

**STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION**

IN THE MATTER OF:)	
)	
CENTRAL MAINE POWER COMPANY)	
25 Municipalities, 13 Townships/Plantations,)	
7 Counties)	
)	APPLICATION FOR SITE LOCATION OF
L-27625-26-A-N)	DEVELOPMENT ACT PERMIT AND
L-27625-TB-B-N)	NATURAL RESOURCES PROTECTION
L-27625-2C-C-N)	ACT PERMIT FOR THE NEW ENGLAND
L-27625-VP-D-N)	CLEAN ENERGY CONNECT
L-27625-IW-E-N)	
)	

Group 4 Comments on Draft Order

Group 4 (consisting of the Appalachian Mountain Club, Natural Resources Council of Maine, and the Maine Council of Trout Unlimited) hereby submits the following comments on the Department of Environmental Protection's (DEP or Department) March 13, 2020, Draft Order (Draft Order) conditionally approving Central Maine Power Company's (CMP or Applicant) application for State land use permits for the New England Clean Energy Connect (NECEC). Group 4 remains opposed to the granting of any State land use permit for this fundamentally flawed project. Nothing in the Draft Order changes Group 4's conclusions in its initial or reply briefs in this matter, and Group 4 still finds that CMP has failed to demonstrate that this project will fit harmoniously into the existing natural environment and will not adversely affect existing uses, scenic character, and natural resources, including significant vernal pools, brook trout habitat, wildlife habitat and lifecycles, and deer wintering areas.

In submitting these comments, Group 4 reserves its right to appeal any and all Findings, Conclusions, and Conditions contained in this Draft Order, which may be included in a Final

Order, regardless of whether those elements are specifically identified and commented on in these comments.

I. Introduction

DEP has correctly recognized that the New England Clean Energy Connect (NECEC) project cannot be permitted as proposed by CMP. Unfortunately, instead of rejecting this flawed project, the Department has attempted to carry CMP's water by crafting and imposing conditions in an attempt to reduce and compensate for the project's serious impacts on brook trout and wildlife habitat. These proposed conditions are also a dramatic departure from the project as proposed by CMP that was debated during the hearings held last year by DEP and the Land Use Planning Commission. The correct course of action would have been for DEP to deny the permit for the project as proposed. Instead, DEP has inappropriately taken on the role of a surrogate for CMP and redesigned the project in a way that will justify granting a permit.

The proposed tapering and Wildlife Area conditions are unlikely to provide the wildlife and habitat benefits promised. It is also unclear how these conditions will be monitored and enforced or what the remedy will be if they do not provide the desired mitigating impacts. However, even with the best-case scenario for the proposed on-site mitigation, DEP correctly recognizes that the project still cannot be permitted due to its impacts on the environment and has required additional land conservation as compensation for the project's impacts. Unfortunately, the proposed conservation is also inadequate in both form and function. The proposed conservation is both too small in size to appropriately offset the harm caused by CMP's proposed project and also fails to provide the appropriate safeguards to ensure that the conserved land will be managed in a way that provides the required wildlife benefits. Stronger guidelines are necessary to identify the appropriate parcels and ensure adequate management to maximize

the habitat and connectivity benefits for the mature forest species most heavily impacted by the project.

II. Mitigation measures fail to ensure that the proposed project will not have unreasonable impacts on resources protected

Group 4 agrees with DEP's assessment that the proposed project would have a substantial impact on brook trout habitat, particularly in Segment 1. However, we disagree with DEP's assessment that the combination of minimization measures proposed by the Applicant and additional measures required as conditions of the draft permit have "minimized impacts to waterbodies that serve as fisheries habitat to the greatest extent practicable."¹ We also maintain, as we did in our testimony, that the proposed mitigation measures intended to compensate for unavoidable impacts are insufficient and are primarily directed at resources very different from the high-quality, high-elevation, wild brook trout streams that are directly impacted by the NECEC.

Group 4 also fully agrees with DEP's assessment that the project as proposed would have "substantial and harmful" fragmenting impacts on the western mountains region and could not be permitted as proposed by CMP. As a result of this finding, DEP has proposed three types of mitigation – tapering along the entire length of Segment 1, taller vegetation in selected areas, and compensatory land compensation. Unfortunately, these proposed mitigation measures are inadequate to ensure that the proposed project would not have unreasonable fragmenting impacts. The first two mitigation strategies, tapering and taller vegetation, would only provide limited benefit for mitigating fragmenting impacts (especially for mature forest species) and the land conservation is currently inadequate to provide significant compensatory benefits.

¹ Draft Permit, p. 84.

A. Proposed mitigation measures fail to ensure that the proposed project will not unreasonably harm brook trout habitat

The draft decision credits the following measures for minimizing 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.² Our concerns about the inadequacies of each of these measures are discussed below:

- **Riparian filter areas**

Within the wire zone of these 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. The result will be to convert the corridor from intact forest with strict limits on tree removal during timber harvest to a permanent 150-foot band of short scrub-shrub vegetation. Importantly, these “protections” would not apply within the wire zone except in areas where more protective prescriptions apply. 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

² Draft Permit, p. 82-84.

inputs that are essential for fish habitat, or a forest canopy that provides leaf fall and insect inputs to aquatic food chains. The increase in width of this zone from 25 feet to 100 feet does little to reduce the impacts of this project, with the exception that it may somewhat improve sediment removal.

- **Protection of the Grand Falls, Basin, and Lower Enchanted Tracts**

As discussed in detail in Jeff Reardon’s pre-filed direct and surrebuttal testimony, most of the river and stream habitat protected in the proposed compensation parcels is unlike the stream habitat impacted by the NECEC’s inadequate buffers. 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 mainstem 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.^{3,4}

- **Full-height vegetation at Gold Brook and Mountain Brook**

The measure to require 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 are also cited for benefits to brook trout at these stream crossings.⁵ The full canopy vegetation at these two sites is provided by taller poles or pole 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. This condition is therefore applied to three of the 271 stream crossings in Segment 1 (only 1.1% of stream crossings in

³ Reardon Pre-filed Direct Testimony, p. 22-23.

⁴ Reardon Surrebuttal Testimony, p. 6-7.

⁵ Wildlife Area 11, which includes the Kennebec River crossing and no other streams, will also have full canopy vegetation, as the line will be underground. In CMP’s original overland crossing, full canopy vegetation would have been maintained due to pile heights and locations.

Segment 1). While full canopy closure reduces the impacts on these two streams, it is notable that tributaries to both streams are not included. At Gold Brook, five tributary streams adjacent to the Gold Brook crossings are not included in 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, all capable and non-capable species would be removed during initial clearing, and these areas would be maintained as scrub-shrub thereafter. Based on the Google Earth map layers provided,⁶ 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 one of those streams, Gold Brook, one of the “full canopy” crossings of Gold Brook will be compromised by a cleared and maintained construction road.

This means that DEP’s mitigation measure is only fully applied to a single stream, Mountain Brook, and partially applied to Gold Brook. While both are important brook trout resources, the overall significance of these two improved crossings is very small in the context of the entirety of the NECEC’s impacts on brook trout and other aquatic habitat.

- **Thirty-five-foot tall vegetation in 12 Wildlife Areas**

Wildlife Areas 1-10 require 35-foot vegetation to protect fish and wildlife habitat. In these areas, rather than complete clearing, only 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),

⁶ https://www.maine.gov/dep/gis/datamaps/lawb_neccec_project/2019-10-10%20NECEC%20Project%20Data.kmz.

would 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 draft 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 taller than 35 feet would be removed. This prescription is applied to 12.23 miles of Segment 1. These areas include crossings of 21 streams or, according to DEP, 7.7% of the 271 intermittent and permanent stream crossings in Segment 1.⁷ Of the 12 miles that receive this treatment, more than seven miles include access roads that will still be cleared and maintained as scrub-shrub habitat, significantly reducing the area that will support 35-foot vegetation.

Importantly, vegetation maintenance within the 35-foot canopy areas would involve tree cutting at ground level, rather than topping, when trees reach 35 feet or have the potential to reach 35 feet 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 24.⁸ At age 24, trunk diameters (dbh) ranged from 3.08” to 4.29”.⁹ Even at age 29, when all species but beech were exceeding 45 feet, dbh never exceeded 6 inches for any species.¹⁰ 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

⁷ Draft order, Table C-1, page 132-133.

⁸ Nyland, Ralph D; Ray, David G; and Yanai, Ruth D, 2004. Height Development of Upper-Canopy Trees Within Even-Aged Adirondack Hardwood Stands. *Northern Journal of Applied Forestry*, September 2004. (See Table 1, p 119) 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

⁹ *Id.*

¹⁰ *Id.*

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, this measure applies to only 12 of the 53 miles in Segment 1. The 35-foot canopy is interrupted by cleared and maintained access roads in more than half of that length. Even counting those areas that include access roads, it is applied to only 21 stream crossings, less than 8% of the stream crossings in Segment 1. 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 shading to streams or large enough to serve as large woody debris if recruited into the stream channel.

- **Tapered vegetation**

Tapered vegetation is required within the entire length of Segment 1. As prescribed in the draft permit, 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” zones discussed above, access roads would be cleared and maintained as scrub-shrub.

The effectiveness of this measure to protect brook trout habitat is limited by the same concerns that apply in the 35-foot canopy zones. Trees that are removed when they reach heights near 35 feet will be young, short, and attain small trunk diameters and limited canopy spread. This substantially limits their ability to provide shade or to serve as large woody debris. These limitations are of course even greater for woody vegetation that is removed when it nears 25 feet

or 15 feet in height. And the wire zone, which occupies more than 1/3 of the total width of the corridor, would still be maintained permanently as 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 streams NECEC would cross.

- **\$1,875,000 for culvert replacements**

While the NECEC project would have extensive impacts on brook trout habitat, and while improving fish passage at culverts can improve habitat access for brook trout, there is no nexus between the two. CMP's project would have many impacts on brook trout habitat through removal of forested buffers but it would not impede fish passage. Nor are the fish passage projects to be funded by the culvert replacement fund necessarily in the same streams or even watersheds that CMP will impact. The draft order allows the culvert fund to be spent "in the vicinity of Segments 1 and 2."¹¹ CMP's 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. Funds like the recently awarded municipal grants to install Stream Smart culverts¹² may not be used on private roads, and private forest landowners have generally been less interested than municipalities in using public funds to improve fish passage. Except for Route 201, there are no public roads adjacent to Segment 1. As envisioned, it is much more likely that the \$1,875,000 fund in the draft permit would be spent on public roads near Segment 2, where brook trout impacts are much lower due to co-location of the NECEC corridor with existing power lines.

In this region, where culvert replacements would likely be on public roads and need to meet state and federal DOT standards, culvert costs would almost certainly exceed the \$50,000-

¹¹ Draft Order, page 84.

¹² *Id.*

\$100,000 range cited, with the result that fewer than the envisioned 25 culverts would likely be replaced. The bigger problem is that the DEP has done no calculation of how the benefits of 25 culverts with improved passage compensates for the impacts of CMP's hundreds of stream crossings with inadequate buffers.

B. Proposed mitigation measures fail to ensure that the proposed project will not unreasonably harm wildlife habitat through increased fragmentation

- i. Tapering is a scenic impacts mitigation measure, was not designed to mitigate forest fragmentation impacts, and will be too difficult to implement as envisioned

Reliance on tapering to mitigate this project's environmental impact is unsupported in the record. The primary purpose of tapering as proposed by the Applicant was for reducing the scenic impact of the corridor in areas of high scenic sensitivity such as Coburn Mountain. The Applicant presented no evidence that tapering would have any mitigating impact on wildlife habitat or forest fragmentation. While tapering along the length of the corridor may have some benefit for reducing edge effects in forested areas adjacent to the corridor, this strategy has not been studied, and it would provide almost no connectivity benefit for mature forest species. Even along the edges, most 35-foot high trees would be saplings in the 3-inch to 5-inch diameter range (excluding damaged or broken trees with larger diameters). While there may some species that would avoid 10-foot high scrub-shrub but would utilize 15-foot to 35-foot-tall sapling vegetation, this would not provide adequate connecting habitat for marten or other mature forest species.

Group 4 also has serious concerns about how this tapered condition would be established, and whether DEP has sufficient capacity to monitor and enforce this condition for the life of the project. The tapering diagram provided by the Applicant shows nicely tapered vegetation.¹³

¹³ Prefiled testimony of Amy Bell Segal, Exhibit CMP 5-B, p. 60.

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 Exhibit CMP 5-B to exist immediately following project construction. The initial clearing of the corridor would 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 regrowth to grow to the desired heights. This regeneration may itself be even-aged (as will regeneration where the corridor passes through recent clearcuts), and most trees may reach the target height at the same time, resulting in another heavy removal during the next corridor maintenance cycle. Rather than the nicely tapered vegetation pictured by the Applicant, the corridor is likely to 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.

There are many questions about how DEP will monitor and enforce the progress toward the desired condition. 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 DEP determine if the Applicant is meeting this condition? 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.

While tapered vegetation may provide limited benefits in theory, this outcome is not supported in the record and the practical difficulties of achieving and enforcing the maintenance of this condition raise serious questions about whether these benefits could ever be achieved.

- ii. Requirements for proposed Wildlife Areas are not sufficient to ensure that these areas provide significant connectivity benefit

In theory, the Wildlife Areas may provide some benefit to habitat connectivity, primarily for species that do not require mature forest. However, in practice there would be difficulties and delays in achieving the desired condition. Greater specificity is needed to ensure that these areas provide the desired benefits.

In her supplemental testimony, Group 6 witness Dr. Simons-Legaard set forth the minimum characteristics for marten habitat that should be maintained in the Wildlife Areas, which are not limited to canopy height.¹⁴ As she stressed in her testimony, it is critical that all of these requirements be incorporated into DEP's conditions. These include:

- **Trees be at least 30 feet tall (preferably greater than 40 feet tall).**

DEP's draft condition would require that "vegetation with a minimum height of 35 feet" be maintained.¹⁵ However, the draft order also states that "only trees taller than 35 feet, or trees that may grow taller than 35 feet prior to the next scheduled maintenance will be removed during construction," and that "[w]ith regard to ongoing vegetation management, trees that exceed 35 feet or are anticipated to exceed this height before the next scheduled maintenance cycle will be selected and cut at ground level."¹⁶ This effectively makes 35 feet not the *minimum* but the *maximum* height that will be maintained, with the likely outcome that most remaining vegetation will be significantly below the 35-foot threshold. In addition to barely meeting the height guideline for marten habitat, this creates problems for the other characteristics.

¹⁴ Supplemental testimony of Group 6 witness Erin Simons-Legaard, page 1.

¹⁵ Draft Order at 107.

¹⁶ Draft Order, Appendix C.

- **Minimum basal area of 80 ft²/acre**

This threshold is at least as important as the height requirement as a regenerating stand with a few scattered taller trees will not provide the intended mitigation. The removal of all trees greater than 35 feet tall from the Wildlife Areas during construction is likely to mean that large parts of these areas would not meet this threshold following construction. Those stands that provide the greatest connectivity benefit (mature closed canopy stands) would see the greatest level of overstory removal. This means that achieving this basal area threshold would largely depend on restoration through future growth.

The minimum size tree that can be counted toward this threshold is not specified in the testimony. However, the research on which this guideline is based specifies a minimum diameter at breast height of 7.6 cm (3 inches)¹⁷, meaning that this basal area must be maintained in trees at least 3 inches in diameter but no more than 35 feet tall – a very narrow window. 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. Thus, these stands could end up in a cycle of heavy clearing followed by regeneration.

Group 4 has serious concerns as to whether this threshold can realistically be achieved and maintained over the long term, as would be required to realize any environmental benefit from the proposed Wildlife Areas, as long as trees over 35 feet tall are regularly removed.

- **At least 30% canopy closure in all seasons**

This requirement can only be achieved in mixed wood or softwood stands. Absent planting of softwoods, hardwood stands can never meet this guideline. No information is provided as to how much of the area within the Wildlife Areas consists of mixed wood or

¹⁷ See for example Payer and Harrison (2003, 2004) cited in the prefiled testimony of David Publicover.

softwood stands capable of meeting this threshold. Based on examination of aerial photography and National Land Cover data, there are several extensive areas of hardwood forest within these wildlife areas.

- **Frequent snags (dead trees)**

While it may be possible to retain some snags less than 35 feet tall during construction, they would not last long, and the 35-foot height limit would prevent the recruitment of snags in the future. Dead 35-foot-tall saplings will not provide the necessary habitat benefits of larger snags. We do not believe that this characteristic can be maintained, further reducing the potential benefit provided by the Wildlife Areas.

Ensuring that the Wildlife Areas achieve and can be maintained in the desired condition over the long term requires much more information to support this strategy and stronger requirements to ensure that the necessary habitat conditions are maintained throughout the life of the project than are contained in the Draft Order.

DEP has failed to require, and the Applicant has failed to provide, sufficient information to ensure that the benefits of the Wildlife Areas for mature forest connectivity are maximized and that the desired conditions could be achieved and maintained:

- There is no evidence in the record of 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 construction.
- There is no evidence in the record of the tallest poles that can be utilized in different areas.
- 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 height.

DEP has also not developed any plan 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, DEP has not specified any “triggers” that would require additional land conservation as compensation for portions of the Wildlife Areas that cannot meet the desired conditions (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 desired condition over the long term.

The simplest and most effective way to achieve the desired benefits in the Wildlife Areas would be to require that full-height vegetation be maintained in the entirety of the Wildlife Areas (i.e., that the vegetation in these areas be allowed to naturally progress toward a mature condition). This strategy would also reduce monitoring and enforcement obligations for DEP. Given that CMP has demonstrated that it is feasible to do this in limited areas along Segment 1, it should be feasible to expand the practice to important Wildlife Areas. Based on available information, Group 4 does not believe any protective measure short of maintaining full-height

vegetation in all Wildlife Areas could provide the habitat functions DEP is attempting to protect by this condition.

III. The proposed compensatory land conservation is inadequate to offset significant habitat function losses

Group 4 strongly agrees with DEP's assessment that, even with the on-site mitigation of tapering and Wildlife Areas, the project is not permissible and that additional mitigation in the form of compensatory land conservation is required. However, the amount of conservation proposed by DEP is the absolute lowest level recommended by any non-Applicant expert witness during the hearing and is based on best-case assumptions about the environmental benefits of tapering and Wildlife Areas. Given that the environmental benefits of tapering and Wildlife Area mitigation strategies 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. Unfortunately, the Draft Order does not contain assurance that the conserved land would be of sufficient quantity or quality 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.

The conserved land must be held in fee by a state agency (MDIFW or MBPL) or a credible NGO and managed as a natural area. Without this ownership arrangement there is no guarantee that the protected land would provide the maximum possible benefit to mature forest species that would suffer the greatest impact from the project by allowing the natural development of unfragmented mature forest conditions and the abandonment of many roads. That the project would have a significant adverse fragmenting impact is well-established in the record and the Draft Order. The compensatory conservation land must have an offsetting and equally significant defragmenting benefit.

If the land is conserved by easement, it should be held by a state agency or NGO with an established history of holding and monitoring large easements. It should not be held by a newly created entity with no experience in this area.

The location and condition of the conserved land is also critical to ensure that it provides the necessary habitat benefits. Multiple scattered parcels of heavily harvested land would not provide the necessary benefits. Strong preference should be given to lands within the Moose River or Cold Stream watersheds, which would provide the greatest nexus to the project's impacts.

Group 4 recommends that proposed parcels be reviewed and approved by an advisory committee consisting of representatives of relevant state agencies (MDEP, MBPL, MDIFW, and MNAP) and Intervenor Groups 4 and 6. Lands proposed for mitigation should be evaluated according to a predetermined set of criteria, including but not limited to:

- Ideally the land mitigation land would consist of a single contiguous parcel. If this is not possible, the number of separate parcels should be minimized with one at least 25,000 acres and no parcel less than 5,000 acres.¹⁸
- Proximity to and connectivity benefits for existing conservation lands or other areas of high conservation value.
- Presence of large unfragmented blocks of mature forest.
- Presence of high-value brook trout streams and subwatersheds.
- Presence of other significant ecological values (such as habitat for Species of Greatest Conservation Need, rare or exemplary natural communities, and high-quality aquatic habitat).

¹⁸ These figures are based on guidelines for landscape-level ecological reserves developed by The Nature Conservancy and the Maine Ecological Reserves Scientific Advisory Committee.

- Areas of high climate change resilience as mapped by The Nature Conservancy's Resilient and Connected Lands analysis.

In addition, if lands are held with a conservation easement that allows timber harvesting, the following provisions should be included:

- Timber harvesting must not exceed growth over any 10-year period. One of the purported benefits of the project is a reduction in greenhouse gas emissions (a benefit that we believe has not been established), and over time the mitigation parcels must not become a source of greenhouse gases.
- The land should be managed according to the landscape-level marten habitat guidelines established by University of Maine researchers. The primary habitat impacted by the project is to marten and other mature forest species, and the conserved land must focus on enhancing this habitat. Over time the amount of suitable marten habitat on the conservation land must not be decreased and ideally should increase.
- A minimum 100-foot, no-cut riparian buffer should be maintained on all brook trout streams to protect intact riparian buffer functions.

IV. DEP erred in its Title, Right, and Interest (TRI) determination

When CMP presented its application to the Department, it included two leases that were void as a matter of law:

1. A lease over Passamaquoddy land that lacked the requisite signature from the Bureau of Indian Affairs (BIA), and

2. A lease of State Public Reserved Land in Johnson Mountain and West Forks Plantation Northeast¹⁹ parcels that lacked the requisite approval of the State Legislature (and was further unlawfully issued to a utility that lacked the requisite CPCN).²⁰

As a result, both leases were a legal nullity. This alone should have made clear at the outset that CMP lacked the requisite TRI necessary to proceed with its application. TRI cannot be cured after-the-fact; the law is clear that adequate TRI must exist continuously at all stages of the administrative process. On this ground, the Department should deny the permits.

More troubling is the Department's proposed disparate treatment of these two functionally identical dead-letter leases. With regard to the Passamaquoddy lease, the Department conditioned the permits on CMP obtaining the requisite BIA approval. Logically, this would require the same condition with regard to the lease over Public Reserved Lands: the permits 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 proposes for the Passamaquoddy lease.²¹ Thus, the Department must condition the permit on CMP obtaining the requisite legislative approval.

¹⁹ 2014. Transmission Line Lease Between Department of Agriculture, Conservation, and Forestry, Bureau of Parks and Lands and Central Maine Power, p. 11. Attachment A.

²⁰ The Bureau of Parks and Lands (BPL) erred in granting CMP the lease prior to the company's obtaining a Certificate of Public Convenience and Need (CPCN), a clear violation of 35-A MRS § 3132(13).

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). Despite not receiving a CPCN from the Maine Public Utilities Commission (PUC) until May 3, 2019, BPL issued this lease to CMP, for a transmission line subject to 35-A M.R.S. § 3132, across public lands, on December 8, 2014. When notified of CPCN requirement at a February 18, 2020, work session held by the Agriculture, Forestry, and Conservation (ACF) Committee of the Maine Legislature, 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." (Cutko statement available at: <https://www.mainepublic.org/post/maine-lawmakers-question-legality-2014-cmp-lease-state-lands-transmission-corridor>).

²¹ CMP may argue that the condition of BIA approval was unnecessary as a result of its proposed reroute around Passamaquoddy land. First, this changes nothing about the above analysis—the Department's proposed approach of

The Department's statement that it will simply defer to its sister agency is nonsensical. BPL's lease with CMP violates Maine's Constitution and DEP simply cannot defer to BPL's clear disregard for Constitutional requirements.

In November 1993, Maine voters amended the Constitution in order to protect public lands by passing Article IX, Section 23 of the Maine Constitution, which states that "State park land, public lots or other real estate held by the State for conservation or recreation purposes and designated by legislation implementing this section may not be reduced or its uses substantially altered except on the vote of 2/3 of all the members elected to each House."²²

In 1994, the Legislature classified Public Reserved Lands as "designated lands" and clarified that "designated lands...may not be reduced or substantially altered except by a 2/3 vote of the Legislature." 12 M.R.S § 598-A. The Legislature defined "substantially altered" as:

Changed so as to significantly alter physical characteristics in a way that frustrates the essential purposes for which that land is held by the State. The essential purposes of state parks, historic sites, public access sites, facilities for boats and the Allagash Wilderness Waterway are the protection, management and improvement of these properties for public recreation, conservation, scenic values, nature appreciation, historic preservation and interpretation, public access and related purposes. The essential purposes of public reserved and nonreserved lands are the protection, management and improvement of these properties for the multiple use objectives established in section 1847.

12 M.R.S § 598(5). In turn, 12 MRS § 1847 requires that Public Reserved Lands "be managed under the principles of multiple use to produce a sustained yield of products and services by the use of prudent business practices and the principles of sound planning and that the Public Reserved Lands be managed to demonstrate exemplary land management practices, including silvicultural, wildlife and recreation management practices, as a demonstration of state policies governing management of forested and related types of lands."

a permit condition is the only lawful option; second, this shows that the Department, in its proposed decision, made its findings and conclusions based on an incorrect understanding of what land the corridor would actually cross.

²² Accessed at: <http://legislature.maine.gov/ros/LawsOfMaine/#Const>.

In short, the Maine Constitution requires a 2/3 vote of the Legislature to approve any large-scale industrial, commercial, or utility lease of public lands. In spite of this, BPL entered into a lease in 2014 with CMP for a 300-foot wide, one-mile-long transmission line through the Johnson Mountain and West Forks Northeast public lands, both of which are “designated lands,” without obtaining a 2/3 vote of the Legislature. Despite requests for this issue to be considered during the hearing, DEP refused to allow this testimony.

This past legislative session, the ACF Committee sent a letter to BPL Director Cutko asking for documents related to BPL’s decision to grant a lease for a 300-foot-wide transmission corridor across the Johnson Mountain and West Fork Plantation Northeast parcels.²³ It is clear from the record that BPL never made such a finding. In response to ACF’s request, Director Cutko was only able to find three responsive documents, none of which contained any BPL analysis as to whether or not the 300-foot-wide corridor for NECEC across public lands would constitute a reduction or substantial alteration in those public lands.²⁴ One of the documents, an internal BPL memo, mistakenly stated that Maine law did not require such a finding; rather, approval of the governor and commissioner were all that was necessary for a lease across public lands.²⁵ With no analysis of likely impact of the lease on public lands, BPL also failed to send the issue to the Legislature for a vote. Thus, the only record evidence to which the Department can “defer” is that the leases were not issued in accordance with the law.²⁶

DEP’s statement that it will simply defer to its sister agency is also nonsensical because the State Legislature is not a “sister agency,” it is a separate branch of government. Just as CMP, in order to cross Passamaquoddy land, needs the approval of both the Passamaquoddy and the

²³ Letter from ACF Committee Chairs Senator Dill and Representative Hickman. Jan. 30, 2020, p.1. Attachment B.

²⁴ Attachment C 1-4: BPL Cover Letter and Three Responsive Documents.

²⁵ Attachment C – 3, p. 1.

²⁶ See Maine Legislature committee information webpage for LD 1893, accessed at: http://www.mainelegislature.org/legis/bills/display_ps.asp?id=1893&PID=1456&snum=129&sec3.

BIA, so too to cross Maine Public Reserved Land, CMP needs approval of both the BPL and the State Legislature. BPL has no authority to grant legislative approval and stating that the Department will “defer” to BPL’s signature on the lease as a substitute for legislative approval makes no more sense than deferring to the Passamaquoddy signature on the lease as a substitute for BIA approval.

Thus, the lease is void, and we ask that the Department deny the permits. In the alternative, we ask that the Department treat the Public Lands lease issue in the same manner that it proposed for the Passamaquoddy lease: condition the permits on CMP obtaining the requisite legislative approval.

V. DEP erred in its findings on greenhouse gas emission

Group 4 repeatedly requested that greenhouse gas emissions be included as a hearing topic.²⁷ DEP denied these requests, ruling instead that intervenors could submit written comments on the issue of greenhouse gas emissions until the close of the record.²⁸ Group 4 submitted extensive written comments on greenhouse gas emissions, which we incorporate here by reference in their entirety.²⁹ Despite our extensive submission, DEP failed to even address Group 4’s comments. Instead, DEP stated that

The Department defers to and accepts 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.³⁰

²⁷ 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).

²⁸ Third Procedural Order, p 4. February 2019. “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.”

²⁹ Group 4 Greenhouse Gas Comments, May 2019.

³⁰ Draft Order at 103.

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, DEP merely accepted the conclusions of the Maine Public Utilities Commission (PUC) to find that the numerous and significant negative environmental impacts from this project are somehow justified by the findings of a different agency with no expertise in environmental issues. As the state agency tasked with protecting Maine from the impacts of climate change, DEP's failure to even acknowledge our extensive and well-documented evidence that NECEC would provide no climate benefits is shocking and an error of law. So, too, is the fact that DEP would consider greenhouse gas benefits a mitigating factor for the destruction that NECEC would cause without performing a thorough and independent evaluation of CMP's claims. The PUC, and now DEP, have not examined the issue of whether 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. This is the most important issue in determining whether NECEC would reduce carbon emissions. Group 4 provided extensive evidence that NECEC would result in this sort of energy "shell game." However, no discussion of these considerations is presented in the Draft Order.

Moreover, DEP ignored compelling evidence in Group 4's comments that Hydro-Quebec's impoundments emit substantial amounts of carbon pollution, among the highest levels for impoundments in the world.³¹ Instead, in simply accepting the PUC's conclusions, DEP accepted the underlying assumption in the PUC's flawed finding that carbon emissions from Hydro-Quebec's reservoirs are zero. Massachusetts Institute of Technology Professor Bradford Hager submitted additional evidence on this topic during the Army Corps hearing process. His

³¹ Group 4 May 8, 2019 Comment on project's failure to reduce greenhouse gas emissions, p. 7-8 (citing Bradford M. Hager. 2019. Commentary: Hydro-Quebec offers misleading claims about power's climate impact. *Portland Press Herald*.).

testimony and supplemental testimony on Hydro-Quebec's carbon emissions to the Army Corps of Engineers on this project are included as Attachment D.

DEP also erred in summarizing public comments related to greenhouse gas emissions by highlighting supportive comments about GHG emissions and failing to acknowledge overwhelming numbers of public comments in opposition to the project because it would not provide greenhouse gas reductions. DEP mentioned public comments in support of the project because of perceived greenhouse gas benefits two separate times, without citing which comments DEP was relying on or how many of these comments there were.³² However, nowhere in the Draft Order does DEP ever acknowledge the significant public comments expressing concern that the extensive environmental impacts of this project were not justified by the greenhouse gas emissions reductions claimed by CMP or asking DEP to do its own investigation of these claims to be sure that the sacrifice of Maine's environment was justified.³³

In closing, by neglecting to perform an independent analysis of purported NECEC carbon benefits, DEP's balancing of environmental impacts against potential greenhouse gas reductions is fatally flawed, endangering Maine's environment on a faulty and unsupported assumption. Based on the failure to appropriately investigate the purported objective of this project, we strongly urge DEP to deny this permit.

³² Draft Order at 35, 70.

³³ In the April 2, 2019, public hearing at least five individuals raised concerns about CMP's greenhouse gas claims (*see* April 2, 2019, public testimony of J. Mahon, Tr. p 62-63; J. Stewart, Tr. p. 78-79; M. McCarthy, Tr. p. 93-94; H. Trotsky, Tr. p. 103-05; S. Day, Tr p. 108-11) as compared with only one individual stating that environmental impacts were justified in light of perceived greenhouse gas benefits (*see* April 2, 2019, public testimony of A. Howlett, Tr. p 48-50).

VI. Conclusion

Based on the considerations raised in this comment letter and throughout this proceeding, the Department should deny CMP's permit application. CMP has not met its burden to show that this project complies with applicable laws. Despite DEP's efforts to "fix" CMP's application through numerous conditions in its Draft Order, the proposed minimization, mitigation, and compensation measures remain inadequate and this permit application must be denied.

Submitted on April 13, 2020

Respectfully,



Susan J. Ely
On Behalf of Group 4 (AMC, NRCM, TU)
3 Wade Street
Augusta, ME 04330
(207) 430-0175

TRANSMISSION LINE LEASE

BETWEEN

DEPARTMENT OF AGRICULTURE, CONSERVATION AND FORESTRY BUREAU OF PARKS AND LANDS and CENTRAL MAINE POWER COMPANY

This Lease Agreement is made by and between the State of Maine, by the Bureau of Parks and Lands, Department of Agriculture, Conservation and Forestry (hereinafter called the "Lessor"), acting pursuant to the provisions of Title 12 M.R.S.A. §1852(4), and Central Maine Power Company, a Maine corporation with its principal place of business at 83 Edison Drive, Augusta, Maine (hereinafter called "Lessee"). For the considerations hereinafter set forth, the Lessor hereby leases to Lessee, and Lessee hereby takes from the Lessor, the non-exclusive use of that portion of the West Forks Plantation and Johnson Mountain Township (T2 R6 BKP WKR) Maine Public Reserved Lands in Somerset County, Maine described in Exhibit "A" and shown on Exhibit "B" attached hereto and incorporated herein, being a three hundred (300) foot wide by approximately one mile long transmission line corridor located on a portion of the aforementioned Maine Public Reserved Lands. The described transmission line corridor, together with the improvements now or hereafter to be placed thereon, is hereinafter referred to as the "Property" or "Premises," and is subject to the following terms and conditions:

1. Term:

- a. This lease shall be in effect from the date of execution of this instrument for a term of twenty-five (25) years and, at no less than 5 year intervals, the term of this lease may be extended by mutual agreement for additional years as will grant Lessee a remaining lease term totaling no more than twenty-five (25) years, so long as Lessee is in compliance with the conditions of this lease. Lessee shall not request a lease term extension any more often than once every five years. Notice of any lease extension shall be given to Lessor at least six (6) months prior to the expiration of any initial term or renewal period.
- b. Lessor reserves the right to terminate this Lease at any time during the term hereof to the extent permitted under the provisions contained in paragraph 13 Default.
- c. Lessee has the right to terminate this Lease upon at least ninety (90) days prior written notice to Lessor, or such lesser notice period as agreed to by Lessor in writing.
- d. Any notice required by this paragraph, whether by Lessee or Lessor, shall be sent postage pre-paid, registered or certified mail, return receipt requested, to the party at the address set forth in paragraph 24.

2. Rent. Lessee shall pay to the Lessor rental as follows:

An annual payment of \$1,400.00. The first payment shall be due on the date of execution of this lease (the "Initial Payment") and subsequent annual payments shall be made on or before December first of each following year. Lessor or Lessee may, within the first twelve months of the lease and at either Lessor's or Lessee's sole discretion, commission an appraisal of the Premises. Both Lessor and Lessee shall agree on the Appraiser to be assigned the appraisal assignment. Lessee agrees to pay any additional value above the Initial Payment indicated by the appraisal and the cost of the appraisal. The annual payment shall be adjusted each year in an amount not to exceed the average increase in the Consumer Price Index as published by the Bureau of Labor Statistics, United States Department of Labor over the preceding one year period.

In addition, Lessee shall pay to Lessor the negotiated price of the timber present on the Premises based on mill scale and stumpage value at time the corridor is harvested for the construction of the utility corridor.

3. Use. The Property shall be used by the Lessee as follows: to erect, construct, reconstruct, replace, remove, maintain, operate, repair, upgrade, and use poles, towers, wires, switches, and other above-ground structures and apparatus used or useful for the above-ground transmission of electricity ("Facilities"), all as the Lessee, its successors and assigns, may from time to time require upon, along, and across said Property; to enter upon the Property at any time with personnel and conveyances and all necessary tools and machinery to maintain the Premises and facilities; the non-exclusive right of ingress to and egress from the Premises over and across the land of the Lessor; to transmit electricity and communication, as conditioned below, over said wires, cables, or apparatus installed on Lessee's facilities. Lessee shall own all communication facilities and such facilities shall be for Lessee's use in its business as a public utility. In the event Lessee desires to provide capacity to others on Lessee's communication facilities, Lessee shall first obtain Lessor's written approval, which shall not be unreasonably withheld. Lessor may adjust the rent at such time as Lessee provides communication capacity to others. The rent adjustment is to be determined by an appraisal paid for by Lessee. Both Lessor and Lessee shall agree on the Appraiser to be assigned the appraisal assignment. Lessee shall not sub-lease or contract the communication facilities for any other commercial use. The Lessor further grants to said Lessee the right to establish any and all safety and reliability regulations applicable to said transmission line corridor which said Lessee deems necessary and proper for the safe and reliable construction and maintenance of said structures, wires, and apparatus and for the transmission of electricity.
4. Quiet Enjoyment. So long as Lessee pays the rent, performs all of its non-monetary obligations, and otherwise complies with the provisions of this Lease, the Lessee's possession of the Premises for its intended use will not be disturbed by the Lessor, its successors and assigns except as otherwise provided under the terms of this Lease. Notwithstanding any provision to the contrary herein, Lessor reserves the right to enter onto the Premises at any time and from time to time to inspect the Premises.

5. Access:

- a. It is agreed by the parties to this Lease that Lessor is under no obligation to construct or maintain access to the Premises, notwithstanding any provisions of any federal, state and local law to the contrary. However, the Lessee shall be allowed to cross Lessor's abutting land by using Lessor's Forest Management Roads for access to the Premises for construction, maintenance and repairs, subject to reasonable restrictions and regulations imposed by Lessor, and the rights of others using said roads. Upon reasonable advance notice to Lessee, Lessor reserves the right to close, lock or otherwise restrict access along or through the Forest Management Roads at any time it appears reasonably necessary to protect the safety of persons or property. Such situations include, but are not limited to, spring mud season or periods of high fire danger. Lessee shall immediately repair any damage to the road caused by Lessee. Lessor is under no obligation to provide maintenance to the road. If Lessee wishes to undertake performing repairs or upgrades to the Forest Management Roads, Lessee must acquire prior written approval from Lessor. Lessee shall acquire prior written approval for the construction or use of any other access location across Lessor's land abutting the Premises which approval shall not be unreasonably withheld, delayed, or conditioned.
- b. The Lessor expressly reserves the right for itself or its guests, servants, or agents to pass and repass over the described Premises at any and all times with machinery and equipment necessary for the operation or conduct of Lessor's uses as such uses may from time to time exist, provided that: said uses will comply with the above referenced safety regulations and any applicable state law, and will not prohibit the Lessee from complying with the conditions or requirements imposed by permitting agencies; that the Lessor shall provide Lessee with at least three business days prior written notice if Lessor will be on the Premises with construction or logging equipment; and that such use will not unreasonably interfere with the rights of Lessee herein conveyed.

6. Lessee Covenants. The Lessee covenants as follows:

- a. No buildings, either permanent or temporary, may be constructed or placed upon the described Premises, except temporary structures during construction of the Facilities, such as field trailers.
- b. Crossing mats for stream or wetland crossings shall not be made of ash or hemlock, so as to avoid introduction of invasive pests associated with these species.
- c. No hazardous or toxic waste substance or material, residual pesticides or fertilizers, other than organic compost, shall be used or kept upon the Premises or any portion thereof, nor shall any livestock or poultry be kept temporarily or permanently thereon. Pesticides, herbicides, and chemical defoliant registered for use in Maine may be applied to the Premises only after acquiring prior written approval from Lessor and only by trained applicators working under the supervision of applicators

licensed by the State of Maine in formulations and dosages approved by the Environmental Protection Agency and Lessor. One month prior to all pesticide applications, Lessee shall provide information to Lessor, including, but not limited to pesticides, herbicides, and chemical defoliants to be used, dates and methods of application, application locations and reasons for use.

- d. There shall be no vegetation removal that would result in less than 50% aerial coverage of woody vegetation and stream shading within 25 feet of a stream.
- e. There shall be no vegetation maintenance or disturbance within a 50-foot radius around the high water boundary of a significant vernal pool from March 15 – July 15; provided, however, that Lessee may take all appropriate actions with regards to vegetation management to ensure that Lessee is in compliance with all federal and state laws, rules and regulations imposed upon Lessee as the owner and operator of the Facilities.
- f. Lessee shall not make any strip or waste of the Leased Premises or of any other lands of Lessor. Vegetation clearing within the Leased Premises for Lessee's Facilities shall be limited to standards approved by the Maine Public Utilities Commission and shall encourage a ground cover of woody species with a maximum mature height approaching but not exceeding 15 feet. Lessee shall make every effort to minimize clearings and cutting of vegetation.
- g. Lessee acknowledges that lease of the Premises by the Bureau of Parks and Lands, Department of Agriculture, Conservation and Forestry is unique, and that in authorizing the Lease under 12 M.R.S. § 1852(4)(A), Lessor requires that Lessee shall make every reasonable effort within the leased Premises to be in conformance with the Maine Department of Inland Fisheries and Wildlife "Recommended Performance Standards for Inland Waterfowl and Wadingbird Habitats in Overhead Utility ROW Projects", "Recommended Performance Standards for Maine's Significant Vernal Pools in Overhead Utility ROW Projects", and "Recommended Performance Standards for Riparian Buffers in Overhead Utility ROW Projects", all dated March 26, 2012, which copies are attached to this lease, or the publication's most current version.
- h. Lessee shall not kindle any outside fires on the Premises or any other land of the Lessor, except in accordance with applicable federal, state and local regulations, and hereby agrees to assist with any means at Lessee's disposal in putting out fires occurring on the Premises or adjacent areas, and to report promptly such fires to Lessor or its representative and to the appropriate authorities.
- i. Lessee agrees to maintain the Premises in a neat and sanitary manner and to provide for proper disposal of all garbage, trash, septic (for purposes of this Lease, "septic" shall mean, but is not limited to, sewage, wash water, black water, gray water and slop water), and other waste in compliance with all applicable federal, state and local laws and in a manner so as not to be objectionable or detract from the aesthetic values of the general area. Lessee shall not discharge any untreated or partially treated sewage or other waste materials directly or indirectly into any body of water including but not limited to, any wetland, stream, river, lake, pond, or

groundwater. In addition, Lessee covenants that it bears the responsibility for any noncompliance with all federal, state and local laws and regulations governing septic and other waste disposal resulting from Lessee's activities and Lessee shall indemnify and hold harmless Lessor from and against any and all actions, suits, damages and claims by any party by reason of noncompliance by Lessee with such laws and regulations. Such indemnification shall include all Lessor's costs, including, but not limited to reasonable attorney fees.

- j. No non-forest waste including, but not limited to, broken equipment, spilt fuels, fluids and lubricants, fluid and lubricant containers, equipment parts, tires, debris, garbage, or trash shall be deposited, discharged, dumped or buried upon the Premises. Forest woody waste (e.g., wood chips and stumps) may be disposed of on the premises, but may not be disposed of in piles. Stumps shall be buried in "stump dump" holes, except that small numbers of stumps (four or less) may be left aboveground. All non-forest waste shall be disposed of legally and not on property of Lessor.
- k. Lessee shall not build permanent roads on the Premises without obtaining prior specific written permission from the Lessor; provided, however, that Lessee may construct a minimal number of temporary roads and trails to facilitate the construction of the transmission line (tree clearing, pole setting, wiring). At the time construction is completed, all temporary roads and trails shall be dismantled and put to bed or converted to permanent access trails. All access trails shall be built to Best Management Practices (BMP) standards as shown in the "Maine Motorized Trail Construction and Maintenance Manual" written by the Bureau of Parks and Lands Off-Road Vehicle Division, dated May 2011 and all roads shall be built pursuant to those Best Management Practices (BMPs) standards pertaining to forest management and road construction practices set forth in the publication entitled, "Best Management Practices for Forestry: Protecting Maine's Water Quality," prepared by the Maine Department of Agriculture, Conservation and Forestry, Maine Forest Service, in such publication's most current version at the time of the grant of this lease, and as the same may be further amended, supplemented or replaced after the date of the execution of this lease.

Prior to start of construction, Lessee shall provide an Access and Maintenance Plan to Lessor for review and approval. This plan shall provide details and maps on proposed roads, permanent and temporary, access points, temporary trails, inspection, and maintenance access, and descriptions of any proposed bridges, temporary or permanent.
- l. Natural Plant Community, wetland and Significant Vernal Pool field surveys of the Premises must be conducted by Lessee or Lessee's designee prior to any construction on the Premises. Lessee shall send to Lessor and to the Maine Department of Inland Fisheries and Wildlife a copy of all completed surveys before commencing any construction on the Premises.
- m. Lessee shall be in compliance with all Federal, State and local statutes, ordinances, rules, and regulations, now or hereinafter enacted which may be applicable to Lessee in connection to its use of the Premises. Lessee further shall

not construct, alter or operate the described Premises in any way until all necessary permits and licenses have been obtained for such construction, alteration or operation. Lessee shall provide written confirmation that Lessee has obtained all material permits and licenses to construct and operate the Facilities. Lessee shall furnish Lessor with copies of all such permits and licenses, together with renewals thereof to Lessor upon the written request of Lessor. This lease shall terminate at the discretion of the Lessor for failure of Lessee to obtain all such required permits. Prior to such termination, however, Lessor shall provide written notice to Lessee of such failure and Lessee shall have 30 days in which to cure such failure.

n. In the event of the following:

- a) Lessee constructs an electric transmission line on the Premises; and
- b) Lessee has determined, in its sole discretion, to rebuild the existing transmission line (the "Jackman Tie Line") located on that part of the existing 100-foot wide utility corridor described in a lease dated July 9, 1963 and recorded in the Somerset County Registry of Deeds, Book 679, Page 37 (the "Jackman Tie Line Lease") that is located westerly of the Premises and easterly of Route 201; and
- c) Lessee receives all permits and regulatory approvals necessary to rebuild the line in such new location including, but not limited to, approvals of the Maine Public Utilities Commission and the Maine Department of Environmental Protection; then

Lessee agrees to relocate said Jackman Tie Line from the above described portion of the Jackman Tie Line Lease to a location on the Premises and such other corridor as acquired by the Lessee from others. Upon completion of any such relocation of the Jackman Tie Line or its functional replacement pursuant to this section and removal of Lessee's facilities from that portion of the Jackman Tie Line Lease lying westerly of the Premises, Lessor and Lessee agree to amend the Jackman Tie Line Lease to delete from the lease area that portion of the Jackman Tie Line Lease lying westerly of the Premises. All other terms and conditions of the Jackman Tie Line Lease shall remain in full force and effect. The term "rebuild" as used in this paragraph, shall not include routine repair or replacement of poles, crossarms, insulators, braces or conductor.

7. Liability and Insurance.

a. Lessee shall without unreasonable delay inform Lessor of all risks, hazards and dangerous conditions caused by Lessee which are outside of the normal scope of constructing and operating the Facilities of which Lessee becomes aware of with regards to the Premises. Lessee assumes full control of the Premises, except as is reserved by Lessor herein, and is responsible for all risks, hazards and conditions on the Premises caused by Lessee.

b. Except for the conduct of Lessor and Lessor's guests and agents, Lessor shall not be liable to Lessee for any injury or harm to any person, including Lessee, occurring in or on the Premises or for any injury or damage to the Premises, to any property of the Lessee, or to any property of any third person or entity. Lessee shall indemnify and defend and hold and save Lessor harmless, including, but not limited

to costs and attorney fees, from: (a) any and all suits, claims and demands of any kind or nature, by and on behalf of any person or entity, arising out of or based upon any incident, occurrence, injury, or damage which shall or may happen in or on the Premises that is caused by the Lessee or its Agents; and (b) any matter or thing arising out of the condition, maintenance, repair, alteration, use, occupation or operation of the Premises, the installation of any property thereon or the removal of any property therefrom that is done by the Lessee or its Agents. Lessee shall further indemnify Lessor against all actions, suits, damages, and claims by whoever brought or made by reason of the nonobservance or nonperformance of Lessee or its Agents of: (a) any obligation under this Lease; or (b) any federal, state, local law or regulation pertaining to Lessee's use of the Premises.

c. The Lessee shall obtain and keep in force, for the duration of this lease, a liability policy issued by a company fully licensed or designated as an eligible surplus line insurer to do business in this State by the Maine Department of Professional & Financial Regulation, Bureau of Insurance, which policy includes the activity to be covered by this Lease with adequate liability coverage over at least one million dollars for each occurrence and two million dollars in annual aggregate in general commercial liability coverage to protect the Lessee and the Lessor from suits for bodily injury and damage to property. Nothing in this provision, however, is intended to waive the immunity of the Lessor. Upon execution of this Lease, the Lessee shall furnish the Lessor with a certificate of insurance as verification of the existence of such liability insurance policy.

8. Lessee's Liability for Damages. Lessee shall be responsible to Lessor for any damages caused directly or indirectly by Lessee or its guests, servants or agents, including, but not limited to, interference or meddling with any tools, machinery, equipment, gates, buildings, furniture, provisions or other property of the Lessor on the Premises, its agents, employees or guests.
9. Tax Proration. Lessee shall pay when due all taxes levied on the personal property and improvements constructed by Lessee and located on the Premises. Lessor shall be responsible for any real property taxes levied on the Premises based on unimproved land. Lessor shall have no ownership or other interest in any of the Facilities on the Property and Lessee may remove any or all of the Facilities at any time.
10. Lease Assignment, Sublease and Colocation: Lessee shall not assign or sublease in whole or part without prior written consent of Lessor, which consent shall not be unreasonably withheld. Lessor may lease the Premises for other compatible uses and colocation of other utilities so long as such rights do not extend to access to the Facilities, said uses will not prohibit the Lessee from complying with the conditions or requirements imposed by permitting agencies, and such use will not interfere with the rights herein conveyed, including the right to build such additional Facilities as may be accommodated on the Premises using transmission line spacing standards approved by the Maine Public Utilities Commission.
11. Lessee's Removal of Structures: Lessee must obtain Lessor's advance written consent, which consent shall not be unreasonably withheld, delayed, or conditioned, to the method of removal before any structures or improvements are removed from the Premises.

12. Surrender. Upon termination of this Lease for any reason, Lessee shall deliver the Premises to Lessor peaceably, without demand, and in reasonably good condition clear of all trash and debris, unusable equipment, unregistered vehicles and abandoned equipment and structures, located on the Premises by Lessee or its Agents. If such trash and debris and other unusable equipment, unregistered vehicles, and abandoned equipment and structures are not removed within one hundred eighty days (180) days of the termination of this Lease, the Lessor shall thereafter have the right to remove it and Lessee shall reimburse Lessor for the costs of such removal and disposal. Any other personal property, fixture, or structure on the Premises belonging to Lessee shall be removed by Lessee, unless Lessor requests in writing, that the other personal property, fixture, or structure may remain and Lessee agrees in writing not to remove it. If the Lessee fails to remove such other personal property, fixture, or structure such items shall be deemed the property of the Lessor two hundred and ten days (210) days after termination of the Lease and the Lessor shall thereafter have the right to remove it and charge the Lessee with the costs of such removal and disposal. In the event that any of this other personal property, fixtures, or structures on the Premises are incapable of being removed within one hundred eighty days (180) days, Lessee may be allotted up to one year to remove the items, with prior written approval from Lessor, which approval shall not be unreasonably, delayed, or conditioned. Any holding over by Lessee without Lessor's prior written consent shall be considered a tenancy at sufferance.

13. Default.

a. The following constitutes a default under this Lease: (1) Lessee's failure to perform any of its monetary or nonmonetary obligations under this Lease; (2) the filing of any bankruptcy or insolvency petition by or against Lessee or if Lessee makes a general assignment for the benefit of creditors which is not resolved or withdrawn within 30 days of such petition being filed; (3) an execution, lien, or attachment issued against the Lease, the Premises, or Lessee's property on the Premises, unless Lessee provides Lessor with satisfactory assurances and evidence that such execution, lien, or attachment will be released within a reasonable time not to exceed ninety (90) days, unless a shorter period of time is provided for by any applicable law or proceeding for the removal thereof, in which case the more restrictive time limitation applies; (4) the assignment or sublease of this lease to any third party without Lessor's prior written consent; or (5) the violation of any state, federal or local law, rule, regulation, or ordinance; or (6) Lessee's abandonment of the leased premises.

b. Upon the occurrence of any such event of default and subject to any applicable cure period as defined in paragraph 6(m), above, Lessor may, in addition to (and not instead of) any other remedies available at law or in equity, terminate this lease with notice or demand to Lessee and enter and take possession of the leased premises. Lessee shall be liable to Lessor for loss and expense, including reasonable attorney fees, incurred by reason of such default or termination hereof. Lessor will provide Lessee with written notice of an event or occurrence of default under paragraph 13(a)(1) and Lessee shall have a reasonable period of time, as determined by Lessor, to cure said default which period shall not exceed thirty (30) days; provided, however, that if Lessee satisfies to Lessor that Lessee has

undertaken the appropriate actions to cure said default and such default has not been cured within the said time permitted, the Lessor may exercise its sole discretion to extend the cure period.

14. Statutory Authority Over Public Lands. Lessor shall have the right to request that this Lease be amended from time to time and throughout the term of this lease in the event that any Lease term is found not to comply with Maine state law regarding the lease of property under 12 M.R.S. § 1852(4). Lessor shall send notice to Lessee of the proposed revision. Upon receipt of such notice, Lessee shall have the option to either terminate the Lease by notifying Lessor in writing within thirty (30) days of receipt of notice or negotiate an amendment to the Lease in order to bring such term in compliance with said state law. Except as provided in this Lease, neither Party shall have the right to terminate this lease unless the resulting non-compliance constitutes a default under Section 13 hereof, in which case Section 13 shall govern.
15. Mechanics Lien. If any notice is filed at the county registry of deeds of a builder's, supplier's or mechanic's lien on the Premises, arising out of any work performed by or on behalf of Lessee, Lessee shall cause such lien to be discharged or released immediately and shall indemnify Lessor against any such claim or lien, including all costs and attorney fees that Lessor may incur in connection with the same.
16. Succession; No Partnership. This Lease shall be binding upon and inure to the benefit of the heirs, executors, administrators, successors in interest and assigns of the parties hereto. Nothing in this agreement shall be construed to create an association, joint venture, trust or partnership covenant, obligation, or liability on or with regards to any of the parties to this agreement.
17. Waiver. Any consent, express or implied, by Lessor to any breach by Lessee of any covenant or condition of this Lease shall not constitute a waiver by the Lessor of any prior or succeeding breach by Lessee of the same or any other covenant or condition of this Lease. Acceptance by Lessor of rent or other payment with knowledge of a breach or default by Lessee under any term on this Lease shall not constitute a waiver by Lessor of such breach or default.
18. Force Majeure. Except as expressly provided herein, there shall be no abatement, diminution, or reduction of the rent or other charges payable by Lessee hereunder, based upon any act of God, any act of the enemy, governmental action, or other casualty, cause or happening beyond the control of the parties hereto.
19. Eminent Domain. In the event that the Premises or any portion thereof shall be lawfully condemned or taken by any public authority, Lessor may, in its discretion, elect either: (a) to terminate the Lease; or (b) to allow this Lease to continue in effect in accordance with its terms, provided, however, that a portion of the rent shall abate equal to the proportion of the Premises so condemned or taken. All condemnation proceeds shall be Lessor's sole property without any offset for Lessee's interests hereunder.
20. Holding Over. If Lessee holds over after the termination of this Lease, said hold over shall be deemed to be a trespass.

21. **Lessor Protection.** Lessor expressly retains and nothing contained herein shall be construed as a release or limitation by Lessor of any and all applicable liability protections under Maine law. Lessor specifically retains any and all protections provided under Maine law to owners of land, including but not limited to those provided under the Maine Tort Claims Act, 14 M.R.S.A. §§ 8101-8118.
22. **Cumulative Remedies.** The remedies provided Lessor by this Lease are not exclusive of other remedies available by current or later existing laws.
23. **Entire Agreement.** This Lease sets forth all of the covenants, promises, agreements, conditions and understandings between Lessor and Lessee governing the Premises. There are no covenants, promises, agreements, conditions, and understandings, either oral or written, between them other than those herein set forth. Except as herein provided, no subsequent alterations, amendments, changes, or additions to this Lease shall be binding upon the Lessor or Lessee unless and until reduced to writing and signed by both parties.
24. **Notices.** All notice, demands, and other communications required hereunder shall be in writing and shall be given by first class mail, postage prepaid, registered or certified mail, return receipt requested; if addressed to Lessor, to:
State of Maine, Department of Agriculture, Conservation and Forestry, Division of Parks and Lands,
22 State House Station, Augusta, ME 04333-0022, Attn: Director;
and if to Lessee, to;
Central Maine Power Company, Real Estate Services
83 Edison Drive, Augusta, Maine 04364, Attn. Supervisor, Real Estate
25. **General Provisions:**
- a. **Governing Law.** This Lease shall be construed and interpreted in accordance with the laws of the State of Maine.
- b. **Savings Clause.** The invalidity or unenforceability of any provision of this Lease shall not affect or impair the validity of any other provision. To the extent any provision herein is inconsistent with applicable state statute, the statute is deemed to govern.
- c. **Paragraph Headings.** The paragraph titles herein are for convenience only and do not define, limit, or construe the contents of such paragraph.

IN WITNESS WHEREOF, the parties have hereunto set their hands the day and year first above written. For purposes of this Lease, a facsimile signature shall be deemed an original.

Lessor:

STATE OF MAINE

Department of Agriculture, Conservation, and Forestry
Bureau of Parks and Lands

By: _____
Thomas Morrison Acting Director

Dated: _____, 2014

Witness

Lessee:

CENTRAL MAINE POWER COMPANY

BY: Mary R. Smith
Mary R. Smith, Authorized Representative

Dated: 12-8-14

Roberta B. Holahan
Witness

ROBERTA B. HOLAHAN
Notary Public, State of New York
No. 01HO8040322
Qualified in Monroe County
Commission Expires April 17, 2019

EXHIBIT A

**Leased Premises
Department of Agriculture, Conservation and Forestry
Bureau of Parks and Lands
and
Central Maine Power Company**

A non-exclusive lease over a portion of the Lessor's land located in Johnson Mountain Township (T2 R6 BKP WKR), and West Forks Plantation, Somerset County, Maine, more particularly described as follows:

A strip of land 300 feet in width beginning at the southerly line of the Maine Public Reserved Lot located on the northerly line of West Forks Plantation and extending northerly a distance of 4700 feet, more or less, to the northerly line of the Maine Public Reserved Lot located on the common line between West Forks Plantation and Johnson Mountain Township (T2 R6 BKP WKR). The centerline of said strip beginning at a point on the southerly line of the Lessor's land at a point that is 7,500 feet westerly of the southeasterly corner of said Lot in West Forks Plantation; thence on a bearing of 342.2 degrees a distance of 4,700 feet, more or less, to a point on the northerly line of said Lot in Johnson Mountain Township, said point being 2640 feet, more or less, westerly of the northeast corner of said Lot and the east line of Johnson Mountain Township; said leased area containing 33 acres, more or less (the "Leased Premises").

The description of the Leased Premises is based on a current conceptual design of the Lessee's proposed transmission line corridor and may be subject to modification by Lessee to minimize impacts on environmentally sensitive areas. Lessor and Lessee agree that upon completion of environmental assessments, final engineering, and if applicable, any survey prepared by Lessee, Lessee will prepare a final description of the Leased Premises to be incorporated into this Lease. Lessor and Lessee further agree that the final alignment of the transmission line corridor will be substantially as described herein and any significant deviation from the above described line will be agreed to in writing by Lessor and Lessee.

Seller's Initials _____

Leased Premises

Maine Public Reserved Lots

Department of Agriculture, Conservation and Forestry
Bureau of Parks and Lands
and
Central Maine Power Company

Leased Premises
Department of Agriculture, Conservation and Forestry
Bureau of Parks and Lands
and
Central Maine Power Company

LEASE AMENDMENT

This Amendment to the Lease is made as of this 11 day of June, 2015 (Effective Date) between the Department of Agriculture, Conservation and Forestry Bureau of Parks and Lands, ("Lessor") and Central Maine Power Company, a Maine corporation with an office at 83 Edison Drive, Augusta, Maine 04336 ("Lessee").

WITNESSETH

WHEREAS, Lessor and Lessee (collectively, the Parties) entered into a certain Lease (Lease) effective December 8, 2014 to lease a portion of the Lessor's land located in the West Forks Plantation and Johnson Mountain Township (T2 R6 BKP WKR) Maine Public Reserved Lands in Somerset County, Maine ("Premises") to be developed and used as a transmission line corridor and;

WHEREAS, at lease execution, Lessee initially agreed to pay to the Lessor an annual base year lease payment (Year One) of \$1,400.00; which shall be adjusted each subsequent lease year in an amount not to exceed the average increase in the Consumer Price Index, as published by the Bureau of Labor Statistics, United States Department of Labor.

NOW THEREFORE, the Parties agree to amend the Lease as follows.

- 1) The initial Year One annual (base year) lease payment shall be increased from \$1,400.00 to \$3,680.00.

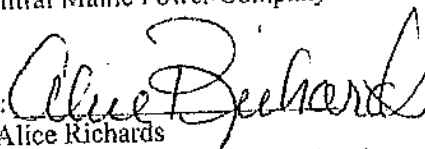
Except as specifically amended herein, all terms and conditions of the original Lease shall remain in full force and effect including the annual lease payment shall continue to be adjusted each year in an amount not to exceed the average increase in the Consumer Price Index, as published by the Bureau of Labor Statistics, United States Department of Labor over the preceding one year period.

IN WITNESS WHEREOF, The parties hereto have caused this Amendment to Lease to be executed by its duly authorized agent as of the date first written above.

LESSEE:

Central Maine Power Company

By:


Alice Richards

Its: Supervisor, Real Estate Services

LESSOR:

State of Maine
Department of Agriculture,
Conservation and Forestry
Bureau of Parks and Lands

By:


Walter E. Whitcomb

Its: Commissioner

Amendment Agreement

X

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•LESSEE:

Central Maine Power Company

By: 
Alice Richards
Its: Supervisor, Real Estate Services

LESSOR:

State of Maine
Department of Agriculture,
Conservation and Forestry
Bureau of Parks and Lands

B 
Walter E. Whitcomb
Its: Commissioner

SENATE

JAMES F. DILL, DISTRICT 5, CHAIR
G. WILLIAM DIAMOND, DISTRICT 26
RUSSELL BLACK, DISTRICT 17

KAREN S. NADEAU, LEGISLATIVE ANALYST
CHERYL MCGOWAN, COMMITTEE CLERK



HOUSE

CRAIG V. HICKMAN, WINTHROP, CHAIR
DAVID HAROLD MCCREA, FORT FAIRFIELD
MARGARET M. O'NEIL, SACO
CHLOE S. MAXMIN, NOBLEBORO
TIFFANY ROBERTS-LOVELL, SOUTH BERWICK
MARYANNE KINNEY, KNOX
THOMAS H. SKOLFIELD, WELD
RANDALL C. HALL, WILTON
THEODORE JOSEPH KRYZAK, JR., ACTON
WILLIAM D. PLUECKER, WARREN

STATE OF MAINE
ONE HUNDRED AND TWENTY-NINTH LEGISLATURE
COMMITTEE ON AGRICULTURE, CONSERVATION AND FORESTRY

January 30, 2020

Andy Cutko, Director
 Bureau of Parks and Lands
 Department of Agriculture, Conservation and Forestry
 22 State House Station
 Augusta, ME 04333-0022

Dear Director Cutko,

As you know, the Joint Standing Committee on Agriculture, Conservation and Forestry (ACF Committee) held a public hearing on Tuesday, January 21st for 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."

At the public hearing it became evident that LD 1893 was introduced to address concerns relating to the lease of public lands to Central Maine Power (CMP) for a transmission line through western Maine. This legislation also raises the question of whether the lease agreement between the State and CMP required approval by two-thirds of the Legislature. Article IX, Section 23 of the Constitution of Maine states:

State park land, public lots or other real estate held by the State for conservation or recreation purposes and designated by legislation implementing this section may not be reduced or its uses substantially altered except on the vote of 2/3 of all the members elected to each House.

As you know, at the public hearing last week, we requested that you provide the ACF Committee with relevant documents and communications regarding the lease of public lands to CMP. Please include documents and communications, including emails and handwritten notes or notations, among or between staff in the Bureau of Parks and Lands, the Bureau of Forestry, the Office of the Commissioner, the Office of the Attorney General, the Office of the Governor, and representatives of CMP. More specifically, we are interested in any materials from January 1, 2013 through January 1, 2016 and after July 1, 2018 relating to the determination that the lease of public lands on the West Forks Plantation and Johnson Mountain Township in Somerset County by CMP did not constitute a reduction or substantial alteration of those lands and, therefore, did not require a two-thirds vote of the Legislature.

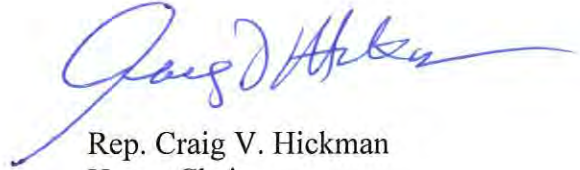
(over)

It is our understanding that the public records search will require approximately 40 staff hours. With this in mind, we respectfully request that you complete this search by Friday, February 14th.

Sincerely,



Sen. James F. Dill
Senate Chair



Rep. Craig V. Hickman
House Chair

cc: Members, Joint Standing Committee on Agriculture, Conservation and Forestry
Amanda Beal, Commissioner, Department of Agriculture, Conservation and Forestry
Emily Horton, Department of Agriculture, Conservation and Forestry



STATE OF MAINE
DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY
BUREAU OF PARKS AND LANDS
22 STATE HOUSE STATION
AUGUSTA, MAINE 04333

JANET T. MILLS
GOVERNOR

AMANDA E. BEAL
COMMISSIONER

February 14, 2020

Senator James F. Dill, Chair
Representative Craig Hickman, Chair
Committee on Agriculture, Conservation and Forestry
100 State House Station
Augusta, Maine 04333-0100

Dear Senator Dill and Representative Hickman,

In response to your request of January 30, 2020, regarding the Bureau's lease to CMP of public reserved lands in West Forks Plantation and Johnson Mountain Township, the Bureau has searched its e-mail records, digital files, and paper files, and found the following responsive documents:

- 1) A document titled "Considerations for locating a CMP Right of Way across BPL Lands in West Forks PLT. and Johnson Mt. TWP." This document was located in a digital file accessible to a number of BPL staff. The date on the digital file was August 25, 2014. I should note that the document's reference to 12 M.R.S. § 1852(4) mistakenly provides that the Governor's and Commissioner's consent is required. 12 M.R.S. § 1852(4) does not require consent of the Governor or Commissioner to approve a lease.
- 2) An e-mail dated July 9, 2014 from DACF Commissioner Walt Whitcomb to BPL Director Tom Morrison referencing correspondence with the Governor's Energy Office.
- 3) A document titled "CMP Lease Amendment: Summary 3-17-15." This document was also located in a digital file accessible to several BPL staff, and it summarizes the financial terms of the lease and amendment.

Director of Real Property Management David Rodrigues and I will be available at the work session to discuss questions related to these documents, to the extent that our knowledge of these documents and associated issues permit.

Sincerely,

Andy Cutko

Cc: Commissioner Amanda Beal, DACF
Emily Horton, DACF
Karen Nadeau, Legislative Analyst

ANDREW R. CUTKO, DIRECTOR
BUREAU OF PARKS AND LANDS
18 ELKINS LANE, HARLOW BUILDING



PHONE: (207) 287-3821
FAX: (207) 287-6170
WEB: WWW.MAINE.GOV/DACF

Cutko, Andy

From: Eastman, Kathy on behalf of Whitcomb, Walt
Sent: Wednesday, July 9, 2014 8:45 AM
To: Morrison, Tom
Subject: FW: Land Follow Up
Attachments: GoogleEarth_Image.jpg

-----Original Message-----

From: Woodcock, Patrick C
Sent: Tuesday, July 01, 2014 9:39 AM
To: Whitcomb, Walt
Subject: FW: Land Follow Up

Commissioner Whitcomb,
This is the parcel that I discussed this morning. I would appreciate you taking a look to see if you could work to accommodate this request.
Patrick

Patrick C. Woodcock
Governor's Energy Office – Maine

-----Original Message-----

From: Harrington M, Joel [mailto:Joel.Harrington@cmpco.com]
Sent: Monday, June 23, 2014 8:20 AM
To: Woodcock, Patrick C
Subject: Land Follow Up

Patrick,

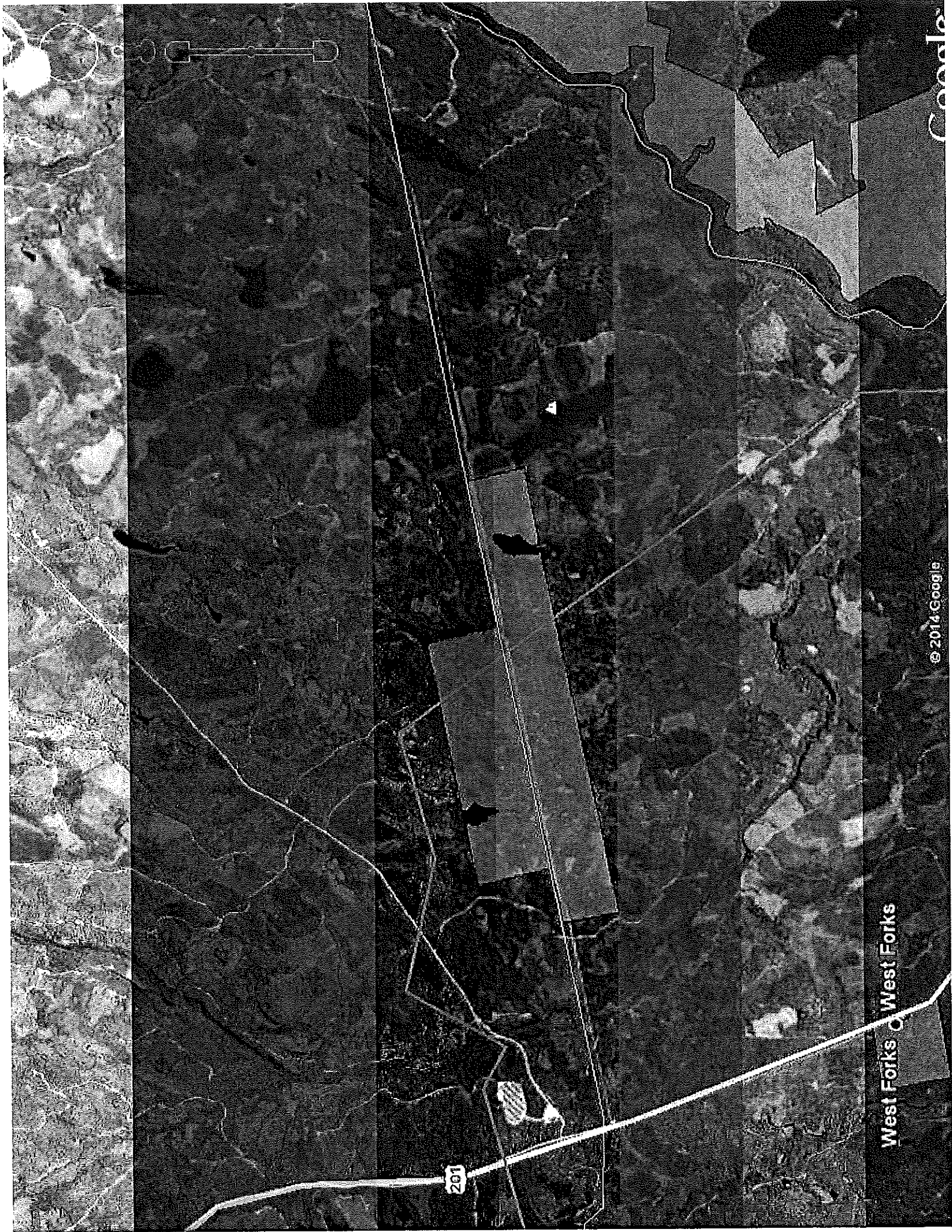
Here is the specific parcel we discussed last week.

Joel
Sent via my BlackBerry mobile device

----- Original Message -----

From: Freye, Kenneth H
Sent: Thursday, June 19, 2014 06:41 PM
To: Harrington M, Joel; Dickinson, Thorn
Cc: Sawyer, William M.
Subject: Google Earth Image

Joel,
The parcels are the public lot in Johnson Mountain (State ID 168-150) and the public lot in West Forks Plantation (State ID 205-352). They are the parcels on the attached aerial that are bisected by the purple line, the proposed centerline for the HVDC line. Let me know if you need more information.
Ken



West Forks, West Forks

© 2014 Google

Google

Considerations for locating a CMP Right of Way across BPL Lands in West Forks Plt and Johnson Mt. Plt

1. Authority to grant ROW across existing public lots (Johnson Mountain Twp Lot and West Forks Plt. Lot):

BPL can grant a right of way through its Public Reserved Lands through two statutory authorities:

- a. 12 MRSA Section 1852, subsection 4, allows the bureau to lease public reserved lands for utilities rights-of-way for a term not exceeding 25 years; with the consent of the Governor and the Commissioner.
- b. 12 MRSA Section 1851 allows the bureau to execute deeds to convey lands, subject to the approval of the Legislature (by a two-thirds vote pursuant to 12 MRSA Section 598-A).




Note on Routing: There is already a lease to CMP for a power line corridor across the northern border of the West Forks Plt. Lot. That corridor extends all the way to Route 201, with an existing crossing of Cold Stream. It appears to be about 100 feet wide at most. The Bureau looked at this as a potential alternative route, and concluded that the net new acreage of ROW across current state ownership would appear to be about the same. Because of impacts related to crossing of Cold Stream, as discussed below, this option was not viewed as preferable to the proposed alignment.

2. Pending Cold Stream Forest Acquisition: The proposed corridor route would cross a portion of a property that is intended for BPL acquisition, with implications for both the routing and options for the conveyance of a right of way or deed. The Cold Stream Forest Project is a Forest Legacy Project which will entail BPL acquisition of lands along Cold Stream and its headwater ponds in order to protect important brook trout and deer habitat. See the attached map. This planned acquisition would occur in 2015. Forest Legacy funds in the amount of \$6 million have been approved for this project, and an additional \$1.5 million is requested from the Land for Maine's Future program, currently in the process of determining the use of voter approved bond for a round of proposals submitted earlier this spring. The Cold Stream Forest Project is LMF's highest ranked project.

Conveyance considerations related to the Cold Stream Forest Acquisition: The proposed route would cross about 0.2 mile of the Cold Stream Forest lands expected to come under state ownership. Once the property is acquired with Forest Legacy and LMF funds, there would be significantly more complication in making a conveyance of the property, or a power line corridor lease. To avoid this, the Bureau proposes to work with Plum Creek, and the Trust for Public Land (which holds a purchase option on the property), to exclude the proposed corridor from the acquisition property.

Routing Considerations: Regarding the routing, additional analysis would be needed, but It does appear that where the proposed corridor crosses Cold Stream near the Capital Road might minimize new clearing needed, reducing potential impacts of loss of shade and warm runoff, as well as visual impacts on the stream corridor. The Bureau would ask that the crossing involve as little width and clearing as possible, for these reasons. The Bureau, TPL and Plum Creek, the present landowner, would need to understand what is needed for this crossing in order to adjust the project accordingly. There was already a small buffer of land excluded from the project around the Capital Road – the question is, how much more is needed?



-  Cold Stream Project
-  State Lands
-  Private Conserved Lands

Cold Stream Project South

Johnson Mountain TWP, Parlin Pond Twp
Moxie Gore & West Forks Plt, ME

Boundaries are approximate. Created by The Trust for Public Land on 8/1/2013. Information on this map is provided for purposes of discussion and visualization only.



Proposed CMP Power Line ROW

West Forks of West Forks

201

© 2014 Google



Google

CMP Lease Amendment

SUMMARY

3-17-15

- On December 15, 2014, DACF entered into a 25 year utility line lease with CMP for a new transmission line on Maine Public Reserved Lands in West Forks Plantation and Johnson Mountain Township.
- The lease had an estimated rent of \$1,400 which was paid by CMP at the time the lease was signed.
- Section 2 of the lease required an appraisal to be done within 12 months of the lease signing to determine what the rent should be. CMP paid for the appraisal.
- CMP had the appraisal completed in early spring of 2015 and the appraisal determined the rent to be \$3,680 for the first year.
- The attached Lease Amendment reflects the change in rent from \$1,400 to \$3,680 for the first year of rent.
- CMP has paid the rental increase of \$2,280 and is paid in full for the 2015 rental year.

Hager: Testimony to Army Corps of Engineers on Hydro-Québec's carbon footprint, Dec. 5, 2019

Good afternoon. I very much appreciate the chance to put on record the surprisingly large published estimates of the negative climate impact of Hydro-Quebec's energy.

My name is Brad Hager. I am a Professor of Earth Sciences at the Massachusetts Institute of Technology, where I co-direct one of MIT's Low Carbon Energy Centers. I split my time between Massachusetts and our home in Mercer, Maine. I am also an avid outdoorsman – over the years my family and I have spent about 10 months on canoe trips on the rivers of northern Quebec. I worry about the planet that our children will inherit and I am especially concerned about continued growth in carbon emissions.

Over the past decade, scientists have recognized the surprisingly large emissions of carbon dioxide and methane by some hydro-power facilities. Studies published recently in the peer reviewed scientific literature¹ document the greenhouse gas emissions of approximately 1,500 hydro facilities, including most of those providing power to Hydro Québec.

To summarize what I will present in more detail:

- 1) There is an extremely wide range of greenhouse gas emissions from hydro facilities. Six of Hydro Québec's reservoirs are among the top 25% of greenhouse gas emitters of hydro plants worldwide. Their emissions range from about that of a modern natural gas power plant to over twice that of coal power plants. They are definitively NOT the source of green power that they are made out to be.
- 2) Why are Hydro-Québec's reservoirs so dirty? Hydro-Québec's reservoirs are nothing like the clean reservoirs of Switzerland that dam deep, narrow valleys above tree line. Rather, Hydro-Québec's reservoirs flood vast tracts of low-lying woodlands, resulting in deforestation akin to that we see in the alarming images of burning the Amazon. In addition, the greenhouse gas emissions from decay of submerged trees and disturbed soils in newly created reservoirs are twice as high as decades-old ones, so building new reservoirs to provide power for export leads to particularly high emissions in the first 5 – 10 years of reservoir life.

Given the fact that Hydro-Québec's high greenhouse gas emissions are documented in the peer reviewed literature, it seems dereliction of duty to allow NECEC to proceed without serious and formal federal review. NECEC's negative impacts on the climate must be considered in the permitting process.

The bar chart on the next page shows the range of carbon footprints for common power sources. The numbers on the vertical axis give the greenhouse gas impact per MWh of energy

¹ Barros, N.; Cole, J. J.; Tranvik, L. J.; Prairie, Y. T.; Bastviken, D.; Huszar, V. L.; Del Giorgio, P.; Roland, F. Carbon emission from hydroelectric reservoirs linked to reservoir age and latitude. *Nat.Geosci.* 2011, 4 (9), 593.

Teodoru CR, Bastien J, Bonneville M, Giorgio PA, Demarty M, Garneau M, et al. The net carbon footprint of a newly created boreal hydroelectric reservoir. *Glob Biogeochem Cycles*. 2012; 26 (2), 4187 DOI: 10.1029/2011GB004187. (Referred to as "Quebec study:" One author is from Hydro-Québec.)

Scherer, L.; Pfister, S. Hydropower's biogenic carbon footprint. *PLoS One*. 2016, 11 (9), No. e0161947. (Referred to as "Swiss study.")

Ocko, I. B, and Hamburg, S. P. Climate Impacts of Hydropower: Enormous Differences among Facilities and over Time. *Environ. Sci. Tech.* 2019 doi: 10.1021/acs.est.9b05083.

generated. The bars show the ranges from various sources, ranging from the dirtiest on the left – coal – to the cleanest on the right – wind and nuclear. In the middle, with the largest range by far, is hydropower. Note that 10% of the world's hydro has a footprint that plots off the top of this chart.

Where does Hydro Québec fit in this wide range? Hydro Québec emissions documented in the Swiss global study are shown in black font. Note that the Caniapiscau dam, which makes the largest lake in Québec, has *twice* the carbon footprint of coal! This is hardly clean energy. And 5 more reservoirs have footprints higher than modern natural gas plants. Only 1 small Hydro Québec reservoir is as clean as wind.

The range in values for the detailed Québec Eastmain-1 study are shown in red. After the initial flooding, emissions were above modern gas, approaching coal. After a decade, they drop off to a value about half that of gas, with the crossover after about 5 years.

The sketch of a watershed in the final figure provides an intuitive understanding of the wide range in variation of hydro's carbon footprint. Deep reservoirs in narrow mountain valleys with little vegetation (think Switzerland or Iceland) are clean. Shallow lowland reservoirs that flood vast areas of forest (think Hydro-Québec) are dirty.

In summary, the carbon footprints of Hydro-Québec's power as documented in the peer-reviewed scientific literature make it among the dirtiest hydro in the world. In view of this published science, it would be irresponsible to grant a license for NECEC without a thorough Environmental Impact Assessment that considers its negative effects on the climate and the environment.

Thank you for the opportunity to testify.

Bradford H. Hager
Cecil and Ida Green Professor of Earth Sciences
Massachusetts Institute of Technology
bhhager@mit.edu

Somerville, MA and Mercer, ME

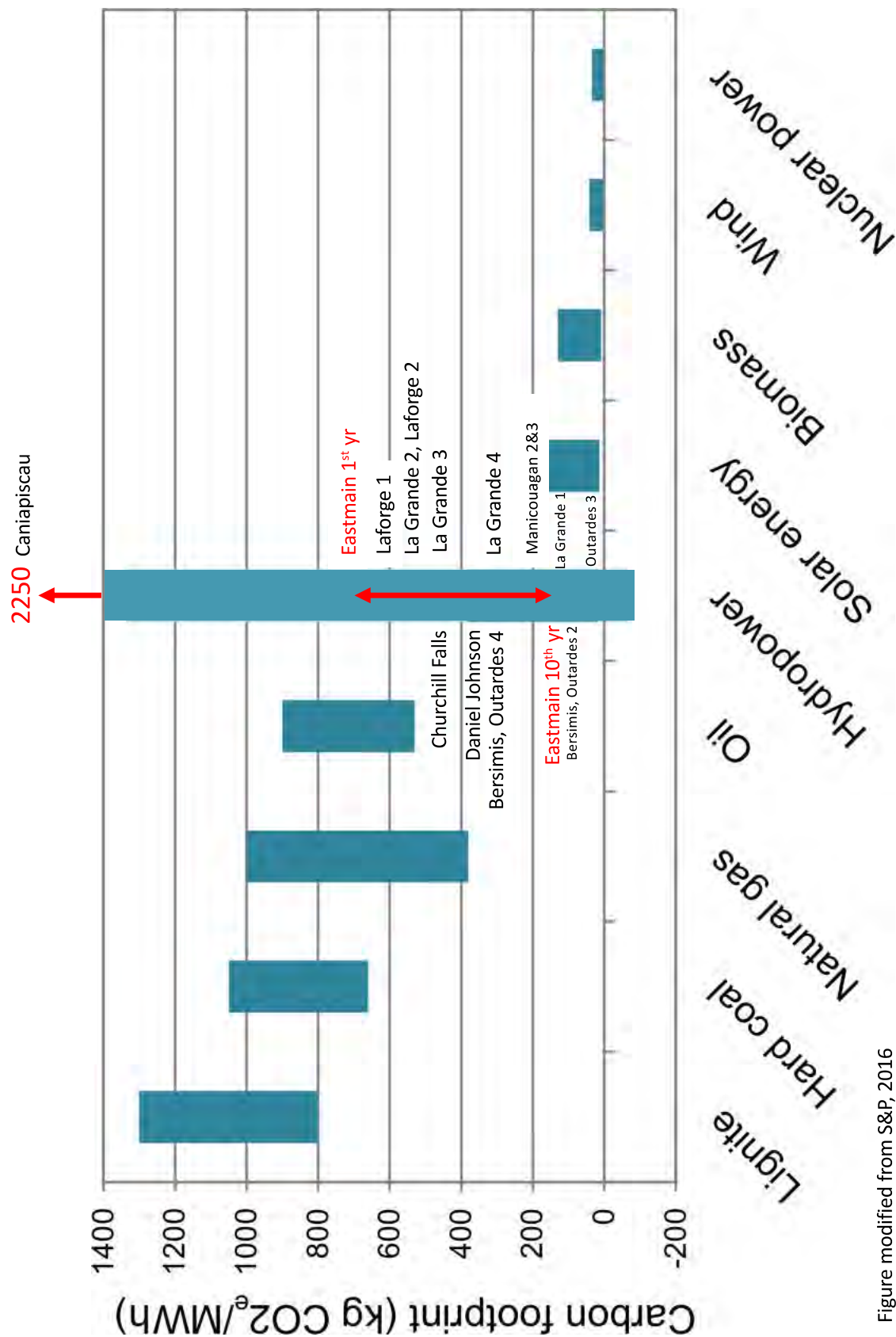


Figure modified from S&P, 2016
Black text – HQ emissions from S&P 2016
Red text – emissions from Q 2012

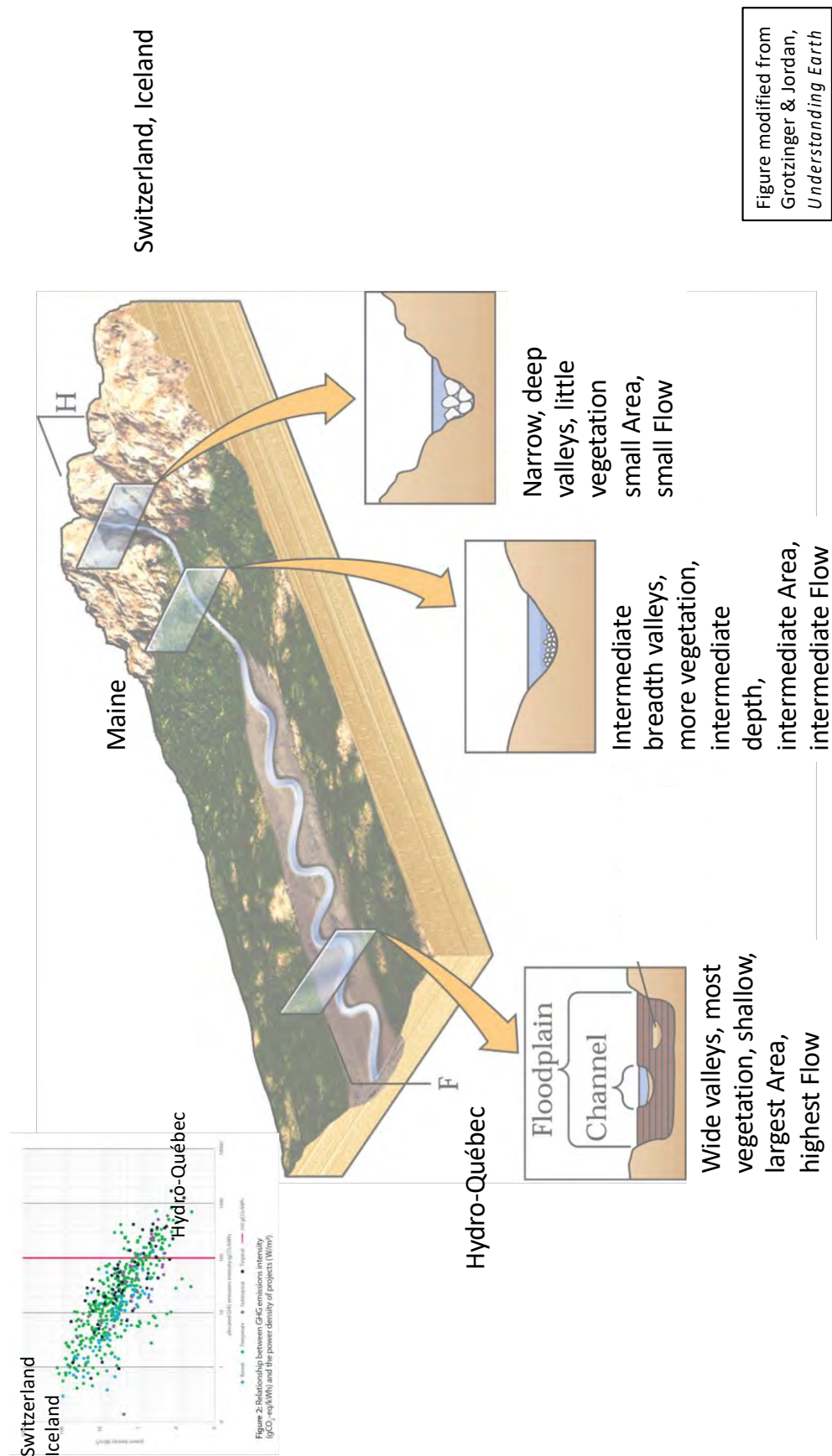


Figure modified from
Grotzinger & Jordan,
Understanding Earth

Documentation of the Carbon Footprint of Hydro Québec's Hydropower

Bradford H. Hager

Cecil and Ida Green Professor of Earth Sciences

Department of Earth, Atmospheric and Planetary Sciences

Massachusetts Institute of Technology

Summary

The purpose for building NECEC is to provide a conduit for ~ 10 TWh/yr of electricity to Massachusetts. The premise used to justify NECEC is that this power would result in much less net emission of greenhouse gasses than what would be produced from electricity generated using modern natural gas power plants (~ 400 g CO₂/kWh). Yet despite claims that its power is "low-carbon," Hydro Québec (HQ) has provided no formal documentation of this claim.

In this white paper I provide relevant references, as well as giving a road map through these references to finding values of CO₂e emissions of HQ reservoirs. The information in the peer-reviewed literature demonstrates that a large fraction of HQ power is not low carbon.

A growing number of peer-reviewed articles in the scientific literature address the carbon footprint of hydro reservoirs worldwide. By studying these papers and the on-line supplementary materials accompanying them, I have assembled sufficient information to determine the greenhouse gas emissions of 18 of HQ's major reservoirs – those that generate in excess of 1 TWh/yr of electricity each. There is a tremendous range in HQ emissions – from 5 g CO₂/kWh (half that produced by wind) to 2265 g CO₂/kWh (twice that produced by coal). About half of HQ generation is comparable in emissions to natural gas. These estimates are given in a table and illustrated in a figure in the final two pages of this document.

Relevant literature

About 20 years ago, scientists began to recognize the possibility that reservoir greenhouse gas emissions are significant (e. g., St. Louis et al., 2000). In particular, HQ undertook an extensive research program to measure the fluxes of CO₂, CH₄, and N₂O in their reservoirs and surroundings. Tremblay et al. (2005) published measurements of greenhouse gas fluxes for many Canadian reservoirs, including most existing HQ reservoirs. Fluxes were reported in mg/m²/d. (There is tremendous scatter in the observations for a given reservoir because emissions vary greatly in space and time. The standard deviation of the values reported are approximately equal to the values themselves.)

Teodoru et al. (2012) measured variations in emissions as a function of time over the three years following the filling in 2006 of the new Eastmain-1 reservoir in Québec. They found that

initially the CO₂ footprint was comparable to a coal fired power plant, but decreased to that of a modern gas plant after 3 years. They extrapolated the data to conclude that, over 100 years, the cumulative emissions of this reservoir would be about half that of a gas plant

Barros et al. (2011) compiled data from about 100 hydro reservoirs worldwide, concluding that emissions were correlated with reservoir age and latitude. His data set included Tremblay's (2005) data.

Hertwich (2013) made an important advance by making estimates from the web of the amount of energy generated by these reservoirs. This made it possible to convert the conventional measurements of emissions per unit area to obtain emissions per kWh.

Scherer and Pfister (2016) used the ~150 reservoirs in the Hertwich (2013) data set to fit a general linearized model, explaining most of the CO₂ emission variation using only two variables: Hertwich's area/electricity ratio and the logarithm of reservoir area. They then used the recently developed Global Reservoir and Dam Database (GRAND, see Lehner et al., 2011) to estimate model-based fluxes for ~ 1500 reservoirs worldwide. The supplementary data files of Scherer and Pfister (2016) provide a convenient source for the Hertwich (2013) data set, as well as an alternative estimate (from GRAND) for energy generation in 2009.

Deemer et al. (2016) also augmented the Barros et al (2011) data set with more recent measurements. However, they focused on reservoirs where methane is the main greenhouse gas, and their study does not add substantially to information about HQ reservoirs.

Estimates of Hydro Québec CO₂e footprint

Table 1 gives estimates, using four approaches, for the CO₂ equivalent emissions (g CO₂e/kWh) for the 18 HQ reservoirs generating > 1 TWh/yr. Because generation by any power plant varies from year to year, there are two estimates used: H13 is the older value provided by Hertwich (2013), while S&P is the value for 2009 provided by Scherer and Pfister, 2013. Systems are ranked by using the larger of these two values. (Note that the H13 value for the Robert-Bourassa system is anomalously large, and not in line with others in the La Grande system, making me skeptical of this value.)

The values of CO₂e (g/kWh) in the columns labeled "S&P data" were calculated using the two estimates of energy (in TWh) with data for reservoir emissions in the Scherer and Pfister (2016) table. The "S&P model" column gives Scherer and Pfister's (2016) values for their two-parameter model. The "T12 data" gives Teodoru et al.'s (2012) observed emissions for the Eastmain-1 reservoir in 2009, three years after it was flooded. Cells where there was no information are left blank. Cells where greenhouse gas emissions exceed that of natural gas are highlighted in yellow. Cells where greenhouse gas emissions exceed that of coal are highlighted in red.

Even though HQ's two top power producers, Robert-Bourassa and Churchill Falls, are over 40 years old, they both have carbon footprints approximately equal to that of modern natural gas. Brisay/Caniapiscau is two times dirtier than coal. Most of HQ's power has a much greater carbon emissions than wind.

Table 1: Estimates of CO2e for Hydro Québec's reservoirs > 1 TWh/yr

System	Area (km2)	TWh			CO2e g/kWh			
		Max	H13	S&P	S&P data H13 TWh	S&P data S&P TWh	S&P model S&P TWh	T12 data H13 TWh
Robert-Bourassa (La Grande-2)	2835	37.4	37.4	5.2	57	412	576	
Churchill Falls*	4816	30.8		30.8			436	
Bersimis	798	12.5	12.5	7.8	35	56	313	
La Grande 4	765	10.1	10.1	8.9	46	52	309	
Manic 5	1973	9.8	9.8		124			
La Grande 3	2420	8.7	8.7	8.4	210	217	451	
La Grande 2A	2835	7.1	7.1		222			
Manic 2	124	6.5	5.1	6.5	10	8	180	
Manic 3	236	5.8	4.9	5.8	6	5	219	
Bersimis 2	38	5.5		5.5			119	
La Grande 1	70	4.5	4.5	2.7	12	20	165	
Outardes 3	11	4.5	3.2	4.5			42	
Outardes 4	625	3.7	2.6	3.7	194	138	329	
Laforge-1	960	2.7	2.7	1.7	371	588	605	
Eastmain-1	600	2.7	2.7		309			275
St-Marguerite 3	253	2.6	2.6		197			
Outardes 2	26	2.0		2.0			102	
Brisay/Caniapiscau	4318	1.2	1.2	0.8	1501	2265	2250	

* Churchill Falls is in Labrador, but almost all of its power goes to HQ.

Figure 1 illustrates the range of estimates for these reservoirs in a bar graph. For reference, the line showing 400 g CO₂e/kWh is the value for a modern natural gas power plant.

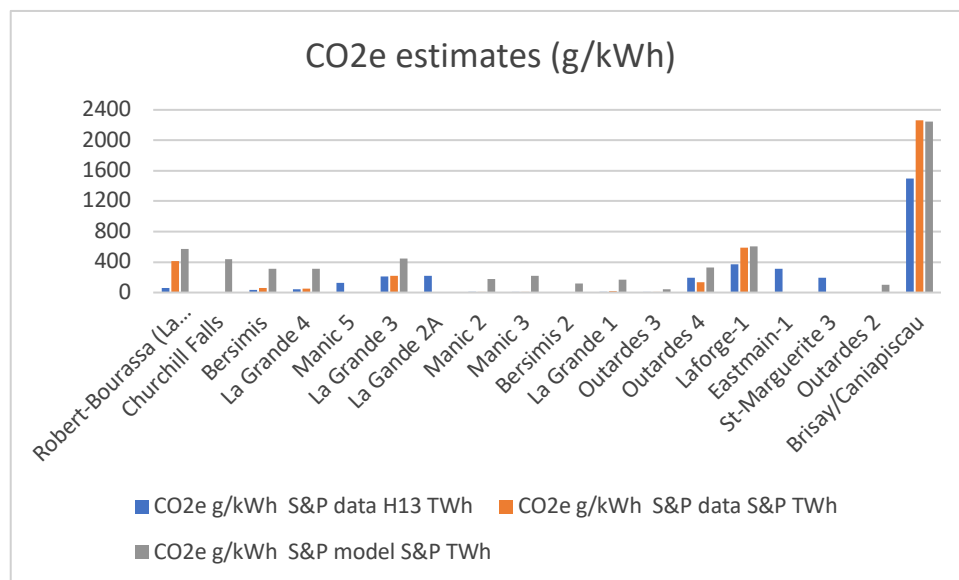


Figure 1: CO₂e (g/kWh) estimates for HQ's reservoirs generating > 1 TW/y.

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