will not cause unreasonable soil erosion or reduction in the capacity of the land to hold water so that a dangerous or unhealthy condition may result.

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 and the temporary impacts associated with access roads. CMP has developed a standard manual, *Environmental Guidelines for Construction and Maintenance Activities on Transmission Line and Substation Projects* (2010), which it uses as a routine part of all transmission and substation projects (a copy of the manual is attached as Exhibit 13.) 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 the Maine Department of Environmental Protection (DEP), is largely based on DEP's *Maine Erosion and Sediment Control BMPs*, dated March 2003, and DEP's Chapter 500, and contains specific Best Management Practices appropriate for electric transmission line and substation construction. These guidelines will be followed in the construction of the transmission line.

E. Will not cause highway or public road congestion or unsafe conditions with respect to use of the highway or public road existing or proposed.

There are no public or private roads proposed as part of the project, and there are no anticipated impacts on traffic. CMP will obtain all necessary entrance permits from the Maine Department of Transportation for the construction phase, but construction vehicles, for the most part, will be within the right-of-way and off public roads.

F. Will provide for adequate sewage disposal in conformity with the State Plumbing Code and all other applicable regulations.

There is no sewage disposal necessary or proposed as part of the project.

G. Will not cause an unreasonable burden on the ability of a municipality to dispose of solid waste and/or sewage if municipal services are to be utilized.

Once the project is constructed, there will be no waste generated by the site. CMP anticipates that solid waste generated from the proposed project area will be limited to minimal land clearing and construction debris. This debris is inert, non-hazardous material that will be handled in accordance with the Maine State Solid Waste Management and Recycling Law (38 M.R.S.A. § 2101 et seq.).

Wood cut and cleared from the MPRP 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 the conductors (wires)). All merchantable wood will be hauled off and sold for lumber or firewood. 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 transferred to a facility to be utilized in the production of erosion control mulch.

Construction will generate other wastes and 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

H. Will not have an undue adverse effect on the scenic or natural beauty of the area, aesthetics, historic sites or rare and irreplaceable natural areas, any deer wintering areas identified by the Maine Department of Fish and Wildlife or other agency or any public rights for physical or visual access to water bodies.

The proposed project will take place entirely within the existing corridor that will continue to be maintained in a vegetated state. Since the corridor already contains structures of a similar nature and a buffer strip of uncleared trees will remain between the new line and the nearest abutters on the west side, the proposed project will not have an undue adverse effect on the scenic or natural beauty of the area, aesthetics, historic sites, or irreplaceable natural areas. Physical and visual points of access to water bodies or from public viewpoints will not be affected. No rare, threatened, or endangered species or other critical areas will be affected.

A small portion of a deer wintering area (1.2 acres of a 197-acre deer yard) is within the right-of-way west of Stackpole Road and south of Bowie Hill Road Extension. A second deer wintering area is located where the right-of-way crosses into Auburn. Approximately 4.9 acres of this 50.4-acre deer yard are within the transmission corridor. Both deer wintering areas are rated by the Maine Department of Inland Fisheries and Wildlife as of “indeterminate” value. These portions of the corridor are not forested at

present, and no structures are proposed within the deeryards, therefore no impacts are anticipated. See Maps 3, 5, and 6, Exhibit 7: Site Plan, Proposed.

As noted in P. Historic Resources, page 13, historic resources will be avoided or managed according to the process set forth by the MOA signed by the SHPO, ACOE, and CMP. Rock walls that are disturbed by construction will be restored as soon as access to the corridor is no longer required.

I. Is in conformance with the Town's Subdivision Ordinance, Comprehensive Plan, Land Use Ordinance, and all other ordinances if any and if applicable.

The Durham Subdivision Ordinance does not apply, as no subdivision is proposed. The project will comply with all applicable standards of the Land Use Ordinance and is consistent with the policies of the Comprehensive Plan.

J. The applicant has adequate financial and technical capacity to meet the standards required by this Ordinance.

CMP is a subsidiary of Iberdrola USA, Inc. (formerly Energy East Corporation), which in turn is a subsidiary of Iberdrola, S.A. Iberdrola is Spain's number one energy group, one of the largest electricity companies in the world, and a world leader in wind power. Iberdrola operates in more than 40 countries, employs more than 33,000 people worldwide, and has a stock market capitalization in excess of \$45 billion. CMP is a financially strong company with total assets in excess of \$2 billion, credit ratings of BBB+ / Baa1 (from Standard & Poor's and Moody's, respectively), strong banking relationships, and access to the investment grade debt capital markets. CMP has short-term revolving credit availability of \$200 million through a bank facility (\$100 million) and under an agreement with Iberdrola USA (\$100 million). CMP has the regulatory authority to have outstanding, at any time, up to \$500 million of unsecured, medium-term notes (MTNs), of which there were \$293 million outstanding at Sept. 30, 2009, and has provisional authority to issue up to \$1 billion of first mortgage bonds (FMBs, rated A/A2 by Standard & Poor's and Moody's, respectively), of which there were \$150 million outstanding at Sept. 30, 2009.

K. Whenever situated in whole or in part, within 250 feet of any pond, lake, stream or river waters, will not adversely affect the quality of such body of water or unreasonably affect the shoreline of such body of water.

The transmission corridor is not within 250 feet of any pond, lake, or river waters. The corridor does include land within 250 feet of perennial and intermittent streams. Several measures will be taken to ensure that no adverse impacts to water quality or the shoreline of these water bodies will result from the project.

As described in CMP's *Environmental Guidelines for Construction and Maintenance Activities on Transmission Line and Substation Projects* (2010) (Exhibit 13) and the Construction Plan (Exhibit 14), the Applicant will minimize disturbance to the ground, encourage shrub vegetation growth, take extra precautions to prevent spilling oil or fuels near water bodies, utilize erosion and sedimentation control devices and structures, and

restore disturbed areas as soon as construction in the area is complete. Some specific measures to be used whenever practicable include:

- Identifying and flagging sensitive areas before construction begins;
- Using existing logging, farm, or other access roads and trails with the permission of the landowner to avoid creating new access roads;
- Installing erosion and sedimentation controls before construction begins;
- Refraining from disturbing the soil just prior to heavy rain events;
- Maintaining a filter strip of 25 feet or more adjacent to water bodies;
- Using water bars, broad-based dips, or turnouts approximately 50 feet from the access to any water body crossing;
- Using construction mats in wet areas; and
- Restoration and stabilization of disturbed areas after construction in the immediate area is complete, using straw mulch, erosion control mix, matting, or seeding.

See also the response to O. Water Quality Impacts, page 13. As a result of these measures, the project will not adversely affect surface water quality or unreasonably affect the shoreline of any water body.

L. Will not, alone or in conjunction with existing activities, adversely affect the quality or quantity of ground water.

Groundwater resources will not be needed for the construction or operation of the transmission line. Neither the quantity or quality of groundwater resources will be impacted. Any blasting that may be needed to set poles will be small and shallow enough not to affect groundwater resources. See also response to A, page 15.

M. The applicant will determine, based on the Federal Emergency Management Agency's Flood Boundary and Floodway Maps and Flood Insurance Rate Maps, whether the site of the proposed use is in a flood-prone area. If the site of proposed use, or any part of it, is in such an area the applicant will determine the 100-year flood elevation and flood hazard boundaries within the site. The proposed use shall include a condition of plot approval requiring that principal structures on any lots where the proposed use is to be conducted shall be constructed with their lowest floor including the basement, at least three (3) feet above the 100-year flood elevation and will only be constructed if permitted under the Town's Flood Hazard Ordinance.

The transmission structures will not have floors. CMP will obtain from the Code Enforcement Officer a Floodplain permit for structures within the floodplain.

N. Will not have an adverse impact on spawning grounds, fish, aquatic life, bird and other wildlife habitat.

See the responses to I. Soil Erosion Control page 10, O. Water Quality Impacts, page 13, H page 17, and K, page 18. The project will not have an adverse impact on spawning grounds, fish, aquatic life, bird or other wildlife habitat.

O. Will not cause noise, odor, glare, or vibration to disturb the peaceful enjoyment of adjacent property.

Noise impacts from the new transmission line are expected to be minimal. In general, audible noise (AN) is relative to conductor (wire) size. CMP has selected conductor sizes that under ideal, dry conditions are designed to be noise free; under adverse weather conditions (e.g., very high humidity and storm conditions) these same conductors will emit only a slight crackling sound. Modeling of a transmission line configuration similar to that proposed in Durham indicates that the new conductors will produce audible noise at 35.6-39.3 decibels on the A-weighted scale (dBA) at the edge of the right-of-way under the most adverse conditions⁶, and 10.4-14.3 dBA at the edge of the right-of-way in fair weather. Furthermore, the audible noise will dissipate quickly as distance from the edge of the right-of-way increases, and will be masked by the sound of wind and rain. These noise levels are below the Town's guidance for sound levels (55 dBA during the day, 45 dBA at night). For comparison purposes, a soft whisper at 15 feet is about 30 dBA; 40 dBA is comparable to a quiet office environment.

Once construction is complete, there will be no noise, odors, vibrations or other impacts generated by the site which would have a significant detrimental effect on the use and peaceful enjoyment of abutting property owners.

P. Will not place an excessive burden on the ability of the Town to provide municipal, governmental or educational services.

Once construction is complete, there will be no impacts from traffic, and the new transmission line will not require any additional town services (currently, CMP offers town fire departments training on how to handle fires within CMP transmission corridors; this practice will continue after construction of the project).

There will be no more demand on municipal services for the completed project than there is now. Nevertheless, the new infrastructure will bring new tax dollars to the Town.

⁶ Noise modeling was done assuming the transmission right-of-way was at 2,000 feet of elevation, where noise travels farther. The highest elevation along the right-of-way in Durham is 300 feet.

Exhibit 1: Letter from Town of Durham's Attorney

Exhibit 2: State Model Shoreland Zoning Ordinance

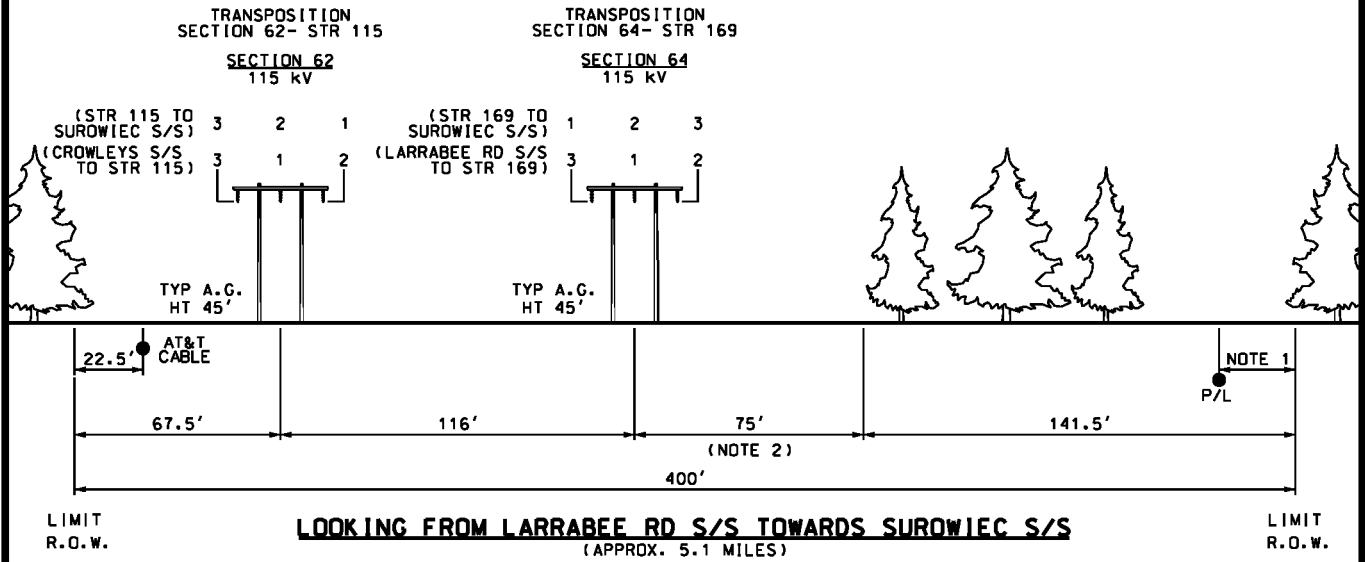
Exhibit 3: MPRP Project Scope

Exhibit 4: Location Map

Exhibit 5: Transmission Corridor Cross Section

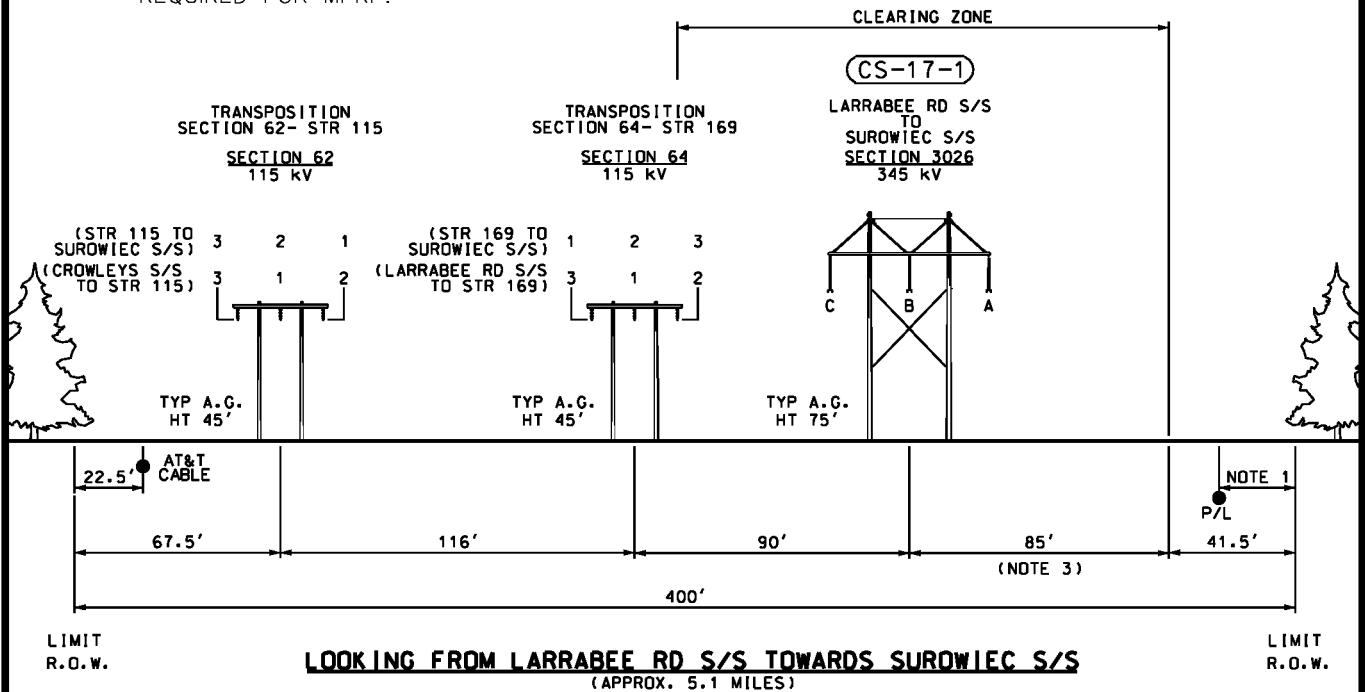
NOTES 1: GAS PIPELINE LOCATION VARIES ALONG ROW.
 2: EXISTING TREE LINE SHOWN IS APPROXIMATE AND VARIES IN SOME LOCATIONS.

EXISTING



NOTE 3: PROPOSED CLEARED WIDTH SHOWN IS THAT REQUIRED FOR MPRP.

PROPOSED



THIS DRAWING SHALL BE REVISED ON THE CADD SYSTEM ONLY

-DRAFT- FOR REVIEW ONLY				SECTION 64		POLE 164 TO 233		STA. 630+20 TO 899+13	
ENG. CONTRACTOR				MAINE POWER RELIABILITY PROGRAM					
D				EXISTING AND PROPOSED R.O.W.					
C				ALTERNATIVE N5 FOR N-1-1 ANALYSIS					
B				CHECKED		DESIGNED		DATE	
A				SGW		SGW		6/11/09	
NO. REVISION DATE BY				SCALE		DRAWN		APPR.	
SCALE				NTS		CENTRAL MAINE POWER CO.			
NO. REVISION DATE BY				TRANSMISSION ENGINEERING				SEGMENT 17	
NO. REVISION DATE BY				SCALE				SHEET N5-17-6D	

Exhibit 6: Site Plan, Existing

Exhibit 7: Site Plan, Proposed

Exhibit 8: Structure Height Ranges

**Exhibit 9: Memorandum of Agreement Between CMP and
the Maine Historic Preservation Commission**

Exhibit 10: List of Abutters

Exhibit 11: Proof of Notification

Exhibit 12: Proof of Right, Title, or Interest

Exhibit 13: CMP's *Environmental Guidelines for Construction and Maintenance Activities on Transmission line and Substation Projects*

APPENDIX B
CONSTRUCTION MATERIALS SOURCE LIST

APPENDIX C
OTHER RECOMMENDED REFERENCE
MANUALS

APPENDIX D
CONSTRUCTION TECHNIQUE ILLUSTRATIONS

APPENDIX E

EROSION AND SEDIMENTATION CONTROL LAW* 38

M.R.S.A. § 420-C

APPENDIX F
MAINE SLASH LAW* 12 M.R.S.A. § 9333

APPENDIX G
CULVERT SIZES FOR STREAM CROSSINGS
(3X RULE)

Exhibit 14: Construction Plan

EXHIBIT 7-8

Photos of Typical Equipment Mat Placement

EXHIBIT 7-9

Example of Stream Crossing Using Equipment Mats

EXHIBIT 7-10
Structure Site Preparation

**Exhibit 15: *Environmental Control Requirements
for Contractors and Subcontractors of Central Maine Power Company
- Oil and Hazardous Material***

Exhibit 16: Vegetation Management Plan