

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

IN THE MATTER OF

CENTRAL MAINE POWER COMPANY
Application for Site Location of Development
Act permit and Natural Resources Protection
Act permit for the New England Clean Energy
Connect (“NECEC”)

L-27625-26- A-N
L-27625-TB- B-N
L-27625-2C- C-N
L-27625-VP- D-N
L-27625-IW- E-N

Public Hearing Requested

**NATURAL RESOURCES COUNCIL OF
MAINE REQUEST FOR BOARD OF
ENVIRONMENTAL PROTECTION
REVIEW OF NECEC AND,
ALTERNATIVELY, APPEAL OF THE
DEPARTMENT’S ORDER APPROVING
NECEC**

The Natural Resources Council of Maine (“NRCM”) requests that the Board of Environmental Protection (“Board”) (i) vacate the May 11, 2020 Order (“Order”) of the Maine Department of Environmental Protection (“Department”) conditionally approving Central Maine Power Company’s (“CMP”) applications for approval of the New England Clean Energy Connect (“NECEC” or “Corridor”), and (ii) exercise its sole and mandatory authority to determine compliance of NECEC with Maine’s environmental statutes, specifically the Natural Resource Protection Act (“NRPA”) at 38 M.R.S. §§ 480-A – 480-JJ and the Site Location of Development Act (“Site Law”) at 38 M.R.S. §§ 481 – 490, as required by 38 M.R.S. §§ 341-D(2), 344(2-A) and 06-096 CMR. Ch. 2 § 17(C). Alternatively, NRCM appeals the Order. NRCM respectfully requests that the Board either assume original jurisdiction over this project of statewide significance and hold a public hearing or, alternatively, hold such a hearing and consider

supplemental evidence in reviewing the Order on appeal.¹ As detailed below, the extensive and onerous adverse impacts to natural resources and the environment from the NECEC are unreasonable and thus do not comply with NRPA or the Site Law. Consequently, even if the Board declines to exercise its mandatory review authority, it must reverse the Order on appeal.

BACKGROUND

CMP proposes construction and operation of a 145-mile, high-voltage, direct current (HVDC) transmission line, called the New England Clean Energy Connect, from Québec to an interconnection with the New England energy grid in Lewiston. About 54 miles of the transmission line route would consist of an entirely new 150-foot wide partially-cleared transmission corridor through a currently undeveloped section of Maine's North Woods. The NECEC includes above-ground transmission lines that would severely fragment this critical forest habitat, crossing the Appalachian Trail, countless wetlands and streams, deer wintering areas, and encroaching upon Beattie Pond, a Class 6 remote pond.

CMP also proposes expansion of the clearing running under and beside its existing lines, requiring removal of additional vegetation and increasing the density and intensity of impacts to the entirety of the existing corridor. The NECEC poses a unique threat to Maine's environment. Unlike other transmission line projects contemplated by the Department and the Land Use Planning Commission (Commission or LUPC), the NECEC does not ensure reliable power for Mainers. Instead, it is simply a profit making operation by a Maine public utility that, unlike utility operations, is more akin to a giant subdivision or shopping mall. However, unlike such a traditional

¹ NRCM hereby incorporates by reference herein all of the prefiled direct, rebuttal, surrebuttal, and hearing testimony of and comments on the Draft Department Order—and any attachments or exhibits thereto—by Groups 1, 2, 4, 6, 8, and 10 and the comments on the Draft Department Order by the Innu Nation, including all attachments thereto, for review by the Board as part of its original jurisdiction review of the NECEC or appellate review of the Order.

development project, this project carves a wide, nearly 150-mile long continuous swath from the Canadian border to Lewiston, including roughly 53 miles of new line in Maine's North Woods.

Commissioner Mercer, commencing in 2017, improperly failed to refer the NECEC, a project of statewide significance, to the Board for its review as required by 38 M.R.S. §§ 341-D(2), 344(2-A) and 06-96 CMR. Ch. 2 § 17(C). Instead, the Commissioner assigned a hearing officer, and the Department proceeded to consider, review and then, in May of 2020, conditionally approve CMP's applications for NRPA and Site Law approvals for NECEC resulting in the Order. Because only the Board, and not the Commissioner, is statutorily authorized to review and approve projects of statewide significance, the Board must vacate the Order and independently and *de novo* review compliance of the NECEC with NRPA and the Site Law as required by statute and as implemented by Chapters 2 and 3 of the Department's Rules.

It is clear from the record before the Department that the NECEC fails to comply with NRPA or the Site Law. Thus, should the Board fail to exercise its original jurisdiction over the NECEC as required by statute, it must overturn the Department's decision on appeal. 06-096 CMR Ch. 2 § 24. NECEC impacts to protected resources and the environment are unreasonable and unsupported by a demonstration that there are not practicable alternatives. The project will not fit harmoniously into the existing natural environment and will adversely and unreasonably affect existing uses, scenic character, and natural resources, including significant vernal pools and wetlands, brook trout habitat, wildlife habitat and lifecycles, water quality, and deer wintering areas.

DISCUSSION

I. NRCM Has Standing as an Aggrieved Party and as a Party to Department Proceedings on the Order.

NRCM is Maine's largest environmental advocacy group with over 25,000 members and supporters. NRCM's mission is protecting, restoring, and conserving Maine's environment, now and for future generations.² Many of NRCM's members use the area proposed for the NECEC for their outdoor recreation, such as fishing, hunting, and hiking. NRCM also has members and supporters who are guides in this area, and NECEC would harm their businesses. As such, NRCM is an aggrieved party with standing to pursue this appeal. *See* 06-096 CMR Ch. 2 § 24(B)(1).

NRCM petitioned to intervene as a party to Department proceedings resulting in the Order, and the First Procedural Order³ therein held that NRCM established particularized injury as required for party status under 06-096 CMR Ch. 3 § 11. NRCM's submissions and the Department's findings there are incorporated by reference in support of its request for the Board to exercise original jurisdiction pursuant to 06-096 CMR Ch. 2 § 17 and, alternatively, on appeal of the Order pursuant to 06-096 CMR Ch. 2 § 24.⁴

II. Because the Commissioner Lacks Authority to Review Projects of Statewide Significance Like NECEC, the Board Must Vacate the Order and Assume Original Jurisdiction.

Controlling statutes require the Board to assume jurisdiction over and decide license applications that involve projects of statewide significance. 38 M.R.S. §§ 341-D(2), 344(2-A); 06-

² *See* <https://www.nrcm.org/about-nrcm/>.

³ NRCM incorporates by reference its intervention petition and the First Procedural Order granting NRCM's intervention.

⁴ NRCM's standing is consistent with the Department's previous finding in this matter, and Maine courts also regularly hold that similarly situated parties have standing to pursue appeals. *See, e.g., Conservation Law Found., Inc. v. Town of Lincolnville*, No. AP-00-3, 2001 WL 1736584, at *7 (Me. Super. Feb. 28, 2001); *Nat. Res. Council of Maine v. Pub. Utilities Comm'n*, 567 A.2d 71, 73 (Me. 1989); *Hammond Lumber Co. v. Fin. Auth. of Maine*, 521 A.2d 283, 287 (Me. 1987).

96 CMR Ch. 2 § 17(C). These statutes require that the Board—not the Commissioner—“**shall** decide each application for approval of permits and licenses that in its judgment represents a project of statewide significance.” 38 M.R.S. § 341-D(2). A project is of statewide significance if it meets at least 3 of the 4 statutorily defined criteria:

1. Will have an environmental or economic impact in more than one municipality, territory or county;
2. Involves an activity not previously permitted or licensed in the State;
3. Is likely to come under significant public scrutiny; and
4. Is located in more than one municipality, territory or county.

Id. § 341-D(2)(E); *accord* 06-096 CMR Ch. 2 § 17(C).

Use of the word “shall” imposes a mandatory duty and does not provide the Board or Commissioner with discretion. The Legislature provided specific rules to “be observed in the construction of statutes, unless such construction is inconsistent with the plain meaning of the enactment.” 1 M.R.S. § 71. One such specific rule is that, when used in laws enacted after December 1, 1989, the words “‘shall’ and ‘must’ are terms of equal weight that indicate a mandatory duty, action or requirement.” *Id.* § 71(9-A); *accord* *McGee v. Sec’y of State*, 2006 ME 50, ¶ 14 & n.3, 896 A.2d 933, 938–39. “If the meaning of the language is clear, we interpret the statute to mean what it says.” *N.A. Burkitt, Inc. v. Champion Rd. Mach. Ltd.*, 2000 ME 209, ¶ 6, 763 A.2d 106, 107 (*citing* *Kimball v. Land Use Regulation Comm’n*, 2000 ME 20, ¶ 18, 745 A.2d 387, 392). Here, the statutory mandate is clear. Only the Board has jurisdiction to review the NECEC.

Nor is there legal authority supporting the Commissioner’s retention of jurisdiction over an application that meets 3 of the 4 criteria and is thereby defined as a project of statewide significance. 38 M.R.S. § 344(2-A) (“the commissioner **shall** decide as expeditiously as possible if an application meets 3 of the 4 criteria set forth in section 341-D, subsection 2 and **shall** request

that the board assume jurisdiction of that application. If at any subsequent time during the review of an application the commissioner decides that the application falls under section 341-D, subsection 2, the commissioner **shall** request that the board assume jurisdiction of the application”) (emphasis added).⁵

Thus, unless the Board determines that NECEC does not meet the definition of project of statewide significance—a conclusion that would be flatly contrary to the statutory definition of “statewide significance”—then the Order is without legal effect because the Commissioner lacked jurisdiction to issue it.

NECEC is the prototypical project of statewide significance, handily meeting all four statutory and regulatory definitional standards:

- *First*, NECEC will have environmental or economic effects across more than one municipality, territory, or county. The Order describes the breadth of the project, which includes a 145.3 mile long transmission line from Beattie Township to Lewiston, a 26.5 mile line from Windsor to Wiscasset, and multiple new or renovated converter stations or substations. Order, 3. The environmental impacts pursuant to NRPA and the Site Law are, as described in the Order, significant. Order, 1.
- *Second*, NECEC involves an activity not previously permitted or licensed in the State—namely the transmission of energy from one foreign jurisdiction (Québec) to an interconnection with the New England grid in Lewiston in order to benefit ratepayers in another foreign jurisdiction (Massachusetts). Unlike other transmission line projects contemplated by the Department and LUPC in the past, this project does not meet any reliability need for Maine or connect a new generator within Maine but instead proposes a massive corridor as a for-profit venture primarily for the benefit of foreign jurisdictions.

⁵ This section of the law also contemplates that interested persons may request that the Commissioner refer an application to the Board, and that the Commissioner is required to issue a written decision if s/he declines to do so. 38 M.R.S. § 344(2-A). It is unclear whether this occurred. However, the statutory mandate imposed on the Commissioner and the Board is entirely independent of a request from any interested person. 38 M.R.S. §§ 341-D(2); 344(2-A); 06-96 CMR. Ch. 2 § 17(C). Moreover, because the statutes are written with regard to whether the Commissioner or the Board shall “assume jurisdiction” of a particular decision, *id.*, this issue of subject matter jurisdiction within the agency may be raised at anytime—including on appeal—and is decided based on the “jurisdiction, powers and authority that are conferred on the Board by express legislative grant.” *Ford Motor Co. v. Darling's*, 2014 ME 7, ¶¶ 41-42, 86 A.3d 35, 49.

- *Third*, NECEC has undoubtedly come under significant public scrutiny. The sheer number of parties to the underlying Department proceeding evidence the hotly contested nature of the project. A Google search reveals the same: the term “CMP Corridor” returned roughly 21,600 results on June 8, 2020. More than 66,000 Mainers likewise signed petitions in support of a ballot initiative aimed at stopping the Corridor, which is slated to appear on the November ballot. *Reed v. Sec’y of State*, 2020 ME 57, ¶ 2. This project has attracted significant and ongoing public scrutiny because people are rightly concerned about its negative effects.
- *Fourth*, as described above, the NECEC spans nearly 150 miles and multiple municipalities and counties. *See Order*, 3.

In light of the foregoing, the Board is the proper—and only—licensing decision maker.

The Commissioner is required to refer projects of statewide significance, like NECEC, to the Board. The Board is required to assert original jurisdiction over and determine compliance of a project of statewide significance like NECEC with NRPA and the Site Law. *See* 38 M.R.S. §§ 341-D(2), 344(2-A); 06-096 CMR Ch. 2 § 17(C). The Board must correct this flawed process and assume responsibility by holding a public hearing and undertaking its own independent review of CMP’s application.

III. Exercise of Original Jurisdiction Allows the Board to Address the Threshold Question of Jurisdiction as well as Numerous Errors in and Lack of Substantial Evidence Supporting the Order.

In addition to issuance without jurisdiction, the Order contains numerous errors of law and is unsupported by substantial evidence. The Order likewise imposes conditions that purport to mitigate NECEC’s impacts to protected resources and the environment but which fail to meet the standards set for the in NRPA and the Site Law. *Order*, 1-2. Whether the Board assumes original jurisdiction, or considers these issues on appeal, the Board should conduct a *de novo* review of this matter, 38 M.R.S. § 341-D(4)(A) (“The board is not bound by the commissioner's findings of fact or conclusions of law but may adopt, modify or reverse findings of fact or conclusions of law

established by the commissioner”); *accord* 06-096 CMR Ch. 2 § 24(G), and reverse the Order for the reasons detailed below.⁶

A. CMP does not have sufficient right, title or interest in the NECEC.

Right, title and interest (“TRI”) presents a jurisdictional bar to Board or Department review and must exist at all times. 06-096 CMR Ch. 2 § 11(D). CMP does not have TRI in NECEC both because it agreed to transfer its interest in NECEC before NECEC is built or operated and because the documentation of TRI it presented is patently illegal.

First, during the course of the Department proceedings on NECEC, CMP’s TRI in the NECEC materially changed through execution and approval of a stipulation before the PUC (which CMP was required to do in order to obtain its Certificate of Public Convenience and Necessity (“CPCN”). That stipulation specified that “CMP will transfer and convey the NECEC to NECEC Transmission LLC (“NECEC LLC”), a Delaware limited liability company that is a wholly owned subsidiary within the Avangrid Networks family of companies and is not a subsidiary of CMP.” *Cent. Me. Power Co.*, Request for Approval of CPCN for the New England Clean Energy Connect Consisting of the Construction of a 1,200 MW HVDC Transmission Line from the Québec-Maine Border to Lewiston (NECEC) and Related Network Upgrades, Docket No. 2017-00232, Stipulation at 16 (Me. P.U.C. Feb. 21, 2019), attached hereto as Appendix D. Because neither CMP nor any subsidiary thereof is legally authorized to construct or operate the NECEC, CMP lacks “the kind of relationship to the ... site, that gives [...] legally cognizable expectation of having the power to use that site in the way that would be authorized by the permit or license he seeks.” *Picker v. State Dep’t of Env’tl. Prot.*, No. CIV.A. AP-01-75, 2002 WL 1023629, at *3 (Me. Super. Apr. 6, 2002) (*quoting and citing Southridge Corp. v. Board of Env’t.*

⁶ NRCM seeks reversal of the Order and denial of NECEC authorization under NRPA and the Site Law.

Protection, 655 A.2d 345, 348 (Me. 1995) and *Walsh v. City of Brewer*, 315 A.2d 200, 207 (Me. 1974)).

Furthermore, Chapter 2 of the Department's Rules defines a transfer of ownership at Section 1(R). 06-096 CMR Ch. 2 § 1(R). The conveyances required by the CMP Stipulation clearly fall within this definition.⁷ Compliance with the CMP Stipulation substitutes a new entity for CMP, one which has not yet presented itself for Department review,⁸ and which means that CMP will not, by its very terms, own or operate the NECEC as required by Chapter 2 rules on TRI.

Second, the Bureau of Parks and Lands lease of State Public Reserved Land in Johnson Mountain and West Forks Plantation Northeast⁹ parcels ("Illegal BPL Lease") was not authorized by the Maine Legislature. The Illegal BPL Lease was also issued to a utility (CMP) which had not yet obtained the required CPCN. As a result, the Illegal BPL Lease is void on its face and does not meet the submission requirements for documentation of TRI set forth in Chapter 2 Section 11(D) of the Department's Rules.

Department reliance on the Illegal BPL Lease as documentation of TRI is improper as even a cursory review reveals significant legal flaws, information about which was readily available during the course of Department review of the NECEC. BPL granted the Illegal BPL Lease prior

⁷ Section 1(R) of Chapter 2 of the Department's Rules defines "Transfer of Ownership" as a change in the legal entity that owns a property, facility or structure that is the subject of a license issued by the Department. A sale or exchange of stock (or in the case of a limited liability corporation, of membership interests), or a merger, is not a transfer of ownership for the purposes of this rule provided the legal entity that owns or operates the property, facility or structure remains the same.

⁸ The CMP Stipulation also calls into question numerous Order findings such as those regarding financial and technical ability, where there is no record evidence of NECEC Transmission, LLC's financial and technical qualifications to construct, own, and operate the NECEC.

⁹ 2014. Transmission Line Lease Between Department of Agriculture, Conservation, and Forestry, Bureau of Parks and Lands and Central Maine Power, at 11. Attachment A to Group 4's Comments on Draft Order.

to CMP obtaining a CPCN, a clear violation of 35-A MRS § 3132(13).¹⁰ CMP did not receive a CPCN from the Maine Public Utilities Commission (“PUC”) for the NECEC until May 3, 2019. Four and a half years before that, without any public notice or awareness of the NECEC (and perhaps without itself knowing what the lease was for), BPL issued the Illegal BPL Lease to CMP on December 8, 2014. When notified of the CPCN requirement at a February 18, 2020,¹¹ work session held by the Agriculture, Forestry, and Conservation (“ACF”) Committee of the Maine Legislature on LD 1893, “An Act To Require a Lease of Public Lands To Be Based on Reasonable Market Value and To Require Approval of Such Leases for Commercial Purposes,” BPL Director Andy Cutko stated that, “Now that I am aware of the utilities requirement I would certainly want to follow the law and get that secured prior.”¹² The ACF Committee unanimously voted out of committee an amended version of LD 1893 finding that the Illegal BPL Lease violated 35-A M.R.S. § 3132 and requiring any new lease to receive a two-thirds vote of all elected members of both houses of the Legislature. For the Illegal BPL Lease, the requirement of such a vote was already the law because construction of the NECEC would substantially alter that State Public Reserved Land—Article IX, Section 23 of the Maine Constitution requires that any reduction or substantial alteration of public reserved lands requires approval by a 2/3rd vote of the Legislature. *See also* 12 M.R.S. §§ 598 to 598-B.

¹⁰ 35-A M.R.S. § 3132 states: Public lands. The State, any agency or authority of the State or any political subdivision of the State may not sell, lease or otherwise convey any interest in public land, other than a future interest or option to purchase an interest in land that is conditioned on satisfaction of the terms of this subsection, to any person for the purpose of constructing a transmission line subject to this section, unless the person has received a certificate of public convenience and necessity from the commission pursuant to this section. (emphasis added).

¹¹ Notably, this occurred months before issuance of the Order.

¹² Cutko statement available at: <https://www.mainepublic.org/post/maine-lawmakers-questionlegality-2014-cmp-lease-state-lands-transmission-corridor>.

More troubling is the Department's disparate treatment of two functionally identical facially void leases. With regard to a lease with the Passamaquoddy presented to the Department by CMP, but which was not yet signed by the Bureau of Indian Affairs ("BIA"), the Department's draft Order conditioned approval on CMP obtaining the requisite approval. Logically, this would require the same condition with regard to the lease over Public Reserved Lands: the permit must be conditioned on CMP obtaining the requisite legislative approval. There is no rational basis for the Department to propose to treat the Public Lands lease any differently than it proposed for the Passamaquoddy lease.¹³

Accordingly, the Board should mandate receipt of TRI sufficient to meet the requirements of Chapter 2 of the Department's Rules and sufficient to ensure that the Board is aware of the actual location of the NECEC in order to provide a legal foundation for evaluation of compliance with NRPA and the Site Law and appropriate conditions before considering the application. The Board should initiate its review (including a hearing) only after NECEC LLC obtains TRI (including a valid lease from BPL) and submits all necessary information for the Department to determine whether the proposed owner and operator of NECEC can comply with NRPA and the Site Law. At a minimum, however, were the Board to consider the application prior to a Legislative vote, the Board should impose a condition, similar to the condition originally proposed by the Department for the BIA lease, that NECEC LLC obtain the necessary legislative approval pursuant to Me. Const. art. IX, § 23; 12 M.R.S. §§ 598 to 598-B for the BPL lease of State Public Reserved Land in Johnson Mountain and West Forks Plantation Northeast.

¹³ The Order eliminated this proposed condition likely due to NRCM's comments noting that the CMP's revisions to the NECEC route meant that the Passamaquoddy land was no longer part of the project. However, while this changes nothing about the above analysis—the Department's proposed approach of a permit condition is the only lawful option—it does present the troubling indication that by the end of its multi-year review of the NECEC the Department remained uncertain of the location of the NECEC. One wonders then, how reliable its assessment of and accounting for of impacts to the environment can be?

B. The NECEC causes unreasonable adverse impacts to brook trout habitat in violation of NRPA and the Site Law even after mitigating Order conditions.

NRPA, the Site Law, and Chapters 335 and 375 of the Department's Rules require CMP to prove that the NECEC will not result in unreasonable adverse impacts to significant wildlife habitat, freshwater wetland plant habitat, or threatened or endangered plant habitat. 38 M.R.S. § 480-D(3); 38 M.R.S. § 484(3); 06-096 CMR Chs. 310, 335, and 375. In so doing, CMP must adequately document avoidance and mitigation of and compensation for such impacts. The Order describes the significant impacts to fisheries and wildlife from the NECEC. Specifically, endangered species (Roaring Brook Mayfly and Northern Spring Salamanders); brook trout habitat; habitat fragmentation and buffer strips around cold water fisheries. The NECEC impacts to such resources are unreasonable even considering implementation of Order conditions intended to ameliorate them.

The Order sets forth the following measures in an effort to make reasonable the NECEC adverse impacts to brook trout and coldwater fisheries: (1) Increasing riparian filter areas (buffers) along streams from 25 feet to 100 feet around all perennial streams in Segment 1, all coldwater fisheries streams in other segments, and all Outstanding River Segments; (2) Protection of the Grand Falls, Basin, and Lower Enchanted Tracts, protecting 12.02 miles of streams combined; (3) Providing for full canopy vegetation at Gold Brook and Mountain Brook; (4) Maintaining 35-foot height vegetation in 12 "Wildlife Areas" that total 12.2 miles of Segment 1; (5) Tapered vegetation within the remaining length of Segment 1; and (6) \$1,875,000 in funding for culvert replacements.¹⁴ These measures are inadequate. The NECEC adverse impacts remain unreasonable as discussed in detail below.

¹⁴ Order, 82-84.

1. The NECEC does not include adequate riparian filter areas (buffers) to address unreasonable adverse impacts to brook trout habitat.

The Order requires maintenance of a “riparian filter area” or buffer within 100 feet of all perennial streams in Segment 1, all coldwater fisheries streams in other segments as identified in Appendix E, all streams containing threatened or endangered species, and all Outstanding River Segments; and within 75 feet of all other streams. Appendix C to the Order outlines the vegetation management plan for these areas. Despite providing more protection for riparian areas than that included in CMP’s applications for the NECEC, the vegetation management plan for riparian filter areas still requires significant clearing within the wire zone (within 15 feet, horizontally, of any conductor). Within the wire zone of riparian filter areas, all vegetation taller than 10 feet would be cut to ground level during initial clearing. Outside the wire zone, in the remainder of the 150-foot-wide corridor, only non-capable vegetation would be allowed to exceed 10 feet in height. All vegetation capable of reaching into the wire zone would be removed on a two- to three-year cycle in Segment 1, and a four-year cycle in other segments.

Order conditions regarding vegetation management convert existing vegetation along the NECEC route from intact forest with strict limits on tree removal during timber harvest to a permanent 150-foot swath of short scrub-shrub vegetation. This vegetative condition would be regularly maintained, preventing recovery of vegetation that could serve critical buffer functions such as providing shade and overhead cover to streams, woody debris inputs that are essential for fish habitat, or a forest canopy that provides leaf fall and insect inputs to aquatic food chains. Stripping an area of vegetation defies its ability to serve as a buffer. Thus, increasing the width of this area where vegetation is slightly less stripped (from 25 feet to 100 feet) does not create a buffer or reduce NECEC adverse impacts to fisheries and other protected resources except that it may somewhat improve sediment removal.

2. NECEC compensation for impacts to brook trout habitat in the Grand Falls, Basin, and Lower Enchanted Tracts is not comparable to nor does it address impacts to brook trout habitat and is thus inadequate to comply with NRPA or the Site Law.

As discussed in detail in Jeff Reardon’s pre-filed direct and surrebuttal testimony on behalf of consolidated Group 4, consisting of NRCM, the Maine Chapter of Trout Unlimited, and the Appalachian Mountain Club, most of the river and stream habitat protected in the proposed compensation parcels is significantly different from the higher-value stream habitat impacted by the NECEC’s inadequate buffers.¹⁵ The impacted streams are mostly cold, high-elevation, headwater streams that are highly productive of wild brook trout. The streams “protected” in the compensation parcels are mostly large main stem rivers that warm significantly in the summer, have a recreational fishery at least partially supported by stocking, and have limited or no potential to produce wild brook trout.¹⁶ This defies the purpose of compensation parcels—*i.e.*, replacing the functions and values of the adversely impacted natural resource. CMP’s failure to propose compensation parcels which hew closely to those impacted by the NECEC impermissibly allows unreasonable adverse impacts.

3. Full-height vegetation at Gold Brook and Mountain Brook only protects one Gold Brook crossing and one crossing of Mountain Brook, not any tributaries, and thus allows unreasonable adverse impacts to brook trout habitat.

The Order condition requiring full canopy vegetation at Gold Brook and Mountain Brook was proposed to protect Roaring Brook Mayfly habitat in part of Wildlife Area 4 (Gold Brook) and Wildlife Area 6 (Mountain Brook) but is also cited for benefits to brook trout at these stream crossings.¹⁷ Full canopy vegetation at these two sites is provided by taller poles or pole locations

¹⁵ Reardon Pre-filed Direct Testimony, 21-23; Reardon Surrebuttal Testimony, 6-7.

¹⁶ Reardon Pre-filed Direct Testimony, 22-23; Reardon Surrebuttal Testimony, 6-7.

¹⁷ Wildlife Area 11, which includes the Kennebec River crossing and no other streams, will have full canopy vegetation, because CMP agreed to undergrounding in this location. CMP’s original overland crossing maintained full canopy vegetation via pole heights and locations.

that allow for mature tree canopy below the wire zone, and is required between four structures spanning 0.65 miles with two crossings of Gold Brook and between three structures spanning 0.38 miles with a single crossing of Mountain Brook. Thus, full height vegetation is required at only three of the 271 stream crossings in Segment 1 (only 1.1% of stream crossings in Segment 1). While full canopy closure reduces adverse impacts to these two streams, these protections do not apply to tributaries to either Gold or Mountain Brook.

At Gold Brook, five tributary streams adjacent to the Gold Brook crossings are excluded from the “full canopy vegetation” zone, and therefore get only 35-foot tall vegetation. The effectiveness of these “full canopy” areas is further reduced by clearing within the “full canopy” areas for access roads and structures. Within the footprint of each structure and for the entire length of the access roads, NECEC will result in removal of all capable and non-capable species during initial clearing, and these areas would be maintained as scrub-shrub thereafter. Based on the Google Earth map layers provided,¹⁸ access roads coincide with approximately 0.4 miles of the 0.65 miles of full canopy in Wildlife Area 4, including one of the two Gold Brook crossings. The cleared road will cross Gold Brook, leaving a maintained scrub-shrub buffer rather than full canopy in perpetuity at the crossing. As a result, uninterrupted full canopy vegetation is applied to less than one mile of the 53-mile-long Segment 1, and only two of the 271 stream crossings would retain full canopy vegetation. At Gold Brook, one of the two “full canopy” crossings of Gold Brook will be compromised by a cleared and maintained construction road.

In short, even the limited area of “full canopy” vegetation required by the Order only applies fully to the sole crossing of Mountain Brook itself (exclusive of tributaries). While both Gold and Mountain Brook are important brook trout resources, the overall significance of these

¹⁸https://www.maine.gov/dep/gis/datamaps/lawb_necec_project/2019-10-10%20NECEC%20Project%20Data.kmz.

two improved crossings is very small in the context of the entirety of the NECEC’s adverse impacts to brook trout and other aquatic habitat and certainly does not suffice to make those adverse impacts reasonable.

4. Thirty-five-foot tall vegetation in 12 Wildlife Areas only reduces adverse impacts to 5 miles of the NECEC and, thus, leaves unreasonable adverse impacts to brook trout habitat.

The Order specifies 35 foot tall vegetation to address adverse impacts to fisheries and wildlife habitat in Wildlife Areas 1-10. In these areas, instead of the clear cutting proposed by CMP, the Order requires that trees that are taller than 35 feet, or may reach heights greater than 35 feet before the next scheduled maintenance (within two to three years), may be removed. Trees would be removed when they either reach 35 feet in height, or when they have the potential to reach 35 feet before the next scheduled maintenance. Note that the Order labels these “35-Foot Minimum Vegetation Height” areas, but the prescription for vegetation maintenance would actually result in a 35-foot **maximum** vegetation height, as all vegetation approaching 35 feet would be removed.

The Order applies this prescription to the NECEC adverse impacts in 12.23 miles within Segment 1 of the approximately 150 mile NECEC. These areas include crossings of 21 streams or, according to the Order, 7.7% of the 271 intermittent and permanent stream crossings in Segment 1.¹⁹ Of the 12 miles benefiting from this additional protection, more than seven miles include access roads that will still be cleared and maintained as scrub-shrub habitat. Thus, a mere 5 miles of the NECEC will comply with this condition and support 35-foot vegetation.

Importantly, vegetation maintenance within the 35-foot vegetation area allows tree cutting at ground level, rather than topping, when trees reach 35 feet or have the potential to reach 35 feet

¹⁹ Order, 135-136 (Table C-1).

within 2-3 years. As a result, this area, though it may support some vegetation taller than scrub-shrub, will never grow mature trees that support spreading canopies or larger trunks. A study of re-generating even-aged hardwood stands in upstate New York found that at age 19, sugar maple, beech, yellow birch, and white ash were all exceeding 30 feet in height; and all reached heights of 35 feet or taller by age 24.²⁰ At age 24, trunk diameters (dbh) ranged from 3.08” to 4.29”.²¹ Even at age 29, when all species but beech were exceeding 45 feet, dbh never exceeded 6 inches for any species.²² Although trees with a maximum heights of 35 feet in the corridor may provide some shade, they will not grow to heights that support full crown development and provide substantial shading before their removal. They will also not attain trunk diameters large enough to count as large wood for instream habitat.

To summarize, 35 foot vegetation areas are required in only 12 of the 53 miles in Segment 1 and 150 mile NECEC. The 35-foot canopy is interrupted by cleared and maintained access roads for all but 5 miles. Even counting those areas that include access roads, 35 foot vegetation is required for only 21 stream crossings, less than 8% of the stream crossings in Segment 1 alone. On the streams to which it applies, it would result in vegetation taller than scrub-shrub but not in trees tall enough to provide full shade to streams or large enough to serve as large woody debris if recruited into the stream channel.

5. It is not known whether tapered vegetation will effectively alleviate adverse impacts to brook trout habitat caused by the NECEC.

²⁰ Nyland, Ralph D; Ray, David G; and Yanai, Ruth D, Height Development of Upper-Canopy Trees Within Even-Aged Adirondack Hardwood Stands, *Northern Journal of Applied Forestry*, September 2004 (Table 1, p. 119), *available at* https://www.researchgate.net/profile/Ruth_Yanai/publication/233671448_Height_Development_of_Upper-Canopy_Trees_Within_Even-Aged_Adirondack_Northern_Hardwood_Stands/links/5552a64f08ae980ca606c177/Height-Development-of-Upper-Canopy-Trees-Within-Even-Aged-Adirondack-Northern-Hardwood-Stands.pdf (attached as Appendix C).

²¹ *Id.*

²² *Id.*

The Order requires tapered vegetation for the entire length of Segment 1. The effectiveness of this measure at mitigation of adverse impacts to brook trout habitat is unproven, untested, and anticipated to be very limited. The Order specifies that tapering will include (1) a 54-foot wide “wire zone” within which all woody vegetation would be cut to ground level and allowed to regenerate to no taller than 10 feet; (2) a 16-foot wide taper on each side of the wire zone that would be selectively cut to remove vegetation taller than 15 feet and maintained with vegetation of 15-foot maximum height; (3) a 16-foot wide taper within which vegetation up to 25 feet would be maintained; and (4) a final 16-foot wide taper within which vegetation up to 35 feet would be maintained. As with the “Full Canopy” and “35-Foot Canopy” areas discussed above, access roads would be cleared and maintained as scrub-shrub.

The record does not support a conclusion that tapering will effectively counteract unreasonable adverse impacts from the NECEC.²³ Trees removed upon reaching heights near 35 feet will be young, short, and with have small trunk diameters and limited canopy spread. This substantially limits their ability to provide shade or to serve as large woody debris. These limitations increase for each progression to shorter woody vegetation in the taper (*i.e.*, removal at 25 feet or 15 feet in height). The wire zone, which occupies more than 1/3 of the total width of the NECEC, will be permanent scrub-shrub, as will all access roads. Thus, tapering will provide neither sufficient shade nor input of large wood materials to protect the many high-quality brook trout stream crossing that comprise the NECEC.

²³ Group 4 Comments on Draft Order, April 13, 2020.

6. The \$1,875,000 culvert fund does not address adverse impacts to brook trout habitat.

The Order requires fish passage improvements through culvert replacements to improve brook trout access to habitat as an offset to NECEC unreasonable adverse impacts to brook trout. NRCM agrees that NECEC's impacts to brook trout are unreasonable and adverse, and that improving fish passage at culverts can improve habitat access for brook trout. However, there is no nexus between the two and the Department erred in conflating the two issues. The NECEC presents numerous and varied significant impacts to brook trout habitat through its removal and degradation of forested buffers but NECEC does not impede fish passage. Even if the NECEC did present fish passage impacts, the proposed fish passage projects funded by CMP's culvert replacement fund are not necessarily in the same streams or even watersheds impacted by the NECEC.

The Order allows the culvert fund to be spent "in the vicinity of Segment 1,"²⁴ a facially vague standard. NECEC impacts and the existing quality of brook trout habitat are both highest in Segment 1, where there are few public roads and the land and the logging road network are owned and used primarily for timber harvest. Private forest landowners are generally less willing than municipalities to use funds to improve fish passage because of the associated restrictions on use of their property and maintenance obligations. Further, the Order contains no guidelines ensuring use of or priority of use of the culvert fund for crossings of high-quality brook trout streams equivalent to those adversely impacted by NECEC.

In Segment 1, roads are typically privately owned and used primarily for logging, culvert replacement costs would almost certainly exceed the \$50,000-\$100,000 range cited, with the result that far fewer than 25 culverts would likely be replaced. Worse, there is no clear linkage between

²⁴ Order, 86.

the handful of culverts constructed and improvements to brook trout habitat. In short, there is no relationship between paying for culverts (which may improve fish passage) and addressing impacts to brook trout habitat resulting from hundreds of stream crossings laying that habitat bare to the warming effect of sun and removal of all woody inputs.

C. NECEC habitat fragmentation impacts are unreasonable even considering Order conditions intended to mitigate impacts.

The Department's Rules implementing the Site Law (06-096 CMR Ch. 375 § 15) require adequate provision for the protection of wildlife and fisheries through maintenance of suitable and sufficient habitat, including travel lanes and avoiding habitat fragmentation. NRPA (06-096 CMR Ch. 310 and 335) similarly prohibits unreasonable impacts to protected natural resources including a goal of no net loss of function and values of rivers, streams, brooks, wetlands, and significant wetland habitat.

The proposed NECEC carves a swath through an unfragmented forest block that encompasses more than 500,000 acres within a larger area that is one of the last remaining temperate broadleaf mixed forests. This part of Maine's North Woods supports exceptional biodiversity and maintains that biodiversity even as the climate changes. These qualities make the area unique and important wildlife habitat. The Order acknowledges that the NECEC "could contribute to habitat fragmentation and have unreasonable adverse impacts on wildlife as a result of the effects on wildlife as a result of the effects on wildlife travel lanes and lifecycles and accessibility to suitable and sufficient habitat. Fragmentation occurs when contiguous habitat is broken into smaller, more isolated patches." Order at 75-76. These impacts result even though there is already forest management in this area. *Id.* The Department found that:

as Segment 1 initially was proposed, the applicant had not made adequate provision for the protection of wildlife; the proposal's contribution to habitat fragmentation and impact on habitat and habitat connectivity was an unreasonable impact on

wildlife habitat. Through modifications CMP made to its proposal during the permitting process, these potential wildlife impacts have been reduced. Through further modification required as a condition of this Order, adequate provision for the protection of wildlife will be achieved.

Order, 76.

Unfortunately, examination of the Order conditions modifying the NECEC indicates continued failure to comply with NRPA and the Site Law. These deficiencies are fatal and the Board should deny the permits.

1. Tapering is a scenic impact²⁵ mitigation measure that does not mitigate adverse impacts to wildlife habitat from forest fragmentation and will be difficult to implement and monitor for compliance.

Tapering is intended to reduce the scenic impact of the corridor in areas of high scenic sensitivity such as Coburn Mountain. There is no evidence that tapering mitigates impacts to wildlife habitat or addresses forest fragmentation. While tapering the entire length of the NECEC may have some benefit for reducing edge effects in adjacent forested areas, this strategy has not been studied. Tapering provides almost no connectivity benefit for mature forest species to offset fragmentation. Even along the edges, where tapering would result in trees that are a maximum of 35-feet high (as discussed above), these trees will be mere saplings in the 3-inch to 5-inch diameter range (excluding damaged or broken trees with larger diameters). While there may be some species that would avoid 10-foot high scrub-shrub but would utilize 15-foot to 35-foot-tall sapling vegetation, it is insufficient to provide adequate connecting habitat for marten or other mature forest species. As such, reliance on tapering conditions to offset what the Department concedes are unreasonable fragmentation impacts is impermissible under NRPA and the Site Law.

²⁵ NRPA (38 M.R.S. § 480-D(1)) and the Site Law (38 M.R.S. § 484(3)) both specify standards pertaining to scenic impacts that NECEC must satisfy- but doesn't. The Board should likewise consider NECEC's failure in this regard.

NRCM also has serious concerns about how this tapered condition would be established, and whether the Department has sufficient capacity to monitor and enforce this condition for the life of the NECEC. The tapering diagram provided by the Applicant shows nicely tapered vegetation.²⁶ However, Section 1 of the proposed corridor would pass through a range of stand types and ages and it is unrealistic to expect the uniform condition presented in Applicant's Exhibit CMP 5-B to exist immediately following construction. Initial clearing will consist of a nearly complete overstory removal of all trees greater than 5-inch diameter, leaving seedlings and saplings of a range of heights and densities. Closed canopy stands may have little established regeneration and will require time for the regeneration to grow to the desired heights. This regeneration may itself be even-aged (as will regeneration where the NECEC passes through recent clearcuts), and most trees may reach the target height at the same time, resulting in another heavy removal during the next maintenance cycle. Rather than the nicely tapered vegetation pictured by the Department, the NECEC will consist of an on-going patchwork of seedlings and saplings that may only achieve the desired tapered condition after decades of careful tending, if ever.

It is not clear how progress toward the required tapered condition will be monitored and enforced or whether there will be any benefit whatsoever in terms of an offset to habitat fragmentation. Will a monitor be onsite during clearing to ensure that clearing is being done appropriately to reach the desired condition in the shortest possible time? How will the Department determine condition compliance? What, if any, penalties will CMP have to pay for non-compliance, and will those penalties be sufficient to ensure compliance? Without monitoring and substantial penalties, the Applicant could decide that maintaining tapered vegetation is too expensive and simply choose to pay the penalties as a cost of business. Will there be any effort to

²⁶ Pre-filed Testimony of Amy Bell Segal, Exhibit CMP 5-B at 60.

determine the value of tapering by quantifying habitat use impacts and the loss associated with NECEC?

2. Requirements for proposed Wildlife Areas are not sufficient to ensure that these protected areas provide any significant connectivity benefit.

In theory, the Wildlife Areas prescribed by the Order may enhance habitat connectivity, primarily for species that do not require mature forest. However, in practice there would be numerous difficulties and significant delays in achieving such benefits—if achievement were ever accomplished.

In her supplemental testimony, Group 6 witness Dr. Simons-Legaard set forth the minimum characteristics for pine marten habitat that should be maintained in the Wildlife Areas in order to provide habitat connectivity. These bare minimums were not so simple as maintaining a set canopy height.²⁷ As she stressed in her testimony, it is critical that all of these requirements be incorporated into the NECEC to address the unreasonable adverse impacts otherwise resulting from the NECEC. These include: (a) the trees be at least 30 feet tall (preferably greater than 40 feet tall); (b) a minimum basal area of 80 ft²/acre; (c) a minimum of 30% canopy closure in all seasons; and (d) frequent snags (dead trees). The NECEC meets none of these measures for avoiding unreasonable adverse impacts to wildlife habitat associated with fragmentation.

The Order holds that NECEC impacts are unreasonable without tapering. Yet, as discussed above, tapering results in a **maximum** tree height of 35 feet with the most likely outcome being that the average tree height in the area impacted by NECEC is well below 30 feet.²⁸

Maintenance of a minimum basal area of 80 square feet per acre is at least as important as the minimum 30 foot height requirement because a regenerating stand with only a few scattered

²⁷ Supplemental testimony of Group 6 witness Dr. Erin Simons-Legaard, 1.

²⁸ Order, Appendix C.

taller trees will not mitigate fragmentation. The removal of all trees greater than 35 feet tall from the Wildlife Areas during construction means that large parts of these Wildlife Areas will not meet this threshold following construction. Those stands that provide the greatest connectivity benefit (mature closed canopy stands) would undoubtedly see the greatest level of overstory removal. As a result, achieving this basal area threshold would largely depend on restoration through future growth. As such, this criterion for avoiding adverse fragmentation effects is likewise unlikely to be met.

Likewise, the minimum size tree that can be counted toward this requirement is not specified. However, simple math indicates that there is likely an extremely narrow potential window for trees that can provide enough basal area without tipping over the 35-foot threshold for removal. Research indicates that this requirement could be met by a tree with a minimum diameter at breast height of 7.6 cm (3 inches),²⁹ meaning that this basal area must be maintained in trees at least 3 inches in diameter but no more than 35 feet tall. Stands fitting this very narrow range of tree sizes would likely be dense, even-aged sapling stands and could require extensive removal once the canopy reaches 35 feet, reducing the stand below the basal area threshold mere years after finally attaining the minimum requirements outlined by Dr. Simons-Legaard. Thus, these stands could end up in a cycle of heavy clearing followed by regeneration without ever really offering any mitigation of the unreasonable fragmentation impacts NECEC imposes.

Based on examination of aerial photography and National Land Cover data, there are several extensive areas of hardwood forest within these Wildlife Areas. Yet, if this basal density requirement can be met at all, it can only be achieved by mixed wood or softwood stands. Absent planting of softwoods, hardwood stands of less than 35 feet will never meet this criterion. There

²⁹ See Payer, D. and Harrison, D.J. (2003, 2004), discussed and cited in the pre-filed testimony of David Publicover (February 22, 2019).

is no information indicating how much of the Wildlife Areas consists of mixed wood or softwood stands capable of meeting this threshold and without requiring planting or active management to achieve a mixed wood or softwood stands.

Finally, frequent snags are unlikely in the Wildlife Areas. Once cleared, the remaining tree sizes are so short and of such minimal diameter that the interconnections of snags are effectively eliminated as relevant to habitat fragmentation.

In short, the Wildlife Areas established in the Order are highly unlikely to provide the characteristics necessary to avoid habitat fragmentation. Further, there is no clarity regarding maximization of the benefits of the Wildlife Areas for mature forest connectivity or if there are alternative which would better mitigate the admittedly unreasonable habitat fragmentation impacts of the NECEC. Specifically:

- There is no evidence in the record regarding which stands within the Wildlife Areas currently meet the thresholds set forth above for canopy height, basal area, and softwood canopy cover, and which stands would meet these thresholds following NECEC construction.
- There is no evidence in the record of the tallest poles that can be utilized in different areas as an alternative to habitat fragmentation associated with a maximum tree height of 35 feet.
- There is no evidence in the record of the maximum tree height that can be maintained given poles of the maximum height. This will vary by location based on topography and other factors. These heights, not a blanket 35 feet, should be set at the desired tree height in different areas.
- There has been no provision of any plan based on forest growth modeling (such as the Forest Vegetation Simulator) demonstrating how progress toward the desired conditions would be achieved, how long it would take to achieve these conditions, and that these conditions could be maintained given the need for on-going removal of trees above the maximum 35 foot height.

There is no provision for long-term monitoring to ensure that progress toward these required conditions is achieved and maintained. It is not sufficient to examine aerial photography or simply measure canopy height – basal area must also be periodically monitored.

Finally, there are no “triggers” requiring additional land conservation as compensation for failed Wildlife Areas or portions of Wildlife Areas which do not attain the conditions necessary to mitigate habitat fragmentation (such as hardwood stands that will not meet the winter canopy closure threshold), which will not achieve them in a reasonable time, or which cannot be maintained in the necessary condition over the long term.

3. The Order-mandated land conservation does not adequately compensate for the NECEC abnegation of functions and values of significant wildlife habitat.

The NECEC, as proposed by CMP, included insufficient compensation for impacts to significant wildlife habitat even with the on-site mitigation of tapering and Wildlife Areas. The amount of land conservation required by the Order is the bare minimum recommended by any non-Applicant expert witness and is based on best-case assumptions about the environmental benefits of tapering and Wildlife Areas. Given that, as discussed in detail above, the environmental benefits of tapering and Wildlife Areas are unlikely to be fully realized for some time (perhaps several decades), if at all, the habitat protections provided by compensatory land conservation are especially critical. Furthermore, some impacts, including the Site Law requirement that the project fit harmoniously into the environment cannot be mitigated by offsite measures. Unfortunately, the Order does not contain a sufficient quantity or quality conservation lands to provide these necessary benefits. Conservation easements in an area with limited development threat, but which allow commercial forestry to continue as usual, would provide very limited additional benefits and are insufficient and unacceptable as a replacement for the lost functions and values associated with the NECEC impacts.

D. CMP failed to perform an adequate alternatives analysis, ignored practicable alternatives, and the NECEC results in unreasonable adverse impacts in contravention of NRPA and the Site Law.

A fulsome alternatives analysis is foundational to NRPA review and compliance. Under NRPA, CMP must demonstrate that the NECEC “will not unreasonably interfere with existing scenic, aesthetic, recreational or navigational uses” and “will not unreasonably harm significant wildlife habitat, freshwater wetland plant habitat, threatened or endangered plant habitat, aquatic or adjacent upland habitat, travel corridor, freshwater, estuarine or marine or other aquatic life.”³⁰

Chapters 310 (Wetlands), 315 (Scenic and Aesthetic), and 335 (Wildlife) all contain explicit requirements that an applicant conduct an alternatives analysis to determine whether a less harmful alternative exists. Under no circumstances can an application be approved where this analysis is not done or where the project would cause unreasonable harm to a protected resource, even where no practicable alternative exists. Chapter 310 states that an:

activity will be considered to result in an unreasonable impact if the activity will cause a loss in wetland area, functions, or values, and there is a practicable alternative to the activity that would be less damaging to the environment. The applicant shall provide an analysis of alternatives (see Section 9(A)) in order to demonstrate that a practicable alternative does not exist.³¹

However, “[e]ven if a project has no practicable alternative and the applicant has minimized the proposed alteration as much as possible, the application will be denied if the activity will have an unreasonable impact on the wetland.”³²

Chapter 315 of the Department’s Rules addressing scenic and aesthetic uses requires the Department to consider all “practicable alternatives to the proposed activity that will have less

³⁰ 38 M.R.S. § 480-D.

³¹ 06-096 CMR Ch. 310, § 5.

³² 06-096 CMR Ch. 310, § 5(D).

visual impact, and cumulative effects of frequent minor alterations on the scenic resource” and states that:

[a]n application may be denied if the activity will have an unreasonable impact on the visual quality of a protected natural resource as viewed from a scenic resource even if the activity has no practicable alternative and the applicant has minimized the proposed alteration and its impacts as much as possible through mitigation. An “unreasonable impact” means that the standards of the Natural Resources Protection Act, 38 M.R.S.A. § 480-D, will not be met.³³

Chapter 335, of the Department’s Rules addressing significant wildlife habitats, also requires:

[a] narrative describing whether a practicable alternative to the alteration exists that would be less damaging to the environment and what alternatives were considered during project design. The narrative must address why the activity cannot avoid or lessen impacts to the significant wildlife habitat by utilizing, managing or expanding one or more other sites; reducing the size, scope, configuration or density of the proposed activity; developing alternative project designs; or by some other means.³⁴

The alternatives analysis requirement underlying NRPA as set forth in Chapters 310, 315, and 335 is clear. Is there a practicable alternative? If so, the reasonableness of adverse impacts is called into question. But, “[e]ven if the activity has no practicable alternative, and the applicant has minimized the proposed alteration as much as possible, the application will be denied if the activity will have an unreasonable impact on protected natural resources or the subject wildlife.”³⁵

Here CMP did not conduct a reasonable and complete alternatives analysis, did not demonstrate that there is no practicable alternative, and did not demonstrate that the NECEC does not unreasonably impact protected natural resources.

1. CMP’s Alternatives Analysis is Inadequate.

A NRPA alternatives analysis is a report that analyzes whether a less environmentally damaging practicable alternative to the proposed alteration, which meets the project purpose,

³³ 06-096 CMR Ch. 315, § 9.

³⁴ 06-096 CMR Ch. 335, § 5(A).

³⁵ 06-096 CMR Ch. 335, § 3(A) and (C).

exists. Determining whether a practicable alternative exists includes:

1. Utilizing, managing or expanding one or more other sites that would avoid the wetland impact;
2. Reducing the size, scope, configuration or density of the project as proposed, thereby avoiding or reducing the wetland impact;
3. Developing alternative project designs, such as cluster development, that avoid or lessen the wetland impact; and
4. Demonstrating the need, whether public or private, for the proposed alteration.³⁶

CMP's alternatives analysis failed to make this determination. CMP never looked at alternate routes for NECEC along existing disturbed corridors, such as the Spencer Road or Route 201. CMP's alternatives analysis contains no discussion of undergrounding all or any portion of the NECEC except the after the fact addition of burial of the Kennebec Gorge crossing.³⁷ The crossing of the Kennebec Gorge and the Merrill Strip Alternative are perfect demonstrations of CMP's failure to consider practicable alternatives. In both instances, CMP considered and dismissed these alternatives as impracticable only to change course when the threat of permit denial loomed close. Indeed, CMP's NECEC Project Developer, Thorn Dickinson, testified that neither CMP, nor any consultants hired by CMP, did any formal analysis of undergrounding options until directed to do so by the Department.³⁸

2. CMP's Alternatives Analysis Ignored Practicable Underground Alternatives.

CMP claims that its failure to analyze even a single underground route option was due to the fact that undergrounding the 53 miles of new transmission corridor was "not reasonable or

³⁶ 06-096 CMR Ch. 310, § 9(A).

³⁷ Compare CMP NRPA Application (Alternative Analysis) with CMP Amended NRPA Application of October 19, 2018.

³⁸ May 9, 2019 Hearing Transcript, 410.

feasible because the costs of doing so would defeat the purpose of the Project.”³⁹ However, these calculations were not done until long after CMP made the decision to select its preferred route.⁴⁰ The actual cost data provided by CMP, the itemized calculations of material and labor costs, were redacted under the label “Proprietary” throughout CMP’s May 17, 2019 submission regarding “costs, dollars, or a numerical backup sheet for CMP Exhibits 11-B through 11-G in Mr. Bardwell’s pre-filed rebuttal testimony” requested by the Department.⁴¹ On cross examination, CMP conceded that the incremental cost increase for undergrounding specific areas within the LUPC P-RR subdistrict for the 53 miles of greenfield corridor in Maine’s North Woods range from \$13, 28 and to 30 million which is approximately one, three, and three percent increases in the capital costs for the project (or a total of 7 percent) of the capital cost of the NECEC.⁴² CMP also conceded that its budget includes a contingency of at least 15 percent of the total project cost. Accordingly, CMP’s claims that undergrounding portions of the NECEC is not financially feasible are false. The undergrounding alternative is financially feasible given CMP’s contingency funds.⁴³

CMP also argues that undergrounding a transmission line is not technically or logistically feasible.⁴⁴ In fact, burial of HVDC lines is exceedingly common, even here in New England.⁴⁵ The fully permitted HVDC line from Hydro-Québec through Vermont, TDI, would be 157 miles long with 97 miles in underwater cables and 57 in buried cables.⁴⁶ Similarly 60 miles of the

³⁹ CMP Dickinson Rebuttal Testimony, 2-3.

⁴⁰ In bolstering their argument that burying the new portion of the line would dramatically increase the cost of the project, CMP’s consultants analyzed the cost of burying the line along the 53 new miles of transmission corridor along CMP’s preferred route through the woods but did not disclose the actual cost of only burying the line along existing roads until meeting the existing corridor. CMP Tribbet Rebuttal Testimony, 5; May 9, 2019 Hearing Transcript, 414-15.

⁴¹ May 17 CMP Response to Department Request for Information, 4-28.

⁴² May 9, 2019 Hearing Transcript, 395: 5-10.

⁴³ May 9, 2019 Hearing Transcript, 389: 1-2, 15-18.

⁴⁴ See generally, CMP Bardwell Rebuttal Testimony, 2-9.

⁴⁵ Group 8 Russo Direct Testimony, 3-4, and Exhibits CR-3 and CR-4.

⁴⁶ *Id.* at 4.

Northern Pass Project through New Hampshire would have been buried.⁴⁷ CMP claims that Northern Pass and TDI should not be used as an example of an underground transmission project because they have not “demonstrated that is feasible” and have not secured long-term transmission service agreements.⁴⁸ This is misleading. Northern Pass was initially selected as the winning bid in the Massachusetts 83D RFP process, but was rejected after the New Hampshire Site Evaluation Committee denied the project a necessary permit siting concerns over siting concerns.⁴⁹

In short, CMP failed to consider utilization of undergrounding techniques (whether directional drilling, micro boring, or otherwise) to avoid or mitigate adverse impacts from the NECEC even though such alternatives are practicable.

3. CMP’s Alternatives Analysis Ignored Practicable Alternatives that Would Minimize Scenic, Wildlife Habitat and Wetland Impacts by Following Existing Roads and Leaving Full-height Vegetation Via Taller Poles.

CMP’s alternatives analysis is impermissibly silent regarding alternate routes utilizing existing disturbances, such as roads, or other techniques such as taller poles to allow full-height vegetation and reduce scenic, wetland, or wildlife impacts.⁵⁰ Whether buried or not, a route that followed existing roads, whether along the Spencer Road or Route 201 to Jackman, would dramatically reduce wildlife and fisheries impacts.⁵¹ Unfortunately, CMP’s alternatives analysis does not discuss the practicability of such alternatives.

CMP also failed to consider an alternative that utilized a combination of mitigation strategies. For example, CMP could have selectively designed a route that used some combination of undergrounding such as directional drilling, trenching, micro tunneling, co-location, and taller

⁴⁷ *Id.*

⁴⁸ CMP Tribbet Rebuttal Testimony, 3.

⁴⁹ Group 4 Comments, 2 (citing New Hampshire Site Evaluation Committee March 30, 2018 Decision and Order Denying Application for Certificate of Site and Facility).

⁵⁰ *See generally* CMP NRPA Application (Alternatives Analysis).

⁵¹ May 9, 2019 Hearing Transcript, 62, 66-67.

poles to mitigate some of the worst environmental and scenic impacts from NECEC. Unfortunately, CMP did not evaluate any alternatives that utilized any of these approaches, even though this would align with common practice.

Similarly, CMP did not delineate NRPA protected resources and develop alternative project designs to avoid or mitigate impacts even where practicable alternatives exist. CMP could readily, as discussed above, utilize any number of practicable alternatives (pole heights and locations, directional drilling) to avoid or mitigate NECEC impacts to brook trout habitat. Yet, CMP declined to do so even despite NRPA's plain language requiring this analysis.

CMP's insufficient alternatives analysis, the availability of practicable alternatives, and the unreasonableness of the NECEC adverse impacts preclude Board approval under NRPA.

E. The Department barred critical analysis of CMP's claims that the NECEC results in greenhouse gas benefit claims then improperly credited CMP for these purported benefits as a mitigation for the NECEC's adverse impacts to protected resources.

Despite denying parties an opportunity to vet CMP's greenhouse gas claims in an open hearing process and leading parties to believe that their comments would be reviewed in any final Departmental decision-making process,⁵² the Department simply accepted CMP's assertions regarding greenhouse gas benefits from the NECEC and referenced findings of the Maine PUC on this issue.⁵³ In its comments to the Department, NRCM noted that the PUC and the Department failed to examine whether the NECEC would simply divert electricity from other markets to supply this contract or whether those other markets would ramp up fossil-fuel-generated electricity to make up for lost supply going through NECEC.⁵⁴ This is the most important issue in determining

⁵² See Order, 12 (“In the February 5, 2019 Third Procedural Order, the Presiding Officer determined that greenhouse gas emissions would not be included as a hearing topic.”).

⁵³ Order, 105.

⁵⁴ See, e.g., Group 4 April 12, 2020 Comments on Draft Order, 23-24; Group 4 May 9, 2019 Comments, 7-8.

whether NECEC would reduce carbon emissions. NRCM provided extensive evidence that NECEC would result in this sort of energy “shell game.”⁵⁵ However, the Department never mentioned NRCM’s comments or discussed this issue in any of its decision documents.

Moreover, the Department ignored compelling evidence from NRCM showing that Hydro-Québec’s impoundments emit substantial amounts of carbon pollution, among the highest levels for impoundments in the world.⁵⁶ Instead, in simply accepting the PUC’s conclusions, the Department accepted the underlying assumption in the PUC’s flawed finding that carbon emissions from Hydro-Québec’s reservoirs are zero.⁵⁷ Massachusetts Institute of Technology Professor Bradford Hager submitted additional evidence on this topic during the Army Corps hearing process. His testimony and supplemental testimony on Hydro-Québec’s carbon emissions to the Army Corps of Engineers on this project was included as Attachment D of NRCM’s comment on the draft Permit, incorporated herein by reference.

Counsel for the Department indicated that this exclusion was the result of a lack of jurisdiction for review of greenhouse gas emissions under NRPA or the Site Law. Despite this, the Order then relied on CMP’s assertions of greenhouse gas emissions benefits from NECEC in offsetting NECEC adverse impacts under NRPA.⁵⁸ Notwithstanding the Department’s obligation to assess greenhouse gas emissions generally, *see* 38 MRSA §577, the Department erroneously excluded evidence on and analysis of the greenhouse gas impacts, and then concluded that the permits could not be granted without counting the unsupported assertions of such benefits by CMP, which the parties were never allowed to address with evidence. Such double talk is impermissible.

⁵⁵ *See* Group 4 May 9, 2019 Comments, 1-13.

⁵⁶ *See id.* at 7-8 (citing Bradford M. Hager, Commentary: Hydro-Québec offers misleading claims about power’s climate impact. *Portland Press Herald*, January 5, 2019).

⁵⁷ *See* Order, 105.

⁵⁸ *See id.*

Either the impacts are quantified and assessed with the ability to cogently examine evidence presented supporting mitigation strategies, or the mitigation cannot be counted.

Board review of the NECEC should include an independent greenhouse gas analysis to verify CMP's claims or should explicitly reject those claims given the existing evidence indicating their falsity. Based on its independent greenhouse gas analysis, the Board should, pursuant to NRPA, increase the amount of compensatory land conservation and require that the land conservation be near the impacted area and managed to improve forest health and mitigate climate impacts.

IV. The Board Should Hold a Public Hearing, Take Additional Testimony, and Consider Supplemental Evidence.

As explained above, because this is a project of statewide significance, the Board should assume original jurisdiction of these permits and conduct a public hearing. Even if it does not do so, the Board is required to conduct a *de novo* review of the record in this matter. 38 M.R.S. § 342-D(4)(A) (“The board is not bound by the commissioner’s findings of fact or conclusions of law but may adopt, modify or reverse findings of fact or conclusions of law established by the commissioner.”). Furthermore, the Board is authorized to conduct public hearings as part of its *de novo* review of the Department, and NRCM specifically requests that it do so pursuant to 06-096 CMR Ch. 2 § 24(B)(4).

The same factors that make this a project of statewide significance also weigh in favor of the Board holding a public hearing. The NECEC would be one of Maine’s largest-ever industrial projects and would damage a vast area of forest that is a resource of statewide and global significance as well as a significant source of recreation and tourism-based revenue for the entire region. Not only is the NECEC one of the largest industrial projects ever proposed in Maine, the

impacts would be felt for decades, with CMP admitting that the company has no plans to ever decommission this project.

Where, as here, both the Department's draft permits and the Order differ substantially from the NECEC proposed by CMP (and, notably, substantial changes occurred between the draft and final Order) it is particularly important for the Board itself to hold a hearing and take additional testimony. Testimony before the Department focused on the inadequacies of the application as proposed, but the Board should hold a hearing to take testimony on whether the conditions to the Order allow for compliance with NRPA and the Site Law. Such testimony was impossible before the Department because CMP did not include these measures until after the close of the record. While NRCM and others submitted substantial comments on the draft Order, there were not meaningful responses or changes addressing those comments, nor an opportunity to comment on CMP's post-record proposals.

In addition to the evidence and comments in the record before the Department, NRCM makes the following offer of proof with regard to the testimony it would offer at a Board public hearing, and identifies the following supplemental evidence that the Board should consider whether or not a public hearing is held:

- NRCM would submit written or oral testimony on CMP's lack of TRI, in particular with regard to the illegal BPL lease and change in ownership issues. The Department rejected requests to include TRI as a hearing topic during its process. Just as the Board is tasked with considering the environmental impacts of projects of statewide significance, it must determine whether the NECEC (and/or the Order on appeal) is supported by sufficient TRI to clear the low jurisdiction threshold without conditions such as a requirement that CMP obtain the necessary legislative authorization to substantially alter public reserved lands.

- NRCM makes an offer of proof to the Board to take testimony on the Illegal BPL lease. NRCM’s testimony would be consistent with the testimony provided to the Agriculture, Conservation and Forestry Committee (“ACF Committee”) record on LD 1893, which addressed CMP’s illegal BPL lease and includes:
 - All testimony;⁵⁹
 - The January 30, 2020 ACF Committee letter to BPL concerning LD 1893 and BPL’s response (attached as Appendix A); and
 - The recordings of the ACF Committee LD 1893 hearing, work session, and language review.⁶⁰
- NRCM would submit written or oral testimony on the inadequacy of Order conditions implementing measures to alleviate the unreasonable adverse impacts of the NECEC to brook trout habitat and habitat fragmentation, including, among others:
 - Lack of full-height vegetation in all riparian filter areas (such as by directional drilling, taller pole heights, careful pole location or a combination of these techniques);
 - Failure to include cold, high-elevation, headwater streams that are highly productive of wild brook trout;

⁵⁹ Available at

http://www.mainelegislature.org/legis/bills/display_ps.asp?id=1893&PID=1456&snum=129&sec3.

⁶⁰ NRCM respectfully requests that the Board consider these audio files as supplemental evidence. Because they are audio files and not printed documents, they cannot be attached to this appeal and linking to the audio files is the only appropriate method of presentation. The files are available at <http://sg001-harmony.sliq.net/00281/Harmony/en/PowerBrowser/PowerBrowserV2/20200121/-1/13889> (hearing starts at 1:30 and runs to 4:09); <http://sg001-harmony.sliq.net/00281/Harmony/en/PowerBrowser/PowerBrowserV2/20200218/-1/14054> (starts at 1:20:50 and runs to 2:30:05, containing a discussion by BPL Director Andy Cutko of the BPL response to the ACF Committee FOAA as well as legislators’ statements on the lease being invalid and the vote); and <http://sg001-harmony.sliq.net/00281/Harmony/en/PowerBrowser/PowerBrowserV2/20200305/-1/14177> (language review starts at 3:58:28 and runs to 4:13:20, and also includes testimony from legislators).

- Lack of full canopy crossings for all brook trout streams and their tributaries through directional drilling, taller pole heights, careful pole locations, or some combination of these or other techniques;
 - Lack of full canopy stream crossings in all Wildlife Areas via taller pole heights, careful pole location, directional drilling, or some combination of these or other techniques;
 - Lack of full canopy vegetation in all Wildlife Areas; and
 - Failure to include long-term monitoring and “triggers” that mandate additional land conservation as compensation for any failure of any portion of a Wildlife Areas to attain the conditions necessary to mitigate fragmentation (such as hardwood stands that will not meet the winter canopy closure threshold), which will not achieve them in a reasonable time or which cannot be maintained in the necessary condition over the long term
- NRCM would submit written or oral testimony on the inadequacy of the proposed mitigation and compensation.
 - NRCM would submit written or oral testimony on the lack of carbon emissions reduction benefits from NECEC. NRCM repeatedly sought to introduce such evidence before the Commissioner, yet the Commissioner denied NRCM’s requests and did not respond to its written comments in the record. NRCM repeatedly requested that greenhouse gas emissions be included as a hearing topic.⁶¹ The Department denied these requests, ruling instead that intervenors could submit written comments on the issue of greenhouse gas

⁶¹ Group 4 oral request to include greenhouse gas emissions in hearing, Second Pre-Hearing Conference, Jan. 17, 2019; Group 4 request to include greenhouse gas emissions, Jan. 24, 2019 (supported by Intervenor Groups 2 and 10).

emissions until the close of the record.⁶² Order, 12. NRCM submitted extensive written comments on greenhouse gas emission, which the Department failed to address.⁶³ Instead, the Department stated that it:

[A]ccepts the PUC's finding on this issue and weighs the NECEC project's reductions in GHG emissions against the project's other impacts in its reasonableness determination. In doing so, the Department finds the adverse effects to be reasonable in light of the project purpose and its GHG benefits, provided the project is constructed in accordance with the terms and conditions of this Order.⁶⁴

The Department's failure to independently review evidence on greenhouse gasses and then to accept the PUC's conclusion that CMP's purported greenhouse gas benefits were real as a mitigating factor for the damage the project does not meet the requirements of NRPA or the Site Law.

- NRCM would submit written or oral testimony consistent with its comments on the draft Order on how the conditional approval is inconsistent with NRPA and Site Law.

In addition to the above-referenced information, NRCM offers the following categories of supplemental evidence, detailed in Appendix B (Index of Supplemental Evidence), which NRCM has used due diligence to bring to the attention of the Department, but was either ignored or could not have been brought to the attention of the Department earlier in the licensing process.⁶⁵

⁶² February 2019 Third Procedural Order, 4 (“The Presiding Officer has determined that net greenhouse gas emissions will not be added as a topic to be addressed at the hearing, however the parties may submit written evidence on this issue into the record. The issue can be adequately addressed through written submissions.”).

⁶³ Group 4 Greenhouse Gas Comments, May 9, 2019.

⁶⁴ Order, 105.

⁶⁵ Pursuant to 06-096 CMR Ch. 2 § 24(b), NRCM has clearly labeled each exhibit with its date, source, and a note indicating whether it is in the existing record or is proposed supplemental evidence. Appendix B, the Index, summarizes this information.

- The February 21, 2019 Stipulation between Central Maine Power Company and the PUC. *See* Appendix D.
- Testimony provided in connection with LD 640 in March 2019, which Resolve sought specifically to require a study of the greenhouse gas emissions impacts of NECEC. *See* Appendices B (Index of Supplemental Evidence), J, K, L.
- Information excluded by the Department that resulted in the wholesale exclusion or redaction of certain testimony. Because the Department erred by excluding this evidence, the Board should now permit NRCM to introduce this evidence. *See* Appendices B (Index of Supplemental Evidence), E, F, G, H, I, M, N.

Chapter 2 of the Department's Rules specifies that the Board has discretion to hold a public hearing on request regardless whether it reviews the NECEC pursuant to its original jurisdiction over projects of statewide significance or on appeal of the Order. 06-096 CMR Ch. 2 § 7(B). Here, NRCM respectfully requests both. Further, should the Board exercise only its appellate jurisdiction pursuant to Section 24 of Chapter 2, NRCM seeks to supplement the record with evidence that is relevant and material, and which it is bringing to the Board's attention at the earliest possible time as specified above. 06-096 CMR Ch 2 § 24(B)(4) & (D).

V. Remedy

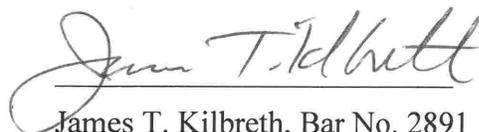
NRCM respectfully requests that the Board vacate the Order and assume original jurisdiction over and hold a public hearing on this project of statewide significance. NRCM asks that the Board take, review, and consider all the evidence necessary to determine compliance of the NECEC with NRPA and the Site Law. Alternatively, NRCM respectfully requests that the Board exercise its appellate jurisdiction to review and overturn the Order.

CONCLUSION

For the foregoing reasons, NRCM respectfully requests that the Board vacate the Order, exercise its original jurisdiction and review the NECEC *de novo*, including holding a public hearing. Alternatively, NRCM appeals the Order, requests a public hearing, requests submission of supplemental evidence as detailed above, and seeks denial of NECEC. In either case, Board review of the NECEC will show its failure to comply with either NRPA or the Site Law.

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Dated at Portland, Maine
this 10th day of June 2020

A handwritten signature in cursive script, reading "James T. Kilbreth". The signature is written in black ink and is positioned above a horizontal line.

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