



JANET T. MILLS
GOVERNOR

STATE OF MAINE
DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY
LAND USE PLANNING COMMISSION
22 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0022

AMANDA E. BEAL
COMMISSIONER
SAMANTHA HORN
ACTING EXECUTIVE DIRECTOR

Memorandum

To: LUPC Commissioners
From: Bill Hinkel, Regional Supervisor
Date: September 4, 2019
Re: Central Maine Power Company's proposed New England Clean Energy Connect Project
Deliberative Session

Background

At its meeting on September 11, 2019, the Commission will hold a deliberative session on the Site Law Certification for Central Maine Power Company's ("CMP") proposed New England Clean Energy Connect project ("proposed Project"). As with all Commission meetings, deliberative sessions occur at a meeting that is open to the public. However, because the record is closed, the Commission does not receive further comment on the Site Law Certification.

The deliberative session is an opportunity for Commission members to review with staff and one another the testimony and written comments received regarding the Commission's role in certifying the proposed Project, discuss issues in dispute, discuss the evidence in evaluating the applicable review criteria, and consider, for a possible vote, the Draft Decision Document provided by staff.

The role of the Commission is to certify to the Department of Environmental Protection:

- a) whether the proposed Project is an allowed use within the subdistricts in which it is proposed;
and
- b) whether the proposed Project meets any land use standards established by the Commission that are not duplicative of those considered by the Department of Environmental Protection in its review of the proposed Project under the Site Location of Development Law.

While the Commission must certify to the Department of Environmental Protection whether the proposed Project is an allowed use within all subdistricts in which it is proposed, the hearing held in this matter focused on the Commission's role in certifying whether the proposed Project is allowed by special exception in the Recreation Protection ("P-RR") subdistricts. The proposed Project would

cross or traverse P-RR subdistricts at the Kennebec River, near Beattie Pond, and at the Appalachian Trail.

For the Commission to find a use is allowed by special exception in the P-RR subdistricts, the Commission must find that an applicant has shown by substantial evidence that:

- a) there is no alternative site which is both suitable to the proposed use and reasonably available to the applicant;
- b) the use can be buffered from those other uses and resources within the subdistrict with which it is incompatible; and
- c) such other conditions are met that the Commission may reasonably impose in accordance with the policies of the Comprehensive Land Use Plan.

Draft Decision Document Summary

Staff has prepared a Draft Decision Document, included as Attachment A of this memorandum, to aid the Commission in its deliberations. The Draft Decision Document includes staff recommendations for findings and conclusions for certain review criteria and presents options for findings and conclusions related to the Beattie Pond and Appalachian Trail P-RR special exception criteria. In summary, the Draft Decision Document concludes that the proposed Project:

- is an allowed use in the D-GN, D-RS, M-GN, P-FP, P-FW, P-GP, P-SL, and P-WL subdistricts;
- is an allowed use in the Kennebec River P-RR subdistrict and is buffered; and
- complies with all applicable land use standards, with conditions related to the public health, safety and general welfare standard (draft Condition #1, page 45); the vegetative clearing standard (draft Condition #4, page 45); and traffic (draft Condition #5, page 45).

The Commission may deliberate and choose to direct staff to revise any of the conclusions or conditions recommended in the Draft Decision Document.

The Draft Decision Document presents possible options for findings and conclusions with respect to the Beattie Pond and Appalachian Trail P-RR subdistricts. A discussion of the alternatives analysis and buffering, and possible options for Commission findings and conclusions, for both the Beattie Pond and Appalachian Trail P-RR subdistricts, is presented below.

CMP and intervenors in the proceeding raised numerous issues which are identified and discussed in their prefiled written testimonies, at the live hearing (see hearing transcripts), in post-hearing briefs and proposed findings of fact, and in reply briefs, all of which have previously been provided to the Commission. Public comments received on the proposed Project have also been provided to the Commission for consideration in its decision.

ALTERNATIVES ANALYSIS

The Draft Decision Document at pages 9-24 addresses alternatives considered by CMP.

1. Alternative routes for above ground installation – CMP evaluated three above ground project routes and ultimately decided that the project as proposed would be the least environmentally damaging and most cost-effective option.
2. Undergrounding alternative – CMP evaluated the alternative of undergrounding the transmission line, both entirely within the proposed new 53.5-mile corridor (Segment 1) as well as within the Beattie Pond and Appalachian Trail P-RR subdistricts specifically.

Beattie Pond P-RR subdistrict — *Draft Decision Document pages 15-18*

Approximately 1.2 miles of the proposed Project would traverse the ½-mile wide P-RR subdistrict surrounding Beattie Pond, a remote management class 6 lake.

- Criterion: There is no alternative site which is both suitable to the proposed use and reasonably available to the applicant.

Key question: Does the alternatives analysis evidence support a conclusion that there is no alternative which is both suitable to the proposed use and reasonably available to CMP to avoid crossing the Beattie Pond P-RR?

Possible factors to consider:

- Cost of land needed for an above ground alternative south of the proposed route to avoid the P-RR – 50 times fair market value
- An alternate above ground route to the north would have increased visibility from Beattie Pond
- Undergrounding cost of \$15.3 million (or 2.04% of the overall proposed Project cost)
- Temporary environmental impacts associated with undergrounding
- Potential for increased access to Beattie Pond over permanent roads that would be needed to service an underground installation

ALTERNATIVES ANALYSIS (cont'd)

Beattie Pond options for Commission consideration

The Draft Decision Document at pages 17-18 provides two options for the Commission to consider. The draft language is:

Overall, as compared to the proposed overhead transmission line, undergrounding at the Beattie Pond subdistrict would necessitate the use of more heavy equipment, longer construction time, greater disruption to traffic, additional temporary environmental impacts, construction of permanent access roads, and higher construction costs. Both overhead and undergrounding methods of installing a transmission line result in some environmental and scenic impacts within the P-RR subdistricts. The Commission finds that, on balance,

- A. the benefit to recreational users on Beattie Pond of undergrounding the transmission line does not outweigh the environmental, technological, logistical, and financial implications of using this methodology in the Beattie Pond P-RR subdistrict and is therefore not suitable to the proposed use or reasonably available to the applicant.

OR

- B. the benefit of undergrounding the transmission line within the Beattie Pond subdistrict outweighs the environmental, technological, logistical, and financial implications of doing so and is therefore an alternative that is both suitable to the proposed use and reasonably available to the applicant.

The Commission may choose to take a non-binding straw vote for either paragraph A or paragraph B to assist in framing a motion and vote for its final conclusions.

ALTERNATIVES ANALYSIS (cont'd)

Appalachian Trail P-RR subdistrict — *Draft Decision Document pages 18-20*

Approximately 3,500 feet of the proposed Project would traverse the 200-foot wide P-RR subdistrict surrounding the Appalachian Trail in Bald Mountain Township.

- Criterion: There is no alternative site which is both suitable to the proposed use and reasonably available to the applicant.

Key question: Does the alternatives analysis evidence support a conclusion that that there is no alternative which is both suitable to the proposed use and reasonably available to CMP to avoid traversing and crossing the Appalachian Trail P-RR?

Possible factors to consider:

- Proposed Project would be co-located with an existing transmission line
- Alternative routes would result in crossings of the Appalachian Trail in one or more locations where there are no existing transmission line corridors
- CMP provides easement to the USA (National Park Service) for the Appalachian Trail
- New transmission line greatly exceeds the size of the existing line
- Undergrounding cost of \$29.8 million (or 3.97% of the overall proposed Project cost)
- Noise and scenic impacts of undergrounding construction
- Temporary environmental impacts associated with undergrounding
- Termination stations needed for undergrounding would be visible from the Appalachian Trail

ALTERNATIVES ANALYSIS (cont'd)

Appalachian Trail options for Commission consideration

The Draft Decision Document at page 20 provides two options for the Commission to consider. The draft language is:

Overall, as compared to the proposed overhead transmission line, undergrounding at the Appalachian Trail P-RR subdistrict would necessitate the use of more heavy equipment, longer construction time, greater disruption to traffic, additional temporary environmental impacts, construction of permanent access roads, and higher construction costs. Both overhead and undergrounding methods of installing a transmission line result in some environmental and scenic impacts within the P-RR subdistricts. The Commission finds that, on balance,

- A. the benefit to recreational users on the Appalachian Trail of undergrounding the transmission line does not outweigh the environmental, technological, logistical, and financial implications of using this methodology in the Appalachian Trail P-RR subdistrict and is therefore not suitable to the proposed use or reasonably available to the applicant.

OR

- B. the benefit of undergrounding the transmission line within the Appalachian Trail P-RR subdistrict, outweighs the environmental, technological, logistical, and financial implications of doing so and is therefore an alternative that is both suitable to the proposed use and reasonably available to the applicant.

The Commission may choose to take a non-binding straw vote for either paragraph A or paragraph B to assist in framing a motion and vote for its final conclusions.

SPECIAL EXCEPTION BUFFERING ANALYSIS

The Draft Decision Document at pages 25-33 addresses special exception buffering.

Beattie Pond P-RR subdistrict — *Draft Decision Document pages 26-28*

- Criterion: The use can be buffered from those other uses and resources within the subdistrict with which it is incompatible.

Key question: Does the evidence support a conclusion that the proposed Project can be buffered from those other uses and resources within the subdistrict with which it is incompatible, namely recreational fly fishing on Beattie Pond?

Possible factors to consider:

- Management objective of management class 6 lakes is prohibiting development within 1/2 mile of these water bodies
- Although the height of the transmission structure closest to Beattie Pond was reduced, a total of three structures and the shield wires would be visible from Beattie Pond
- Non-specular conductors are proposed for portions of the proposed Project outside the Beattie Pond P-RR to reduce visual impacts from sensitive areas
- Vegetative clearing associated with the proposed Project has the potential to make Beattie Pond and the P-RR subdistrict around the pond more accessible to all-terrain vehicles and snowmobiles

SPECIAL EXCEPTION BUFFERING ANALYSIS (cont'd)

Beattie Pond options for Commission consideration

The Draft Decision Document at page 28 provides two options for the Commission to consider. The draft language is:

In consideration of all the evidence, the Commission concludes that

- A. the proposed Project will be buffered from those other uses and resources within the subdistrict with which it is incompatible, namely recreational fishing on Beattie Pond, provided non-specular conductors are used as required by Condition 2.a of this Site Law Certification and that motorized vehicle access to the P-RR subdistrict via the transmission corridor is prevented in accordance with Condition 2.b of this Site Law Certification.

OR

- B. given that the tops of three HVDC structures and their shield wires will be visible from Beattie Pond, a remote pond zoned for protection from development, the proposed Project will not be buffered from those other uses and resources within the subdistrict with which it is incompatible, namely recreational fishing on Beattie Pond.

The Commission may choose to take a non-binding straw vote for either paragraph A or paragraph B to assist in framing a motion and vote for its final conclusions.

SPECIAL EXCEPTION BUFFERING ANALYSIS (cont'd)

Appalachian Trail P-RR subdistrict — *Draft Decision Document pages 28-31*

- Criterion: The use can be buffered from those other uses and resources within the subdistrict with which it is incompatible.

Key question: Does the evidence support a conclusion that that the proposed Project can be buffered from those other uses and resources within the subdistrict with which it is incompatible, namely primitive recreational hiking on the Appalachian Trail?

Possible factors to consider:

- The proposed Project would be co-located with an existing transmission line
- The existing transmission line predates the Appalachian Trail and the P-RR subdistrict at the proposed location for the new crossing
- CMP proposes planting a total of 93 shrubs, “Joe’s Hole (Moxie Pond) Planting Plan,” to provide visual buffering of the proposed Project

SPECIAL EXCEPTION BUFFERING ANALYSIS (cont'd)

Appalachian Trail options for Commission consideration

The Draft Decision Document at page 31 provides two options for the Commission to consider. The draft language is:

In consideration of all the evidence, the Commission concludes that

- A. the proposed Project, given the visibility of the existing transmission line, will be adequately buffered from those other uses and resources within the subdistrict with which it is incompatible, namely primitive recreational hiking on the Appalachian Trail, provided the vegetative planting described in CMP's "Joe's Hole (Moxie Pond) Planting Plan" is installed and maintained for the life of the project in accordance with Condition 2.c of this Site Law Certification.

OR

- B. the proposed Project will not be buffered from those other uses and resources within the subdistrict with which it is incompatible, in that additional clearing and higher poles will be visible to primitive recreational hikers on the Appalachian Trail.

The Commission may choose to take a non-binding straw vote for either paragraph A or paragraph B to assist in framing a motion and vote for its final conclusions.

FINAL CONCLUSIONS

The Draft Decision Document at pages 43-44 provides options for final conclusions for the Commission to consider. A straw vote, as suggested above, would help the Commission in deciding whether to move forward with a motion to vote on sub-paragraph A, B, or C below. The draft language is:

...

2. The proposed Project

A. is an allowed use in the Recreation Protection subdistricts provided CMP:

- a. Utilizes non-specular conductors on all portions of the proposed Project that will be visible from Beattie Pond;
- b. Monitors the portions of the corridor within the Recreation Protection subdistrict surrounding Beattie Pond and takes all necessary measures to prevent informal trail building for motorized vehicle access; and
- c. Installs and maintains for the life of the project the vegetative plantings described in CMP's "Joe's Hole (Moxie Pond) Planting Plan" within the Recreation Protection subdistrict surrounding the Appalachian Trail.

OR

B. is an allowed use in the Kennebec River Recreation Protection subdistrict and the Appalachian Trail Recreation Protection subdistrict, but is not an allowed use in the Beattie Pond Recreation Protection subdistrict.

OR

C. is an allowed use in the Kennebec River Recreation Protection subdistrict and the Beattie Pond Recreation Protection subdistrict, but is not an allowed use in the Appalachian Trail Recreation Protection subdistrict.

ATTACHMENT A



JANET T. MILLS
GOVERNOR

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**SITE LAW
CERTIFICATION**

COMMISSION DETERMINATION
IN THE MATTER OF

REQUEST OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
FOR SITE LOCATION OF DEVELOPMENT LAW CERTIFICATION
CENTRAL MAINE POWER COMPANY
NEW ENGLAND CLEAN ENERGY CONNECT
SITE LAW CERTIFICATION SLC-9

FINDINGS OF FACT AND DETERMINATION

The Maine Land Use Planning Commission (“Commission”), at a meeting of the Commission held on September 11, 2019, and after reviewing the request of the Maine Department of Environmental Protection (“Department”) for Site Location of Development Law (“Site Law”) Certification (“SLC”) SLC-9, supporting documents and other related materials on file, makes the following findings of fact and determination.

PROJECT DESCRIPTION AND LOCATION

Central Maine Power Company (“CMP”) proposes to construct the New England Clean Energy Connect Project (“proposed Project”), a high voltage direct current (“HVDC”) transmission line and related facilities to deliver electricity from Quebec, Canada to a new converter station in Lewiston, Maine. The proposed Project would include three main components: construction of a new transmission line corridor, expansion of an existing transmission line corridor, reconstruction of existing transmission lines within existing corridors, and rebuilding and upgrading substations.

The areas that would be involved in the proposed Project extend from Beattie Township at the Maine border with Quebec, Canada to Lewiston, Maine. The transmission line corridor and other components associated with the proposed Project would be located in the following townships, plantations, towns and municipalities:

- Franklin County townships: Beattie Township, Lowelltown Township, Merrill Strip Township, Skinner Township;



- Somerset County townships and plantations: Appleton Township, Bald Mountain Township, Bradstreet Township, Concord Township, Hobbstown Township, Johnson Mountain Township, Moxie Gore, Parlin Pond Township, The Forks Plantation, T5 R7 BKP WKR, West Forks Plantation; and
- Towns and municipalities: Alna, Anson, Auburn, Chesterville, Durham, Embden, Farmington, Greene, Industry, Jay, Leeds, Lewiston, Livermore Falls, New Sharon, Pownal, Starks, Windsor, Whitefield, Wilton, Wiscasset, Woolwich.

The proposed Project is described by CMP in five segments. A project scope map showing the extent of each segment is included as **Appendix A** of this Site Law Certification.¹ Segment 1 would be 53.5 miles in length and would begin in Beattie Township and end in Moxie Gore, entirely within townships and plantations served by the Commission. Segment 2 would be 21.9 miles in length and would begin in The Forks Plantation and end in Moscow, within which The Forks Plantation and Bald Mountain Township are served by the Commission. Segment 3 would be 71.5 miles in length and would begin in Concord Township and end in Lewiston, within which only Concord Township is served by the Commission. Segments 4 and 5 would be wholly within towns and municipalities not served by the Commission.

A new 145.3-mile, 320-kilovolt HVDC transmission line would be constructed in Segments 1, 2, and 3. In Segment 1, the transmission line corridor would be 300 feet wide, is generally forested, and is not currently developed. A 150-foot wide portion of the Segment 1 corridor would be cleared of vegetation capable of growing into the conductor safety zone, as required by the National Electric Reliability Corporation.² In Segments 2 and 3, the proposed Project would be co-located with an existing transmission line and clearing of the corridor would be increased by 75 feet to accommodate the new line.

No new permanent roads would be constructed for portions of the proposed Project within the Commission's jurisdiction. Access to portions of the proposed Project within the Commission's jurisdiction in Segments 1, 2, and 3 would be over existing land management roads.³

CMP would utilize a backhoe to excavate holes to install transmission line structures. Placement of transmission line structures would disturb areas ranging from 30 square feet to 195 square feet, depending on the height of the transmission line structure required at a specific location and the size of the base needed to install each transmission line structure. Additional holes would be excavated to install guy wire anchors, as needed. Blasting may be required in some areas to achieve the

¹ Excerpt from CMP's Site Law application, exhibit 1-1.

² The North American Electric Reliability Corporation is a not-for-profit international regulatory authority whose mission is to assure the effective and efficient reduction of risks to the reliability and security of the grid. The North American Electric Reliability Corporation develops and enforces reliability standards, including the management of vegetation to prevent encroachments into the Minimum Vegetation Clearance Distance of its transmission lines.

³ Access to Segments 1, 2, and 3 would be largely over privately-owned roads used for timber harvesting activities. Land management roads are used primarily for agricultural or forest management activities; however, some private landowners in the remote areas of Maine where the proposed Project would be located allow members of the public to utilize land management roads for recreation, hunting, fishing and other similar uses.

necessary depth for the transmission line structures and guy wire anchor bases. Once a hole is dug to the proper depth, a crane would be used to place the pole in proper alignment.⁴

SCOPE OF COMMISSION’S REVIEW: ZONING, LAND USE STANDARDS, AND COMPREHENSIVE LAND USE PLAN

Pursuant to 12 M.R.S. § 685-B(1-A)(B-1), the Commission must determine whether the proposed Project is an allowed use within the subdistricts in which it is proposed and whether the proposed Project meets any land use standards established by the Commission that are not considered in the Department’s review under the Site Law.

a. Commission’s Zoning Subdistricts & Use Listings

Within the Commission’s jurisdictional area, there are three major zoning district classifications—management, protection, and development districts—which the Commission has further delineated into zoning subdistricts to protect important resources and prevent conflicts between incompatible uses. For each subdistrict, the Commission designated uses that are allowed without a permit, uses that are allowed without a permit subject to standards, uses that are allowed with a permit, uses that are allowed with a permit by special exception, and uses that are prohibited. The Commission’s zoning subdistricts are codified in the Commission’s Land Use Districts and Standards, 01-672 C.M.R. ch. 10 (“Chapter 10”).

The proposed Project would be located within the following subdistricts, listed in the Table 1 below. Because the proposed Project is a “utility facility” as that term is defined in Ch. 10, § 10.02(248), the table identifies the status of utility facilities within each listed subdistrict.

Table 1. Subdistricts in which the proposed Project is proposed and use listing status.

Subdistrict	Use Listing Status
General Development	Allowed with a permit
Residential Development	Allowed with a permit
General Management	Allowed with a permit
Flood Prone Protection	Allowed with a permit
Fish and Wildlife Protection	Allowed with a permit
Great Pond Protection	Allowed with a permit
Shoreland Protection	Allowed with a permit
Recreation Protection	Allowed with a permit by special exception
Wetland Protection	Allowed with a permit by special exception

⁴ Additional details regarding proposed construction plans are found in CMP’s Natural Resources Protection Act (“NRPA”) application, section 7.0. The proposed Project would include other components that are either exempt from Site Law review by the Department or that are otherwise not proposed within the Commission’s jurisdiction. Additional information regarding these components is provided in CMP’s Site Law permit application.

b. Land Use Standards

The Commission's land use standards are codified in Ch. 10, §§ 10.24 – 10.27, and are grouped into three categories: development standards, dimensional requirements, and activity-specific standards.⁵ The Commission's role in certifying the proposed Project to the Department is limited to reviewing development standards that are not duplicative of the Department's review pursuant to the Site Law. 12 M.R.S. § 685-B(1-A)(B-1). Applicable statutory criteria⁶ and review standards that are not duplicative of the Department's review are:

- a. Vehicular Circulation, Access and Parking – Ch. 10, §§ 10.24(B) and 10.25(D);
- b. Conformance with Chapter 10 and the regulations, standards and plans adopted pursuant to Ch. 10 – Ch. 10, § 10.24(E);
- c. Subdivision and Lot Creation – Ch. 10, §§ 10.24(F) and 10.25(Q);
- d. Public's Health, Safety and General Welfare – Ch. 10, § 10.24
- e. Lighting – Ch. 10, § 10.25(F);
- f. Activities in Flood Prone Areas – Ch. 10, § 10.25(T);
- g. Dimensional Standards – Ch. 10, § 10.26(D) and (F);
- h. Vegetative Clearing – Ch. 10, § 10.27(B);
- i. Pesticide Application – Ch. 10, § 10.27(I); and
- j. Signs – Ch. 10, § 10.27(J).

c. Comprehensive Land Use Plan

Pursuant to 12 M.R.S. § 685-C(1), the Commission has a Comprehensive Land Use Plan that guides the Commission in developing specific land use standards, delineating district boundaries, siting development, and generally fulfilling the purposes of the Commission's governing statute. If approving applications submitted to it pursuant to 12 M.R.S. § 685-A(10) and § 685-B, the Commission may impose such reasonable terms and conditions as the Commission considers appropriate to satisfy the criteria of approval and purpose set forth in these statutes, rules, and the Comprehensive Land Use Plan.⁷

⁵ Ch. 10, subchapter III.

⁶ The criteria for approval set forth at 12 M.R.S. § 685-B(4) are restated in Chapter 10, § 10.24.

⁷ Ch. 10, § 10.24.

PROCEDURAL BACKGROUND

On March 31, 2017, Massachusetts Electric Distribution Companies, in coordination with the Massachusetts Department of Energy Resources, issued a Request for Proposal for Long-Term Contracts for Clean Energy Projects (“Massachusetts RFP”).

On July 27, 2017, CMP and Hydro Renewable Energy, Inc., an affiliate of Hydro Quebec, submitted to Massachusetts Electric Distribution Companies a joint bid proposal, *New England Clean Energy Connect: 100% Hydro*, in response to the Massachusetts RFP.

On September 27, 2017, CMP submitted to the Department an application for a NRPA permit pursuant to 38 M.R.S. §§ 480-A – 480-JJ and a Site Law permit pursuant to 38 M.R.S. §§ 481 – 490 for its proposed Project.

On October 12, 2017, the Department submitted to the Commission a Request for Certification for CMP’s proposed Project.

On October 13, 2017, the Commission provided the Department with a Completeness Determination in which staff determined that there was sufficient information to begin the review of the certification request pursuant to 12 M.R.S. § 685-B(B-1), and the Department accepted the applications as complete for processing.

On November 17, 2017, the Commissioner of the Department decided that the Department would hold a public hearing on CMP’s NRPA and Site Law permit applications. On June 27, 2018, the Department provided notice of the opportunity to intervene in its hearing.

On December 11, 2017, the Appalachian Mountain Club, Maine Audubon, and the Natural Resources Council of Maine, in a joint letter to the Commission, filed a request for a hearing on the allowed use determination portion of the Commission’s certification of the proposed Project.

On December 19, 2017, the Commission voted to hold a public hearing limited to whether the proposed Project is an allowed use within the Recreation Protection (“P-RR”) subdistricts. On March 28, 2018, Massachusetts Electric Distribution Companies selected the proposed Project as the winning bid in the Massachusetts RFP.

On July 12, 2018, the Commission provided notice of the public hearing and opportunity to intervene.

To facilitate efficient review and avoid the need for duplicative testimony by the same parties and interested members of the public in different proceedings, the Commission decided to hold its public hearing jointly with the Department.

Through its First Procedural Order, the Commission granted intervenor status to the 30 petitioners identified in Table 2 below. Additionally, the Commission allowed the Office of the Public Advocate to participate as a governmental agency, which, pursuant to Chapter 5 § 5.15, has all the rights of an intervenor.

Table 2. Persons and entities granted leave to intervene.

Hawk’s Nest Lodge	Taylor Walker
Kennebec River Angler	Tony DiBlasi
Kingfisher River Guides	Edwin Buzzell
Maine Guide Service, LLC	Appalachian Mountain Club
Mike Pilsbury	Natural Resources Council of Maine
Alison Quick	Trout Unlimited
Carrie Carpenter	City of Lewiston
Courtney Fraley	Town of Caratunk
Eric Sherman	Wagner Forest Management
Kathy Barkley	NextEra Energy Resources, LLC
Kim Lyman	Western Mountains & Rivers Corp.
Linda Lee	International Brotherhood of Electrical Workers
Mandy Farrar	Industrial Energy Consumer Group
Matt Wagner	Lewiston Auburn Metropolitan Chamber of Commerce
Noah Hale	Maine State Chamber of Commerce

The Presiding Officer consolidated the following twelve intervenors: 1) Alison Quick, 2) Carrie Carpenter, 3) Courtney Fraley, 4) Eric Sherman, 5) Kathy Barkley, 6) Kim Lyman, 7) Linda Lee, 8) Mandy Farrar, 9) Matt Wagner, 10) Noah Hale, 11) Taylor Walker, and 12) Tony DiBlasi. This group is referred to as the “Local Residents and Recreational Users” in Intervenor Group 10 (see next paragraph).

The Department’s and the Commission’s Presiding Officers further consolidated the Intervenor groups into the following ten (10) intervenor groups.

- Group 1: Friends of Boundary Mountains*; Maine Wilderness Guides*; Old Canada Road*
- Group 2: West Forks Plantation*; Town of Caratunk**; Kennebec River Anglers**; Maine Guide Services**; Hawk’s Nest Lodge**; Mike Pilsbury**
- Group 3: International Energy Consumer Group**; City of Lewiston**, International Brotherhood of Electrical Workers**; Maine Chamber of Commerce**;
Lewiston/Auburn Chamber of Commerce***

- Group 4: Natural Resources Council of Maine^{**}; Appalachian Mountain Club^{**}; Trout Unlimited^{**}
- Group 5: Brookfield Energy^{*}; Wagner Forest^{**}
- Group 6: The Nature Conservancy^{*}; Conservation Law Foundation^{*}
- Group 7: Western Mountains and Rivers Corporation^{**}
- Group 8: NextEra^{**}
- Group 9: Office of the Public Advocate^{*}
- Group 10: Edwin Buzzell^{**}; Local Residents and Recreational Users^{***}

Note:

- * indicates: Intervenors granted by the Department only
- ** indicates: Intervenors granted by the Department and the Commission
- *** indicates: Intervenors granted by the Commission only

After receiving input from the parties, the Department's and the Commission's Presiding Officers selected the following hearing topics:

- a. Scenic Character and Existing Uses;
- b. Wildlife Habitat and Fisheries;
- c. Alternatives Analysis; and
- d. Compensation and Mitigation.

The Commission required pre-filing of all direct and rebuttal testimony in advance of the hearing. On April 1-5, 2019, in Farmington, and on May 9, 2019, in Bangor, the Department held a public hearing on CMP's proposed Project. On April 2, 2019, and May 9, 2019, only, the hearing was held jointly with the Commission. The hearing included both daytime and evening sessions. Participation in the daytime sessions was limited to the parties. The evening sessions, held on April 2, 2019, for the Commission and the Department jointly, and April 4, 2019, the Department only, were devoted to receiving testimony from members of the public. The Commission allowed the submission of post-hearing briefs, proposed findings of fact, and reply briefs following the hearing.

The opportunity for public comment on the proposed Project began with receipt of the request for certification on October 12, 2017. Following the conclusion of the hearing, the Presiding Officers held open the opportunity for public comment until May 20, 2019, then until May 28, 2019, to allow the public to file statements in rebuttal of those written statements filed by May 20, as

required by Commission rule Chapter 5. In October 2017, the Commission created a webpage for the proposed Project on which pertinent information regarding the Commission’s certification process was posted.⁸ A GovDelivery distribution list specific to the proposed Project was created by the Commission in October 2017 to provide updates on the proposed Project.⁹ Any interested person was provided the option to enter their email address to receive updates regarding the proposed Project. The Commission received approximately 300 written comments from members of the public, municipalities, plantations, and townships regarding the proposed Project. Additionally, the Commission received written and oral testimony from dozens of members of the public at the public hearing on April 2, 2019.

The Commission and the Department concluded the hearing in this matter on May 9, 2019. The record remained open until May 31, 2019, for the submission of limited additional evidence and responses. The Commission’s hearing record closed on May 31, 2019.

ALLOWED USE DETERMINATION: SPECIAL EXCEPTION REVIEW CRITERIA

As set forth in Table 1 above, a utility facility is a use allowed with a permit within all subdistricts in which it is proposed, except in the P-RR and Wetland Protection (“P-WL”) subdistricts. Within the P-RR and P-WL subdistricts, a utility facility is allowed with a permit by special exception. For the Commission to find that a use is allowed by special exception in both the P-RR and P-WL subdistricts, pursuant to Ch. 10, §§ 10.23(I)(3)(d) and 10.23(N)(3)(d) respectively, an applicant must show by substantial evidence that:

- a. there is no alternative site which is both suitable to the proposed use and reasonably available to the applicant;
- b. the use can be buffered from those other uses and resources within the subdistrict with which it is incompatible; and
- c. such other conditions are met that the Commission may reasonably impose in accordance with the policies of the Comprehensive Land Use Plan.

The proposed Project would cross or traverse three separate P-RR subdistricts: 1) where the proposed Project would cross the Kennebec River in West Forks Plantation and Moxie Gore; 2) adjacent to Beattie Pond in Beattie Township, Lowelltown Township, Skinner Township, and Merrill Strip Township; and 3) at a proposed crossing of the Appalachian Trail in Bald Mountain Township. The proposed Project crosses P-WL subdistricts in numerous locations throughout Segments 1, 2, and 3.

The purpose of the P-RR subdistrict is to provide protection from development and intensive recreational uses to those areas that currently support, or have opportunities for, unusually

⁸ https://www.maine.gov/dacf/lupc/projects/site_law_certification/slc9.html (last accessed August 13, 2019).

⁹ GovDelivery is a Maine government subscription service allowing citizens to sign up for free text and email updates about topics relevant to the subscriber.

significant primitive recreation activities. By so doing, the natural environment that is essential to the primitive recreational experience will be conserved. Ch. 10, § 10.23(I). The purpose of the P-WL subdistrict is to conserve coastal and freshwater wetlands in essentially their natural state because of the indispensable biologic, hydrologic and environmental functions which they perform. Ch. 10, § 10.23(N).

SPECIAL EXCEPTION ALTERNATIVES ANALYSIS

The Commission considers alternatives analysis information to determine whether a proposed activity is an allowed use by special exception within P-RR and P-WL subdistricts.¹⁰ Although the Commission's role does not include evaluation of alternatives outside the P-RR and P-WL subdistricts, an understanding of CMP's overall alternatives analyses for siting the proposed Project is necessary context for the Commission's evaluation of the P-RR and P-WL special exception criteria.¹¹

a. Alternative Routes for Transmission Line Corridor: Above Ground Alternatives

CMP analyzed three HVDC transmission line alternative routes when designing the proposed Project, each of which it stated would meet the project purpose of delivering energy generation from Québec to the New England Control Area.¹² In doing so, CMP specifically evaluated alternatives that would avoid the P-RR subdistricts. The three routes CMP evaluated are the Preferred Route, which is the route selected by CMP for its proposed Project for which it seeks permits; Alternative 1; and Alternative 2. Alternative 1 would require a new and additional crossing of the Appalachian Trail, would require acquisition of lands held in conservation, would include 93 miles of new corridor as compared to the Preferred Route distance of 53.5 miles, and would require more landowner acquisitions. Alternative 2 would also require a new crossing of the Appalachian Trail, the acquisitions of land in the 36,000-acre Bigelow Preserve and from the Penobscot Indian Nation, contains more wetland and stream crossings than the Preferred Alternative, and requires more landowner acquisitions than the Preferred Alternative.

CMP considered the following in conducting its evaluation of alternatives: conserved lands, undeveloped right-of-way, amount of clearing required, number of stream crossings, transmission line length, National Wetlands Inventory mapped wetlands, deer wintering areas, inland waterfowl and wading bird habitat, public water supplies, significant sand and gravel aquifers, and parcel count total. In siting Segment 1, CMP stated that it considered the presence of publicly owned

¹⁰ The Department requires a broader alternatives analysis as part of its review under the NRPA that addresses avoidance and minimization of impacts to protected natural resources over the entire proposed Project, including impacts to protected natural resources within the Commission's jurisdiction.

¹¹ CMP's complete alternatives analysis is provided in section 2.0 of its NRPA permit application with the Department. Alternatives analyses pertaining to the P-RR and P-WL subdistricts are discussed in section 25 of CMP's Site Law permit application as well as in its hearing testimony before the Commission.

¹² CMP witness Brian Berube, hearing transcript, April 2, 2019, pages 129-130; NRPA application, section 2.0.

conservation lands (e.g., the Appalachian National Scenic Trail and Maine Bureau of Parks and Lands properties), as well as those held by private conservation organizations such as The Nature Conservancy and the New England Forestry Foundation. The paramount goal of the route selection was to avoid iconic scenic and recreational areas that characterize this part of western Maine, including the Bigelow Preserve, the Crocker Mountain High Peaks area, Mount Abraham, Saddleback Mountain, the Moosehead Region Conservation Easement, Grace Pond in Upper Enchanted Township, the Leuthold Forest Preserve, the Number 5 Bog Ecological Reserve, and the Moose River/Attean and Holeb Ponds. CMP further stated that care was taken to microsite the new corridor in a manner that would avoid visual impacts to smaller but visually sensitive areas such as the Moxie Falls Scenic Area and the Cold Stream Forest.

CMP stated that it would utilize existing transmission line corridors to the greatest extent practicable for the proposed Project. Approximately 73 percent of the proposed Project would be sited in existing transmission corridors, and CMP already holds title, right, or interest to lands within these existing corridors. Regarding Segment 1, the undeveloped corridor between the Canadian border and The Forks Plantation, CMP asserts that it has fee title, leases, and easements to all the land within the Preferred Alternative corridor.

Ultimately, CMP decided that the Preferred Alternative would be the least environmentally damaging and most cost-effective option and is the route selected for the proposed Project.

CMP evaluated additional specific alternatives to avoid crossing the P-RR subdistricts at the Kennebec River, Beattie Pond, and the Appalachian Trail.

In an effort to avoid the P-RR subdistrict at Beattie Pond, CMP attempted to negotiate an agreement with a landowner for a corridor south of the pond through Merrill Strip Township. CMP testified that the landowner demanded approximately 50 times the fair market value for the land necessary to avoid the Beattie Pond P-RR. Consequently, CMP concluded that this alternative was not reasonably available.¹³ CMP's witness testified that \$1,000 per acre is a reasonable value to consider for planning purposes for land around Beattie Pond.¹⁴ CMP did not identify how many acres of land they would need to acquire to accomplish the southern alignment to avoid the Beattie Pond P-RR.¹⁵

CMP provided an easement to the United States government for the construction of the Appalachian Trail at the location where it now seeks to install an additional transmission line as part of the proposed Project.¹⁶ The easement reserves the right to build and maintain additional transmission lines and clear within the corridor. CMP contends that alternative alignments at this location would result in one or more new crossings of the Appalachian Trail where there is not an existing transmission line.

¹³ CMP witness Brian Berube, hearing transcript, April 2, 2019, page 130.

¹⁴ CMP witness Kenneth Freye, hearing transcript, May 9, 2019, pages 383-384.

¹⁵ Hearing transcript, April 2, 2019, pages 140-141.

¹⁶ CMP rebuttal testimony, exhibit 9-B.

None of the components of the proposed underground crossing of the Kennebec River would be visible from the P-RR subdistrict. CMP concluded that the previously proposed overhead crossing of the Kennebec River is no longer suitable as it would have a greater environmental impact than the current proposal.

More detailed discussion of alternatives for sections of the proposed Project that would cross or traverse the P-RR subdistricts is provided below.

b. Alternative Routes for Transmission Line Corridor: Undergrounding Alternative

Several intervenors raised the concern that CMP did not include undergrounding the transmission line as an alternative considered to the proposed overhead crossing of the Beattie Pond and Appalachian Trail P-RR subdistricts. In response, CMP argued that it “is under no obligation to analyze alternatives that are too remote, speculative, or impractical to pass the threshold test of reasonableness.... It was and remains so obvious that undergrounding would not be practicable that CMP did not initially include it as an alternative in its Applications.”¹⁷ CMP testified that when the proposed Project was designed at put to bid for the Massachusetts RFP, incorporating the costs associated with undergrounding would have resulted in CMP’s proposal not being competitive relative to the other proposals and therefore not selected by the Massachusetts Electric Distribution Companies.¹⁸ Additional costs to underground the proposed Project at the Beattie Pond or Appalachian Trail P-RR subdistricts would be borne by CMP (or an affiliate owner of the [proposed] Project) and its investors.¹⁹

Despite CMP’s conclusion that undergrounding would be obviously cost prohibitive without conducting a thorough analysis, CMP provided an underground alternatives analysis in response to the testimony of witnesses in Intervenor Groups 2, 6, and 8. CMP additionally provided detailed cost analysis information to the Commission and Department on May 17, 2019. CMP argued that “this analysis confirmed CMP’s initial determination that undergrounding the [proposed] Project, or even portions of the [proposed] Project beyond the proposed undergrounding at the upper Kennebec River, is not reasonable, and therefore also could not be ‘practicable,’ because the costs of doing so would defeat the purpose of the [proposed] Project. For the same reason, undergrounding in the two other P-RR subdistricts that the [proposed] Project will cross is not suitable or reasonably available to CMP.”²⁰

Intervenor Groups 2, 4, and 10 argued that CMP did not conduct a proper and thorough alternatives analysis, in part, because the time to conduct such analysis was at the time the proposed Project was being sited, not during the hearing. Intervenor Group 4 argued that the amount of redacted information in CMP’s undergrounding cost analysis renders the analysis of limited use in

¹⁷ CMP post-hearing reply brief, page 20.

¹⁸ CMP witness Thorn Dickinson, prefiled rebuttal testimony.

¹⁹ CMP witness Thorn Dickinson, prefiled rebuttal testimony, page 11.

²⁰ CMP post-hearing reply brief, pages 20-21.

evaluating whether or not these figures are reasonable, what they include, and whether the alternatives could have been practicable, had they ever truly been considered by CMP.²¹

Intervenor Group 8 argued that HVDC transmission lines installed worldwide that are similar to the one proposed by CMP are routed underground and therefore are technically feasible.

Undergrounding some of all of proposed Project in Segment 1, Intervenor Group 8 argues, is a financially viable alternative that would mitigate scenic and recreational concerns in this section of the proposed Project. CMP committed to route the proposed Project under the Kennebec River, which will cost \$42 million, approximately four percent of the project's capital cost.

Intervenor Group 8 argued that HVDC transmission lines installed worldwide that are similar to the one proposed by CMP are routed underground and therefore are technically feasible and that undergrounding some of all of proposed Project in Segment 1 is a financially viable alternative that would mitigate scenic and recreational concerns in this section of the proposed Project. Intervenor Group 8 argued that CMP committed to route the proposed Project under the Kennebec River, which will cost \$42 million, approximately four percent of the proposed Project's capital cost. The incremental cost increases for undergrounding the specific areas within the P-RR subdistrict for Segment 1 range from \$13, 28, and 30 million, which is approximately one, three, and three percent increases in the capital costs for the proposed Project. The total associated cost attributable to routing under the Kennebec River and specific areas in Segment 1, therefore, sum to only 11 percent of the proposed Project's total costs. Intervenor Group 8 argued that CMP conceded that its budget includes a contingency of 15 percent of the total project cost. Accordingly, undergrounding specific areas within the P-RR subdistrict for Segment 1 is well within CMP's anticipated contingency funds for the NECEC.²²

CMP argued that, contrary to the assertions of Intervenor Group 8, undergrounding is not available or feasible considering the technology and logistics and doing so would defeat the purpose of the proposed Project because it would not have been selected by the Massachusetts Electric Distribution Companies.²³ CMP argued that “[t]he design of transmission lines that interconnect systems is very, very site dependent” and that “underground transmission installations cause a continuous surface disruption (rather than intermittent and widely spaced at each overhead structure installation location), require additional control measures for soil erosion, sedimentation, and dust generation during construction, require permanent access roads to every jointing location along the route, and can only avoid wetlands and waterways by using higher cost and higher risk trenchless methods.”²⁴

In both prefiled rebuttal testimony and at the live hearing, CMP's witness, Justin Bardwell provided testimony regarding underground transmission methods, potential alternate routes, estimated costs, anticipated environmental and public impacts, and additional risk during construction. Mr. Bardwell identified and discussed direct burial and trenchless installation technologies used as alternatives to overhead transmission lines. Key points relative to the Commission's review include the following.

²¹ Intervenor Group 4 post-hearing brief.

²² Intervenor Group 8 post-hearing brief, page 4 (footnotes omitted).

²³ CMP witness Thorn Dickinson, prefiled rebuttal testimony, pages 2-3, 10.

²⁴ CMP post-hearing reply brief, page 21.

- Generally, direct burial of a transmission line in a trench is the lowest cost underground option. This requires digging a trench, management of spoils, erosion control, and removal of trees along a 75-foot wide corridor.
- Direct burial is often unsuitable for installation within roadways.
- Trenchless horizontal directional drill (“HDD”) technology methodology can be used to overcome or avoid surface obstacles, such as highways, railroads, sensitive wetlands, or waterways.
- HDD installation is two to ten times more expensive than trenched installations.
- HDD requires termination stations, similar in appearance to a similar to a substation, when transitioning between overhead and underground segments.
- Underground construction for the proposed Project would be expected to be mostly direct burial with HDD installations used for major highway, waterway, and wetlands crossings.
- The cost estimate for undergrounding the for the entirety of the proposed route in the proposed Project would be approximately \$1.9 billion. The cost estimate for undergrounding only the Segment 1 would be approximately \$750 million. These costs are approximately 5 to 7 times more than the expected cost of overhead transmission construction.
- The vast majority of environmental impacts would be temporary impacts associated with construction.
- Outage rates for overhead and underground installations are respectively 0.53 incidents per 100 miles and 0.141 incidents per 100 miles. Outages in an overhead line are often restored in a few hours, while outages in underground cables typically require 2 to 5 weeks to restore.
- Larger vehicles are needed to service an underground transmission line than an overhead transmission line making access during winter and spring more challenging.

c. Kennebec River P-RR subdistrict alternatives analysis

The proposed Project includes the proposed crossing of the Kennebec River at a location north of Moxie Stream, between West Forks Plantation and Moxie Gore. This river segment is commonly referred to as the Kennebec Gorge and is located just below the Harris Station Dam, the largest hydropower generating facility in Maine. The P-RR subdistrict extends 250 feet from the normal high water mark on both sides of the Kennebec River from the outlet of Indian Pond at the Harris Station Dam to 0.5 miles above its confluence with the Dead River in The Forks Plantation.²⁵

²⁵ Comprehensive Land Use Plan, Appendix B, Rivers with Special Zoning (2010).

Recreational whitewater rafting in Maine is centered on the Kennebec River, particularly within the Kennebec Gorge, the Dead River, and the West Branch of the Penobscot River.²⁶ Controlled flow releases from the Harris Station Dam support commercial and recreational rafting in this reach of the Kennebec. Between the dam and its confluence with the Dead River, there are no known residential or commercial developments within the Kennebec River P-RR subdistrict. Several individuals and companies representing the recreational and commercial uses of the Kennebec Gorge for whitewater rafting intervened in and testified at the hearing held by the Commission in April and May 2019.

In addition to the broader alternatives analyses discussed above, CMP evaluated three alternatives specific to the proposed crossing of the Kennebec River: 1) at a location north of Moxie Stream, between West Forks Plantation and Moxie Gore; 2) a crossing of the Kennebec River on CMP-owned land about one mile downstream of Harris Dam; and 3) a crossing of the Kennebec River near the Harris Station powerhouse. These are depicted in Figure 25-3 of CMP's Site Law application.

CMP selected the option north of Moxie Stream, between West Forks Plantation and Moxie Gore as its preferred alternative and, in its September 27, 2017, Site Law application, proposed to cross the Kennebec Gorge with an overhead transmission line. In response to early concerns about the impact of the overhead crossing proposal on scenic character and compatibility with the existing recreational uses, CMP, on October 19, 2018, filed an amendment to its Site Law and NRPA applications to incorporate an underground crossing of the Upper Kennebec River using HDD technology.

The proposed HDD crossing of the Kennebec River would not include the construction or placement of any structures within the P-RR subdistrict. The proposed HDD crossing would consist of three main components: 1) the HDD bore, a subgrade conduit containing the HDVC line; 2) two termination stations, one on each side of the river, where the transmission lines transition from underground to overhead; and 3) trenching, a direct buried conduit used to carry the transmission cables from the HDD bore to the termination station.

Intervenors provided no final arguments opposing CMP's proposed HDD crossing of the Kennebec River.

d. Commission findings and conclusions regarding the Kennebec P-RR subdistrict alternatives analysis

Given the potential for significant visual impacts to recreational users on the Kennebec River from an overhead alternative at that location, that the undergrounding alternative using a directional drill would result in no construction activity within the Kennebec River P-RR subdistrict, and the termination stations, which would also be located outside the Kennebec River P-RR, will be well

²⁶ Comprehensive Land Use Plan, page 102.

buffered from the river, the Commission concludes that there is no other alternative that is both suitable and reasonably available to the applicant outside of the Kennebec River P-RR subdistrict.

e. Beattie Pond P-RR subdistrict alternatives analysis

As set forth in the Commission's Wildlands Lake Assessment Findings, Ch. 10, Appendix C, Beattie Pond is a remote, undeveloped, management class 6 lake. A management class 6 lake is a remote pond that:

- a. Ha[s] no existing road access by two-wheel drive motor vehicles during summer months within 1/2 mile of the normal high water mark of the water body;
- b. Ha[s] existing buildings within 1/2 mile of the normal high water mark of the water body limited to no more than one non-commercial remote camp and its accessory structures; and
- c. Support[s] cold water game fisheries.

Ch. 10, § 10.02(125).

The management objective of management class 6 ponds is prohibiting development within 1/2 mile of these ponds to protect the primitive recreational experience and coldwater lake fisheries in remote settings.²⁷ In 1978, the Commission established a P-RR subdistrict within 1/2 mile of the normal high water mark of Beattie Pond. Approximately 1.2 miles of the proposed Project corridor would be located within the Beattie Pond P-RR subdistrict encompassing portions of Beattie Pond Township, Lowelltown Township, and Skinner Township.

Alternative Routes South and North of the Beattie Pond P-RR

CMP stated that it attempted to negotiate an alternative alignment south of the Beattie Pond P-RR subdistrict through Merrill Strip Township, but the landowner required compensation of approximately 50 times fair market value for that property; thus, CMP concluded that alternative is not practicable. Re-routing north of the pond to avoid the P-RR subdistrict would result in approximately two miles of additional corridor and associated vegetation clearing and would lead to potentially higher visibility from the pond, due to the higher elevations associated with Caswell Mountain. Thus, CMP concluded that neither alternative route is suitable for the proposed use, and reasonably available.²⁸

When asked at the April 2, 2019, hearing by Commission staff how much land CMP would need to acquire to avoid routing the proposed Project through the Beattie Pond P-RR, CMP's witness, Brian

²⁷ Comprehensive Land Use Plan, page 290.

²⁸ Site Law application, section 25.3.1.1; CMP post-hearing brief, page 23.

Berube, testified that he was unable to provide a definitive answer and that the ability of CMP to acquire any land outside the proposed corridor requires a willing buyer and seller.²⁹

Undergrounding Alternative in Beattie Pond P-RR

CMP's witness, Thorn Dickinson, testified that CMP had not evaluated the alternative of undergrounding the transmission line within the Beattie Pond P-RR subdistrict.³⁰ In response to this testimony, the Department, at the joint hearing, requested additional information from CMP regarding the cost of undergrounding the proposed transmission line at Beattie Pond and the Appalachian Trail.³¹ CMP submitted on May 17, 2019, its response to the May 9, 2019, request for additional information.

The estimated cost of an underground alternative for the 1.2 miles of transmission line within the Beattie Pond P-RR is \$15.3 million, or 2.04% of the overall proposed Project cost of approximately \$750 million. CMP's witness testified that, in general, underground construction costs five to seven times as much as overhead construction.³² CMP's witness and technology consultant testified that undergrounding the transmission line within the Beattie Pond P-RR "would have increased operational risk due to being 37 miles from paved roads. That distance limits the access for repair and maintenance crews particularly during winter and creates additional difficulties in impending remote monitoring."³³

The undergrounding alternative would involve the installation of termination stations outside the P-RR subdistrict and installation of approximately 1.2 miles of buried cables, including three jointing locations and crossing of two freshwater wetlands by approximately 1,000 feet long HDD installations.³⁴ CMP also testified that a short underground cable segment would create operational problems and reduce transmission line reliability and the remote location of the termination stations would present a significant operational challenge in the winter months since the privately-owned land management roads are not plowed.³⁵ CMP testified that to make underground repairs it would need to get heavy equipment, such as excavators, to this remote site. CMP expressed concern about its ability to get equipment to the Beattie Pond P-RR in poor road and weather conditions. In comparison, CMP testified that generally a line truck would be used to make repairs to an overhead line installation within the Beattie Pond P-RR, and that type of vehicle would be capable of traversing the roads under adverse conditions.³⁶

²⁹ Hearing transcript, April 2, 2019, pages 140-141.

³⁰ Hearing transcript, April 2, 2019, page 140.

³¹ Hearing transcript, May 9, 2019, pages 489-490.

³² Hearing transcript, May 9, 2019, page 341, lines 18-20.

³³ CMP Witness Justin Bardwell, hearing transcript, May 9, 2019, page 344.

³⁴ CMP post-hearing brief, page 52.

³⁵ CMP Witness Justin Bardwell, prefiled rebuttal testimony, pages 19-20.

³⁶ CMP witness Justin Bardwell, hearing transcript, May 9, 2019, pages 431-432.

f. Commission findings and conclusions regarding Beattie Pond P-RR subdistrict alternatives analysis

The Commission considered all relevant testimony and documents in the record for this proceeding. Regarding alternatives for locating the proposed Project outside of the P-RR subdistricts, the Commission finds most credible CMP's testimony and other evidence provided by CMP. The Beattie Pond alternative to the north of the pond is not suitable due to the potential for a higher visual impact to users of the pond. The alternative to the south is not reasonably available based on CMP's testimony on the cost to purchase the property.³⁷ The Commission finds 50 times the market value of the property to be unreasonable.

CMP provided credible evidence that routes co-locating the transmission line with the existing public or private roads are not reasonably available given the challenges of acquiring the necessary rights-of-way.

Were CMP to underground the transmission line within the Beattie Pond P-RR, the Commission agrees that accessing the corridor to perform maintenance and repairs would be technically and logistically challenging, especially during winter months, because the underground line would be located 37 miles from the nearest paved road. The Commission does not, however, find such access challenges dispositive of whether undergrounding is a suitable and reasonably available alternative. The line would be located 37 miles from the nearest paved road regardless of whether it is undergrounded or overhead. Thus, repair vehicles would need to access the same location. And, as CMP testified, underground lines experience fewer outages than overhead installations. The Commission is not persuaded that the difference in the type of repair equipment and vehicles needed to access the corridor at the Beattie Pond P-RR subdistrict rules out the undergrounding alternative in this location.

Undergrounding at the Beattie Pond P-RR would eliminate the visual impact of the proposed Project on recreational users of the pond. However, the intensity of the activity, need for nearby termination stations, and the development of permanent roads within the P-RR subdistrict to service an underground installation is inconsistent with the Commission's management goals for Beattie Pond, a management class 6 lake, managed for remote recreational experiences.

Overall, as compared to the proposed overhead transmission line, undergrounding at the Beattie Pond subdistrict would necessitate the use of more heavy equipment, longer construction time, greater disruption to traffic, additional temporary environmental impacts, construction of permanent access roads, and higher construction costs. Both overhead and undergrounding methods of installing a transmission line result in some environmental and scenic impacts within the P-RR

³⁷ Site Law application, section 25.3.1.1; CMP post-hearing brief, page 23.

subdistricts. The Commission finds that, on balance,

A. the benefit to recreational users on Beattie Pond of undergrounding the transmission line does not outweigh the environmental, technological, logistical, and financial implications of using this methodology in the Beattie Pond P-RR subdistrict and is therefore not suitable to the proposed use or reasonably available to the applicant.

OR

B. the benefit of undergrounding the transmission line within the Beattie Pond subdistrict outweighs the environmental, technological, logistical, and financial implications of doing so and is therefore an alternative that is both suitable to the proposed use and reasonably available to the applicant.

g. Appalachian Trail P-RR subdistrict alternatives analysis

The Commission has established a 200-foot wide P-RR subdistrict centered on the entire length of the Appalachian Trail within its jurisdictional area. The proposed Project would cross the P-RR subdistrict in three locations at the Appalachian Trail adjacent to Moxie Pond in Bald Mountain Township. At this location, the Appalachian Trail is located in an existing CMP corridor containing a 115-kilovolt transmission line. One of the three proposed Appalachian Trail crossings is located at an area referred to as Joe's Hole, which crossing is depicted in Figure 25-4 of CMP's Site Law application and in "Photosimulation 50: Troutdale Road, Bald Mountain Twp" included as Appendix D of CMP's December 7, 2018, response to additional information request.

The cleared portion of CMP's existing corridor in the Appalachian Trail P-RR is approximately 150 feet wide. CMP proposes to widen the clearing by an additional 75 feet on the southern side of the corridor to accommodate the new HVDC transmission line. The resulting cleared portion of the corridor in this location would be 225 feet wide. Portions of six proposed HVDC transmission structures would be visible from the Appalachian Trail P-RR and co-located within an existing CMP transmission line corridor.

CMP's witness testified that while the existing corridor intersects the P-RR subdistrict near the Troutdale Road, the proposed clearing associated with the proposed Project is entirely outside the P-RR and in a Residential Development subdistrict. CMP's witness introduced Applicant Exhibit "Cross-1" depicting the location of the proposed clearing associated with the proposed Project and the zoning boundaries for the P-RR subdistricts.³⁸ Based on information provided by CMP regarding the extent and location of vegetative clearing at the proposed Appalachian Trail crossing, the Commission concurs that the clearing associated with the proposed Project crosses the Appalachian Trail P-RR in two rather than the three locations identified in the September 2017 Site Law application.

³⁸ CMP witness Peggy Dwyer, hearing transcript, April 2, 2019, pages 143-145.

CMP stated in their Site Law application that “[t]he configuration of the [Appalachian Trail], within and adjacent to an approximately 3,500-foot long portion of transmission line corridor, prevented CMP from avoiding direct impacts to the subdistrict through the siting of the transmission line structures. As a result, one of five transmission line structures in this portion of the Project corridor is located within the P-RR subdistrict.” CMP additionally stated that “[a]lternative alignments of the transmission line to meet the purpose and need of the Project would result in crossings of the Appalachian Trail in one or more locations where there are no existing transmission line corridors. Co-location of the transmission line within the existing transmission line corridor is therefore the least environmentally-damaging practicable alternative.”³⁹

In 1987, CMP granted to the United States of America an easement for the Appalachian Trail to cross CMP’s land.⁴⁰ Pursuant to the easement, CMP reserves the right to construct electric transmission lines in the corridor that the Appalachian Trail crosses. With respect to undergrounding at the proposed Appalachian Trail crossing, CMP’s witness testified that CMP would have to acquire the underground rights from the United States National Park Service and CMP has not sought to acquire such rights. Intervenor Group 4 argued that CMP’s alternative analysis should have included the undertaking of discussions with private land owners, the National Park Service, and the Maine Appalachian Trail Club to explore the potential alternative of relocating the Appalachian Trail outside CMP’s corridor.⁴¹

Additional numerical cost analysis information concerning the proposed crossing of the Appalachian Trail provided by CMP on May 17, 2019, included estimates for undergrounding the proposed transmission line at the Appalachian Trail crossing. The estimated cost of an underground alternative for the approximately 1.0 mile of transmission line within the Appalachian Trail P-RR is \$29.8 million, or 3.97% of the overall proposed Project cost of approximately \$750 million. CMP’s witness testified that underground construction is a not a practicable or reasonable alternative and that underground construction would have increased environmental impacts, increased impacts to the public and increased cost to overhead construction. CMP argued that undergrounding of the transmission line at Joe’s Hole would require a large hydraulic rig to be set up next to the Appalachian Trail for several months causing significant noise and visual impacts and would require construction of termination stations within site of the trail.⁴² CMP did not address whether the timing of such construction could be coordinated during a period of reduced trail use to minimize the impacts on trail users.

Intervenor Groups 2 and 10 argued that the proposed Project will “degrade the hiking experience for users of the Appalachian Trail. It would be the first crossing of the [Appalachian Trail] by a transmission line of this size anywhere in the state.”⁴³

³⁹ Site Law application section 25.3.1.3.

⁴⁰ CMP prefiled rebuttal testimony, exhibit CMP-9-B.

⁴¹ Intervenor Group 4 post-hearing brief, page 9.

⁴² CMP witness Justin Bardwell, hearing transcript, May 9, 2019, page 343; CMP’s post-hearing brief, page 27.

⁴³ Intervenor Groups 2 and 10 post-hearing brief, page 7.

h. Commission findings and conclusions regarding the Appalachian Trail P-RR subdistrict alternatives analysis

The Commission considered all relevant testimony and documents in the record for this proceeding. Regarding alternatives for locating the proposed Project outside of the P-RR subdistricts, the Commission finds most credible CMP's testimony and other evidence provided by CMP. Alternative routes for crossing the Appalachian Trail are not suitable because they would cross the Appalachian Trail in places not already impacted by an existing transmission line.⁴⁴

Undergrounding at the Appalachian Trail P-RR would necessitate construction of termination stations that would be visible to remote recreational hikers, and the positioning of a large hydraulic drilling rig next to the trail for several months which would result in greater noise and visual impacts than the construction of the proposed overhead transmission lines.

The Commission considers cost as a factor in evaluating whether an alternative is reasonably available to an applicant. CMP's estimated costs associated with undergrounding the transmission line in the Appalachian Trail P-RR subdistricts is \$29.8 million (or 3.97% of the overall proposed Project).

Overall, as compared to the proposed overhead transmission line, undergrounding at the Appalachian Trail P-RR subdistrict would necessitate the use of more heavy equipment, longer construction time, greater disruption to traffic, additional temporary environmental impacts, construction of permanent access roads, and higher construction costs. Both overhead and undergrounding methods of installing a transmission line result in some environmental and scenic impacts within the P-RR subdistricts. The Commission finds that, on balance,

A. the benefit to recreational users on the Appalachian Trail of undergrounding the transmission line does not outweigh the environmental, technological, logistical, and financial implications of using this methodology in the Appalachian Trail P-RR subdistrict and is therefore not suitable to the proposed use or reasonably available to the applicant.

OR

B. the benefit of undergrounding the transmission line within the Appalachian Trail P-RR subdistrict, outweighs the environmental, technological, logistical, and financial implications of doing so and is therefore an alternative that is both suitable to the proposed use and reasonably available to the applicant.

⁴⁴ CMP witness Brian Berube, hearing transcript, April 2, 2019, page 170.

i. P-WL subdistrict alternatives analysis

The Wetland Protection subdistrict includes the area enclosed by the normal high water mark of surface water bodies, including coastal and freshwater wetlands and rivers, streams and brooks, within the Commission's jurisdictional area. Freshwater wetlands means “[f]reshwater swamps, marshes, bogs and similar areas that are inundated or saturated by surface or groundwater at a frequency and for a duration sufficient to support, and which under normal circumstances do support, a prevalence of wetland vegetation typically adapted for life in saturated soils and not below the normal high water mark of a body of standing water, coastal wetland, or flowing water.” Ch. 10, § 10.02(87).

The Commission’s Chapter 10 describes three categories of coastal or freshwater wetlands included in P-WL subdistricts: P-WL1, P-WL2, and P-WL3. Ch. 10, § 10.23(N)(2)(a).

The Department considers impacts to freshwater wetlands, including the wetlands zoned as P-WL, in its review of the proposed Project pursuant to the NRPA and related rule, Wetlands and Waterbodies Protection, 06-096 C.M.R. ch. 310. The Commission’s Protected Natural Resource standards set forth in Ch. 10, § 10.25(P) are therefore duplicative and not considered by the Commission in its certification decision. In preparing its NRPA application, CMP provided an alternatives analysis that identified wetlands and water bodies generally one acre and larger, listed in the National Wetlands Inventory maps developed by the United States Fish and Wildlife Service, which would be crossed by the proposed Project. CMP considered and favored transmission line routes that minimized crossings of wetlands and water bodies to minimize unavoidable temporary (construction mat crossings) and permanent (habitat conversion, filling) impacts to these resources. frequency of wetland occurrence per mile of transmission line corridor is greater along the route alternatives than along the preferred route. CMP concluded that frequency of wetland occurrence per mile of transmission line corridor is greater along the route alternatives than along the preferred route for which it seeks permits. As such, a route meeting the purpose and need of the proposed Project and reasonably available to CMP could not be found without similar or greater impact to P-WL subdistricts.⁴⁵

CMP’s preferred alternative route, for which it seeks permits, includes 76.3 acres of mapped wetland impacts compared to 118.3 acres for Alternative 1 and 113.3 acres for Alternative 2.⁴⁶ CMP did not provide information regarding the number of crossings of P-WL subdistricts the two alternative routes would involve.

CMP stated that the proposed Project would cross P-WL subdistricts a total of 34 times.⁴⁷ The Commission finds that the proposed Project would intersect a total of 73 individually zoned P-WL subdistricts. A summary of the locations and wetland category for each crossing is provided in Table 3 below. A total of two transmission structures, identified in Table 4 below, are located

⁴⁵ Site Law application, section 25.3.2. CMP’s alternatives analysis is included in section 2.0 of its NRPA application.

⁴⁶ CMP Witness Gerry Mirabile, prefiled direct testimony, pages 19-20.

⁴⁷ Site Law application, section 25.3.2.

within the P-WL subdistricts.⁴⁸ The primary impact to wetlands from the proposed Project would be the conversion of forested wetlands to scrub-shrub wetlands and emergent wetlands. The footprint of the two proposed transmission structures within P-WL3 wetlands would result in permanent impacts.

Table 3. Location and category of P-WL wetlands within the proposed Project area.

Location	Nearest Transmission Structure	Wetland Category
Appleton Township	3006-723	P-WL1: Wetlands of Special Significance
	3006-727	P-WL2: Scrub-shrub Wetlands
	3006-728	P-WL3: Forested Wetlands
	3006-731	P-WL3: Forested Wetlands
	3006-754	P-WL1: Wetlands of Special Significance
Bald Mountain Township	3006-436	P-WL1: Wetlands of Special Significance
	3006-436	P-WL3: Forested Wetlands
	3006-440	P-WL3: Forested Wetlands
	3006-441	P-WL3: Forested Wetlands
	3006-447	P-WL2: Scrub-shrub Wetlands
	3006-453	P-WL3: Forested Wetlands
	3006-463	P-WL1: Wetlands of Special Significance
	3006-483	P-WL1: Wetlands of Special Significance
3006-483	P-WL1: Wetlands of Special Significance	
Bradstreet Township	3006-667	P-WL2: Scrub-shrub Wetlands
	3006-667	P-WL1: Wetlands of Special Significance
	3006-671	P-WL2: Scrub-shrub Wetlands
	3006-678	P-WL1: Wetlands of Special Significance
	3006-678	P-WL2: Scrub-shrub Wetlands
	3006-680	P-WL1: Wetlands of Special Significance
	3006-682	P-WL3: Forested Wetlands
	3006-685	P-WL1: Wetlands of Special Significance
	3006-687	P-WL3: Forested Wetlands
	3006-687	P-WL2: Scrub-shrub Wetlands
	3006-687	P-WL1: Wetlands of Special Significance
	3006-688	P-WL1: Wetlands of Special Significance
Concord Township	3006-354	P-WL3: Forested Wetlands
	3006-357	P-WL3: Forested Wetlands
	3006-361	P-WL3: Forested Wetlands
	3006-365	P-WL1: Wetlands of Special Significance
	3006-365	P-WL3: Forested Wetlands

⁴⁸ CMP's August 13, 2018, response to additional information request.

	3006-365	P-WL2: Scrub-shrub Wetlands
	3006-365	P-WL3: Forested Wetlands
	3006-366	P-WL3: Forested Wetlands
	3006-370	P-WL2: Scrub-shrub Wetlands
	3006-375	P-WL2: Scrub-shrub Wetlands
	3006-376	P-WL2: Scrub-shrub Wetlands
	3006-376	P-WL3: Forested Wetlands
	3006-378	P-WL3: Forested Wetlands
	3006-708	P-WL1: Wetlands of Special Significance
Hobbestown Township	3006-703	P-WL1: Wetlands of Special Significance
	3006-708	P-WL3: Forested Wetlands
	3006-710	P-WL3: Forested Wetlands
	3006-721	P-WL2: Scrub-shrub Wetlands
Johnson Mountain Township	3006-588	P-WL2: Scrub-shrub Wetlands
	3006-599	P-WL3: Forested Wetlands
	3006-614	P-WL2: Scrub-shrub Wetlands
	3006-650	P-WL2: Scrub-shrub Wetlands
Moxie Gore	3006-540	P-WL3: Forested Wetlands
	3006-541	P-WL3: Forested Wetlands
	3006-543	P-WL3: Forested Wetlands
	3006-548	P-WL3: Forested Wetlands
Skinner Township	3006-770	P-WL2: Scrub-shrub Wetlands
T5 R7 BKP WKR	3006-693	P-WL2: Scrub-shrub Wetlands
	3006-693	P-WL3: Forested Wetlands
	3006-694	P-WL3: Forested Wetlands
	3006-694	P-WL3: Forested Wetlands
	3006-694	P-WL3: Forested Wetlands
	3006-695	P-WL3: Forested Wetlands
	3006-700	P-WL1: Wetlands of Special Significance
	3006-700	P-WL3: Forested Wetlands
	3006-702	P-WL1: Wetlands of Special Significance
	3006-702	P-WL3: Forested Wetlands
	3006-703	P-WL1: Wetlands of Special Significance
	3006-703	P-WL3: Forested Wetlands
	3006-704	P-WL3: Forested Wetlands
	3006-705	P-WL3: Forested Wetlands
The Forks Plantation	3006-502	P-WL2: Scrub-shrub Wetlands
	3006-502	P-WL1: Wetlands of Special Significance
	3006-502	P-WL1: Wetlands of Special Significance
	3006-530	P-WL3: Forested Wetlands

West Forks Plantation	3006-566	P-WL3: Forested Wetlands
	3006-567	P-WL3: Forested Wetlands

Table 4. Proposed transmission structures located within P-WL subdistricts.

Structure Number	Subdistrict	Location	Natural Resource Map Number
3006-541	P-WL3	Moxie Gore	Segment 1 - Map 113
3006-548	P-WL3	Moxie Gore	Segment 1 - Map 110

Capable tree species include, but are not limited to, fir, spruce, oaks, pines, maples, birches, poplar, elm, beech, and basswood.⁴⁹ CMP developed a Construction Vegetation Clearing Plan which describes the restrictive management practices required for protected natural resources during vegetation clearing associated with proposed Project construction.⁵⁰ CMP also developed a Post-Construction Vegetation Maintenance Plan which describes the restrictive maintenance requirements for protected natural resources within the transmission line corridor and applies to routine maintenance.⁵¹

j. Commission findings and conclusions regarding the P-WL subdistrict alternatives analysis

The Commission finds that the two alternative routes analyzed CMP would result in greater wetland impact than CMP’s preferred alternative for which is seeks permits. In addition, the Commission finds that the trench method of installing transmission lines, as discussed by Mr. Bardwell, would necessitate excavation of a trench through each wetland area resulting in temporary wetland impacts from the removal of vegetation and disturbance of soils. The underground trench alternative would also involve permanent changes in wetland vegetation, the conversion of forested wetland to scrub-shrub wetland for example. Mr. Bardwell testified to the cost of horizontal directional drilling beneath wetlands and the Commission finds this would be cost prohibitive and not an alternative that is reasonably available for the 73 individually zoned P-WL subdistricts within the Commission’s jurisdictional area. In consideration of all the evidence, the Commission concludes that there is no alternative site which is both suitable to the proposed use and reasonably available to the applicant relative to the P-WL subdistricts.

⁴⁹ Site Law application, section 10.1.

⁵⁰ Site Law application, exhibit 10-1.

⁵¹ Site Law application, exhibit 10-2.

SPECIAL EXCEPTION BUFFERING ANALYSIS

The special exception criteria for the P-RR and P-WL subdistricts require that the use can be buffered from those other uses and resources within the subdistrict with which it is incompatible. For purposes of Chapter 10, the proposed Project use is a utility facility. Because components of the proposed Project will be visible, the Commission considers visual screening of the proposed use from other uses and resources with which it is incompatible to determine whether the proposed use is sufficiently buffered.

CMP submitted a visual impact assessment, prepared by Terrence J. DeWan & Associates. CMP's visual impact assessment, which includes photosimulations, examines the potential scenic impact of the transmission line from 32 key observation points, including Beattie Pond, the site of the proposed Kennebec River crossing, and the site of the proposed crossing of the Appalachian Trail.^{52,53}

The Department contracted with Dr. James F. Palmer, Scenic Quality Consultants, an independent scenic consultant, to assist in the Department's review of the evidence submitted on scenic character. Given the overlap of the Department's scenic character review with the Commission's consideration of scenic impacts as they relate to the buffering special exception criterion, the Commission considered Dr. Palmer's review of CMP's visual impact assessment.

In siting the proposed Project, and specifically the segments within the P-RR subdistricts, CMP stated that it maximized the use of natural buffers, such as topography and intervening vegetation, to maintain visual buffers, and also sited the proposed new transmission line within existing transmission line corridors.⁵⁴

a. Kennebec River P-RR buffering analysis and conclusions

As stated above, the proposed use is a utility facility. The P-RR subdistrict extends 250 feet from the normal high water mark on each side of the Kennebec River. CMP's proposed crossing of the

⁵² Site Law application, section 6.16, Appendix D, Photosimulations I and IA; section 6.16, Appendix D, Photosimulations 10, 10A, 10B, 11, and 11A; and section 6.16, Appendix E.

⁵³ The perspective of some key observation points is from private property. In its prefiled direct testimony, Wagner Forest testified that "the inclusion of photos and photo simulations from private lands, including those from our managed property, taken without our consent. This project will pass through several miles of private working forests, which only allow public recreational access at the sole discretion of the individual landowners. Based on recent public comments regarding the NECEC project, it is apparent this access privilege is misunderstood by many in the public. We ask you to not encourage this misunderstanding by considering photos or simulations from viewpoints that occur on private land." The photosimulations provided for the Kennebec River, Beattie Pond and the Appalachian Trail were not taken from lands owned by Wagner Forest.

⁵⁴ CMP post-hearing brief, page 8 (footnotes omitted).

river using underground horizontal directional drilling technology would result in no project components being visible from this P-RR subdistrict.

CMP proposed to retain a forested buffer of approximately 1,200 in length within the corridor between the northwest shoreline and the termination station and a forested buffer of approximately 1,000 in length will be preserved within the corridor between the southeast shoreline and the termination station. Updated photographic simulations and computer model images of the proposed HDD crossing, submitted by CMP with its October 19, 2018, Site Law application amendment, demonstrate that no components of the proposed Project would be visible from the Kennebec River P-RR subdistrict.

Existing uses of the Kennebec River at the site of the proposed crossing include recreational whitewater rafting, kayaking, and fishing. Intervenor Groups 2 and 10 argued that “[t]he West Forks has seen over 100,000 people a year recreate on their two class A Rivers – the Kennebec River Gorge and the Dead River – for whitewater boating, commercial and private rafting as well as canoeing, kayaking and fishing”; that no level of buffering can protect the use of recreational whitewater rafting on this type of river; that “CMP has failed to meet the special exception criterion regarding buffering”; and that “[n]o visual assessment has been done or study of what damage directional drilling will do to the surrounding area, Kennebec Gorge or the cold stream fisheries located just below the crossing.”⁵⁵

The Commission finds that Intervenor Groups 2 and 10 do not make a compelling argument that the applicant has failed to meet the special exception criterion for buffering at the proposed crossing of the Kennebec River. Specifically, the proposed undergrounding of the transmission line at the Kennebec River crossing will prevent the proposed Project from being seen by users of the river. Based on CMP’s photosimulations, the Commission finds that CMP’s revised proposal to underground the line within the Kennebec River P-RR would entirely avoid scenic impacts within the Kennebec River P-RR subdistrict. The Commission concludes that CMP’s proposed Project will be buffered from those other uses and resources within the Kennebec River P-RR subdistrict with which it is potentially incompatible because no portion of the proposed Project will be visible within or from the P-RR subdistrict on either side of the river.

b. Beattie Pond P-RR buffering analysis and conclusions

Beattie Pond is the only remote, management class 6 lake within 1/2 mile the area that would be crossed or traversed by the proposed Project. As stated above, the management objective of management class 6 lakes is prohibiting development within 1/2 mile of these water bodies to protect the primitive recreational experience and coldwater lake fisheries in remote settings. The Maine Department of Inland Fisheries and Wildlife establishes rules for fishing on Maine ponds and lakes. Beattie Pond may be used for fly fishing only and ice fishing is prohibited.

⁵⁵ Intervenor Groups 2 and 10 post-hearing brief, pages 8, 20, and 52; Intervenor Groups 2 and 10 post-hearing brief, page 8.

The proposed Project would be located within ¼ mile of Beattie Pond. CMP initially identified that views of the proposed Project from Beattie Pond would be limited to one angle structure (two transmission line structures) and the conductor wires located approximately 1,300 feet south of the pond. CMP's visual assessment witness testified at the hearing on May 9, 2019, that the September 2017 photographic simulation depicted Structure 3006-794 as being 110 feet in height.⁵⁶

In response to the Commission's concerns raised about the visibility of Structure 3006-794 from the P-RR subdistrict and whether it would be sufficiently buffered from other uses with which it would be incompatible, CMP proposed design modification and submitted updated photographic simulations the Beattie Pond P-RR subdistrict. Specifically, CMP reduced the height of Structure 3006-794 to 71 feet, which is a reduction of 39 feet from that initially proposed, to improve the buffering of this proposed Project component.

CMP's visual assessment witness testified that, at the reduced height of 71 feet, only a small portion of Structure 3006-794 would still be visible above the tree line from a few areas on the pond but would not appear above the skyline and therefore would be considerably less visually prominent, if it is noticeable at all. CMP's witness further testified that, by reducing the height of Structure 3006-794, the top of Structure 3006-793 would be seen directly behind Structure 3006-794 from the pond and a smaller portion of Structure 3006-795 would also be visible above the tree line. In total, the tops of three transmission line structures, Structure 3006-793, 3006-794, and 3006-795, and the shield wires would be visible above the tree line but not seen against the sky. CMP proposed to use self-weathering steel structures to minimize contrast with the surrounding wooded hillside.⁵⁷ According to CMP, other methods they considered to reduce the visual impact of the proposed Project including tapering of vegetation in the corridor and undergrounding, are not anticipated to be necessary for the Beattie Pond P-RR.

CMP does not propose to use non-specular conductors—which are proposed for other portions of the proposed Project to reduce glare—for the portion of transmission line that may be visible from Beattie Pond. CMP testified that the redesigned structures within the Beattie Pond P-RR would be considerably less visually prominent, if noticeable at all, to recreational users on the pond.⁵⁸

Intervenor Groups 2 and 10 argued that “Beattie Pond is a fly fishing only pond and the scenic character and existing uses of Beattie Pond will be negatively affected, including the existing guided fishing industry” and that “[n]o buffering can protect flying fishing on a Great Pond or Lake [sic].”⁵⁹ “The proposed project would significantly degrade the remote undeveloped scenic character of the region and harm the experience of existing recreational users including hikers, boaters, paddlers and those who hunt and fish in these remote areas.”⁶⁰

⁵⁶ Hearing transcript, May 9, 2019, page 189, lines 18-19.

⁵⁷ Prefiled direct testimony of Amy Bell Segall, page 26, and “Photosimulation I: Beattie Pond, Lowelltown Twp,” revised January 25, 2019.

⁵⁸ CMP post-hearing brief, page 9.

⁵⁹ Intervenor Groups 2 and 10 post-hearing brief, pages 6-7.

⁶⁰ Intervenor Group 4 proposed findings of fact, page 7.

The Commission finds that the proposed Project would be visible from the Beattie Pond P-RR subdistrict based on CMP's testimony and the updated photosimulation. Thus, to buffer the utility facility from the recreational use of Beattie Pond, the Commission requires that CMP use non-specular conductors for portions of the proposed Project near Structures 3006-793, 3006-794, and 3006-795, like those proposed near Rock Pond and Moxie Stream, to reduce reflecting sunlight and visual impacts.

The Commission finds that the vegetative clearing associated with the proposed Project has the potential to make Beattie Pond and the P-RR subdistrict around the pond more accessible to all-terrain vehicles and snowmobiles. Opening this remote pond to more intensive uses by motorized vehicles contradicts the management objectives for management class 6 ponds. The Commission finds that CMP must ensure access to the Beattie Pond P-RR subdistrict by all-terrain vehicles, snowmobiles, and other motorized vehicles from or along the right of way is prevented.

In consideration of all the evidence, the Commission concludes that

A. the proposed Project will be buffered from those other uses and resources within the subdistrict with which it is incompatible, namely recreational fishing on Beattie Pond, provided non-specular conductors are used as required by Condition 2.a of this Site Law Certification and that motorized vehicle access to the P-RR subdistrict via the transmission corridor is prevented in accordance with Condition 2.b of this Site Law Certification.

OR

B. given that the tops of three HVDC structures and their shield wires will be visible from Beattie Pond, a remote pond zoned for protection from development, the proposed Project will not be buffered from those other uses and resources within the subdistrict with which it is incompatible, namely recreational fishing on Beattie Pond.

c. Appalachian Trail P-RR buffering analysis and conclusions

The Appalachian Trail, a resource of national as well as world-wide significance, valued for the scenic qualities that surround it, is a nearly 2,200-mile trail stretching from Georgia to Maine. Maine's portion of the Appalachian National Scenic Trail stretches from Mount Success on the New Hampshire border to Mount Katahdin in Baxter State Park. Of the 281 miles of the Appalachian Trail in Maine, almost all are located in the Commission's jurisdictional area. The 268 miles of the Appalachian Trail in Maine is identified as one of the distinctive recreational resources used by recreational hikers. The Commission has placed P-RR subdistricts on approximately 300 miles of hiking trails, including nearly the entire Appalachian Trail within Maine. The jurisdiction includes much of the Maine section of the Appalachian Trail.⁶¹

⁶¹ Comprehensive Land Use Plan, pages 245, 247, 259, 273.

CMP's summary of visual impact ratings for leaf-off snow cover describes the visual impact of the proposed Project at the [Appalachian Trail] crossing on Troutdale Road as "strong."⁶² CMP proposes to utilize vegetative screening to reduce the visual impact of the proposed crossing of the Appalachian Trail P-RR. Native woody shrub species are proposed in CMP's "Joe's Hole (Moxie Pond) Planting Plan" submitted as Attachment J of CMP's August 13, 2018, response to additional information request. A total of 93 shrubs are proposed to be planted on either side of Troutdale Road in addition to maintaining non-capable vegetation within the corridor.

Intervenor Group 4 argued that "[a] special exception for construction of the proposed project should not be granted for the proposed transmission line crossing of the Appalachian Trail [] in Bald Mountain Twp....because CMP has not shown by substantial evidence that...the transmission line can be buffered from [Appalachian Trail] users."⁶³ "The widening of the corridor and the addition of a second much larger line would significantly increase the visual impact of these transmission line crossings on users of the [Appalachian Trail]" and that "no user surveys were conducted to actually assess users' expectations and reactions to the project."⁶⁴ "The proposed project would greatly exceed the size, in both height and clearing width, of any existing transmission line crossing of the [Appalachian Trail] in Maine, and increase the sense of users that the trail at this location crosses a developed landscape. CMP's contention that the impact on trail users would be 'negligible' is without foundation."⁶⁵ With regard to CMP's proposed planting plan for Joe's Hole, Intervenor Group 4 argued that "these plantings do not, and cannot, come close to buffering the existing use of the [Appalachian Trail], remote hiking, from the increased and incompatible impact of the wider corridor and additional much taller transmission line."⁶⁶

Where the Appalachian Trail intersects the proposed Project, it does so within an existing CMP corridor containing a 115-kilovolt transmission line. CMP argued, "[w]hile the location of the trail throughout this 3,500-foot section of existing transmission line corridor prevented CMP from entirely avoiding impacts within the P-RR subdistrict, the use of the [Appalachian Trail] in these locations is not incompatible with transmission lines, as evidenced by both the existing use of the corridor by [Appalachian Trail] hikers and by the easement from CMP allowing such use and by which the National Park Service [] agreed to the construction by CMP of additional above ground electric transmission lines.... The Project will add additional transmission structures, but the character of the [Appalachian Trail] in this location will not change."⁶⁷ CMP stated,

CMP is willing to relocate the [Appalachian Trail] so that it crosses the CMP transmission line corridor only once in the vicinity of Troutdale Road, eliminating two existing crossings. Before CMP could commit to such a condition, though, the National Park Service [] would need to agree to it, and CMP would need to acquire, on behalf of [National Park

⁶² CMP's Basis Visual Impact Form Summary Table, January 30, 2019.

⁶³ Intervenor Group 4 post-hearing brief, pages 6-7.

⁶⁴ Intervenor Group 4 post-hearing brief, page 7.

⁶⁵ Intervenor Group 4 post-hearing brief, page 8.

⁶⁶ Intervenor Group 4 post-hearing brief, page 10.

⁶⁷ CMP post-hearing brief, pages 10-11.

Service], the necessary property interests in the new location. CMP has secured rights to a parcel that would allow a reroute that eliminates two of the transmission line crossings. However, because this reroute would pass by one or two camps, the Maine Appalachian Trail Club [] prefers the existing two crossings of the transmission line corridor. CMP will continue to explore all options to find a new route that is satisfactory to [Maine Appalachian Trail Club] and [National Park Service]. In the interim, CMP is working with [Maine Appalachian Trail Club] on an interim relocation that will eliminate two crossings but will approach the edge of the [proposed Project]. Provided this interim alignment is ultimately acceptable to [Maine Appalachian Trail Club] and [National Park Service], CMP will pay for the cost of the realignment, including any appropriate buffer plantings. CMP's long-term goal is to secure a permanent re-route acceptable to both [Maine Appalachian Trail Club] and [National Park Service], and CMP is willing to commit the necessary funds to this end.⁶⁸

Intervenor Groups 2 and 10 argued, “[t]he proposed [P]roject will also degrade the hiking experience for users of the Appalachian Trail. It would be the first crossing of the [Appalachian Trail] by a transmission line of this size anywhere in the state.”⁶⁹ Intervenor Group 4 testified, “the Appalachian Trail passes through an existing transmission line corridor containing 115 kilovolt transmission line three times at the southern end of Moxie Pond. The existing towers are about 45 feet high, less than the height of the surrounding forested vegetation. The proposed project would widen this corridor by 50 percent and install a second transmission line with towers that are 100 feet tall, more than twice the height of the existing towers and significantly taller than the surrounding forest.”⁷⁰ “As proposed the project fails the second criteria for a special exception in that this increased impact cannot be buffered from existing uses. The opportunity exists to improve rather than degrade the users’ experience by relocating the trail in this area. [The Commission] should condition the granting of the special exception on a resolution of this issue between [CMP] and [Appalachian Trail] trail mangers.”⁷¹

The existing transmission line predates the Appalachian Trail and the P-RR subdistrict at the proposed location for the new crossing, and numerous transmission line structures are visible from the three areas where the proposed Project would cross the trail this area. CMP’s easement to the United States of America for the Appalachian Trail states that the easement

...shall not be interpreted or exercised to, in any way, interfere with [CMP’s] erection, construction, maintenance, repair, rebuilding, respacing, replacing, operation, patrol and removal of electric transmission, distribution and communication lines consisting of suitable and sufficient poles and towers with sufficient foundations, together with wires strung

⁶⁸ CMP post-hearing brief, page 10, footnote 40.

⁶⁹ Intervenor Group 4 proposed findings of fact, page 7.

⁷⁰ Hearing transcript, April 2, 2019, page 97.

⁷¹ Intervenor Group 4 witness David Publicover, prefiled direct testimony, pages 3-4.

upon and extending between the same for the transmission of electric energy and intelligence, together with all necessary fixtures, anchors, guys, crossarms, and other electrical equipment and appurtenances, or the clearing and keeping clear Tract 108-04 of all trees, timber and bushes growing on said tract only by such means as [CMP] may select which do not interfere with the footpaths continuity or endanger hiker's passing along the footpath.⁷²

While the proposed Project would increase the width of vegetative clearing in the transmission corridor and the height of the proposed transmission pole structures would be considerably higher than the existing transmission poles, the Commission finds that these conditions were contemplated at the time the easement was granted.

In consideration of all the evidence, the Commission concludes that

A. the proposed Project, given the visibility of the existing transmission line, will be adequately buffered from those other uses and resources within the subdistrict with which it is incompatible, namely primitive recreational hiking on the Appalachian Trail, provided the vegetative planting described in CMP's "Joe's Hole (Moxie Pond) Planting Plan" is installed and maintained for the life of the project in accordance with Condition 2.c of this Site Law Certification.

OR

B. the proposed Project will not be buffered from those other uses and resources within the subdistrict with which it is incompatible, in that additional clearing and higher poles will be visible to primitive recreational hikers on the Appalachian Trail.

d. P-WL subdistrict buffering analysis and conclusions

The Wetland Protection subdistrict provides protection to areas that serve as important habitat for terrestrial and aquatic species.⁷³ Uses within P-WL subdistricts vary depending on the type of wetland system. Examples of uses that occur within P-WL subdistricts include hunting, fishing, boating, bird watching, swimming, scientific research, and habitat for fish and wildlife.⁷⁴

Within Segment 1, the proposed Project would cross or traverse 480 freshwater wetlands and convert 8.23 acres of wetland to shrub-scrub wetland. Within Segment 2, the proposed Project would cross or traverse 147 freshwater wetlands and convert 1.13 acres of wetland to shrub-scrub wetland. Within Segment 3, the proposed Project would cross or traverse 227 freshwater wetlands and convert 5.65 acres of wetland to shrub-scrub wetland. The Department reviews all freshwater

⁷² CMP prefiled rebuttal testimony, CMP to USA Easement, exhibit CMP-9-B.

⁷³ Comprehensive Land Use Plan, page 235.

⁷⁴ A detailed discussion of wetland functions and values for areas that would be impacted by the proposed Project is included in section 12.0 of CMP's NRPA permit application.

wetland impacts pursuant to the NRPA, which requires measures for avoidance and minimization of proposed wetland impacts and compensation for wetland impacts that are unavoidable.

Regarding the Commission's special exception criterion that the use can be buffered from those other uses and resources within the subdistrict with which it is incompatible, CMP stated,

A wetlands functions and values assessment [] was performed for the [proposed] Project and is included in Attachment 12 of the NRPA application. The [functions and values assessment] concluded that none of the functions or values identified within forested wetlands would be eliminated or significantly diminished by the conversion of forested wetlands to scrub-shrub and emergent wetlands, and that, on balance, there will be a positive net benefit with regards to functions and values. As a result, the construction of the transmission line in accordance with the methods described in Section 10 (Buffers) of the Site Law Application is consistent with the objective of the P-WL subdistrict.⁷⁵

CMP's proposed compensation plan, dated January 30, 2019, offers compensation for impacts to freshwater wetlands and other protected natural resources regulated by the Department under the NRPA. The total proposed compensation package includes monetary contributions totaling \$5,158,714.82 and the preservation of 2,792.9 acres of land.

CMP's proposed Post-Construction Vegetation Maintenance Plan describes the restrictive maintenance requirements for protected natural resources within the transmission line corridor and specifies that shrub and herbaceous vegetation will remain in place to the extent possible. The Post-Construction Vegetation Maintenance Plan identifies the following procedures to be implemented during vegetation maintenance activities to protect sensitive natural resources:

- Protected resources and their associated buffers will be flagged or located with a Global Positioning System prior to all maintenance operations;
- Hand-cutting will be the preferred method of vegetation maintenance within buffers and sensitive areas, where reasonable and practicable;
- Equipment access through wetlands or over streams will be avoided as much as practicable by utilizing existing public or private access roads, with landowner approval where required;
- Equipment access in upland areas with saturated soils will be minimized to the extent practicable to avoid rutting or other ground disturbance;

⁷⁵ Site Law application, section 25.3.2.

- Significant damage to wetland or stream bank vegetation, if any, will be repaired following completion of maintenance activities in the area; and
- Areas of significant soil disturbance will be stabilized and reseeded following completion of maintenance activity in the area.⁷⁶

The Post-Construction Vegetation Maintenance Plan provides that vegetation maintenance within, and within 25 feet of, freshwater wetlands with standing water will be conducted only by hand cutting with hand tools or chainsaws. Herbicides will not be used in Segment 1. In other segments, the Post-Construction Vegetation Maintenance Plan provides that herbicide use would occur in wetlands only when no standing water is present in the wetland at the time of the application.

The Commission finds that there are no identified uses within the P-WL subdistrict with which the proposed Project is potentially incompatible. The Commission concludes that the proposed Project will be buffered from the resources within the P-WL subdistricts with which it is potentially incompatible, provided CMP complies with the Post-Construction Vegetation Maintenance Plan as stipulated in Condition 3 of this Site Law Certification.

LAND USE STANDARDS

The Commission must determine whether the proposed Project meets any land use standards established by the Commission that are not considered in the Department's review under the Site Law.⁷⁷

a. Vehicular Circulation, Access and Parking, Ch. 10, §§ 10.24(B) and 10.25(D)

In considering this land use standard, the Commission evaluates whether the proposal ensures adequate provision has been made for loading, parking and circulation of land; traffic movement in, on and from the site; and for assurance that the proposal will not cause congestion or unsafe conditions with respect to existing or proposed transportation arteries or methods.

CMP stated:

There are approximately 125 miles of existing gravel roads primarily used for forest management that provide direct access to the Project from State Route 201 in Johnson Mountain Twp. Since the Project is an HVDC transmission line right of way, vehicular traffic would only result during construction (short-term) and maintenance (infrequent), and as such the

⁷⁶ CMP's Post-Construction Vegetation Maintenance Plan, Site Law application exhibit 10-2, December 2018, page 3.

⁷⁷ 12 M.R.S. § 685-B(1-A)(B-1).

Project is not expected to generate a significant amount of traffic. The Project will only access construction areas through the use public roads and existing land management roads. There will be no Level C road projects constructed in any P-RR subdistrict as a result of the Project.^[78]

Temporary, unpaved access roads through sections of the new transmission line corridor will need to be established for the clearing and construction phases of the Project. However, these access roads will be restored to pre-existing contours and revegetated once construction is complete and final restoration has been established. No new permanent roadways will be developed and project construction and maintenance related parking would primarily be in upland locations on the Project corridor or in existing developed areas. No on-street parking will be associated with this project.⁷⁹

CMP stated, “Poles will either be hauled in by truck or skidder or flown in via helicopter. In areas where access is suitable (e.g., level uplands near roads), trucks may be used. In areas with more difficult access, skidders or forwarders may be used to bring the poles to the proposed pole locations. In very remote areas or areas with extreme terrain, or during accelerated construction, helicopter transportation may be used.”⁸⁰

Access to the proposed Project for construction and maintenance would be over both public and private roadways. Public roadways may be under the jurisdiction of the Maine Department of Transportation, Franklin County, or Somerset County. Any vehicle transporting non-divisible loads in excess of legal dimension and weight limits on roads and bridges maintained by the Maine Department of Transportation must obtain an overlimit permit from the Department of the Secretary of State, Bureau of Motor Vehicles. Municipalities may have their own restrictions and permitting systems in place and would have to be checked individually. Access over privately owned roadways would be subject to individual landowner approval and any terms or conditions so stipulated.

The Commission concludes that the proposed Project adequately provides for loading, parking and circulation of traffic, in, on and from the site, and assurance that the proposal will not cause

⁷⁸ Level C Road Project means “[c]onstruction of new roads, and relocations or reconstruction of existing roads, other than that involved in level A or level B road projects; such roads shall include both public and private roadways excluding land management roads.” Ch. 10, § 10.02(112). Within P-RR subdistricts, Level C road projects may be allowed upon issuance of a permit as a special exception. Level A Road Project means “[r]econstruction within existing rights-of-way of public or private roads other than land management roads, and of railroads, excepting bridge replacements.” Ch. 10, § 10.02(110). Level A road projects are allowed without a permit subject to land use standards. Level B Road Project means “[m]inor relocations, and reconstructions, involving limited work outside of the existing right-of-way of public roads or private roads other than land management roads and of railroads; bridge reconstruction and minor relocations whether within or outside of existing right-of-way of such roads.” Ch. 10, § 10.02(111). Level B road projects are allowed upon issuance of a permit, subject to land use standards.

⁷⁹ Site Law application, section 25.4.3.

⁸⁰ NRPA application, section 7.2.1.6.

congestion or unsafe conditions, provided CMP complies with all applicable regulations of the Maine Department of Transportation in accordance with Condition #4.a of this Site Law Certification.

b. Subdivision and Lot Creation, Ch. 10, §§ 10.24(F) and 10.25(Q)

In considering this land use standard, the Commission evaluates whether the proposal to place a structure upon any lot in a subdivision and whether any divisions of land comply with the Commission’s laws and rules governing subdivisions. “‘Subdivision’ means a division of an existing parcel of land into 3 or more parcels or lots within any 5-year period, whether this division is accomplished by platting of the land for immediate or future sale, by sale of the land or by leasing.”⁸¹ A lot or parcel that when sold or leased created a subdivision requiring a permit from the Commission under is not considered a subdivision lot and is exempt from the permit requirement if the permit has not been obtained and the subdivision has been in existence for 20 or more years.⁸²

CMP provided a 20-year land division history, prepared by Curtis Thaxter, LLC, for all parcels within the proposed Project area that are within the Commission’s jurisdictional area, except for parcels within Moxie Gore. CMP stated that it “acquired most of the 300-foot wide corridor located in Moxie Gore in a deed from T-M Corporation dated November 10, 1988 and recorded in the Somerset County Registry of Deeds in Book 1480, Page 89. This transaction was part of a land exchange and boundary line agreement with T-M Corporation in which CMP reconfigured part of its ownership that dated back to the early 1900s. The remainder of the proposed corridor in Moxie Gore crosses land along the Kennebec River that CMP currently owns. This land was also acquired by several deeds in the early 1900s.”⁸³ The land division history prepared by Curtis Thaxter, LLC concludes that no unauthorized land divisions appear to have occurred within the twenty-year review period.

The Commission finds that CMP’s proposal does not include the development of any structures on lots that are part of a subdivision and that the land division history provided by CMP demonstrates that CMP has not created a subdivision. The Commission concludes that the proposed Project complies with Ch. 10, §§ 10.24(F) and 10.25(Q).

c. Public’s Health, Safety and General Welfare – Ch. 10, § 10.24

The burden is upon the applicant to demonstrate by substantial evidence that the criteria for approval are satisfied, and that the public’s health, safety and general welfare will be adequately protected. In the context of utility facilities the applicant “generally must show that the proposed use[] will not burden local public facilities and services” including “fire and ambulance services.”⁸⁴

⁸¹ 12 M.R.S. § 682(2-A).

⁸² 12 M.R.S. § 682(A)(5).

⁸³ Site Law application, section 25.4.1.

⁸⁴ Comprehensive Land Use Plan, § 4.3.E.

The Maine State Federation of Firefighters (“Firefighters Federation”), in a letter dated February 12, 2019, expressed concerns regarding fire and other emergency response capacities within the proposed Project area. The Firefighters Federation has a membership of over 6,000 firefighters of which many are volunteers within small departments in rural communities. The Firefighters Federation stated:

Several of our volunteer members, who serve areas within the proposed NECEC Corridor, contacted us to express their concerns for fire and safety response. These concerns focus not only on the major construction phases of the project, but also on significant risks that will be established and which will continue to exist long after construction crews have left the area and wide areas of high voltage power lines cross their jurisdictions. Further conversations and investigation indicate that to date, no evaluation, assessment, or documentation of the fire, emergency medical, terrorism and other risks, or the services and equipment needed to mitigate those risks, have been formally identified, discussed, studied, and/or reported on.

...

The first 100 miles of the proposed Corridor, including the 70 miles covered by the [Maine Forest Service] and Rangers, has only three (3) volunteer departments within a one-mile (1-mile) buffer of the proposed Corridor. These are the Bingham, Anson, and Solon Volunteer Fire Departments. This area has no staffed fire services and daytime coverage is extremely limited.

South of Bingham, and still within Somerset County, there are three (3) additional fire departments with a two-mile (2-mile) buffer of the proposed NECEC transmission line. These are the volunteer departments of Starks, Madison, and Industry. Once again, these three additional departments have no staffed fire and daytime coverage is extremely limited.

...

Non-fire emergency medical services (EMS) paramedic response is provided by Upper Kennebec Valley Ambulance out of Bingham. Emergency transports are taken to Redington-Fariview [sic] Hospital, 35-miles away. Redington-Fariview [sic] hospital has a Lifeflight landing pad, with helicopter transport dispatched from Bangor, Lewiston, or Sanford, if available.

Concerns regarding the ability of emergency crews to respond to fires within the proposed Project in the Commission's jurisdiction were raised by Intervenor Group 2 and by members of the public.⁸⁵

CMP provided no evidence addressing the proposed Project's impact on fire and ambulance services. The Commission concludes that the public's health, safety and general welfare will be adequately protected provided CMP submits to the Commission, prior to commencing construction of the proposed Project, written agreement(s) with state, local, or private emergency services providers to ensure fire and emergency services are available at all times and at all locations of the proposed Project that are within the Commission's jurisdictional area during and following construction of the proposed Project in accordance with Condition #4.b of this Site Law Certification.

d. Lighting – Ch. 10, § 10.25(F)

In considering this land use standard, the Commission evaluates whether the proposed activity will comply with standards for exterior light levels, glare reduction, and energy conservation.

CMP proposes no permanent operation of lights on transmission line structures installed within the Commission's jurisdiction. CMP does propose that temporary nighttime lighting may be necessary during construction of the proposed Project.

The Commission finds that temporary lighting proposed by CMP is anticipated to comply with the applicable standards and concludes that the proposed Project will comply with the lighting standards set forth at Ch. 10, § 10.25(F).

e. Activities in Flood Prone Areas – Ch. 10, § 10.25(T)

In considering this land use standards, the Commission evaluates whether all development in flood prone areas, including areas of special flood hazard, as identified by Flood Prone Area Protection subdistricts or Federal Emergency Management Agency Flood Boundary and Floodway, Flood Hazard Boundary or Flood Insurance Rate maps comply with the procedural requirements and development standards set forth in Ch. 10, § 10.25(T).⁸⁶

CMP stated that the proposed Project would cross one Flood Prone Area Protection subdistrict in Appleton Township. The only portion of the proposed Project that crosses a flood hazard area mapped by Federal Emergency Management Agency is in Concord Township. CMP proposes no transmission line structures within a Flood Prone Area Protection subdistrict or within mapped 100-year floodplains within the Commission's jurisdictional area.

⁸⁵ Hearing transcript, April 2, 2019, pages 96, 202, 204; Hearing transcript, May 9, 2019, page 58; Hearing transcript, April 2, 2019 – Public Comment Session, pages 23, 37, 89, 106-107.

⁸⁶ The purpose and description of the Flood Prone Area Protection subdistrict is set forth in Ch. 10, § 10.23(C).

The Commission concludes that the proposed Project will not directly impact or increase the risk of flooding and will comply with Ch. 10, § 10.25(T).

f. Dimensional Standards – Minimum Setbacks, Ch. 10, § 10.26(D)

The Commission’s dimensional requirements for minimum setbacks apply to all lots on which structural development is proposed, unless otherwise provided by Ch. 10, § 10.26(G).

In CMP’s proposal, no proposed structures are located within the applicable roadway setbacks (75 feet in all subdistricts, except 30 feet in Residential Development and General Development subdistricts).⁸⁷

All infrastructure associated with the proposed Project within the Commission’s jurisdictional area will be at least 75 feet from all side and rear property lines.

Ch. 10, § 10.26(D)(2)(a) establishes a setback of 100 feet from the nearest shoreline of a flowing water draining less than 50 square miles, a body of standing water less than 10 acres in size, or a coastal wetland, and from the upland edge of non-forested wetlands located in Wetland Protection (P-WL1) subdistricts. Ch. 10, § 10.26(D)(2)(b) establishes a setback of 150 feet from the nearest shoreline of a flowing water draining 50 square miles or more and a body of standing water 10 acres or greater in size.

CMP stated that “[t]ransmission line structures and guy wires will be positioned outside of the setback requirements to the fullest extent practicable. However, the design of the transmission line is constrained by both topography and the presence of natural resources and other features (e.g., roadways). The transmission line was designed to place transmission line structures such that they avoid natural resource impacts to the maximum extent practicable while maintaining necessary safety clearances for the overhead conductors.”⁸⁸ As a result, CMP proposes 135 transmission line structures within the 100-foot shoreline setback due to the nature of the proposed Project, engineering constraints, and other design parameters.⁸⁹ CMP stated that only one transmission structure, Structure 3006-378, would be located within the 150-foot setback required by Ch. 10, § 10.26(D)(2)(b).

CMP requested an exception to the minimum setbacks in accordance with Ch. 10, § 10.26(G)(5), which states, in part, “[a]n exception may be made to the shoreline, road, and/or property line setback requirements for structures where the Commission finds that such structures must be located near to the shoreline, road, or property line due to the nature of their use.” Pursuant to Ch. 10, § 10.26(G)(19), the Commission may reduce the minimum setback requirements for guy wire anchors provided such reduction will not result in unsafe conditions.

⁸⁷ CMP’s August 13, 2018, update to NRPA and Site Law Applications, page 5.

⁸⁸ Site Law application, section 25.4.2.

⁸⁹ Structure numbers and the setback distances are provided in the table provided in CMP’s August 13, 2018, update to NRPA and Site Law applications, page 6.

The Commission finds that the linear nature of the proposed Project and requirement to maintain minimum safety clearances for the overhead conductors results in the placement of transmission structures in locations that cannot meet the Commission's default setback distances from certain water bodies. The Commission finds that CMP has attempted to design the proposed Project in such a way as to avoid conflict with the shoreline setbacks to the greatest extent practicable and that the 135 proposed transmission structures and guy wire placements that do not meet shoreline setbacks is an operational necessity and will not result in unsafe conditions. The Commission concludes that the proposed Project complies with applicable dimensional standards for minimum setbacks.

g. Dimensional Standards – Maximum Structure Height, Ch. 10, § 10.26(F)

Pursuant to Ch. 10, § 10.26(F)(1)(b), the maximum structure height for commercial, industrial, and other non-residential uses involving one or more structures is 100 feet. Pursuant to Ch. 10, § 10.26(F)(2), within 500 feet of the normal high water mark of a body of standing water 10 acres or greater, is 30 feet. Pursuant to Ch. 10, § 10.26(F)(3), features of structures which contain no floor area such as chimneys, towers, ventilators and spires and freestanding towers and turbines may exceed these maximum heights with the Commission's approval.

CMP stated:

Transmission line structure heights are determined during project design based on a number of parameters governed by the safety standards of the National Electric Safety Code. Specifically, for safe operation of the line, the transmission line must be designed in a manner that provides adequate clearance from the ground to the maximum sag of the transmission line. Structure locations are placed, to the extent practicable, in a manner that avoids and spans protected natural resources. Additionally, topographic constraints, the presence of existing utilities, and the span length needed to place structures outside of sensitive areas often requires transmission line structures to be taller than 100 feet.⁹⁰

CMP has identified a total of 96 transmission line structures within the Commission's jurisdictional area that would exceed the maximum structure height of 100 feet.⁹¹ CMP does not propose any structures within 500 feet of a body of standing water 10 acres or greater.

The Commission finds that the proposed transmission structures contain no floor area and thus may exceed the 100-foot height limitation pursuant to Ch. 10, § 10.26(F)(3). The Commission concludes that the proposed Project is consistent with applicable dimensional requirements for maximum structure height.

⁹⁰ Site Law application, section 25.4.1.F.

⁹¹ See Site Law application, Table 25-4 for a listing of proposed structures that would exceed 100 feet in height.

h. Vegetative Clearing – Ch. 10, § 10.27(B)

The Commission has established vegetative clearing standards for areas within 250 feet of certain water bodies. Vegetation clearing activities not in conformance with these standards may be allowed upon issuance of a permit from the Commission provided that such types of activities are allowed in the subdistrict involved and that an applicant for such permit shows by a preponderance of the evidence that the proposed activity, which is not in conformance with the standards will be conducted in a manner which produces no undue adverse impact upon the resources and uses in the area.

Pursuant to Ch. 10, § 10.27(B)(1), a vegetative buffer strip shall be retained within either 30 or 50 feet of the right-of-way of any public roadway, depending on the subdistrict involved, and within either 75 or 100 feet of the normal high water mark of standing and flowing water bodies, depending on the type of water body in proximity to proposed structures. The Department retains jurisdiction over vegetative clearing subject to the NRPA, including clearing adjacent to standing and flowing waters.

Within the vegetative buffer strip, Chapter 10 requires that there shall be no cleared opening greater than 250 square feet in the forest canopy, and selective cutting of trees is permitted provided that a well-distributed stand of trees and other natural vegetation is maintained.⁹²

In Segment 1 of the proposed Project, CMP proposes to clear a 150-foot wide strip of capable vegetation to accommodate the new transmission line. In Segments 2 and 3, CMP proposes to clear a 75-foot wide strip of capable vegetation to accommodate the new transmission line.

Relating to road buffers, CMP stated,

Due to the nature of the [proposed] Project, the buffer strips identified in [Ch. 10,] § 10.27, B will be retained but the Project cannot conform to the selective cutting requirements associated with the maintenance of vegetation ([Ch. 10,] § 10.27, B, 2). The Project will maintain vegetative buffers in all scenarios but these buffers will not include capable vegetation that could grow to heights that would grow into the conductor safety zone of the transmission line. A description of buffers and CMP vegetation clearing and maintenance practices is included in Section 10 of the Site Law application.⁹³

Section 10 of CMP's Site Law application describes the proposed natural resource buffers and clearing guidelines CMP will employ for the proposed Project. CMP stated that all tree species capable of growing into the conductor safety zone must be removed from the buffers during construction and be prevented from re-establishing during periodic scheduled vegetation

⁹² The Commission's rating system for a well-distributed stand of trees is set forth in Ch. 10, § 10.27(B), Table 10.27(B-1).

⁹³ Site Law application, section 25.4.6.

maintenance operations. Selective transmission line corridor management techniques are discussed in Section 10 of the Site Law application and have also been incorporated into CMP's Construction Vegetation Clearing Plan and CMP's Post-Construction Vegetation Management Plan. The objective of CMP's proposed vegetative buffer management plan "is to maintain ecological values of resources without sacrificing the operational safety of the electric transmission line and associated conductors."⁹⁴ CMP proposes mechanized clearing, including motorized equipment, to prepare the corridor for construction. However, for periodic maintenance of the corridor, CMP testified that it "practices integrated vegetation management [], including the selective use of herbicides, to safely and effectively maintain its transmission line corridors in a scrub/shrub cover."⁹⁵ Within Segment 1, CMP testified that it will not apply herbicides but instead utilize mechanical methods for vegetation maintenance on this portion of the proposed Project.⁹⁶ For portions of the proposed Project in which vegetative tapering is proposed or required, CMP stated that mechanized methods, primarily chainsaws, would be used to selectively remove capable vegetation.

CMP's Site Law application section 10.3, Buffer and Resource Protection Concepts, identifies that vegetative buffers are designed to:

- Prevent soil erosion and sedimentation of surface waters;
- Slow the velocity, increase the infiltration, and otherwise remove sediment and other contaminants in runoff before it enters surface waters;
- Reduce access of all-terrain vehicles to streams;
- Provide shade, to reduce the warming effect of sunlight (insolation) on water; and
- Provide cover and habitat for wildlife that use riparian and significant habitats.

CMP's proposed Construction Vegetation Clearing Plan specifies restrictive vegetation management requirements for sensitive areas within the proposed Project area including:

- Wetlands and streams;
- Perennial streams within designated Atlantic salmon habitat;
- Significant vernal pools;
- Inland waterfowl and wading bird habitat;
- Deer wintering areas;

⁹⁴ Site Law application, section 10.2.

⁹⁵ CMP Witness Gerry Mirabile, supplemental testimony, page 4.

⁹⁶ CMP Witness Gerry Mirabile, supplemental testimony, page 5.

- Rare plant locations; and
- Locations over mapped significant sand and gravel aquifers.

On January 30, 2019, CMP submitted revisions to its Construction Vegetation Clearing Plan and Post-Construction Vegetation Management Plan to incorporate 100-foot buffers on perennial streams located in Segment 1, including all coldwater fisheries, waterbodies containing special concern, threatened, and/or endangered species, and outstanding river segments; and 75-foot buffers on all other streams. In addition, CMP proposes to employ tapered vegetation management areas to minimize the visual impact of the proposed Project from the summit of Coburn Mountain in Upper Enchanted Township and from Rock Pond in T5 R6 BKP WKR.

The Commission concludes that the proposed Project will be conducted in a manner which produces no undue adverse impact upon the resources and uses in the area provided CMP adheres to the vegetative clearing and maintenance as described its Construction Vegetation Clearing Plan and Post-Construction Vegetation Management Plan.

i. Pesticide Application – Ch. 10, § 10.27(I)

Pursuant to Ch. 10, § 10.27(I), pesticide application in any of the subdistricts will not require a permit from the Commission provided such application is in conformance with applicable state and federal statutes and regulations.

CMP proposes to use herbicide applications after initial clearing of the corridor is completed to gain control of vegetation growth. When control is achieved, treatment will typically occur as part of scheduled maintenance on a 4-year cycle or as needed to discourage the establishment of capable tree species. CMP would not use herbicides within the 53.5 miles of new corridor in Segment 1 of the proposed Project. For the remainder of the line, CMP stated that “[h]erbicides will be selectively applied to capable species, using low-pressure (hand-pressurized) backpack applicators, to prevent growth of individual capable specimens and to prevent regrowth of cut capable specimens. Individual capable specimens will be treated with herbicides, and no broadcast application will be done. CMP will not use herbicides within 25 feet of any waterbody or standing water. In addition, CMP will not use herbicides within 100 feet of a known well or spring or within 200 feet of any known public water supply.”⁹⁷ CMP also stated that “[h]erbicides will be used in strict accordance with the manufacturer’s [United States Environmental Protection Agency]-approved labeling and will not be applied directly to waterbodies or areas where surface water is present.”⁹⁸

The Commission concludes that the proposed use of herbicides complies with the Commission’s land use standards for pesticide application.

⁹⁷ Site Law application, section 15.2.

⁹⁸ Site Law application, exhibit 10-1, section 2.2.

j. Signs – Ch. 10, § 10.27(J)

The Commission’s regulations pertaining to signs, set forth in Ch. 10, § 10.27(J)(2), establishes standards to ensure placement of signs does not produce undue adverse impact upon the resources and uses in the area.

CMP does not propose to install signs as part of the proposed Project within the Commission’s jurisdictional area. Traffic control signs and directional signs utilized during the proposed Project construction would be limited and temporary and do not require a permit pursuant to Ch. 10, § 10.27(J)(1)(d).

The Commission concludes that the proposed Project will comply with the Commission’s land use standards for signs.

FINAL CONCLUSIONS

1. The proposed Project is an allowed use in the General Development, Residential Development, General Management, Flood Prone Protection, Fish and Wildlife Protection, Great Pond Protection, and Shoreland Protection subdistricts.
2. The proposed Project

A. is an allowed use in the Recreation Protection subdistricts provided CMP:

- a. Utilizes non-specular conductors on all portions of the proposed Project that will be visible from Beattie Pond;
- b. Monitors the portions of the corridor within the Recreation Protection subdistrict surrounding Beattie Pond and takes all necessary measures to prevent informal trail building for motorized vehicle access; and
- c. Installs and maintains for the life of the project the vegetative plantings described in CMP’s “Joe’s Hole (Moxie Pond) Planting Plan” within the Recreation Protection subdistrict surrounding the Appalachian Trail.

OR

B. is an allowed use in the Kennebec River Recreation Protection subdistrict and the Appalachian Trail Recreation Protection subdistrict, but is not an allowed use in the Beattie Pond Recreation Protection subdistrict.

OR

- C.** is an allowed use in the Kennebec River Recreation Protection subdistrict and the Beattie Pond Recreation Protection subdistrict, but is not an allowed use in the Appalachian Trail Recreation Protection subdistrict.
3. The proposed Project is an allowed use in the Wetland Protection subdistrict provided CMP complies with its proposed Post-Construction Vegetation Maintenance Plan.
 4. The proposed Project complies with all applicable sections of the Commission's land use standards provided that CMP:
 - a. Secures all necessary approvals from the Maine Department of Transportation, Franklin County, and Somerset County for the transportation of materials during and following construction of the proposed Project;
 - b. Submits, prior to construction, written agreement(s) with state, local or private emergency services providers to ensure fire and emergency services are available at all times and at all locations of the proposed Project that are within the Commission's jurisdiction during and following construction of the proposed Project.
 5. The proposed Project is consistent with the policies of the Comprehensive Land Use Plan without additional conditions.

A. Therefore, the Commission CERTIFIES to the Maine Department of Environmental Protection that Site Law Certification SLC-9 for Central Maine Power's proposed New England Clean Energy Connect Project, as proposed, complies with the relevant provisions of the Commission's rule Chapter 10, subject to the findings of fact, conclusions, and conditions contained herein.

OR

B. Therefore, the Commission CERTIFIES to the Maine Department of Environmental Protection that Site Law Certification SLC-9 for Central Maine Power's proposed New England Clean Energy Connect Project, as proposed, does not comply with all relevant provisions of the Commission's rule Chapter 10.

Pursuant to Ch. 4 § 4.11(12)(b), a determination to approve or deny a request for certification of a Site Law application pending before the Maine Department of Environmental Protection is not final agency action and is not appealable except as part of the Department of Environmental Protection permitting decision.

[Note: If the Commission determines the proposed Project does not comply with all relevant provisions of the Commission's rule Chapter 10, the following section on conditions will be deleted from the final decision.]

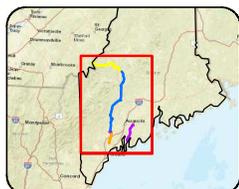
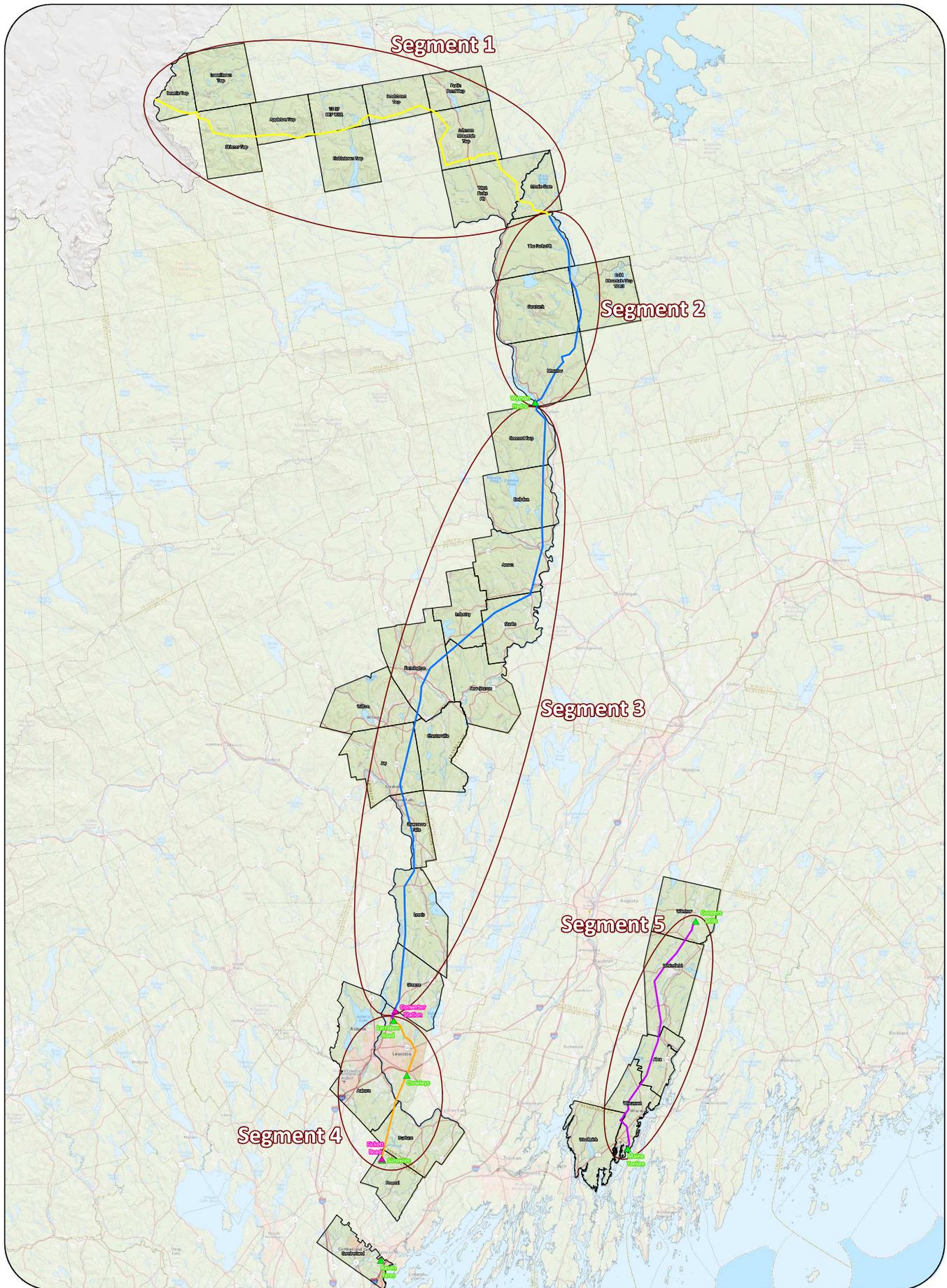
CONDITIONS

1. Prior to construction, CMP shall submit to the Land Use Planning Commission, written agreement(s) with state, local or private emergency service providers to ensure fire and emergency services are available at all times and at all locations of the proposed Project within the Commission's jurisdiction during and following construction of the proposed Project.
2. CMP shall utilize non-specular conductors on all portions of the proposed Project that will be visible from Beattie Pond, including the span between transmission Structures 3006-793, 3006-794, and 3006-795.
3. CMP shall monitor all portions of the corridor within the Recreation Protection subdistrict surrounding Beattie Pond and shall take all necessary measures to prevent informal trail building for motorized vehicle access within the Recreation Protection subdistrict.
4. CMP shall install and maintain for the life of the project, the vegetative plantings described in CMP's "Joe's Hole (Moxie Pond) Planting Plan" within the Recreation Protection subdistrict surrounding the Appalachian Trail.
5. CMP shall secure all necessary approvals from the Maine Department of Transportation, Franklin County, and Somerset County for the transportation of materials during and following construction of the proposed Project.

DONE AND DATED AT BREWER, MAINE, THIS ____ DAY OF SEPTEMBER, 2019.

Everett Worcester, Chair

APPENDIX A



Legend

HVDC (New ROW)	Rebuild Sections
HVDC (Existing ROW)	Existing Substation
New 345 kV Line	Proposed Substation

New England Clean Energy Connect
Overview Map

10 Miles

8/15/2017