

THE STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

APPLICATION FOR SITE LOCATION OF DEVELOPMENT ACT PERMIT
AND NATURAL RESOURCES PROTECTION ACT PERMIT
FOR THE NEW ENGLAND CLEAN ENERGY CONNECT
FROM QUÉBEC-MAINE BORDER TO LEWISTON
AND RELATED NETWORK UPGRADES

PRE-FILED DIRECT TESTIMONY OF
ELIZABETH CARUSO
TOWN OF CARATUNK

FEBRUARY 28, 2019

1 **TESTIMONY OF ELIZABETH CARUSO**

2 **Q. Please state your name and address**

3
4 A. Elizabeth Caruso, 81 West Shore Rd, Caratunk, Maine 04925

5
6 **Q. What is the name of your organization and business address?**

7
8 A. Town of Caratunk, PO Box 180, Caratunk, Maine 04925

9 **Q. What is your current position?**

10 A. First Selectman, Overseer, Assessor

11 **Q. What other occupations have you had in the Caratunk area?**

12 I have worked as a Maine Registered Whitewater Guide since 1992. In 1994, I left a lucrative Industrial
13 Engineering career in Connecticut to live and recreate in this amazingly beautiful and peaceful area.
14 Utilizing my Masters in Business Administration, from 1995 to 2008, I co-owned and operated North
15 American Whitewater Expeditions, Inc. (dba North American Outdoor Adventure), a licensed
16 whitewater rafting outfitter operating on 7 rivers in Maine, Massachusetts, Vermont and Connecticut. I
17 also founded and operated The Outpost Bed and Breakfast and River House (bed and breakfast) in the
18 West Forks. In addition, I founded and operated the Dead River Outfitter Shop, selling outdoor gear,
19 equipment and clothing for year-round recreationists. In addition to the summer rafting season, we had
20 a fleet of snowmobile rentals and ATV rentals and offered guided tours during both seasons. My
21 company was instrumental in maintaining snowmobile trails, building snowmobile bridges and first
22 opening up Coburn Mountain as a groomed trail.

23 In addition, I helped start The Forks Area Chamber of Commerce and worked as its first Executive
24 Director, where one of my tasks was creating and marketing the Forks Area Snowmobile Trail map.

25 I also participated in the settlement negotiations over the FERC relicensing of Harris Station where
26 Florida Power and Light coordinated a large dialogue with the whitewater industry, communities,
27 organizations and agencies (circa 2000). A far cry from CMP's backroom, secretive dealings with a few
28 business stakeholders to create an MOU in lieu of open community mitigation talks.

29 In addition to working in the greater Forks Area as a guide and business owner, I am an avid outdoor
30 enthusiast. I have spent countless hours navigating the Kennebec, Dead and Penobscot rivers, boating
31 on the area's lakes and ponds, cross country skiing, snowshoeing, hiking the area's mountains and trails,
32 snowmobiling, ATV-ing and fishing. My husband and sons provide our family's organic, grass-fed
33 meat every year by hunting the area's deer and moose.

1 As a full-time homeschool mother, my husband is the primary source of income for our family. His
 2 livelihood is comprised entirely of outdoor, tourism-based activities during Maine's four seasons. He is
 3 a Maine Master Guide, and it is critical to our family that he have a secure flow of guests during the
 4 hunting, fishing, snowmobiling and summer seasons.

5 **Q. Why did the Town of Caratunk intervene in these proceedings?**

6 The Town of Caratunk has grave concerns with regards to many facets of the NECEC proposal. As a
 7 democratic government, our voters (residents) expect the town to defend and represent their welfare.
 8 Most year-round residents derive their income in the tourism industry as independent guides or by
 9 working for the recreational outfitters, lodges, cabins and restaurants, area gas stations, etc. A few of
 10 these residents are intervenors in this proceeding, and many have submitted sworn testimonies and
 11 public comments against the project.

12 Other residents work as carpenters, roofers, woodsmen, and handymen catering to the needs of the
 13 area's landowners, both year-round and seasonal. However, most of Caratunk's landowners are from
 14 out-of-state and own vacation homes and camps along Pleasant Pond and the Kennebec River. Caratunk
 15 residents will not only be impacted financially through their livelihoods from which they derive income
 16 to support families, but also in their ways-of-life. All residents chose homes and vacation homes or
 17 camps in Caratunk for the area's peace and beauty in surroundings and also for the recreational
 18 opportunities provided by the local mountains, ponds, lakes, rivers, streams, etc. NECEC will invade
 19 the beautiful and valuable view shed which they enjoy but which also provides financial worth. NECEC
 20 will assault the nature's silence and the nighttime darkness from their decks and during year-round
 21 recreation activities.

22 There are obviously impacts to public health and safety, and scenic, historic and recreational values
 23 related to any major energy project. Those impacts are the reasons behind the public outcry as seen in
 24 the PUC public witness hearings, on the PUC website, in news stories, letters to the editor and guest
 25 editorials, and at numerous grassroots events. Those impacts are exactly why the Town of Caratunk
 26 intervened in this docket and why **every town, township, and plantation in the immediate vicinity**
 27 that will be impacted by the new corridor **has formally voted against NECEC**.¹ Additionally, several
 28 road associations, including Mile 10 Road Owners Association, Spencer Road, Grace Pond Subdivision

¹ The Town of Caratunk, West Forks Plantation, The Forks Plantation, Town of Jackman, Dennistown Plantation, and Town of Moose River and Alna have all voted to oppose the project and Caratunk has a moratorium in place pursuant to a special town meeting vote.

1 Road Owners Association, and Moxie Pond East Homeowners Association, representing landowners in
2 unorganized territories have submitted letters of opposition to this corridor². Obviously, these impacts
3 are critical enough to have two agencies analyze them from their respective views as an important part
4 of evaluating NECEC compared with any benefits to Maine and any potential alternatives.

5 It is self-evident that installing 100-foot-tall transmission towers along a new corridor as wide as the
6 New Jersey Turnpike through relatively undeveloped western Maine will have numerous, significant,
7 and permanent impacts. The Department doesn't have to quantify the impacts because CMP bears the
8 burden of proof to demonstrate that there won't be impacts. Those impacts are part of the total cost of
9 the project. Unfortunately, CMP hasn't done the studies³ or provided evidence to quantify the impacts or
10 prove there won't be any.

11 Due to the grave concerns of this corporate-profit-only project, an Elective Transmission Upgrade, the
12 Town of Caratunk recently enacted the Electrical Transmission Corridor Moratorium Ordinance in order
13 to protect the public health, safety and welfare of the residents of Caratunk. The Planning Board is
14 working on an appropriate ordinance and determining the most appropriate methods to regulate such
15 activities because there exists the potential for serious public harm including visual and financial impact,
16 fire, noise, taxpayer-incurred costs as well as environmental and health degradation.

17 **Buffering for Visual Impacts: Overview**

18 **CMP has NOT shown that THE USE CAN BE BUFFERED enough to not impact our wild and**
19 **scenic landscape that characterizes our 4-season outdoor recreation area.**

20 The transmission lines and corridor as designated through our area would not be buffered sufficiently to
21 maintain our community's economic vitality, our residents' ways of life and our residents' livelihoods.
22 Our year-round and seasonal residents chose purposefully to live in Caratunk for the remote, wilderness,
23 pristine and recreational attributes of the greater Forks area. This corridor represents a wide strip ripped
24 out of our landscape and significantly impacting, in fact negating, our scenic and wild setting. Tourists
25 and seasonal landowners come from all over the country and the world to partake of our wilderness
26 landscape and our guided wilderness trips, leaving their urban lifestyle to experience our unique pristine
27 wilderness.⁴

² CRTK-13, Homeowners' Association Letters

³ CRTK-1, January 9, 2019 Transcript of PUC hearings, cross-examination by Elizabeth Caruso

⁴ CRTK - 2, Kennebec Valley 2017 Regional Tourism Impacts

1 Our year-round residents who have a commercial guiding business or who are employed as guides,
2 waitstaff, housekeepers, office staff, cooks, cashiers, gas attendants, etc. in this area depend on the
3 characteristics of this wild and scenic landscape to remain wild and scenic and not be industrialized by a
4 150'-300' corridor of transmission lines and 100' poles. In addition, these wilderness guide businesses
5 and their families rely on the viability of the fishing, hunting, snowmobiling, hiking, ATV-ing, and
6 whitewater activities as well as the strength and health of the fishery and wildlife population and habitat.
7 Our community would be dramatically and negatively impacted by this transmission line/corridor
8 through the West Forks/Moxie areas, Johnson and Coburn Mountains and Parlin Pond, Bald Mountain
9 and Appalachian Trail. So much of our residents' revenue depends on the scenic and aesthetic uses of
10 our area.

11 We concur with the Department's statement that the photo-simulation of the corridor in leaf-stage was
12 Inadequate at best. During fall, winter and spring, the lines and poles would be visually, obtrusively
13 industrial against the natural wilderness. One of the many scenic areas impacted in the sub-districts is
14 the Coburn and Johnson mountain area. The corridor will tear a strip along the Coburn Connector Trail
15 and ITS 89, which are one the most popular destinations for snowmobilers. On a busy day, hundreds of
16 tourists snowmobiling to Coburn Mountain's 3800' observatory would be staring 360 degrees down at
17 the vastness of this destructive corridor.

18 **Winter Survey**

19 Because the applicant failed to conduct any survey of this critical season in the greater Forks area, a
20 Winter Recreation Impact Survey⁵ was conducted by Sandra Howard, PhD. This online survey was
21 distributed electronically, and participants responded during a 4-week period between January 18 and
22 February 18, 2019. Of the 163 participants, 70% thought "Riding along a powerline trail" was "Least
23 Important", 70% thought "Groomed trail riding in forested areas" were "Very Important", 71.2%
24 thought "Scenic beauty along snowmobile trails" was "Very Important", and 90% thought "Riding along
25 mountain view trails with overlooks" was "Very Important".

26 We are sure that, had the applicant conducted an analysis of the snowmobile recreation users of the area
27 of the new corridor, the data would show an overwhelming opposition to industrialized infrastructure in
28 this scenic area. As guides and guests have attested, 100' poles, red blinking lights and 150-300' scars

⁵ CRTK – 3, Winter Recreation Impact Survey

1 across the mountains, valleys, streams and ponds are simply horrific to recreationists and tourists
2 traveling to encounter a natural setting.

3 ALTERNATIVES ANALYSIS

4 **CMP has failed to show that there is NO ALTERNATIVE. In fact, there are alternatives.**

5 First of all, there already exists a corridor from the Quebec border on the other side of Route 201. CMP
6 could easily have used this corridor. It's quite simple and is even listed in the MOU with Western
7 Mountains and Rivers Corporation.

8 Secondly, CMP could have buried the line alongside Route 201 in a preexisting corridor and where the
9 land is already disturbed. Thirdly, CMP could have buried the line under pre-existing dirt roads. During
10 the Town's cross examination on January 9th of the PUC hearings, Mr. Dickinson explained that he had
11 proposed burying a transmission line in the Hudson Valley of New York due to aesthetic purposes.⁶

12
13 MR. TANNENBAUM: Can I just follow up quickly? Did -- I wasn't sure I heard this right.
14 Did CMP conduct an analysis of what it would cost to bury the line in the new corridor?

15 MR. DICKINSON: No.

16 MR. TANNENBAUM: Okay, thank you.

17 MS. CARUSO: So you mentioned earlier this morning that on a project in the Hudson
18 Valley you buried the line for aesthetic reasons. And it didn't occur to you to bury the line
19 here through this high tourism area and with all these camp owners having their property
20 abutting a huge DC transmission line?

21 MR. DICKINSON: So the project you're talking about, Connect New York, is a project that
22 is -- I would put in the dream category of project development portfolio that we have. It's --
23 so far has not got momentum within New York state. Maybe part of that is the cost related to
24 it, but, again, what the strategy there is we knew we were submitting into a request for
25 information in New York a number of years ago. We knew that there were existing AC
26 overhead projects that already were in place, and our idea was to find a corridor that already
27 was predisturbed. So a predisturbed corridor and putting a buried line along the thruway
28 means that you're not disrupting, you know, a new area, an area that currently wasn't dug up.
29 You're doing one that was just previously disturbed. So again, there was a specific rationale
30 and reason.
31

32 Route 201 would certainly be considered a "predisturbed" area, and yet, CMP chose not to use this
33 rationale or reason in this case. Additionally, CMP has given no evidence that it had realistically tried to
34 find an alternate route. They have stated that they chose this route because they already own the land,
35 thereby making the project less expensive. **CMP's shortsightedness and desire to cut costs should**

⁶ CRTK – 1, January 9 transcript, p. 90

1 **NEVER be the reason that our towns and landscapes are devastated and our residents' abilities to**
2 **enjoy life and sustain livelihoods should suffer.**

3 Furthermore, the applicant should have used the same foresight and precautions in our spectacular forest
4 and tourism area that they offered in New York. In response to a New York RFI, Thorn Dickinson,
5 Vice-President of Business Development for Iberdrola USA, proposed an underground line for a similar
6 1,000 MW DC line utilizing existing public and private right-of-way. As clearly stated in their own
7 "Connect New York" document⁷, the underground routing was utilized in order to 1) mitigate
8 environmental and right-of-way concerns, 2) avoid eminent domain, and 3) eliminate aesthetic and
9 health-based concerns.

10 **The "Connect New York" Option**

11 Simply stated, "Connect New York" is our vision of how to best advance the major supply-side energy
12 objectives delineated in "Power NY". It would include a 1,000 MW DC bulk transmission line running
13 from the Utica area to New York City. There is also the option to add a second 1,000 MW line. The
14 **routing would be underground utilizing existing public and private right-of-way. In doing so we**
15 **can mitigate environmental and right-of-way concerns that derail most bulk transmission projects**
16 **and avoid eminent domain and NIMBY issues. By burying an efficient, underground DC bulk**
17 **transmission line, line losses will be reduced and aesthetic and health-based concerns eliminated.**

18 In fact, the energy industry knows all too well that burying transmission lines is common practice to
19 alleviate aesthetic and environmental issues. NextEra has brought this very issue to the Department's
20 and Commission's attention. Where but in this spectacular area, would it have been more appropriate to
21 bury this corridor, eliminate 100' monstrosities, huge and humming DC transmission lines, and
22 drastically reduce the amount of herbicides polluting our streams, renowned fisheries and wildlife –
23 which many of us rely on to feed our families.

24 As a competitor in the 83D RFP process, TDI-VT has a fully permitted, ready-and-waiting,
25 **underground and underwater** corridor of 145 miles to deliver the same power from Hydro Quebec
26 into Massachusetts. There is no excuse for CMP to not have buried NECEC underground for the entire
27 length of the 53 new miles of corridor through our last contiguous forest and spectacular tourism area.
28 Additionally, the line should have been buried in all areas where residential homes would abut the line
29 or view shed.

⁷ CRTK – 4, Connect New York, p.7 (emphasis added)

1 Aside from already owning and arranging lease agreements for the land of the new corridor, CMP didn't
 2 research existing uses of the new area to minimize scenic, recreational, visual impacts (as their
 3 competitor TDI had done in Vermont). During the January 9 cross examination, CMP admitted the
 4 following.

5 MS. CARUSO: Okay. So **have you studied winter snowmobiling** in the affected area
 6 of the proposed new corridor?

7 MR. STINNEFORD: **We have not conducted a study**, although we have had
 8 numerous conversations with the Maine Snowmobile Association and they are very
 9 supportive of the Project.

10 MS. CARUSO: Okay. **Have you completed any studies as to why people come to**
 11 **the region of the new portion of the line to hunt, fish, raft, hike, or snowmobile?**

12 MR. DICKINSON: **No**, as I said, I think my understandings from the -- why I believe
 13 there's opportunities for new expanded tourism in the region come from conversations
 14 that I had had with people in the region.⁸

15 In other words, they had *some* conversations with *some* people and that's all they offer to support their
 16 contention that NECEC not only won't harm our tourist economy but will actually be good for it. In
 17 reality, the communities along the new corridor – who obviously know more about our local tourist
 18 economy than CMP does – have all come out strongly in opposition to NECEC. As mentioned above,
 19 the registered voters, landowners and/or boards of selectmen along the new corridor have
 20 overwhelmingly opposed NECEC. In contrast, CMP has very little support. The contractors who would
 21 build NECEC obviously like the idea, the relatively few business owners who would directly benefit
 22 from the WM&RC MOU are required to support it (discussed below).

23 CMP also tries to suggest that a “working forest” is somehow an already-spoiled landscape and that our
 24 local concerns should be dismissed. Western Maine is a wonderful, scenic, special area, and the
 25 landowners that manage the “working forest” are excellent stewards of the land. The overall value and
 26 beauty of our natural heritage is exactly why people come to our region to take advantage of a largely
 27 unspoiled wilderness experience. CMP's implication that this is more or less just a wasteland is untrue,
 28 disrespectful, and doesn't support any finding that NECEC will cause little, if any, impacts in our
 29 region. (Roger Merchant's GROUP 2 testimony will go into greater detail on this issue).

30 Aside from the last-minute resort to bury the 1000' of line under the Kennebec River, **CMP didn't**
 31 **conduct any kind of analysis to find out if it might be possible to install the line underground** – like

⁸ CRTK -1, January 9 Transcript p. 85 (emphasis added)

1 TDI and significant parts of Northern Pass – to see if some of the visual and environmental impact could
2 be avoided:

3 MR. TANNENBAUM: Can I just follow up quickly? Did-- I wasn't sure I heard this
4 right. **Did CMP conduct an analysis of what it would cost to bury the line in the**
5 **new corridor?**

6 MR. DICKINSON: **No.**⁹
7

8 The fact that they only did relatively superficial analyses related to project impacts is extremely
9 disturbing to the local communities and to those whose livelihoods and families are at stake. It should be
10 disturbing to the Department and Commission, as well.

11 What they did do was insufficient. James Palmer, the DEP's peer reviewer responsible for evaluating
12 CMP's Visual Impact Assessment, found it sorely lacking and sent them back to the drawing board to do
13 it better. The peer reviewer said, "The question remains—why is there not a full accounting of potential
14 scenic resources and a documented evaluation of all those with potential visibility? There does not even
15 appear to be a process to attempt a full accounting."

16 CMP has provided [REDACTED]

17 [REDACTED] no
18 evidence that NECEC will not harm our tourism and recreation economy. Without supporting evidence,
19 it is difficult to see how CMP can claim there won't be any impacts. For reasons such as these, it is
20 difficult for intervenors and members of the public to see how the DEP/LUPC could possibly allow
21 NECEC to occur.

22 CMP has gone to great lengths to downplay the impacts and disparage the views of its critics. For
23 example, on September 4, 2018, DEP issued a formal letter response¹⁰ to CMP regarding information
24 that CMP provided on July 26, 2018. DEP's letter includes some enlightening quotes from the CMP July
25 26 filing. According to CMP:

26 "At the Preferred Alternative location, the river is generally flat water, and is **not**
27 **particularly valued by recreational users . . . This commercial [rafting] and**
28 **recreational use of this section of the river arguably has more impact on any bucolic**
29 **nature of the river than does the proposed overhead crossing . . . This existing**
30 **human-caused visual impact at the Harris Dam put-in is significantly greater than**
31 **the Preferred Alternative would be ... and affects rafters' and other boaters'**

⁹ CRTK – 1, January 9 Transcript p. 90 (emphasis added)

¹⁰ <https://www.maine.gov/dep/ftp/projects/necec/2018-09-04-Mirabile-follow-up-questions-7-27-to-8-14-submissions%20.pdf>,
emphasis added

aesthetic expectations on the river downstream . . . Due to the position, buffering, and limited duration of viewing, the overhead crossing in the proposed location will not diminish the recreational use or scenic character of the outstanding river segment located between the Forks and Indian Pond Dam. Accordingly, the two conductors and two shield wires that would cross the river at **the Preferred Alternative location**, which as described above **is not particularly unique or wild, would not adversely affect existing uses of the Kennebec River.”**

DEP asked, “...did CMP draw these conclusions based on user survey data? Can you provide the basis for these statements?” Of course, there was no survey data or analytical basis for CMP’s conclusions. Most of the “analysis” they did was after-the-fact – after the application was filed and only after DEP asked them to do it.

However, a Kennebec River Visitor Impact Study was conducted in 2018, and 98.6%¹¹ respondents stated that a pictured transmission line crossing with 12-18 FAA orange balls¹² would have “a negative impact on your wilderness river experience” (275 out of 279 participants). This information was presented as sworn testimony by Carol Howard at the Hallowell PUC Public Witness Hearing; the following day, CMP amended the application to bury the line under the gorge.

Instead of actually studying recreational impacts, CMP just dismisses them. Rafting guides and recreational boaters strongly disagree with the idea that where NECEC would cross the Kennebec River gorge “is not particularly valued by recreation users.” As a matter of fact – and as any study or survey of actual users would have shown – it’s one of the most peaceful and serene parts of the adventure where boaters have a chance to look around and catch their breath after the excitement of the whitewater. Instead of a constructive approach with stakeholders and any data-driven analysis, they offer unsupported, inaccurate, and frankly offensive opinions like, “recreational use of this section of the river arguably has more impact on any bucolic nature of the river than does the proposed overhead crossing.” Somebody at CMP just made that up. What’s even scarier is they apparently thought saying things like that would help them get a permit.

For additional intervening comments on this topic, please refer to:

06-096 Ch. 375, § 9. Buffer Strips.

06-096 Ch. 375, § 14. No Unreasonable Effect on Scenic Character.

06-096 Ch. 375, § 12. Preservation of Unusual Natural Areas.

38 M.R.S. § 480-D(8). Outstanding river segments.

6-96 . 315.

¹¹ CRTK – 5, KRV Impact Circle Chart

¹² CRTK – 5, KRV Impact Photograph

Site Location of Development Law – 30 M.R.S. § 484. Applicable Licensing Criteria

30 M.R.S. § 484(3). No adverse effect on the natural environment.

The Town of Caratunk believes that CMP has not “made adequate provision for fitting the development harmoniously into the existing natural environment and that the development will not adversely affect existing uses, scenic character, air quality, water quality or other natural resources in the municipalities along the transmission line or in neighboring municipalities.” CMP’s proposed project will likely have significant negative impacts on existing whitewater rafting, hiking, hunting and fishing activities on rivers remote ponds, lakes and on land, as well as on the scenic character of the Old Canada Scenic Byway and the Appalachian Trail. These significant negative impacts on our natural environment correlate to our residents' way of life, livelihoods and the community's economic viability which is dependent on the lure of tourists to visit the very attributes which will be taken away.

30 M.R.S. § 484(3)(H).

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

1

[Redacted text block]

12

[Redacted text block]

13

[Redacted text block]

31

[Large redacted text block]

¹³ CRTK – 1, January 9, p. 124

¹⁴ CRTK – 6, Maine State Federation of Fire Fighters letter, 2/12/19



06-096 375, § 14. No Unreasonable Effect on Scenic Character.

The Town of Caratunk believes that CMP’s proposed project will have a devastating effect on the scenic character along the proposed transmission line. For example, the line will cross the Appalachian Trail, the Old Canada Scenic Byway, the Kennebec Gorge, the Spencer Road, Cold Stream, and many other important scenic sites not the least of which is The Forks Area - Jackman Snowmobile Trail system.

CMP has been propagating that the area of the new 53 miles is nothing but a working forest. We all know that clear cuts grow back, but CMP’s destructive herbicides and cutting will create a permanent wasteland of the forest.

Notably, CMP’s visual rendering showed uninhabited, bland and undesirable roads, ponds and mountains. In order to illuminate the outlandish misrepresentation of these impressive destinations, the Town has attached a file¹⁵ of pictures of the tourist destinations, vacation lands, beautiful mountains, pond and natural landscapes that NECEC will fragment and industrialize, forever destroying God’s creation.

As the Department and Commission review these pictures, we ask you to keep in mind, not only the beauty of the land, but also the joy and peace of the recreationists. If we could ask you to stretch your imagination even further, think about how many Maine employees are involved in meeting the needs of each one of these visitors (housekeeping, cook and wait staff, office administration, reservationists, gas stations, grocery stores, guides, machine rentals, snowmobile groomers, cabins and lodge owners, etc.). Next, think about the families they are supporting. A permit awarded to NECEC would not only permanently affect these landscapes, wildlife and fisheries, but would permanently affect the livelihoods of these Maine citizens and their families.

It is important to note that only after Coburn Mountain was opened as a trail destination, the snowmobiling season became as strong and vibrant as it is now. Personally speaking as one local example, my family would not be able to live in Caratunk year-round if we didn’t have the income of

¹⁵ CRTK – 8, Visual Rendering, Elizabeth Caruso

1 the snowmobiling season during the winter months.

2
3 Visitors from Maine and all over the globe are drawn to this last contiguous forest, remote ponds, and
4 incredible landscapes during the summer, fall hunting and hiking, spring fishing and winter
5 snowmobiling seasons. People leave their industrialized and urban settings to come to this area to catch
6 a glimpse of raw nature in its beauty and allow the inherent peace of their surroundings to settle their
7 souls. Once industrial powerlines flood these views, wrap around our mountains and ponds, these
8 visitors won't have a reason to return.

9
10 Attached is a rendering of The Forks Area snowmobile trail system around Coburn and Johnson
11 mountains with the proposed NECEC corridor superimposed.¹⁶ It is plainly evident that NECEC is
12 **maliciously invasive in its placement within this highly visible tourism destination area.** NECEC
13 will forever degrade this scenic area, significantly undermine the natural beauty of this area and
14 destabilize the tourism economy which Somerset County residents rely so heavily on.

15
16 **The John Muir Trust study of 2017 found that 55% of the tourists would not return to a**
17 **wilderness area if it has transmission infrastructure.**¹⁷

18
19 If CMP chose to bury the line for 1000 ft under the Kennebec River to avoid impact to tourism, CMP
20 should have avoided the snowmobiling recreational area as well. Snowmobiling, or winter, tourism is
21 equally as critical to the Forks area as rafting is during the summer. Coburn Mountain, with its 360-
22 degree spectacular view, is the major lure of snowmobile riders from Eustis, Jackman, Greenville and
23 Bingham. Wrapping industrial infrastructure all around Johnson and Coburn mountains will turn away
24 these riders. Without the volume of riders, restaurants, cabins, lodges, rentals, guides, gas stations, retail
25 shops – and all their support staff – will greatly suffer and some will likely have to move out of the area
26 for work.

27
28 **06-096. 375, § 15. Protection of Wildlife and Fisheries.**

29 The Town of Caratunk believes that CMP's proposed project does not adequately protect wildlife and
30 fisheries. The Town of Caratunk believes that CMP's proposed project does not contain buffer strips of
31 sufficient area to provide wildlife with travel corridors between areas of available habitat, will adversely

¹⁶ CRTK – 9, Coburn Mountain snowmobile trails

¹⁷ CRTK – 10, John Muir Study, 2017

1 affect wildlife and fisheries lifecycles, and will result in unreasonable disturbance of deer wintering
2 areas, significant vernal pools, waterfowl and wading bird habitat, and species declared threatened or
3 endangered.
4

5 As the above report explains, it is obvious that the consistent application of herbicides polluting the
6 Maine native brook trout fisheries and the natural deer and moose habitats would not be considered as
7 “management and conservation efforts aimed at maintaining populations of native species.” Similarly,
8 unnecessarily ruining deer wintering habitats by ripping an industrial corridor through these natural
9 areas would also not be considered proper management and conservation efforts.
10

11 **Natural Resources Protection Act – 38 M.R.S. § 480-D. Applicable Licensing Criteria.** 12

13 **38 M.R.S. § 480-D(1). Existing uses.** 14

15 The Town of Caratunk believes that CMP’s proposed project may unreasonably interfere with existing
16 scenic, aesthetic, and recreational uses as indicated above.
17

18 **Rural vs. Industrial Maine Towns**

19 When addressing the effects of the project location, it is critical that the Department and Commission
20 differentiate between the varied locations which NECEC would affect. There are two completely
21 dissimilar demographic and geographic cultures of Maine.
22

23 On the most northern section, NECEC consists of 53 miles of new corridor prior to the subsequent
24 sections along scenic ponds/lakes and continuing into forested or farm lands in rural towns. These
25 towns and plantations located in Somerset and Franklin counties are among the most heavily opposed to
26 the transmission project. In fact, the towns along the new corridor through the last unfragmented green
27 field are unanimously opposed. Being so remote geographically, these residents specifically chose to
28 acquire their lands for the scenic, peaceful and healthy attributes of a non-industrialized environment.
29 Their livelihoods and ways of life and healthy eating (hunting for organic, grass-fed game) require this
30 preserved, wild landscape. The very livelihoods of the residents in Somerset County, for example, are
31 dependent on their natural landscapes to lure tourists traveling from industrialized settings to recreate in
32 Somerset County.
33

1 In contrast, cities in and around the southern terminus of the line, in Lewiston, Maine, are accustomed to
2 industrial infrastructure. Just as the rural, northern areas depend on a preserved, wild landscape, these
3 cities and residents are dependent on mechanical industries for revenue and jobs. Likewise, these
4 southern areas seek to remedy economic depressions due to loss of industrial jobs with similarly natured
5 jobs.

6
7 The State of Maine is very diverse. Maine icons include lobster, lighthouses, coastlines, logging and
8 paper mills as well as big game, boating and fishing in pristine inland waters and rugged wilderness. LL
9 Bean, another Maine icon, would never publish fishing, kayaking or hunting pictures with industrialized
10 transmission lines in a pristine, wild setting. That is not Maine’s iconic image. It is not “the way life
11 should be”. Although certain proponents, such as the Maine Chamber, Lewiston/Auburn Chamber, City
12 of Lewiston and IBEW, may have louder voices, the rural citizens of Maine are equally as important
13 though fewer in number. The Department and Commission should consider Somerset and Franklin
14 counties equally with Androscoggin County.

15
16 It is also enlightening to find that the public outcry, as revealed through media polls, social media, and
17 especially through the PUC public comments, is not limited to Somerset and Franklin county residents.
18 Citizens from all regions of Maine are crying out to stop this project from devastating Maine’s
19 wilderness, wild nature, Maine’s tourism and brand. A reoccurring message is that we, this generation,
20 must preserve our wild landscape for the future generations – especially because urbanization and
21 industrialized infrastructure will only keep increasing in other areas of the state, region and country.
22 Americans will need Maine’s wild and scenic areas even more in the future!

23
24 **38 M.R.S. § 480-D(3). Harm to habitats; fisheries.**

25
26 The Town of Caratunk believes that CMP’s proposed project may unreasonably harm significant
27 wildlife habitat, freshwater wetland plant habitat, threatened or endangered plant habitat, aquatic or
28 adjacent upland habitat, travel corridor, and aquatic life. The Town of Caratunk also believes that
29 CMP’s proposed mitigation may diminish the overall value of significant wildlife habitat and species
30 utilization of the habitat in the vicinity of the proposed transmission line.

31 [Redacted]

32 [Redacted]

33 [Redacted]

34 [Redacted]

35 [Redacted]

36 [Redacted]

37 [Redacted]

1 [REDACTED]
 2 [REDACTED]
 3 [REDACTED]
 4 [REDACTED]
 5 [REDACTED]
 6 **38 M.R.S. § 480-D(8). Outstanding river segments.**
 7

8 The Town of Caratunk believes that CMP has not demonstrated that no reasonable alternative to
 9 crossing outstanding river segments, such as the Kennebec Gorge, exists which would have less adverse
 10 effect upon the natural and recreational features of the river segment. Although CMP doesn't consider
 11 this section of the crossing as "particularly unique or wild", citing "... the Preferred Alternative location,
 12 which as described above is not particularly unique or wild, would not adversely affect existing uses of
 13 the Kennebec River.”
 14

15 Practically speaking, this is a section of river where guests are sitting in the boats looking around
 16 because it is too shallow to swim. Bald eagles are commonly seen, and the impact of pristine wilderness
 17 is readily noticed and appreciated by guides and guests alike.
 18

19 In actuality, the **Kennebec River is a Class A River** according to the 1982 Maine Rivers Study.¹⁸ CMP
 20 failed to include that, according to the 1982 Maine River Study, the **Kennebec, Dead and Sheepscot**
 21 **Rivers have been identified as "Class A" Rivers** and identified as:¹⁹
 22

- 23 1. River or river segments possessing six resource values with regional, statewide or
 24 greater than statewide significance in a specific resource category.
- 25 2. Rivers or river segments possessing two or more resource values which are recognized
 26 to be some of the State's most significant in a given resource category. Included within
 27 this category are rivers providing important habitat (defined as self-sustaining viable
 28 runs or significant restoration efforts producing fishable populations) for the nationally
 29 significant Atlantic sea run salmon".
 30

31 **RESOURCE VALUES²⁰:**

- 32 • Geologic / Hydrologic Features
- 33 • River Related Critical / Ecologic Resources
- 34 • Undeveloped River Areas
- 35 • Scenic River Resources
- 36 • Historical River Resources
- 37

¹⁸ CRTK – 12,

https://www.maine.gov/dep/gis/datamaps/lawb_maine_river_survey/pdf/1982MaineRiversStudy_FinalReport2011.pdf?sfn=mo

¹⁹ CRTK – 12, Maine Rivers Study, p.9

²⁰ CRTK – 12, Maine River Study, p. 8

- Recreational River Resources

Furthermore, in Section I, Item 5 of the Findings, **the Study stated that impacts of development around these river resources should be avoided or minimized.** Obviously crossing the Kennebec River, whether under or over, and its tributaries should be avoided whenever possible.

There is a significant base of citizen and public agency support for the conservation and sound management of the river resources of Maine.

River conservation interests in the state vary widely. Such interests include recreational boating and fishing, commercial boating and fishing, education and scientific research, wildlife preservation, water quality maintenance, and miscellaneous recreational interests. While these interests vary and sometimes conflict, an underlying consensus exists that **rivers in their natural condition constitute a valuable resource to the State of Maine.** There also appears to be a consensus among river interests regarding which rivers are most important and warrant conservation action.

In addition, there appears to be a public recognition of the need to balance the goals of hydroelectric development and river conservation, and a desire for the use of hydropower where compatible with the resource values of a river and **where impacts of development are avoided or minimized.**

The department and Commission should carefully weigh the findings of this study as it was intended for state agencies' deliberations. As can be seen below, the Kennebec and Dead Rivers were ranked at the highest classification of river resource value, and the state must ensure that these qualities are protected.

INTRODUCTION²¹

On June 22, 1981, Governor Brennan released the Energy Policy for the State of Maine. The hydropower section of the policy directed that:

“The Department of Conservation, working with environmental, economic, energy and other appropriate interests, should identify river stretches in the State that provide unique recreational opportunities or natural values and develop a strategy for the protection of these areas for submission to the Governor.”

In response to this directive, and as a continuation of the State's ongoing efforts to conserve Maine's significant rivers, the Department of Conservation initiated the Maine Rivers Study. The U.S. Department of the Interior, National Park Service's Mid-Atlantic Office, as part of their ongoing river conservation technical assistance to the State, has provided staff to conduct this study.

The purpose of the study is two-fold. The first is to define a list of unique natural and recreation rivers, identifying and documenting important river related resource values as

²¹CRTK – 12, Maine River Study, p. 13 (emphasis added)

1 well as **ranking the State's rivers into categories of significance based on composite**
 2 **river resource value.** The second purpose of the study is to **identify a variety of actions**
 3 **that the State can initiate to manage, conserve, and where necessary, enhance the**
 4 **State's river resources in order to protect those qualities which have been identified**
 5 **as important.**

7 **Chapter 310: WETLANDS AND WATER BODIES PROTECTION**

8 **06-096. 310, § 5. General Standards**

9 The Town of Caratunk believes that CMP has not adequately minimized the amount of wetland to be
 10 altered. The Town of Caratunk believes that CMP's proposal may result in an unreasonable impact
 11 because the project will cause a loss in wetland area, functions, and values, and CMP has not
 12 demonstrated that there is not a practicable alternative to the proposed project that would be less
 13 damaging to the environment.

15 **Chapter 315: ASSESSING AND MITIGATING IMPACTS TO EXISTING SCENIC AND** 16 **AESTHETIC USES**

17 **06-096. 315.**

18 The Town of Caratunk believes that CMP's proposed project is likely to unreasonably interfere with
 19 existing scenic and aesthetic uses, and thereby diminish the public enjoyment and appreciation of the
 20 qualities of a scenic resource, and that any potential impacts have not been adequately minimized.

22 In Caratunk's cross-examination of CMP executives on January 9th, **CMP admitted that they did not**
 23 **even assess the area of the new 53 miles for existing uses.**

24 MS. CARUSO: "in the visual rendering presentation of August 17th you presented -- or
 25 your company presented to the PUC some pictures of Parlin Pond, Enchanted, Coburn
 26 Mountain, Rock Pond, Spencer Road, the Kennebec River, and they appear to be
 27 uninhabited without visible recreational usage or unusual scenery. And then it was stated
 28 at that meeting that you were trying to minimize the impact of a national scenic byway by
 29 putting the line to the east and to the west. Did you analyze the usages of areas you chose
 30 to place the line beyond it being a working forest?"

31 MR. DICKINSON: "You know, I'm not aware of that."²²

33 In Caratunk's cross-examination of CMP executives on January 9th, **CMP admitted that they did not**
 34 **conduct any studies on the impacts of tourism in the area of the new 53 miles.**

35
 22 CRTK -1, January 9 Transcript p. 81

1 MR. TANNENBAUM: Okay, so maybe the question should be, have you done a study
2 of the impacts on tourism?

3 MR. DICKINSON: Yeah, there's no specific study that we did.²³

4
5 In Caratunk's cross-examination of CMP executives on January 9th, **CMP admitted that they did not**
6 **conduct any studies on winter snowmobiling in the area of the new 53 miles.**

7
8 MS. CARUSO: Okay. So have you studied winter snowmobiling in the affected area of
9 the proposed new corridor?

10 MR. STINNEFORD: We have not conducted a study²⁴

11
12 In Caratunk's cross-examination of CMP executives on January 9th, **CMP admitted that they did not**
13 **consider the scenic and economic impacts from the corridor in the scenic and/or residential areas**
14 **of the new 53 miles.**

15 MS. CARUSO: So because of the scenic and economic impacts from this corridor, especially in
16 the new corridor area but also in the existing corridor area with all the camp owners and the
17 people who are impacted, did you ever consider burying the line for the entire length of the new
18 construction?

19 MR. DICKINSON: No, we didn't.

20 MS. CARUSO: Did you ever study the potential difference on the economy of the region
21 between burying the line and not burying the line?

22 MR. DICKINSON: No, we did not.

23 MS. CARUSO: Did you ever evaluate the scenic or visual impact of burying the line versus not
24 burying the line?

25 MR. DICKINSON: No, we did not.²⁵

26
27 Simply stated, CMP did not care where or how this corridor is placed. CMP did not consider the
28 citizens or residents of Maine. Their lack of foresight and attention to details reveals the rushed
29 planning of this project and the lack of stewardship in the great State of Maine.

30 **Chapter 335: SIGNIFICANT WILDLIFE HABITAT**

31 **06-096. 335, § 3(A). Avoidance.**

32 The Town of Caratunk believes that CMP's proposed project is likely to have an unreasonable impact
33 because it is likely to degrade significant wildlife habitat, disturb wildlife, and affect the continued use
34 of significant wildlife habitat by wildlife and CMP has not demonstrated that there is not a practicable

²³ CRTK -1, January 9 Transcript p. 83

²⁴ CRTK -1, January 9 Transcript p. 85

²⁵ CRTK -1, January 9 Transcript p. 89

1 alternative to the project that would be less damaging to the environment. CMP has indicated that the
2 placement of the corridor is based on land CMP owns. This is not avoidance.
3

4 **06-096. 335, § 3(B). Minimal alteration.**

5 The Town of Caratunk believes that CMP has not minimized the alteration of habitat and disturbance of
6 wildlife.
7

8 **06-096. 335, § 3(C). No Unreasonable impact.**

9 The Town of Caratunk believes that one or more of the standards of the NRPA at 38 M.R.S. § 480-D
10 will not be met and that therefore CMP’s project will have an unreasonable impact on protected natural
11 resources and wildlife.
12

13 **06-096. 335, § 3(D). Compensation.**

14 **The Town of Caratunk believes that CMP’s compensation is inadequate to off-set lost habitat**
15 **function.**

16 The Department and Commission must differentiate NECEC as opposed to a reliability transmission
17 project. As an Elective Transmission Upgrade, NECEC must be held to a higher standard than a
18 reliability transmission project, especially when the ETU is just a for-profit project that would be built to
19 serve an entirely different state. This ETU is no different than any other corporation, like Walmart or
20 McDonalds, that is applying for a permit to do business. That clearly shifts the balance when comparing
21 impacts versus benefits. CMP would need to prove there would be numerous, significant, permanent,
22 and quantifiable benefits in Maine that would be enough to justify the numerous, significant, permanent
23 and quantifiable impacts of the project. The evidence in the record doesn’t even come close to
24 supporting a permit.

25 [REDACTED]
26 [REDACTED]
27 [REDACTED]

28 The real cost of the project is what it will do to our natural resources and local economy. Therefore, the
29 question for the Commission is whether there will be any benefits – such as enhancing reliability,
30 improving the tourist and recreation economy, improving trout fisheries, enhancing deer and moose
31 habitats– that sufficiently justify the unavoidable costs of building a brand-new transmission corridor
32 through an area that so strongly disagrees with CMP’s contention it will be a good thing for us.

1 The Department and Commission can only approve NECEC if there is unequivocal and overwhelming
2 evidence that the NECEC ETU will provide significant and long-lasting benefits to Maine without
3 adverse impacts.–The applicant must demonstrate that the proposed activity will not unreasonably
4 interfere with the scenic character, existing scenic, aesthetic, recreational or navigational uses and that
5 the development fits harmoniously into the natural environment. CMP has not provided that evidence.
6 This Elective Transmission Upgrade does not fit harmoniously with the fisheries, wildlife, scenery, or
7 the landowners who abut the line or see the line from their homes. As is obvious from the public outcry,
8 town votes, the nearly 1000 PUC comments, ever-increasing grass roots uprising, countless editorials,
9 etc., this foreign corporate profit venture seeks to destroy the local economy, Maine’s brand and lure,
10 and the livelihoods and ways of life of the Maine people. That’s why CMP didn’t provide sufficient
11 evidence to support their case.

12 [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

19 [REDACTED]
20 [REDACTED]
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Respectfully submitted,

Date: 2/24/19

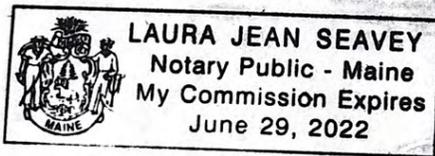
Elizabeth Caruso Gabriel M Caruso
(type or print witness name here
& sign on above line)

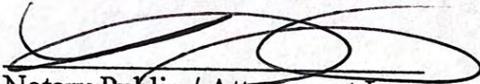
State of Maine
County of Somerset

Date: 2/10/2019

Personally appeared before me the above-named Elizabeth Caruso, who, being duly sworn, did testify that the foregoing testimony was true and correct to the best of his/her knowledge and belief.

Before me,




Notary Public / Attorney at Law
My Commission Expires: 6/29/22

MAINE PUBLIC UTILITIES COMMISSION
AUGUSTA, MAINE

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IN RE:)
) Docket No. 2017-232
CENTRAL MAINE POWER COMPANY) January 9, 2019
)

Request for Approval of CPCN for the New England Clean Energy
Connect Construction of 1,200 MW HVDC Transmission Line from
Québec-Maine Border to Lewiston (NECEC)

APPEARANCES:

- MITCHELL TANNENBAUM, Hearing Examiner
- CHRISTOPHER SIMPSON, Hearing Examiner
- MARK VANNOY, Maine Public Utilities Commission
- BRUCE WILLIAMSON, Maine Public Utilities Commission
- RANDALL DAVIS, Maine Public Utilities Commission
- FAITH HUNTINGTON, Maine Public Utilities Commission
- CHRISTINE COOK, Maine Public Utilities Commission
- BARRY HOBBS, Office of the Public Advocate
- ELIZABETH WYMAN, Office of the Public Advocate
- ERIC BRYANT, Office of the Public Advocate
- JARED DES ROSIERS, Pierce Atwood, Central Maine Power Company
- SARAH TRACY, Pierce Atwood, Central Maine Power Company
- ERIC STINNEFORD, Central Maine Power Company
- DAN PEACO, Daymark Energy Advisors, Central Maine Power
- JEFF BOWER, Daymark Energy Advisors, Central Maine Power
- DOUG SMITH, Daymark Energy Advisors, Central Maine Power
- THORN DICKINSON, Avangrid Networks, Central Maine Power Company
- BERNARDO ESCUDERO, Avangrid Networks, Central Maine Power
- JOHN SHOPE, Foley Hoag, Calpine Corp., Vistra Energy, Bucksport
- STEVE BARTLETT, Foley Hoag, Calpine, Vistra Energy, Bucksport
- JOHN FLUMERFELT, Calpine Corporation
- TANYA BODELL, Energyzt, Calpine Corp., Vistra Energy, Bucksport
- ANDREW LANDRY, Preti Flaherty, Industrial Energy Consumer Group
- SUE ELY, Natural Resources Council of Maine
- PHELPS TURNER, Conservation Law Foundation
- AMY OLFENE, Drummond Woodsum, NextEra Energy Resources
- BRIAN MURPHY, NextEra Energy Resources
- BEN SMITH, Soltan Bass Smith, Western Maine Mountains & Rivers
- ELIZABETH CARUSO, Town of Caratunk
- DOT KELLY

1 CONFERENCE COMMENCED (January 9, 2019, 9:05 a.m.)

2 MR. TANNENBAUM: Good morning. This is a hearing in
3 PUC docket 2017-00232 which is Central Maine Power Company's
4 request for approval of a CPCN for the New England Clean Energy
5 Connect. Let's start with appearances from the parties with
6 the Public Advocate, please.

7 MS. WYMAN: Liz Wyman, Office of the Public Advocate.

8 MR. BRYANT: Eric Bryant with the Office of the
9 Public Advocate.

10 MR. HOBBS: Barry Hobbs, Public Advocate.

11 MR. LANDRY: Andrew Landry from Preti Flaherty on
12 behalf of the Industrial Energy Consumer Group.

13 B. SMITH: Ben Smith on behalf of Western Mountains &
14 Rivers Corporation.

15 MR. TURNER: Phelps Turner, Conservation Law
16 Foundation.

17 MR. DICKINSON: Thorn Dickinson, Avangrid Networks.

18 MR. STINNEFORD: Eric Stinneford, Central Maine
19 Power.

20 MR. ESCUDERO: Bernardo Escudero, Avangrid Networks.

21 MR. PEACO: Dan Peaco, Daymark Energy Advisors on
22 behalf of Central Maine Power.

23 MR. BOWER: Jeff Bower with Daymark Energy Advisors
24 on behalf of Central Maine Power.

25 D. SMITH: Doug Smith with Daymark Energy Advisors on

1 behalf of Central Maine Power Company.

2 MS. TRACY: Sarah Tracy with Pierce Atwood on behalf
3 of Central Maine Power.

4 MR. DES ROSIERS: Jared des Rosiers from Pierce
5 Atwood on behalf of Central Maine Power.

6 MR. MURPHY: Brian Murphy on behalf of NextEra Energy
7 Resources.

8 MS. OLFENE: Amy Olfene of Drummond Woodsum on behalf
9 of NextEra Energy Resources.

10 MS. ELY: Sue Ely, Natural Resources Council of
11 Maine.

12 MS. KELLY: Dot Kelly, Phippsburg, Maine.

13 MS. BODELL: Tanya Bodell from Energyzt on behalf of
14 the generator interveners.

15 MR. SHOPE: John Shope, Foley Hoag on behalf of the
16 generator interveners which are Calpine Corporation, Vistra
17 Energy Corporation, and Bucksport Generation, LLC.

18 MR. BARTLETT: Steve Bartlett, Foley Hoag on behalf
19 of the generator interveners.

20 MR. FLUMERFELT: John Flumerfelt, Calpine
21 Corporation.

22 MR. TANNENBAUM: Okay, witnesses on the panel have
23 been sworn in. Oh, I'm sorry, appearances from the phone,
24 parties in the case?

25 MS. CARUSO: Elizabeth Caruso the town of Caratunk.

1 MR. TANNENBAUM: Okay. Any other party in the case
2 on the phone? Okay, let's proceed then. As I mentioned, this
3 panel has been sworn in in this proceeding so we'll proceed
4 with the questioning from NextEra.

5 MR. MURPHY: Thank you, and good morning, panel.
6 Similar to when we had the technical conference, I put together
7 a booklet with tabs on it that I'll go through. Hopefully
8 it'll make it easier for you all and for me. And in the first
9 tab is part of your application. I'm going to ask you some
10 foundational questions on that first tab. And NEC (sic) is a
11 high-voltage direct current or HVDC transmission line, correct?

12 MR. DICKINSON: That's correct.

13 MR. MURPHY: And NECEC is a high-voltage direct
14 current line designed to deliver 1,200 megawatts of energy. Is
15 that correct?

16 MR. DICKINSON: That's correct.

17 MR. MURPHY: And it's also using the voltage source
18 converter or VSC technology?

19 MR. DICKINSON: That's correct.

20 MR. MURPHY: And it's approximately, in the Maine
21 portion of the line, 145 miles?

22 MR. DICKINSON: That's correct.

23 MR. MURPHY: In your September 2017 petition filed
24 with the Commission, CMP explained that the transmission line
25 was to be constructed and operated as an overhead transmission

1 line.

2 MR. DICKINSON: That's correct.

3 MR. MURPHY: And since then, on October 22nd, 2018,
4 CMP filed documents indicating that it was amending its Maine
5 Department of Environmental Protection application to include
6 an underground crossing of the upper Kennebec River.

7 MR. DICKINSON: That's correct.

8 MR. MURPHY: The underground crossing of the Kennebec
9 River will bury the transmission line for approximately one
10 mile?

11 MR. DICKINSON: That's correct.

12 MR. MURPHY: At the November 28, 2018 technical
13 conference, I asked if CMP had considered routing the
14 underground -- excuse me, considered routing the transmission
15 underground for the 53 miles of green field corridor and
16 whether they had considered that in the same way they
17 considered routing under the Kennebec River. And the answer I
18 received from Mr. Dickinson was that you did not consider in
19 the same manner. Do you recall providing that answer?

20 MR. DICKINSON: Yes, I do.

21 MR. MURPHY: And therefore, just to make sure we're
22 all on the same page, it's currently the company's proposal
23 that the HVDC line will be approximately one mile underground
24 and 144 miles overhead.

25 MR. DICKINSON: That's correct.

1 MR. MURPHY: Now moving to tab four, this is NextEra
2 Hearing Exhibit 19 which is CMP's competitive intelligence
3 presentation on the TDD -- excuse me, the TDI HVDC line. On
4 page one of the presentation, you'll see that the TDI HVDC line
5 proposes to deliver a thousand megawatts of Hydro-Quebec energy
6 into Vermont. Do you see that?

7 MR. DICKINSON: Yes.

8 MR. MURPHY: And also on that first page of the CMP
9 presentation, the TDI Vermont line is approximately 154 miles
10 long. Is that correct?

11 MR. DICKINSON: Yes.

12 MR. MURPHY: And of the 154 miles, approximately a
13 hundred miles of that line is to be routed under water and 54
14 miles of that line is to be buried underground which is also in
15 this presentation.

16 MR. DICKINSON: Correct.

17 MR. MURPHY: And the TDI line is also using the same
18 technology that you all are using which is the VSC HVDC
19 technology. It's not on that page, but if you recall.

20 MR. DICKINSON: I do remember that, yes.

21 MR. MURPHY: Okay. And do you also recall that the
22 line that is the subject of this competitive intelligence is
23 fully permitted? Or they represent that they're fully
24 permitted.

25 MR. DICKINSON: They represent that they're fully

1 permitted.

2 MR. MURPHY: Thank you. And then on tab six, this is
3 information about Northern Pass, and it's fair to say that the
4 panel is aware of the Northern Pass transmission line.

5 MR. DICKINSON: Yes.

6 MR. MURPHY: And that is another HVDC line that is
7 proposed to deliver 190 megawatts of Hydro-Quebec energy into
8 New Hampshire. Correct?

9 MR. DICKINSON: Correct.

10 MR. DES ROSIERS: I believe you meant 1,090 not 190.
11 You said 190.

12 MR. MURPHY: Oh, thank you. 1,090 just to make the
13 record clear. I appreciate that. Is that correct, 1,090?

14 MR. DICKINSON: Yes, that's correct.

15 MR. MURPHY: Thank you. And of that -- I'm sorry.
16 And then next question is are you also aware that the Northern
17 Pass line on the U.S. side is approximately 192 miles in
18 length?

19 MR. DICKINSON: Yes.

20 MR. MURPHY: And of that 192 miles, Northern Pass
21 proposes to bury approximately 60 miles of that line.

22 MR. DICKINSON: Yes.

23 MR. MURPHY: And are you also aware that the New
24 Hampshire siting evaluation committee denied Northern Pass's
25 application for a siting and facility certificate last year?

1 MR. DICKINSON: Yes, I am.

2 MR. MURPHY: Now tab seven is the New York Connect
3 project, and, Mr. Dickinson, you worked on that project,
4 correct?

5 MR. DICKINSON: Yes.

6 MR. MURPHY: And am I correct to say that was a 244-
7 mile HVDC line that was proposed to be buried?

8 MR. DICKINSON: Yes.

9 MR. MURPHY: Now in your application, is it also
10 correct to say that you proposed to bury the HVDC line so that
11 line losses would be reduced and aesthetics and health-based
12 concerns eliminated?

13 MR. DICKINSON: I'm sorry, could you repeat the
14 second part of that?

15 MR. MURPHY: Sure. In your application, is it
16 correct to say that you stated one of the purposes to bury the
17 HVDC line was to reduce line losses and eliminate the concerns
18 regarding aesthetics and health?

19 MR. DES ROSIERS: I'll object to the question to the
20 extent it refers to an application. I don't believe there's
21 been a foundation laid that any application was filed with
22 respect to that project, Connect New York.

23 MR. MURPHY: Okay. We're talking about tab seven.
24 Do you recognize the application that you worked on?

25 MR. DICKINSON: Well, if I -- it would be helpful for

1 me to remember exactly what the date of this is, but I believe
2 this is from an RFI response from New York, you know, I think a
3 number of years ago, but it was a response for ideas from New
4 York about the different risks and challenges they saw
5 associated with the development of a more vibrant energy
6 infrastructure and --

7 MR. MURPHY: That's my understanding as well. So if
8 you go three pages in on tab seven, and under the title The
9 Connect New York Option, and if you go to the first paragraph,
10 the last sentence, and that's what I was paraphrasing. "By
11 burying an efficient underground DC volt transmission line,
12 line losses will be reduced, aesthetics and health-based
13 concerns eliminated."

14 MR. DICKINSON: Yeah, I think the line losses refer
15 specifically to a DC project. The burying portion relates to
16 concerns that we knew existed in the Hudson Valley region
17 associated with aesthetic and health-based concerns. And there
18 were already proposed above-ground AC transmission projects to
19 alleviate -- this is essentially a project that's fundamental
20 purpose was to alleviate the central east constraint in New
21 York where there's a significant amount of congestion. We were
22 -- we had this specific idea as a competitor to other ideas
23 that we saw as being out there. Those other ideas were
24 overhead projects. And by utilizing the thruway, we had a
25 corridor that was pre-disturbed. Obviously that corridor would

1 not have allowed for an overhead line to go right along the --
2 back and forth across the thruway, but a buried line through a
3 portion of land that had already been disturbed by the thruway
4 we believed was another alternative that the state would
5 consider. Of course, as you probably know from looking at
6 this, that in the end, the state decided not to consider this
7 project within that context.

8 MR. MURPHY: Go to tab eight, and throughout my
9 questioning --

10 MR. TANNENBAUM: Brian, I just want to follow up on
11 that. So is your testimony that burying the underground DC
12 line does not, in and of itself, reduce losses?

13 MR. DICKINSON: Yeah, I'd have to go to my -- the --
14 my engineering folks to tell me a little bit more about it, but
15 the prime benefit of the losses comes, I believe, from the
16 actual difference between DC and AC and the reduction in line
17 losses.

18 MR. TANNENBAUM: Okay, thank you. Sorry.

19 MR. MURPHY: No problem. Go to tab eight, and
20 throughout my questioning, again to make it easier on myself
21 and you all, I've taken parts of your testimony. And if you
22 need to refer to more than the parts that I've taken, you know,
23 feel free to, but the first part are pages 15 through 17 of the
24 panel's rebuttal testimony. And on page 15 at lines (sic) 18,
25 you state that CMP has executed a finding memorandum of

1 understanding, or MOU, with Western Mountains & Rivers
2 Corporation. Do you see that?

3 MR. DICKINSON: Yes, I do.

4 MR. MURPHY: Okay. Turning to the next page, which
5 is 16, on lines three through seven, you state the MOU commits
6 CMP to an initial donation of \$250,000. Is that correct?

7 MR. DICKINSON: Yes.

8 MR. MURPHY: And for your own purposes, on tab nine,
9 I have attached the MOU. So if you need to reference the MOU,
10 feel free to do that. You also state that there is an
11 additional 250,000 -- or 50,000 over five years should be paid
12 pursuant to the MOU. Isn't that correct?

13 MR. DICKINSON: That's correct.

14 MR. MURPHY: Now turning to page 17, lines one
15 through three, you state that if the high-voltage DC line
16 crosses the Kennebec Gorge underground, CMP agrees to
17 contribute five to \$10 million. Am I reading that correctly?

18 MR. DICKINSON: That's correct.

19 MR. MURPHY: And as we've already discussed, you've
20 agreed to route the high-voltage DC line under Kennebec Gorge,
21 right?

22 MR. DICKINSON: Correct.

23 MR. MURPHY: Now doing some math, given that you have
24 agreed to route the transmission line under the Kennebec Gorge,
25 in the event -- this is the words from the MOU if you need to

1 check it -- in the event you attain all your permits, license,
2 and approvals, then, under the MOU, you are committed to
3 provide Western Mountains a total of, my read is, 5.5 to \$10.5
4 million in payments. Does that sound correct?

5 MR. DICKINSON: That's correct. Obviously it doesn't
6 include the other commitments that are in the MOU, but that's
7 correct from a dollar perspective.

8 MR. MURPHY: Is it also correct that CMP has not
9 executed any other similar MOUs or agreements like the one it
10 executed with Western Mountains & Rivers?

11 MR. DICKINSON: That's correct.

12 MR. MURPHY: Now going back to tab four, which is the
13 TDI presentation, we'll go to page four. And here there are a
14 bunch of bullets, and part of my questions are about the
15 bullets and also clarifications about the bullets, and I want
16 to just make sure that the record's clear about what the
17 presentation says and doesn't say. Now if we go to the
18 presentation, the third bullet from the top indicates that the
19 TDI line agreed to pay a minimum of \$280 million over 40 years.
20 Do you see that bullet? It's under community funding, second
21 bullet, third bullet starts with "The agreement was filed."

22 MR. DICKINSON: I see that.

23 MR. MURPHY: Okay. And this is where I want to make
24 sure the record's clear. I think we'll be on the same page but
25 want to make sure. The next three bullets are not additive to

1 the 283 million. Actually they describe what's in the 283
2 million. And I have the CLF agreements and other information,
3 but is that your recollection as well? And take your time. I
4 do think those are not in addition to, but -- or subcategories
5 of the 283. And if you want to take it subject to check, I'm
6 happy with that.

7 MR. DICKINSON: That's probably the better way to do
8 it. I'll take that subject to check.

9 MR. MURPHY: So if, subject to check, you agree with
10 me those are subcategories, one example is the bullet that's
11 right underneath the third bullet, the fourth bullet. It
12 starts 109 million. And one of these subcategories is the 109
13 million that would be contributed to a fund to provide
14 renewable energy generation in Vermont. That's what your
15 presentation says, correct?

16 MR. DICKINSON: Correct.

17 MR. MURPHY: Okay. Also on this page, the very last
18 bullet, it explains that TDI agreed to \$136 million payment to
19 be used to reduce electric rates. That's what your
20 presentation says, correct?

21 MR. DICKINSON: Correct.

22 MR. MURPHY: Just simple math, adding the 283 to the
23 136 million, I come up with total commitments for TDI in these
24 agreements of \$419 million. Does that math sound correct?

25 MR. DICKINSON: That sounds correct.

1 MR. MURPHY: Now going to tab 14, this is the
2 Northern Pass bid, an excerpt from that. And you'll see under
3 number three, need for New Hampshire to receive unique benefits
4 for hosting the project, I'm just going to focus on two
5 bullets. And the first bullet that I'll focus on is the second
6 one entitled Forward New Hampshire Fund. Do you see that
7 bullet?

8 MR. DICKINSON: Yes.

9 MR. MURPHY: And according to this bid, Northern
10 Pass, through the Forward New Hampshire Fund, commits \$200
11 million to fund New Hampshire priorities in the areas of
12 community betterment, clean energy innovation, economic
13 development, tourism, etc. Is that correct?

14 MR. DICKINSON: That's correct.

15 MR. MURPHY: Okay. And if you go two more bullets,
16 Northern Pass also committed to a northern county job creation
17 fund for \$7.5 million.

18 MR. DICKINSON: Correct.

19 MR. MURPHY: That's what they're representing. So
20 taking those two numbers together, I come up with approximate
21 \$207 million that Northern Pass has stated it's committed to
22 New Hampshire.

23 MR. DICKINSON: Correct.

24 MR. MURPHY: Now I'd like to go to tab 15. And in
25 tab 15, I have excerpts from three bids into 83D, the NECEC

1 bid, the TDI bid, and the Northern Pass bid. And I'm just
2 going to walk through. If you go three pages in, this is a CMP
3 bid which commits \$50 million to be paid over 40 years to
4 Massachusetts low-income program if you're selected and awarded
5 and receive all your approvals?

6 MR. DICKINSON: Correct.

7 MR. MURPHY: And if we continue two more pages, see
8 that TDI, under what they're calling Section 13.3.2, commits to
9 \$20 million over 20 years.

10 MR. DICKINSON: Correct.

11 MR. MURPHY: And then if we go another two pages,
12 Northern Pass -- I read this to state that Northern Pass is
13 committing only to \$10 million over 20 years for the low --
14 Massachusetts low-income program.

15 MR. DICKINSON: That's correct.

16 MR. MURPHY: Go to tab 16. Again, this is an excerpt
17 from the panel's rebuttal testimony. On page nine at line 18
18 of the rebuttal testimony, you state that the Massachusetts EDC
19 transmission service rates are fixed. Is that correct? Do you
20 see that on line 18?

21 MR. DICKINSON: That's correct.

22 MR. MURPHY: Okay. And then later on page nine, you
23 state at lines 19 through 20, that because the transmission
24 service rates are fixed, that CMP bears the cost risk if ISO
25 New England determines that additional system upgrades are

1 required. Do you see that statement?

2 MR. STINNEFORD: Yes, that's correct.

3 MR. MURPHY: Thank you. Now turning to tab 17 which
4 is CMP's response to NextEra data or information request 002-
5 012. In this response, the second sentence, you repeat again
6 that the transmission service agreement rates are fixed. Do
7 you see that statement?

8 MR. STINNEFORD: Yes.

9 MR. MURPHY: Okay. Then in the next sentence, you
10 state that in developing the TSA fixed rates, CMP made certain
11 assumptions regarding required system upgrades and the CCIS
12 upgrades and their associated cost based on your studies. Do
13 you see that statement?

14 MR. STINNEFORD: Yes.

15 MR. MURPHY: The next sentence indicates that you
16 included a level of contingency in the TSA fixed rate to
17 account for the potential that the final cost associated with
18 the system and CCIS system upgrades are greater than that
19 estimate. Do you see that statement?

20 MR. STINNEFORD: Yes, I do.

21 MR. MURPHY: Okay. Now let's go back to tab 16 and
22 the last page on tab 16. This is, again, an excerpt from your
23 rebuttal testimony. Now this is page 14 and I would direct you
24 to lines 15 through 17 where it states that ISO New England is
25 expected to complete additional -- the additional system impact

1 study by August 2019 and the Section I.3.9 approval process by
2 October of 2019. Do you see those statements?

3 MR. STINNEFORD: Yes.

4 MR. MURPHY: Now does it follow then that CMP will
5 not know the certainty of whether the contingency we discussed
6 with the TSA fixed rate will be sufficient for the additional
7 ISO system upgrades until the October -- August -- I'm sorry,
8 the August or October timeframe? Let me restate that. It was
9 a little choppy. Does it follow that CMP will not know the
10 certainty of whether the contingency you set aside for the
11 additional ISO system upgrades, or the potential for those
12 upgrades, in your fixed transmission service agreement will be
13 met or exceeded until you have the results of the ISO's
14 studies in the August or October timeframe of this year?

15 MR. STINNEFORD: I would agree with that, yes.

16 MR. MURPHY: Okay. So given that, is it fair to
17 state that the current uncertainty associated with the
18 contingency and whether it will be met or exceeded is one of
19 the reasons, not all the reasons but one of the reasons, that
20 CMP has not committed to additional agreements over and above
21 that of the Maine Western Mountains MOU and similar to the
22 agreements that we previously discussed for TDI and Northern
23 Pass?

24 MR. DICKINSON: No, I wouldn't agree to that.

25 MR. MURPHY: Let's go to tab 19. This is page 18

1 from the panel's rebuttal testimony. At lines one through ten
2 -- or, I'm sorry, at lines 10 through 11, the panel states, "It
3 is not clear who will purchase any of the hydroelectric
4 generation that is transported under this TSA." Am I correct
5 that the TSA referred to here is the 110-megawatt TSA between
6 CMP and HQUS?

7 MR. STINNEFORD: Yes.

8 MR. MURPHY: Okay. Now turning to tab 20, this is an
9 excerpt from the HQUS bid into the Connecticut Zero Carbon RFP.
10 It's the title page. And then if you turn to the second page,
11 you see that in the bullets this is a bid between Hydro-Quebec
12 U.S. and Green -- Vermont Green Mountain and not NEC. Am I
13 reading this correctly?

14 MR. DICKINSON: That's correct.

15 MR. MURPHY: Now are you familiar that HQUS did not
16 put any bid into the Connecticut Zero Carbon RFP that included
17 the 110 megawatts TSA and NECEC?

18 MR. DICKINSON: That's my understanding.

19 MR. MURPHY: Is it also your understanding that
20 Hydro-Quebec didn't place any bid, whether it was the Vermont
21 Green Mountain line or the NECEC line, into the 2018 Rhode
22 Island RFP for long-term renewable energy contracts?

23 MR. DICKINSON: Yeah, to my understanding, I agree.

24 MR. MURPHY: Okay. Thank you. Those are all my
25 questions.

1 MR. TANNENBAUM: I'm a little shocked. Okay, let's
2 move to the generator interveners.

3 MR. SHOPE: Good morning. Mr. Dickinson, I
4 understand that you gave some rebuttal testimony in this case
5 relating to the subject of diversion. Do you recall that?

6 MR. DICKINSON: I just had a little hard time hearing
7 you.

8 MR. SHOPE: Oh, sure. Okay. Obviously you are one
9 of the CMP executives who gave rebuttal testimony, correct?

10 MR. DICKINSON: Yes.

11 MR. SHOPE: Okay. And part of the rebuttal that was
12 sort of under your domain of the three of you was the issue of
13 addressing Mr. Speyer's testimony about Hydro-Quebec's possibly
14 diverting exports from other adjoining control areas from New
15 England. Do you recall that?

16 MR. DICKINSON: I would describe my testimony as
17 demonstrating that, compared to an historical baseline, the
18 energy that would be delivered on this NECEC would be
19 incremental to the northeast.

20 MR. SHOPE: Okay, and -- but the -- was the reason it
21 was rebuttal testimony was that it was rebutting the arguments
22 that had been made with regard to diversion?

23 MR. DICKINSON: Yeah, I guess I don't -- the word
24 diversion, I mean, there was the subject about whether this was
25 incremental or not, and that was the focus of the testimony.

1 MR. SHOPE: Okay. Now, and with regard to the way
2 you came about the incremental analysis, just sort of round
3 numbers, you had -- you based -- your conclusion was that by
4 2023, Hydro-Quebec would have approximately 40 terawatt hours
5 available for export and you compared that to a historical
6 baseline that you had derived of 30.5 and you added the 9.54
7 (sic) terawatt hours for NECEC, and that essentially indicated
8 that, in your view, everything under -- that was going to be
9 supplied across NECEC to the Massachusetts utilities would be,
10 in your way of viewing things, incremental?

11 MR. DICKINSON: I would describe basically what I did
12 was to look at a historical five-year baseline which worked out
13 to be 30.5 terawatt hours and assume that they would continue
14 to commit to delivering that 30.5 and then looked at whether an
15 incremental 9.45 terawatt hours could then be delivered and
16 still, over the 20-year period, result in no impacts and have
17 that availability.

18 MR. SHOPE: Okay, and you concluded that Hydro-
19 Quebec, in fact, did have 40 terawatt hours available for
20 export. And so if you added the 30.5 to the roughly 9.5 for
21 NECEC, that equaled the 40?

22 MR. DICKINSON: So, yeah, I concluded that if you
23 take the storage that was demonstrated in capacity at the end
24 of 2017, the existing capability they had in 2017, added the
25 Romaine 4 unit that was in 2020 coming online, and 500

1 megawatts of additional capacity in 2025 and you assume all
2 those pieces, that you -- by delivering 40 terawatt hours, they
3 had that capability to still serve the energy that they had.

4 MR. SHOPE: Okay. And when you said you included the
5 storage, that was based, in part, on your measuring the storage
6 as of the end of the year, correct?

7 MR. DICKINSON: Correct, at the end of 2017.

8 MR. SHOPE: Yeah, okay. And have you made any
9 adjustment for the -- well, and is it your view that it's
10 proper to measure the available storage as of the end of the
11 year as opposed to when it's still winter in -- up in Quebec?

12 MR. DICKINSON: Well, it's the -- I had to rely on
13 just publicly-available data. That was the only piece of data
14 that I had associated with storage, and my view was, by
15 comparing year over year each year's storage at the same point
16 in time, it gave you a general sense of the increasing storage
17 of water that was building up in the HQ system.

18 MR. SHOPE: Okay. But so you're saying you looked
19 for data that would show what the available storage was --
20 well, let me put it this way. The storage that's available on
21 December 31 is not the maximum date of storage in the Hydro-
22 Quebec system, right?

23 MR. DICKINSON: Yeah. I didn't have any other
24 information to demonstrate whether it was high or low.

25 MR. SHOPE: Okay. Well, just based on your general

1 knowledge of being in the industry, it's the case that with
2 hydroelectric systems, or at least in the case of Quebec given
3 its climate, that it has peak load in the winter, it has to
4 supply a lot of electricity to heat people's houses, but at the
5 same time, the snow and the ice are not melting to fill the
6 reservoir, right?

7 MR. DICKINSON: No, that makes sense.

8 MR. SHOPE: Yeah. So during the winter months, in
9 fact, Hydro-Quebec is drawing down on its reservoirs in order
10 to supply electricity for heating.

11 MR. DICKINSON: I'm not a hydro expert, but that
12 makes sense.

13 MR. SHOPE: Okay. So - and the fresh water doesn't
14 come in to refill the reservoir until the late spring and
15 summer, right?

16 MR. DICKINSON: That would make sense.

17 MR. SHOPE: Okay. So that would suggest, therefore,
18 that the low point in the reservoir typically would be at the
19 end of the winter, beginning of the summer.

20 MR. DICKINSON: Yeah, I can see how that would be the
21 case.

22 MR. SHOPE: And so for purposes of reserves and
23 calculating reserves and how much was available, you would want
24 to look at that low point, right?

25 MR. STINNEFORD: I would just comment that, based on

1 my own experience with reservoir management at CMP, it's a
2 cyclical process. You would expect reservoirs to be relatively
3 full, as you say, going into the winter period, but then when
4 the spring melt hits those reservoirs, they do refill and you
5 get another high in storage following the spring melt.

6 MR. SHOPE: Sure. But for purposes of the utility
7 maintaining its reserves, it has to figure out how much it's
8 going to have at the low point, right?

9 MR. DICKINSON: Yeah, again, my understanding from
10 everything I've learned on Hydro-Quebec by researching the
11 publicly-available information, that 98 terawatt hours was
12 their guideline for that minimum level of storage.

13 MR. SHOPE: Okay. And you just weren't able to --
14 did you look for data at what the storage was at the -- you
15 know, in late spring, beginning of summer?

16 MR. DICKINSON: That's correct.

17 MR. SHOPE: You looked for it, but you weren't able
18 to find it?

19 MR. DICKINSON: Yeah, I looked for it and wasn't able
20 to find it.

21 MR. SHOPE: Okay. But if you had found it and it
22 showed lower numbers, that would then mean you would have to
23 adjust the amount that was in storage, right?

24 MR. DICKINSON: Yeah, I mean, I think if I had
25 perfect information and saw the shape overall here, that might

1 be something you'd look at for a specific purpose. Here, what
2 I'm trying to demonstrate is what is the general amount of
3 storage that's available in capacity. And by measuring it on
4 the same day every year, you -- you know, looking back over the
5 last five years, you can clearly see that the level of water in
6 storage is increasing.

7 MR. SHOPE: Okay. But in any event, if we were to
8 actually look at the storage on -- at the low point year to
9 year to year, that would mean there would be a reduction in the
10 amount that would be available.

11 MR. DICKINSON: Yeah, I mean, I don't know what that
12 information is so I don't have it.

13 MR. SHOPE: Now, as part of your calculations, you
14 also had to factor in the amount of electricity that Quebec was
15 going to consume for its own native load, right?

16 MR. DICKINSON: That's correct.

17 MR. SHOPE: Okay. And so maybe if we could
18 distribute what's already been previously marked as NRCM 002-
19 21. So I've marked -- and actually -- so -- and so the --
20 what's already -- what's just been distributed and is marked
21 already as NRCM 002-021, this is the backup for your modeling
22 of the domestic load growth up in Quebec, right?

23 MR. DICKINSON: That's correct.

24 MR. SHOPE: Okay. So if we look at the model here,
25 it looks like you -- your input is you're assuming Hydro-Quebec

1 domestic load of 182.8 terawatts in 2018, and if we just take -
2 - go to 2026, that grows to 189 in your modeling assumptions.

3 Is that correct?

4 MR. DICKINSON: Could you just repeat those numbers
5 and years again?

6 MR. SHOPE: Sure. So it's -- in 2018, which is the
7 first of the years in your backup, it's 182.8 terawatts, and
8 that's to the right of the column roughly in the middle there
9 called HQ Domestic Load.

10 MR. DICKINSON: Correct.

11 MR. SHOPE: Okay. And then that grows in 2026 up to
12 289.

13 MR. DICKINSON: Correct.

14 MR. SHOPE: Okay. And you drew these figures, as I
15 understand it, from the 2017/2026 Electric Supply Plan that was
16 issued by Hydro-Quebec on November 1st of 2016. Is that
17 correct?

18 MR. DICKINSON: That's correct.

19 MR. SHOPE: Okay, and that's -- so we've circulated
20 that. And then if you look on the second page, that -- we see
21 those very same numbers on the -- in the column Needs
22 Identified by the Plan.

23 MR. DICKINSON: Correct.

24 MR. SHOPE: Okay. Yeah, and the document, the 2017
25 to 2026 Electric Supply Plan we'd like to have marked as GINT

1 26. Okay, now -- and how did you find out about the 2017 to
2 2026 Electricity Supply Plan?

3 MR. DICKINSON: I think in my conversations with
4 Hydro-Quebec and me searching for documents that were publicly
5 available that related to load growth, they pointed this out to
6 me.

7 MR. SHOPE: Okay. Now did you make any inquiry as to
8 whether or not the plan that had been issued on November 1st of
9 2016 had been updated as of the time that you were preparing
10 your rebuttal testimony?

11 MR. DICKINSON: I don't remember.

12 MR. SHOPE: You don't remember whether you did that
13 or not?

14 MR. DICKINSON: I believe that my conclusion was this
15 was a good source of information for the basis of the model.

16 MR. SHOPE: Okay. But you don't know whether you
17 inquired as to whether it was the most current information?

18 MR. DICKINSON: It would make sense to me that that
19 conversation happened. I just don't remember it specifically.

20 MR. SHOPE: And presumably, if you had more current
21 information from Hydro-Quebec available, you would have wanted
22 to use it, right?

23 MR. DICKINSON: I think I would have considered -- I
24 considered every piece of information that I looked at in
25 putting together this model.

1 MR. SHOPE: Well, I mean, if Hydro-Quebec had issued
2 an update of the information and that was available, you would
3 presumably wanted to have used it for your analysis, right?

4 MR. DICKINSON: I think if I had a different report,
5 I would read the report, I'd understand what that report was
6 telling me and make sure it made sense within the context of
7 the analysis I was doing.

8 MR. SHOPE: All right. I'd like to distribute the
9 next document, please.

10 MR. TANNENBAUM: John, was the prior document
11 generator interveners six?

12 MR. SHOPE: Twenty-six.

13 MR. TANNENBAUM: Oh, 26.

14 MR. SHOPE: And I'll just note for the record, these
15 are certified translations of excerpts from documents that were
16 originally published in French. And actually, with respect to
17 GINT 16, which was the plan on November 1, 2016, did you read
18 it in the French, Mr. Dickinson?

19 MR. DICKINSON: I do not speak French.

20 MR. SHOPE: Did you have somebody translate it for
21 you?

22 MR. DICKINSON: I think for the relevant pieces where
23 I needed to understand what was being said, my memory is I did
24 make sure that I was understanding things correctly.

25 MR. SHOPE: Is that Google translate?

1 MR. DICKINSON: I think I was also was speaking to a
2 number of people that were bilingual.

3 MR. SHOPE: Okay. All right. So you now have before
4 you the 2017 progress report of the 2017 to 2026 Electricity
5 Supply Plan issued on October 31, 2017. Do you see that?

6 MR. DICKINSON: Yes.

7 MR. SHOPE: Okay. So this is a progress report on
8 the plan that you actually had used, right?

9 MR. DICKINSON: That's what it appears to be, yes.

10 MR. SHOPE: Yeah. And it was issued I guess about
11 nine months before your testimony -- before your rebuttal
12 testimony.

13 MR. DICKINSON: That looks correct.

14 MR. SHOPE: Yeah, okay. Now if we look at the page
15 which is a few pages in but it's marked on the bottom --
16 because it's an excerpt, it says in the lower right corner page
17 8 of 47. Do you see that?

18 MR. DICKINSON: Yes.

19 MR. SHOPE: Okay. And this also has load growth
20 being illustrated, and if you see about three-quarters of the
21 way down there's a -- that Needs Per Plan column that we talked
22 about.

23 MR. DICKINSON: Yes, I see that.

24 MR. SHOPE: Okay. And this one shows that the needs
25 per plan grow from -- in 2018 from 182.1 terawatt hours in 2018

1 to, in 2026, 191.6. Do you see that?

2 MR. DICKINSON: I see that, yes.

3 MR. SHOPE: Okay. So that's a load growth of 9.5
4 terawatt hours in that period, correct?

5 MR. DICKINSON: Between 2018 and 2026?

6 MR. SHOPE: Yes.

7 MR. DICKINSON: Yes.

8 MR. SHOPE: Okay. But the load growth that you had
9 assumed using the plan from the prior year, November 1 of 2016,
10 that was projecting a load growth for the same period of only
11 6.2 terawatt hours, correct?

12 MR. DICKINSON: That's correct, the difference
13 between the 0.4 percent load growth that I assumed and the 0.5
14 percent load growth that was in this analysis.

15 MR. SHOPE: So that's a -- so the difference between
16 those two as of 2026 would be 3.2 terawatt hours of additional
17 consumption being projected by Hydro-Quebec domestically.

18 MR. DICKINSON: Could you repeat that again?

19 MR. SHOPE: Sure. In other words, the difference in
20 the load growth projection as of 2026 is 3.3 terawatt hours,
21 right?

22 MR. DICKINSON: So in 2026, the delta between my
23 analysis and what would be here would be the difference between
24 191.6 and 189. So essentially 2.6 terawatt hours, but if you
25 accumulate that over that period of time, I think that number

1 sounds right.

2 MR. SHOPE: So -- well, just so I'm clear -- but the
3 updated plan had a slightly lower starting point, right?

4 MR. DICKINSON: That's right, yeah. The 2018 number
5 was 182.1 versus 182.8.

6 MR. SHOPE: So the -- but we're talking about at
7 least two or three -- depending on which way you slice it, it's
8 -- we're talking about two or three or more terawatt hours of
9 difference of load growth being projected as between the 2017
10 plan and the 2016 plan.

11 MR. DICKINSON: That's correct.

12 MR. SHOPE: Yeah, okay. And so in relation to NECEC,
13 that would wipe out about a third of the NECEC terawatt hours,
14 right?

15 MR. DICKINSON: Explain that to me?

16 MR. SHOPE: So in the NECEC terawatt hours are 9.5
17 terawatt hours per year over a number of years, right?

18 MR. DICKINSON: 9.4 terawatt hours per year, yeah.

19 MR. SHOPE: Yeah. And your analysis, based on, among
20 other things, the domestic load growth projections in Quebec
21 found that all 9.45 terawatt hours for NECEC would be, in your
22 words, incremental.

23 MR. DICKINSON: Correct.

24 MR. SHOPE: Yeah, okay. But if we say that Quebec
25 needs somewhere, you know, two and a half, three and a half

1 more terawatt hours domestically than you projected because you
2 used the older projection, that means that there's that much
3 less available for NECEC, right?

4 MR. DICKINSON: Well, so if we put into the model a
5 higher level of load forecast, what would happen -- if you go
6 to the HQ Energy Available in Storage, the graph that shows the
7 minimum level of storage and then the maximum level of storage,
8 what I show is that by 2020, you hit the maximum level of
9 storage where actually spilling of energy is going to be
10 required. We obviously know now that that spilling is
11 occurring earlier than I had projected. So by increasing the
12 load, you're going to reduce the amount of spilling, but I --
13 my guess would be that if you actually solved this for that
14 higher level, you would end up with a very similar case.

15 MR. SHOPE: I see. So basically, using the more
16 current load growth projection actually reduces what you
17 perceive as a spillage problem.

18 MR. DICKINSON: It would -- from the forecast I have
19 here, which was based at my understanding of the potential of
20 spilling at that point in time, then the amount of spilling
21 that I'm showing here would be reduced as a result of a higher
22 load forecast, yes.

23 MR. SHOPE: Now -- and you're assuming -- part of --
24 or one of the drivers of your assumption of spilling is that
25 you're using as the baseline the 30.5 terawatt hours which was

1 the average of the five prior years of exports. Is that
2 correct?

3 MR. DICKINSON: My assumption was that prior to NECEC
4 and the purpose for my calculation of the baseline, again,
5 going back to the dialogue that was happening at the time and
6 some of the questions that we'd received from environmental
7 NGOs, was that Hydro-Quebec was not going to be able to deliver
8 on their historical level of exports. They were going to have
9 to reduce those historical level of exports in order to meet
10 NECEC's demands. So we wanted to, in good faith, demonstrate
11 that -- whether that was true or not. And by holding those
12 historical level of exports, we were able to demonstrate that
13 Hydro-Quebec could keep their historical level of exports
14 without -- and add NECEC without having to withdraw energy from
15 other markets. They had enough incremental generation coming
16 online and they had enough water in storage.

17 MR. SHOPE: We went through, at the technical
18 conference, a lot of the storage issues, and so I don't want to
19 revisit all of that since that's, you know, in the record and
20 obviously the Commissioners will be able to consider the
21 correctness or not of your analysis at that time. But you have
22 raised spillage, and -- well, actually, let me back up. So as
23 I understand your previous testimony, the NECEC project is
24 going to be served entirely by existing facilities. Is that
25 correct?

1 MR. DICKINSON: I think that's the --

2 MR. STINNEFORD: Yeah, it's existing generation or
3 additions to that existing generation is, I believe, how it's
4 worded.

5 MR. SHOPE: Okay, but I'm looking at -- so my
6 understanding is that the power -- that no new facilities are
7 being built in order to serve the Massachusetts utilities
8 across NECEC. Is that your understanding?

9 MR. STINNEFORD: Yeah, the PPAs with the
10 Massachusetts EDCs include a list of eligible specific
11 resources which can provide energy under the PPAs, and
12 deliveries -- production and deliveries will have to be tracked
13 through a GIS-like mechanism to verify that. But that doesn't
14 mean that other capacity additions that are made on the HQ
15 system won't occur or won't increase their capability to
16 produce exports.

17 MR. SHOPE: So, well, let's just break that down.
18 The power purchase agreements that the Massachusetts utilities
19 have made with Hydro-Quebec specify that the power that will be
20 provided across NECEC to the Massachusetts utilities will come
21 from a specified group of plants, all of which are now
22 existing. Is that true or isn't it?

23 MR. STINNEFORD: I believe that's true, but, you
24 know, that would also include upgrades to the capacities of
25 those existing resources as well.

1 MR. SHOPE: Okay, so Hydro-Quebec may have to spend
2 additional funds to upgrade its facilities in order to serve
3 the Massachusetts contracts.

4 MR. STINNEFORD: That's not what I said.

5 MR. SHOPE: Okay, so explain to me what the
6 difference is between saying it's going to be served by an
7 upgrade facility or it isn't going to be served by an upgraded
8 facility.

9 MR. STINNEFORD: Hydro-Quebec has a portfolio of
10 generating resources. They have identified in the PPAs a set
11 of those resources that are eligible to provide deliveries
12 under the PPAs. That includes both the existing capacity of
13 those resources as well as any expansions to those resources'
14 capacity in the future. In addition to that, Hydro-Quebec may
15 add additional resources to its portfolio of generating
16 resources that would expand its ability to produce energy and
17 produce exports.

18 MR. SHOPE: Okay. Now, so as I understand your --
19 well, let me ask you this, Mr. Dickinson, since you raised the
20 point of spillage. Is it your position that Hydro-Quebec is
21 going to be building additional upgrades?

22 MR. DICKINSON: Yeah, there's Romaine 4 that'll be
23 added in 2020, 245 megawatts, and then a variety of efficiency
24 improvements that increase generation capacity without
25 increasing reservoir sizes that they've estimated at about 500

1 megawatts for 2025.

2 MR. SHOPE: So these efficiency upgrades, can you
3 just briefly, for the record, just explain what kind --

4 MR. DICKINSON: My understanding is it's --

5 MR. SHOPE: -- practical matter what kind of stuff is
6 that, you know, and --

7 MR. DICKINSON: My understanding is that the
8 reservoir sizes won't change, but they're improving the turbine
9 technologies to be able to extract more power from the water
10 that's flowing through the dam.

11 MR. SHOPE: Okay. And are those upgrades the kind --
12 do they have the lead times that the big dams have?

13 MR. DICKINSON: I would -- I don't have knowledge of
14 it, but it makes sense to me that that lead time would be less
15 because the -- one of the challenges in siting, I would assume,
16 would be the reservoir impact. And if you're not impacting the
17 reservoirs, I would assume the siting would be simpler.

18 MR. SHOPE: Okay. In other words, they have an
19 existing dam, they're just going to have to shut down one of
20 the turbines, either remove it and replace it or in some way
21 gussy it up, if you will, and then set it spinning again?

22 MR. DICKINSON: Yeah, I mean, I don't know all the
23 steps that go into planning, certifying, approvals,
24 construction, and engineering, but in a general sense, yes.

25 MR. STINNEFORD: I would say, you know, typically

1 those types of upgrades are trying to coordinate during
2 regularly-scheduled maintenance periods so there'd be no lost
3 generation.

4 MR. SHOPE: Okay, so now as I understand it, your
5 understanding is that right now, Hydro-Quebec is spilling water
6 because it has insufficient export transmission capability. Is
7 that correct?

8 MR. DICKINSON: Well, I would describe it a little
9 bit different. They clearly have stated that, with this
10 transmission line, they would be able to avoid, in 2018, an
11 amount of spilled energy equivalent to the NECEC line. But the
12 inability for them to deliver energy has -- is a combination in
13 certain markets to transmission capability, as it is in New
14 England, but then to the larger market, it's also their
15 inability to make sales at a margin above zero. Otherwise,
16 they would be -- putting water through the turbines that would
17 result in a sale that's a loss. And so instead of doing that,
18 they're spilling water.

19 MR. SHOPE: Okay. But in other words, at least, in
20 part in your view, Hydro-Quebec is spilling water even though
21 it has enough generation capacity, but it can't get the
22 electricity that it could generate to market in the United
23 States.

24 MR. DICKINSON: Well, it can't get it to market in a
25 profitable sale throughout the northeast.

1 MR. SHOPE: Yeah, okay. Now if Hydro-Quebec can't
2 get the power to market because it has insufficient export
3 transmission capability and, as a result, it's spilling water,
4 why would it build more generation?

5 MR. DICKINSON: Well, again, the -- your question --
6 I just want to make sure that the question is stated correct so
7 I'm not confusing the record. The -- my point is not that it
8 doesn't -- there isn't transmission capability to certain
9 markets. I think yesterday we talked about we do think there
10 is transmission capability to certain markets, not to New
11 England. But the challenge is that the cost for them to get
12 that power to other markets and make an energy sale would
13 result in a loss. So, again, just to make sure your question
14 is right, it's not there isn't transmission capability. It's
15 that they can't make those sales at a loss. So they're faced
16 with a decision: do we run this water through the turbine and
17 sell it at a loss or let the water spill over and have that.
18 So the --

19 MR. SHOPE: Okay, let me just back up and focus on my
20 question which is, okay, if right now their two choices are, in
21 your hypothesis, either sell the water at what you call a loss
22 -- sell the energy at what you call a loss through some export
23 transmission arrangement or spill the water, and those are the
24 choices that they have, why would they build more generation?
25 More generation doesn't solve the problem of getting the energy

1 to market in the United States, does it?

2 MR. STINNEFORD: I think the decisions to add
3 capacity, generating capacity, are long lead time decisions.
4 Hydro-Quebec obviously made some of these decisions years ago,
5 and they have been attempting for over a decade to build a new
6 interconnection to accommodate additional exports. So the
7 delays that have been -- have resulted in getting those
8 additional transmission facilities built have resulted, to some
9 extent, in the spillage.

10 MR. SHOPE: So as I understand it, your view is that
11 Hydro-Quebec began building Romaine 3 and planned for Romaine 4
12 in the expectation that at least some of the energy was going
13 to be used for export to the United States.

14 MR. DICKINSON: Yeah, I think -- that's correct.

15 MR. SHOPE: Okay. And -- but -- and when they did
16 that, they had to hope that the necessary transmission was
17 going to be built on the U.S. side of the border.

18 MR. STINNEFORD: Yeah, I wouldn't --

19 MR. SHOPE: Could you -- do you agree with that?

20 MR. STINNEFORD: I'm not sure I would agree with
21 Thorn's agreement earlier. It's not necessarily exports to the
22 U.S. but exports in aggregate to cost-effective markets.
23 Clearly they would like that to be the U.S. That is the
24 highest-priced market to which they can export, but --

25 MR. SHOPE: Okay, so your view is --

1 MR. TANNENBAUM: John, excuse me, Commissioner
2 Williamson has a follow up.

3 MR. SHOPE: Sure.

4 MR. WILLIAMSON: Excuse me, I'd like to ask a
5 question of the panel. To what extent could Hydro-Quebec be
6 adding reservoir capacity and upgrading turbines in
7 anticipation of expiration of the arrangement with Churchill
8 Falls? I think that's 4,600 megawatts or something at
9 Churchill Falls that expires in 2042.

10 MR. STINNEFORD: Yeah, I'm sure that's a
11 consideration in their long-term planning.

12 MR. WILLIAMSON: Okay, the second thing is on
13 spillage, to what extent might the addition of renewables,
14 particularly wind and solar in Quebec -- I noticed in one of
15 these reports it's mentioned that they're uncertain about the
16 contribution, but it could be -- I think I saw one terawatt
17 hour or a little bit more. To what extent could that spillage
18 -- because there is -- be occurring because there is policy
19 initiatives that are encouraging the development of wind and
20 solar instead? In other words, they have to buy it as a
21 prevential statement.

22 MR. DICKINSON: That's right.

23 MR. WILLIAMSON: -- they don't need the water.

24 MR. DICKINSON: That's right, that's right. The --
25 any generation added or any existing generation within the

1 control area of Quebec, whether it's some that's been added
2 over the last few years or new generation that would be added,
3 would only make the situation of additional spilling a larger
4 challenge.

5 MR. WILLIAMSON: Thank you.

6 MR. SHOPE: So -- oh.

7 MR. WILLIAMSON: Go ahead.

8 MR. SHOPE: Oh, sure.

9 MR. WILLIAMSON: Thank you.

10 MR. SHOPE: Thank you. So -- but just getting back
11 to my question -- and this is speaking to you, Mr. Dickinson,
12 because you are the one who prepared the rebuttal testimony on
13 this point. My recollection of your rebuttal testimony is that
14 you testified that Hydro-Quebec had been building in
15 anticipation of export to the northeastern United States, at
16 least in part. Are you withdrawing that testimony?

17 MR. DICKINSON: Yeah, I do. I think Eric's
18 refinement of my answer is a better one, which is obviously
19 they're looking at every market, and the northeast is obviously
20 one of the important ones that's there.

21 MR. SHOPE: Okay, so your view is that Hydro-Quebec
22 began planning for, permitting, and building Romaine 3 and 4 in
23 anticipation of export to northeastern United States, New
24 Brunswick, Ontario, potential PJM even, Midwest ISO, all of
25 these markets.

1 MR. DICKINSON: So, yeah, I mean, if you look at the
2 historical data around their construction and look at their
3 public statements that they've made as far back as 2003,
4 they've added 5,000 megawatts. One of the key aspects of that
5 they discussed in doing that was building a new clean energy
6 for a future that valued that clean energy.

7 MR. SHOPE: Okay, so --

8 MR. DICKINSON: And then if you move forward, even
9 since 2014 when Romaine 2, Romaine 1, Romaine 3 came -- or --
10 came online, they've, since 2014, added 1,304 megawatts of
11 capacity.

12 MR. SHOPE: Now in planning these dams, they have to
13 determine how big the dams will be, right?

14 MR. DICKINSON: Yes.

15 MR. SHOPE: Okay. And the size of the reservoir is
16 actually -- can be controversial. Is that -- up in Canada as
17 far as --

18 MR. DICKINSON: Yeah, my understanding that the
19 reservoir and the impacts of that are an important part of
20 their permitting.

21 MR. SHOPE: Yeah. And so in determining the sizing
22 of these dams to the extent Hydro-Quebec was considering export
23 markets, it would size the dam bigger to the extent that it was
24 hoping to export as opposed to simply sizing it for Quebec
25 native load.

1 MR. DICKINSON: Yeah, I think their decisions on the
2 size of the generation will be based on a forward-looking
3 strategic view of all the different reasons why they might
4 build hydro.

5 MR. SHOPE: Okay. Now -- and so just to be clear,
6 it's your understanding that they sized the dams bigger in
7 order to serve the export market as well as the native load
8 based on the hope or the expectation or the speculation that
9 sufficient transmission would be built to get that power to the
10 external markets.

11 MR. DICKINSON: I think the export sales has been a
12 consistent, important strategic initiative for them and would
13 have been considered in the size of the generation.

14 MR. SHOPE: Yeah. And for them to -- but in light of
15 the fact that export transmission would be needed, they had, to
16 some degree, speculate that that export transmission would be
17 built. Is that true?

18 MR. DICKINSON: That's right. So they -- as an
19 example, I think Northern Pass was originally being discussed
20 in 2008. And they had to make a decision, if we're going to
21 serve that, what kind of generation might we want to build in
22 order to make sure, going back even further before that. And
23 so when you consider the -- as Eric said, the expectation that
24 some of that transmission might get built and when it would be
25 built, they wanted to make sure there was generation available

1 to serve it.

2 MR. SHOPE: Now, with regard to spilling, I think you
3 said earlier that Hydro-Quebec right now is spilling the amount
4 of energy that would be -- it's spilling the amount of energy
5 at least that would be provided across NECEC due to the fact
6 that it doesn't have insufficient -- it doesn't have sufficient
7 export transmission. Did I hear that right?

8 MR. DICKINSON: Well, just to be clear, what -- I
9 never said what their total amount of energy they're spilling.
10 I understand that on a normal operation of a hydro portfolio,
11 you're always going to have spilling of water for operational,
12 local agreements, water levels. So what I'm talking -- so
13 imagine that as a base level that exists over the last 20 years
14 of normal spilling from an operations perspective. What I'm
15 talking about is the spilling that began in 2017 and
16 accelerated in 2018 related to -- not to operational issues,
17 but specifically to their inability to get the power out of
18 Quebec on an economic basis to make export sales.

19 MR. SHOPE: Okay, and is your information on that the
20 letter of December 14, 2018 from Simon Bergervin at Hydro-
21 Quebec to you?

22 MR. DICKINSON: Well, so there's that piece of
23 information. There's conversations that we had with the
24 Portland Press Herald, with members of Hydro-Quebec. Hydro-
25 Quebec also met with the Boston Globe. They also -- based on

1 the CEO's comments that he's made related to his public
2 announcements associated with the spilling of this economic --
3 the water that can't get out of Quebec as a result of economic
4 ability. But yes, the 10.4 terawatt hours of water that was
5 spilled year to date is about equivalent to water that could
6 have been run through the turbines and delivered on this
7 project if that project was in service now.

8 MR. SHOPE: Okay, so if we -- you mentioned the 10.4
9 terawatt hours. That's a reference to -- that's a figure
10 that's referred in Mr. -- letter -- if we look at what's been
11 marked as Kelly 004-001, Attachment 1, which was the letter of
12 December 14, 2018 which was discussed yesterday as an exhibit
13 -- do you have that?

14 MR. DICKINSON: Yes.

15 MR. SHOPE: Okay. And so if we go down under the --
16 towards the bottom of the page, it's the paragraph that's one
17 up from the last paragraph, and it says, "In this category to
18 date, in 2018 Hydro-Quebec has spilled approximately 10.4
19 terawatt hours' worth of energy," right?

20 MR. DICKINSON: That's correct.

21 MR. SHOPE: Okay. And that would include the -- as
22 far as we know from this letter, that would include the
23 ordinary spillage that you were describing earlier, right?

24 MR. DICKINSON: No, no, absolutely not.

25 MR. SHOPE: Well, it doesn't say that, does it?

1 MR. DICKINSON: Well, it says Hydro-Quebec spilled,
2 due to a lack of economic transmission, 10.4 terawatt hours.

3 MR. SHOPE: No, I'm reading a sentence there and it
4 says, "In this category to date," which is the previous
5 category is water spilled, it says Hydro-Quebec has spilled
6 approximately 10.4 hour -- terawatt hours' worth of energy.
7 And then it says "Without additional transmission export
8 capability, the quantity of spilled water in future years is
9 expected to be comparable to the quantity of spilled water in
10 2018 under comparable market and operational conditions,"
11 right?

12 MR. DICKINSON: So "in this category" is referring to
13 the category of water that was spilled due to economic
14 transmission.

15 MR. SHOPE: But it doesn't say that, sir, does it?
16 Where does it say that?

17 MR. STINNEFORD: That was the question that was posed
18 and to which they are responding was how much was spilled due
19 to a lack of economic transmission.

20 MR. SHOPE: So that's your -- but that's your
21 inference.

22 MR. STINNEFORD: No, that was the question.

23 MR. SHOPE: No, the question -- okay, so the question
24 is regarding the existing hydro facilities that will provide
25 electricity for NEC (sic), have those dams spilled water

1 instead of generating electricity due to a lack of economic
2 transmission. If so, please provide the volume and then please
3 provide the reasons for that spillage. So the question itself
4 presumes that there will be multiple reasons other than
5 economic transmission deficiency, right?

6 MR. DICKINSON: Well, the way Hydro-Quebec answered
7 the question was interpreting that the volumes that we're
8 looking for are for economic transmission. If they were to put
9 in what the total amount of spillage is, I would guess that was
10 probably closer to 15 terawatt hours of energy that actually
11 was spilled.

12 MR. STINNEFORD: In fact, they have confirmed that in
13 conversations that we've had with them.

14 MR. SHOPE: Okay, now these -- when you -- you said
15 you brought people from Hydro-Quebec down to meet with the
16 Portland Press Herald?

17 MR. DICKINSON: Well, I don't know if I brought them.
18 We went together, yes.

19 MR. SHOPE: Okay. And did you ask any of those
20 Hydro-Quebec representatives whether they would be willing to
21 come and testify in these proceedings so we could ask these
22 questions?

23 MR. DICKINSON: I did not ask that question.

24 MR. SHOPE: Nothing further.

25 MR. TANNENBAUM: John, the second document -- I'm

1 sorry, the progress report document, is that --

2 MR. SHOPE: G 7, yes.

3 MR. TANNENBAUM: Okay. Next up is CLF.

4 MR. TURNER: Thanks, Mitch. At this time we don't
5 have any questions.

6 MR. TANNENBAUM: Public Advocate?

7 MR. BRYANT: Good morning. So while -- I have some
8 questions about an exhibit that's being distributed, but first,
9 while Liz is doing that, can you tell us what the status is of
10 ISO New England's system impact study for this project?

11 MR. WILLIAMSON: Can you speak into the mic?

12 MR. BRYANT: My question was what's the status of the
13 ISO New England system impact study for this project?

14 MR. STINNEFORD: It is underway. It has begun.

15 MR. BRYANT: Is it still CMP's expectation that that
16 project -- that that study will be completed next summer or
17 early next fall?

18 MR. STINNEFORD: Yes, I would say this coming fall,
19 yeah.

20 MR. BRYANT: Okay, thank you. So I distributed what
21 has been marked as OPA Exhibit 4. It has been filed in CMS,
22 and it's a letter from Mr. des Rosiers to Mr. Lanphear, and
23 I've copied the first two pages. The remaining pages of this
24 letter are not subject to my question and aren't pertinent to
25 what I want to know. And the reason that I identified Mr.

1 Stinneford for questioning is that he's referenced in this
2 letter beginning at the bottom of the first page and it's to
3 the top of the second. So, Mr. Stinneford, are you familiar
4 with this letter?

5 MR. STINNEFORD: Yes, I am.

6 MR. BRYANT: Did you review it before it was filed in
7 CMS?

8 MR. STINNEFORD: I did.

9 MR. BRYANT: Did you help to draft it?

10 MR. STINNEFORD: I may have helped to edit it, yes.

11 MR. BRYANT: So in this letter, Mr. des Rosiers says

12 --

13 MR. DES ROSIERS: The typos are mine.

14 MR. BRYANT: The typos belong to counsel, thank you.

15 In the letter, counsel says that, quote, "CMP commits that the
16 NECEC will be owned by an affiliated special-purpose entity
17 rather than CMP should the Commission prefer this structure."
18 And I would just ask you, Mr. Stinneford, if CMP commits to
19 what its counsel has put forth in this letter.

20 MR. STINNEFORD: Yes, we do.

21 MR. BRYANT: On the second page of the letter in the
22 large paragraph towards the top, it references that this
23 change, this creation of the affiliate and the transfer of the
24 project to the affiliate, will occur, quote, "before
25 construction." Can you help me understand what CMP means by

1 "before construction"?

2 MR. STINNEFORD: Well, it was our understanding that
3 some of the concerns that had been expressed by the Public
4 Advocate's office and by Commission staff related to the risks
5 that this project would impose on CMP and its ratepayers were
6 risks related to construction. So -- whether that's cost
7 overruns, permitting, whatever. So we felt that to address
8 those concerns, it would make sense to actually make the
9 transfer occur prior to the commencement of construction.

10 MR. BRYANT: How would you identify the commencement
11 of construction? The taking down of trees, the putting up of
12 poles, or something in between?

13 MR. STINNEFORD: It would certainly be a point in
14 time after all permits had been received. There is some
15 procurement activity that's already underway so you can't tie
16 it to procurement, but certainly clearing of corridors would
17 constitute an early stage of construction, yes.

18 MR. BRYANT: The CPCN that's been filed here includes
19 the HVDC line that's generated most of the questioning but also
20 includes some upgrades to existing transmission -- CMP's
21 existing transmission system. Does CMP propose to put all of
22 the projects that are within this CPCN into an affiliate or
23 only the HVDC line?

24 MR. STINNEFORD: Our thought on that would be it
25 would be most efficient to put the HVDC line and converter

1 station into the SPE, but the AC upgrades on CMP's existing
2 system we would propose to keep within CMP. The SPE would
3 still be financially responsible for all the costs associated
4 with those upgrades, but ownership, I think if we started to
5 parse ownership on a reconducted line, for example, gets very
6 complex.

7 MR. BRYANT: Do you agree that in order to accomplish
8 the transfer of the project to an affiliate that CMP would need
9 to initiate a separate docket and to have the affiliate issues
10 examined in that docket under pertinent statute and rule?

11 MR. STINNEFORD: Well, they certainly would need to
12 be addressed in accordance with pertinent statute and rule.
13 Whether that's done within this docket or a separate docket I
14 think is to be determined.

15 MR. BRYANT: But either way, the affiliate would need
16 to receive an approval from this Commission as an affiliate and
17 potentially even as a T&D utility under Maine law. Is that
18 correct?

19 MR. STINNEFORD: That's correct. As we've
20 identified, there'd be a number of transfers and affiliate
21 transactions that would need to occur, and those would require
22 Commission approval.

23 MR. BRYANT: Thank you, that's all I have.

24 MR. TANNENBAUM: I think this might be a good time to
25 take a break. So we'll come back in 15 minutes.

1 CONFERENCE RECESSED (January 9, 2019, 10:27 a.m.)

2 CONFERENCE RESUMED (January 9, 2019, 10:45 a.m.)

3 MR. TANNENBAUM: Okay, let's go back on the record.

4 So the generator interveners have passed out a document, an ISO
5 New England document, titled Interim Compensation Treatment.

6 MR. SHOPE: Yes.

7 MR. TANNENBAUM: And you would like to put that into
8 the record as an exhibit?

9 MR. SHOPE: Yes, which I guess would be GINT 28 if so
10 accepted.

11 MR. TANNENBAUM: Okay, any objection? Or do you want
12 to think about it and -- I realize this is --

13 MR. DES ROSIERS: If I may respond after the lunch
14 break because we -- I haven't looked at it at all. I mean, I
15 assume it's -- because it's an ISO report, we'll have no
16 objection, but since I haven't looked at it, I don't want to
17 say that blindly.

18 MR. TANNENBAUM: Okay, fair enough.

19 MR. SHOPE: And in particular, just if it helps
20 anybody, we're going to be focusing -- or the reason that we'd
21 be introducing it would be slide 20 where ISO indicates that
22 imports would not be eligible for compensation under the -- a
23 fuel security program.

24 MR. TANNENBAUM: All right. We have -- we'll go back
25 to the questioning of the witnesses. I think we do have some

1 follow-up questions from the OPA so we'll do that now. So
2 CMP's initial proposal in this case was to house the NECEC
3 project within CMP?

4 MR. STINNEFORD: That's correct.

5 MR. TANNENBAUM: And in making that proposal or
6 making that decision, can you -- and maybe this is a question
7 for Thorn. Can you tell me who was involved at CMP in the
8 discussions regarding this issue?

9 MR. DICKINSON: In my memory, I was involved. There
10 was counsel, internal counsel, involved. Pierce Atwood was
11 involved and other executives, including at the head of
12 Avangrid Networks, I believe the president of CMP.

13 MR. TANNENBAUM: Okay, and their names? The names?

14 MR. DICKINSON: Sarah Burns, Bob Kump, Scott Mahoney,
15 myself --

16 MR. TANNENBAUM: Eric, were you involved?

17 MR. STINNEFORD: No, not directly in those
18 discussions. I was on temporary leave at that point in time.

19 MR. TANNENBAUM: Okay. Bernardo, were you involved
20 in those discussions?

21 MR. ESCUDERO: I do not recall. I mean -- no, I do
22 not recall.

23 MR. TANNENBAUM: Okay. You want to clarify
24 (indiscernible)?

25 MS. HUNTINGTON: Well, I'm going to ask some

1 questions about documents that were provided as an attachment
2 to an October 9th, 2018 filing by CMP. And it -- I'm not sure
3 that the witnesses need to have the documents in front of them,
4 but I'll look to Jared and Sarah to see whether you would like
5 them to. It's the -- just so you know what I'm referring to,
6 it's the redacted versions of the emails and the privileged
7 document.

8 MR. TANNENBAUM: I think it's just -- what you want
9 to do is confirm from those documents who were involved the
10 discussions. So just --

11 MS. HUNTINGTON: Okay, so I'm looking at the emails
12 and the persons that were included on the emails, and I see
13 consistently that Mr. Dickinson and Mr. Escudero were on the
14 emails. Does that refresh your recollection?

15 MR. ESCUDERO: Yeah, I'm sure I was -- well, I'm not
16 sure, but I believe it's possible that I was copied in emails
17 and probably copied on those meeting invites. What I don't
18 recall is attending those meeting invites -- I mean those
19 meetings, sorry.

20 MS. HUNTINGTON: Do you recall, Thorn, being involved
21 in the emails and attending meetings on this topic?

22 MR. DICKINSON: Yeah, definitely. I mean -- and this
23 is something we've talked about in prior testimony. We had, at
24 this period of time, a great deal of things going on at the
25 same time. So my memory is similar to Bernardo's. I do not

1 remember him being in those discussions so --

2 MS. HUNTINGTON: There's a Mr. Coon referenced on
3 some of the emails. Could you tell us who he is and what his
4 responsibility is at either CMP or Avangrid?

5 MR. STINNEFORD: He is treasurer for Avangrid
6 Networks.

7 MS. HUNTINGTON: Okay. And there's a Cathy McCarthy,
8 Urban Blake (sic), and Anne O'Hanlon included on several of the
9 emails. Could you tell us who those folks are?

10 MR. STINNEFORD: Ms. McCarthy and Mr. Blake are
11 attorneys at Bracewell, our Washington FERC counsel. Anne
12 O'Hanlon is the administrative assistant to Mr. des Rosiers.

13 MS. HUNTINGTON: And there's Paul Dumais referenced
14 on several of the emails and apparently involved in drafting or
15 providing comment on the document. Who was Mr. Dumais and what
16 was his position and his area of expertise?

17 MR. STINNEFORD: Mr. Dumais was director of
18 regulatory with an emphasis on transmission-related issues at
19 the time that this was drafted. He's since retired.

20 MS. HUNTINGTON: Was his -- was it transmission
21 ratemaking issues or transmission development issues or both?

22 MR. STINNEFORD: Primarily ratemaking issues.

23 MS. HUNTINGTON: Okay. And who was -- who is Jeffrey
24 Seabrick (phonetic)?

25 MR. STINNEFORD: Jeffrey Seabrick is an analyst who

1 works for Paul Dumais -- or did work for Paul Dumais at the
2 time.

3 MR. TANNENBAUM: So Thorn, we -- well, we'll take a
4 step back. Eric did answer questions during a tech conference
5 and in a data request regarding the reasons why CMP chose to
6 propose to put the project in CMP as opposed to an affiliate.
7 Can you tell me what your understanding of the reasons why that
8 decision was made?

9 MR. DICKINSON: Yeah, I think they were similar to
10 Eric's perspective. You know, I think that in our view the
11 project could be managed within CMP. We could manage it within
12 a place that didn't provide adverse risks. The costs of the
13 project would be separated out and made separate. So, you
14 know, we didn't see -- at least my own perspective, I didn't
15 see any benefits associated with creating a separate SPE.

16 MR. TANNENBAUM: Were there any other criteria or
17 issues discussed other than the ones raised by Mr. Stinneford?

18 MR. DICKINSON: I mean, I think --

19 MR. DES ROSIERS: If I may, just positing that the
20 content of the discussions that occurred in the presence of
21 counsel, both from Pierce Atwood and from Bracewell, you can
22 identify the topics, but at this point, don't disclose any of
23 the discussion because, as we have previously objected and as
24 has been found, the contents of the communication, there is a
25 privilege here, and I'm -- but I just want to walk the fine

1 line through the discussion.

2 MR. TANNENBAUM: I'm not asking about what --
3 questions about the document. I'm asking Thorn what CMP's
4 reasons were for proposing that it be put into a -- or stay
5 into CMP. And so far, the response from Eric is that you had
6 expertise within CMP --

7 MS. HUNTINGTON: And they own the land.

8 MR. TANNENBAUM: And that you own the land. Is there
9 anything else?

10 MR. DICKINSON: So the -- I think the other filter
11 that I was always looking at throughout this whole bid was
12 preventing -- presenting a project that was as competitive as
13 it could be, and that includes not only price and cost and our
14 ability to manage the project, to own the right-of-way, but
15 also our ability to execute and follow through. And I think
16 the -- another factor would be that having it at CMP was a
17 simpler approval process. We wouldn't have to have this other
18 step associated with creating an SPE. So I think that's the --
19 that topic would be an additional one that would have played --

20 MR. TANNENBAUM: In the approval process here or in
21 Massachusetts?

22 MR. DICKINSON: Well, I think just even structurally
23 within our own organization. You know, the approval process
24 here. I think we're always concerned, you know, that we knew
25 that there were projects that had been ongoing for eight, nine

1 years that were well staffed and ready to pick up anything that
2 we did in our bid. So we tried to minimize any uncertainty and
3 risk that was in our project that somebody could pick apart.

4 MR. TANNENBAUM: Was there a consideration that
5 Massachusetts may look at the bid more favorably if it was
6 housed in CMP as opposed to an affiliate?

7 MR. DICKINSON: I don't think from a -- you know, if
8 they were comparing two bids, one that had it as a separate SPE
9 and one at CMP and those existed, I don't think they would see
10 any difference associated with that. But I think that any
11 additional approval, requirement, regulatory process that might
12 have to exist, I could imagine might be looked at as another
13 risk.

14 MR. TANNENBAUM: Were there any ratemaking
15 considerations?

16 MR. DICKINSON: I don't believe that we saw any
17 differences between ratemaking between the two structures.
18 They would have -- my memory is they would have been identical.

19 MR. TANNENBAUM: Bernardo, are you aware of any of
20 the reasons why CMP chose to house this in CMP?

21 MR. ESCUDERO: No, I am not.

22 MR. STINNEFORD: If I could, Mitch, I mean, my
23 testimony will speak for itself, but I believe I did raise a
24 number of other issues, other than the two that you've noted,
25 in my testimony.

1 MR. TANNENBAUM: Okay. Now --

2 MS. HUNTINGTON: Can I follow up with a ratemaking
3 question? Were there -- was there consideration of the
4 treatment of the property that was acquired for this project
5 with respect to the period of time between when the property
6 was purchased and when it was transferred to what we're
7 referring to as the NECEC tariff within CMP or the ratemaking
8 treatment of the property if the project didn't succeed in the
9 Massachusetts RFP? Was that a consideration?

10 MR. DICKINSON: You know, I don't think that was a
11 consideration associated with the decision. You know, I think
12 that, you know, obviously we've had a lot of discussions around
13 this up until this point. My view, from the guidance I got
14 from external counsel, was that those right-of-ways did -- were
15 applicable to be recovered in rate base and -- or to return on.
16 So at that point when I made that decision, I wouldn't -- I
17 would have thought that if there was an SPE, that they would
18 have been transferred or some mechanism would have been in
19 place at that point to pull them out of rate base. So it
20 wouldn't have played into the decision in my mind.

21 MS. HUNTINGTON: But what -- I was focusing on the
22 period between when the property was purchased and the point in
23 time it was transferred to an SPE. Was that -- or in the event
24 the project didn't go forward. Was that not a consideration,
25 that in those periods of time and under those circumstances,

1 the land would remain in CMP rate base and be recovered by --
2 through CMP ratepayers or through the regional tariff?

3 MR. DICKINSON: My understanding based on the
4 guidance I had from legal counsel was that we would be able to
5 continue to earn a return on those right-of-ways up until the
6 time that it would be -- become part of a project later on.
7 And maybe just a little bit more on that. My understanding of
8 the FERC guidelines on that was if there was some opportunity
9 for a useful opportunity related to that right-of-way to the
10 future, then that's something that has that opportunity to
11 return, and that's what my understanding was based on.

12 MR. TANNENBAUM: So would it be correct that
13 ratepayers will continue to pay for that land until it's
14 transferred to a special-purpose entity?

15 MR. DICKINSON: Well, that was my understanding at
16 that time. That's what I'm referencing in the decision. So as
17 a -- because that was my understanding, in my mind it didn't
18 matter. The property wouldn't matter as it related to
19 transferring it to an SPE because you would transfer it from a
20 period of time when you're earning a return to a period of time
21 when it has a cash flow associated with a transmission service
22 agreement. Again, that was my understanding at that time.

23 MR. STINNEFORD: And I would just say, prospectively,
24 if the project does not go forward, that land will only stay in
25 Account 105 and be considered part of rate base as long as we

1 have a definitive plan for its use. If we no longer have a
2 plan for its use, it comes out.

3 MR. TANNENBAUM: So if you transfer it to an SPE and
4 then the project does not go forward, what happens then?

5 MR. STINNEFORD: Well, it would sit on the books of
6 the SPE as long as the SPE continues to exist, but it would not
7 be in rate base.

8 MR. TANNENBAUM: It would not be in rate base.

9 MR. STINNEFORD: That's right.

10 MR. TANNENBAUM: And it would not go back into rate
11 base unless the SPE has a specific project.

12 MR. STINNEFORD: Well, the SPE would have to have a
13 tariff in which to recover the costs. If it has no project, it
14 has no tariff.

15 MR. TANNENBAUM: Is there a reason to wait until
16 construction begins to transfer the property?

17 MR. STINNEFORD: Our -- as we've expressed perhaps in
18 confidential settlement discussions, but in terms of timing of
19 a transfer, we think it would make sense to wait until permits
20 are secured and then make the transfer because it's much easier
21 to transfer permits once issued than to disrupt the middle of a
22 permitting process by changing the entity. But we think it
23 could be done between that window of time once permits are
24 received but prior to the commencement of construction.

25 MR. TANNENBAUM: So there is a time period between --

1 obviously between the -- getting all the permits and starting
2 construction, and what you're saying is you would put it into
3 the SPE after all the permits are --

4 MR. STINNEFORD: That would be our suggestion. As
5 quickly as possible because we obviously don't want to delay
6 construction, but that would be the window in which we think it
7 makes sense to do it.

8 MR. TANNENBAUM: And meanwhile, this land for future
9 use has been in CMP's rate base and it has been paid for by
10 ratepayers?

11 MR. STINNEFORD: Yes, it is in rate base and we are
12 earning a return on it currently.

13 MR. TANNENBAUM: And that's throughout New England,
14 that's a socialized --

15 MR. STINNEFORD: Land is allocated in rate base based
16 on the so-called PTF/non-PTF allocator. So it's roughly 80/20.

17 MR. TANNENBAUM: Eighty PTF?

18 MR. STINNEFORD: Yes.

19 MR. TANNENBAUM: So if this project goes through,
20 then the ratepayers will have paid a certain amount of money on
21 this land that is now going into CMP's NECEC project.

22 MR. STINNEFORD: Yes.

23 MR. TANNENBAUM: Does CMP have any plans to reimburse
24 customers for that amount of money?

25 MR. STINNEFORD: I'll take my advice from counsel

1 when we're infringing on confidential settlement discussions.
2 That is certainly an issue that has been discussed in
3 settlement.

4 MR. TANNENBAUM: When CMP was -- and maybe this is
5 for Thorn. When CMP was deciding to propose that the project
6 remain with CMP, did the issue of a goodwill payment come up?

7 MR. DICKINSON: No, it didn't, my memory.

8 MR. TANNENBAUM: Eric?

9 MR. STINNEFORD: No, not that I'm aware of.

10 MR. TANNENBAUM: Bernardo?

11 MR. ESCUDERO: I am not aware.

12 MR. TANNENBAUM: I realize this is -- well, I'll ask
13 the question. In making your proposal today or when you filed
14 the letter to house this in an SPE, did CMP consider a goodwill
15 payment under Chapter 820 of the Commission rules or something
16 like a goodwill payment in effect?

17 MR. STINNEFORD: No. This is -- as we've discussed
18 in the context of Chapter 820, we don't view this as a non-core
19 activity which would invoke that requirement.

20 MR. TANNENBAUM: So assuming this doesn't settle and
21 it goes to the Commission, what we have before us is a proposal
22 that -- what I would assume is an amended proposal to house the
23 project in an SPE along with the conditions you indicated in
24 that letter regarding approval of affiliate transactions,
25 participating in money pool arrangements, credit facilities,

1 and that sort of thing. That's -- what's in this letter is
2 essentially an amended proposal?

3 MR. STINNEFORD: It's expressing our willingness to
4 adopt this type of structure with these types of conditions if
5 the Commission determines that that's in the best interest of
6 customers.

7 MR. TANNENBAUM: And if the Commission determines
8 it's in the best interest of customers, the Commission would
9 then rule on whether a goodwill payment is required under the
10 rule?

11 MR. STINNEFORD: I guess that's a question for
12 counsel, but, again, we would dispute that this is a non-core
13 activity that would invoke a Chapter 820 requirement and the
14 payment of a goodwill payment.

15 MS. HUNTINGTON: I think we may have addressed this
16 at one of the technical conferences, but I just wanted to get
17 clarity on the ratemaking treatment or the accounting treatment
18 of the ongoing expenses such as participating in this
19 proceeding or the Massachusetts RFP, as well as engineering and
20 permitting types of activities. How are those being accounted
21 for?

22 MR. STINNEFORD: All of those costs are accumulated,
23 have been accumulated for -- since we initiated the project in
24 accounts that are booked to a preliminary survey and
25 engineering account under FERC accounting rules which means

1 that they are effectively deferred. They're not recovered
2 under our tariff. And once a project is permitted and proceeds
3 to construction, then they are transferred out of that
4 preliminary survey account and actually into the specific FERC
5 plant accounts and expense accounts that would then become part
6 of the capitalized project. So that would include internal
7 labor costs, including our time here today, engineering
8 expenses, study expenses, consultant fees. All of that is
9 being booked into these preliminary survey accounts.

10 MS. COOK: Eric, those accounts, you said the
11 expenses are essentially deferred. Are they deferred with
12 carrying costs in any form?

13 MR. STINNEFORD: No. No.

14 MS. HUNTINGTON: I wanted to go back to the -- to
15 follow up on Mitch's questions again just to make sure we're
16 clear on the witnesses' testimony with respect to the issues
17 that were considered with respect to the decision to house the
18 project in CMP. And I'll articulate what I've heard from the
19 witnesses so far, and if you want to supplement it, please do.
20 So the way you've -- previously Eric has noted that for -- in
21 support of this, that the property is owned by CMP. CMP has a
22 proven track record in developing transmission projects. The
23 employees are within CMP and the arrangements related to
24 sharing employees in affiliate transactions would create an
25 administrative step. And I think Mr. Dickinson referred to the

1 advantage of -- in terms of the process of competing in the RFP
2 as well as with respect to permitting that keeping it in CMP
3 would simplify those processes or make you more competitive.

4 Is that --

5 MR. DICKINSON: Yeah, again, I just think it's a --
6 any time you add an additional requirement in an RFP, you take
7 a risk that that additional requirement is viewed by somebody
8 as a negative aspect to your bid.

9 MS. HUNTINGTON: Okay.

10 MR. STINNEFORD: If I could, Faith, the other issue,
11 and it's related to how you summarized my concerns, but the
12 other concern we expressed was by having to comply with
13 affiliate requirements between the SPE and CMP, we didn't want
14 to see barriers that would create inefficiencies in the
15 execution of the project or that would be detrimental to CMP's
16 core interests by restricting information, systems, employees'
17 time, and things like that.

18 MS. HUNTINGTON: Okay. And again, I understand that
19 I'm not allowed to ask about the content of the privileged
20 document, but I'm puzzled by the disconnect between your
21 testimony that you didn't -- that the fact that there'd be
22 perhaps more favorable ratemaking treatment with respect to
23 things like the property that could ride on CMP ratepayers was
24 not a factor, given the involvement of Mr. Dumais whose -- you
25 know, whose expertise was in FERC ratemaking issues. There

1 weren't any FERC ratemaking issues that were relevant to the
2 decision?

3 MR. DICKINSON: You know, I do remember conversations
4 around allocation of administrative and general costs, but in
5 the end, we determined that those allocations would be the same
6 if it was within CMP or at an SPE. So I think that was a
7 conversation I remember having with Paul. So that would be an
8 example of -- you know, and Paul was also involved in the
9 discussion with the external counsel previously, this was prior
10 to this, around the acquisition of the land and its ability to
11 be recovered under rates. So those are the two things I
12 remember talking to Paul about about this project and
13 specifically within that decision.

14 MS. HUNTINGTON: Thank you.

15 MR. TANNENBAUM: Okay, so we are now going to move on
16 to the IECG. Drew?

17 MR. LANDRY: Thank you. I'm passing out an excerpt
18 from the transmission services agreement which has previously
19 been marked Exhibit -- well, it's NECEC 17 which was included
20 in the prefiling (indiscernible) rebuttal testimony by CMP.
21 This version is marked confidential, but I conferred with Sarah
22 Tracy and others, and I'm confident that these portions are not
23 confidential, so I can refer to these publicly. My name is
24 Andrew Landry. I'm counsel for the Industrial Energy Consumer
25 Group. I don't have that much this morning, but first question

1 I had was I just wanted to confirm -- I know this is in the
2 record elsewhere, but you have stated on a few occasions that
3 are in the earlier part of the record that CMP agrees to hold
4 harmless Maine ratepayers from the cost of this project for the
5 first 40 years of that project. Is that correct?

6 MR. STINNEFORD: Yes.

7 MR. LANDRY: And you just answered a few questions
8 from the Public Advocate and the staff about moving the project
9 into a special-purpose entity, and my understanding is you've
10 expressed a willingness to do so if the Commission orders it
11 but you haven't committed to do that yet. Is that correct?

12 MR. STINNEFORD: That's correct.

13 MR. LANDRY: And in terms of holding customers
14 harmless, Maine ratepayers harmless, from any increases in
15 transmission costs, if the project were to suffer -- it was
16 within CMP and it were to suffer cost overruns or that sort of
17 thing, would having the project in a special purpose entity
18 serve to help insulate Maine customers from those cost
19 overruns?

20 MR. STINNEFORD: I think Maine customers could be
21 insulated in either structure, but --

22 MR. LANDRY: I think we previously talked in a prior
23 technical conference and in some data requests about whether or
24 not Hydro-Quebec failing to deliver any power would constitute
25 an event of default under the transmission service agreement,

1 and I think we concluded that it did not. In other words, the
2 Massachusetts EDCs are on the hook to pay CMP regardless of
3 whether Hydro-Quebec is actually able to deliver any power.

4 MR. STINNEFORD: There are circumstances under the
5 PPAs in which, if Hydro-Quebec fails to deliver for reasons
6 other than a TSA default or TSA non-delivery, that the EDCs can
7 terminate. And if that happens, then there's a termination of
8 not only the PPAs but potentially the TSAs, and Hydro-Quebec,
9 under those circumstances, is liable not only to the EDCs but
10 to CMP.

11 MR. LANDRY: Thank you. Now I circulated, before my
12 questioning, a -- what was attached I believe to your rebuttal
13 testimony, but it's marked NECEC 17. This is a portion of the
14 transmission services agreement between Central Maine Power and
15 NSTAR Electric d/b/a Eversource, and I assume the provisions of
16 this are essentially identical to those agreements that you
17 have with Western Mass. Electric and National Grid subsidiaries.
18 Is that --

19 MR. STINNEFORD: I believe with respect to these
20 particular provisions, that's correct.

21 MR. LANDRY: Now, the provisions that I've copied and
22 circulated relate to owner defaults and I believe is defined
23 under the agreement that Central Maine Power is the owner.

24 MR. STINNEFORD: That's correct.

25 MR. LANDRY: And if we look at 14.2(c), one of the

1 events of default is the failure of the transmission line to be
2 capable of operating at or above 1,040 megawatts as of the
3 commercial operation date unless it's excused. A little
4 paraphrasing, but --

5 MR. STINNEFORD: Yeah, there clearly are other
6 provisions in that section but yes.

7 MR. LANDRY: And looking at 14.2(e), and I'll let you
8 read it but I'll just paraphrase, essentially if there's a lack
9 of availability, failure to meet the minimum average
10 availability for some period of time, there being some
11 opportunity to cure, but if that's not resolved, then that will
12 be a default and -- is that a fair paraphrasing of 14.2(e)?

13 MR. STINNEFORD: Yeah, there are clearly many other
14 subprovisions within that, but that's a fair summary.

15 MR. LANDRY: And looking at the remedies upon
16 default, if you look at 14.4(a), I understand that upon a
17 default, which would include any under 14.2, that the
18 distribution companies may terminate the agreement?

19 MR. STINNEFORD: Yes.

20 MR. LANDRY: Would you agree that moving -- that if
21 the EDCs were to declare an event of default because of a
22 failure to -- of the project to be able to operate as it was
23 agreed to, that the loss of that revenue stream would be a
24 significant adverse impact on CMP or whoever owns the line?

25 MR. STINNEFORD: Well, there are several things that

1 could happen in that circumstance. I guess the first order is
2 that Hydro-Quebec would have rights to step into the agreement
3 and assume those obligations, in which case there potentially
4 could be no impact. But certainly if all revenue was lost,
5 and, you know, Hydro-Quebec is not interested in stepping in
6 and no other third party is, then, yes, the potential loss of
7 revenue would have a major impact.

8 MR. LANDRY: Would you agree that moving the
9 ownership of the line into a special purpose entity would
10 insulate Maine ratepayers from that risk more effectively than
11 having it within CMP?

12 MR. STINNEFORD: It potentially could be more
13 beneficial in that circumstance. As we've said, I mean, we're
14 -- if the project were to stay within CMP, from a ratemaking
15 perspective, we have committed to a full segregation of costs
16 at FERC, and FERC has accepted those provisions. So as I said,
17 I think there are means of insulating CMP even if it is -- the
18 project stays there rather than an SPE. But it, perhaps, could
19 be cleaner if it were separated.

20 MR. LANDRY: Thank you. That's all I have.

21 MR. TANNENBAUM: Okay. Dot?

22 MS. KELLY: No questions.

23 MR. TANNENBAUM: Elizabeth, you still on the line?

24 MS. ELY: I do have questions, NRCM.

25 MS. CARUSO: Yes, I am.

1 MS. ELY: If you want to go (indiscernible) or not
2 (indiscernible).

3 MR. TANNENBAUM: Okay, we'll go with Elizabeth and
4 then you can finish.

5 MS. CARUSO: Can you hear me -- oh. Can you hear me
6 --

7 MR. TANNENBAUM: Yes, I'm sorry, Elizabeth. Could
8 you speak into the phone?

9 MS. CARUSO: Sure. Is this better?

10 MR. TANNENBAUM: Much better.

11 MS. CARUSO: Okay. I have a handout which, due to
12 the weather, I was unable to attend today, but I have someone
13 who's helping me out by distributing a packet of information
14 for your review. And I believe Chris kindly printed off three
15 more pages that can be added to that. I can't tell when you
16 are ready. My feed got stuck. Oh, I see now. Thank you so
17 much for your help, ladies. (Indiscernible) didn't accommodate
18 my drive down there today. Are you all set?

19 MR. TANNENBAUM: I think we are.

20 MS. CARUSO: Okay.

21 MR. TANNENBAUM: Please proceed.

22 MS. CARUSO: So I'd like to start off with tab one in
23 the handout. Of course, you're familiar with it. It's the
24 memorandum of understanding between CMP and the Western
25 Mountains & Rivers Corporation. On page four, Roman numerals

1 three and four discuss the combined lump sum payment of 22
2 million which was initially the plan. My question is is this
3 the only mitigation payment that you have offered to do or do
4 you have any other agreements in place?

5 MR. DICKINSON: No, there are no other agreements.

6 MS. CARUSO: So you're not having any discussions
7 with anyone else related to additional mitigation or
8 compensation payments?

9 MR. DICKINSON: No, there are -- there have been
10 confidential negotiations that have happened here, and also
11 there are bilateral conversations that happened in discussions
12 that we're having.

13 MS. CARUSO: So do you expect to enter into any new
14 or additional mitigation or compensation agreements?

15 MR. DICKINSON: I would say that's uncertain at this
16 point.

17 MS. CARUSO: So you include that there -- it is
18 possible that you could have additional compensation --

19 MR. DICKINSON: Yes.

20 MS. CARUSO: -- your project budget. Okay. Now with
21 regards to the decision to go under the river, that has now
22 dropped the mitigation payment to somewhere between five and
23 ten million. Is that correct?

24 MR. DICKINSON: Yeah, for that portion of the MOU.

25 MS. CARUSO: Okay. Can you explain why you included

1 a provision to allow you to reduce the payment?

2 MR. DICKINSON: Well, it really was part of a two-
3 year dialogue that we had with the people that we had been
4 discussing with over that period of time. And you know, when
5 we started the dialogue, I think there was a general feeling of
6 just say no to the project. We spent a lot of time listening
7 to concerns, hearing what the concerns were of the people in
8 the community, and ultimately -- and part of it is in our --
9 the way we laid out this project of trying to minimize the
10 impacts by utilizing existing corridors and utilizing the new
11 corridor through an area that's already heavily logged, we
12 recognized that there were a few areas that we believed were of
13 the biggest importance, and one of them was the Kennebec River
14 crossing. So when we were approached to begin a dialogue, we
15 did. And in the process of that dialogue, there -- and part of
16 that was exploring what our belief was the cost of an
17 underground piece underneath the Kennebec River, which at that
18 time was in the 30 million range. We started having a dialogue
19 about, well, if there was an overhead, what might a mitigation
20 package look like there. If there is an underground, what
21 might the mitigation package look (sic). So it was a natural
22 dialogue over a couple-year period that eventually lead to that
23 point.

24 MS. CARUSO: So is it safe to assume that you thought
25 the aerial crossing of the Kennebec was the largest single

1 impact worthy of mitigation?

2 MR. DICKINSON: Yeah, I think that's fair to say.

3 MS. CARUSO: Okay. And do you -- so basically,
4 relative to the entire project which involves a significant
5 amount of newly-constructed corridor and numerous other
6 environmental and other types of impacts, you felt that that,
7 you know, thousand feet of visibility or so of the entire
8 project was worthy of mitigation.

9 MR. DICKINSON: We believe that that -- going back to
10 your prior question, we believe that that was the single
11 biggest piece of impact. Obviously within the DEP process that
12 is going on now, we've had a lot of discussions around
13 mitigation, and we've had a lot of discussions about
14 mitigations that will be within that process. But to answer
15 your question, we recognize that there are impacts from a
16 transmission line like this along the path, but we worked
17 extremely hard to try to minimize those impacts in the design.
18 We recognize that in the DEP process, those mitigations will
19 happen, but we recognize that the overhead river crossing was
20 the -- as you said, the single biggest area of concern.

21 MS. CARUSO: Right. Well, I'm not saying that. I'm
22 just asking you if you say that.

23 MR. DICKINSON: Yeah, yeah, no, I agree with that.

24 MS. CARUSO: Okay. And so when you took the 12 to
25 \$17 million off the table, what impacts do you think that five

1 to ten million dollar payment -- what impacts would they
2 address?

3 MR. DICKINSON: You know, I think our perspective was
4 there -- this area around the Kennebec River crossing. Still,
5 there are impacts around that general area, and I think it
6 still was meant to be a representation of that. But I think
7 more that it was an organic process that happened in the
8 negotiation which was I think there was some perspective
9 originally that the agreement would only have some -- you know,
10 only an underground approach could -- would ever be accepted.
11 And then as I said, eventually there was an approach for an
12 overhead. So I don't think there was any algorithm or rubric
13 around what that five to ten meant to represent, but it was,
14 again, the outcome of a dialogue over a two-year period.

15 MS. CARUSO: So, you know, we hear five and we hear
16 ten. Is it five? Is it ten? Is it something in between?
17 What is the amount?

18 MR. DICKINSON: Well, the firm obligation is five,
19 but, you know, the -- at the time, the range -- at that
20 specific time there were discussions around, in some of the
21 unorganized territories, ways in which the community could
22 benefit incrementally by doing tax incentive financing and
23 finding a way to make sure that those incremental taxes find a
24 way into the community. So I think some of that range was
25 around that area, but, you know, obviously I think we -- I know

1 me particularly who was at I think every individual meeting up
2 at The Forks and spent a lot of time up talking to people in
3 the community, I was very proud about this agreement, to the
4 opportunity to bring value to the community. And obviously we
5 continue to be open minded about how we can work with the
6 community going forward, including what that range might mean.

7 MS. CARUSO: So you mentioned that you were meeting
8 with the public and the community and talking to the public.
9 Wasn't that after you had already signed the MOU?

10 MR. DICKINSON: No, I mean, I made -- the -- part of
11 our negotiations with Western Mountains & Rivers was - from our
12 perspective, had a couple of concerns and things that were on
13 our mind when we communicated to them. One was we wanted to
14 have the goal of having this represent the community as a
15 whole, and as you can -- as you probably know from the makeup
16 of the board, we also wanted the board to be representative of
17 a large perspective of the community. And, you know, my
18 experience is that I was up there a lot talking with people
19 that had questions, people that wanted to learn more about what
20 was happening before or after, and we definitely encouraged all
21 the people we were talking about to continue to have
22 conversations, to let the community know that these discussions
23 were going on, although I'm sure that there were components of
24 the negotiation that -- as it relates to specific aspects that
25 were held back and confidential.

1 MS. CARUSO: I will follow up with this more a little
2 bit later, but would it be fair to say that the MOU and the
3 mitigation payment were designed to buy the local support of
4 the few companies and entities that were -- you were meeting
5 with initially for two years and then afterwards broke out and
6 discussed it with the public?

7 MR. DICKINSON: No, I think the way I would
8 characterize it is how I characterized it before. I thought
9 this line provided an opportunity to bring value to the
10 community through expanded nature-based tourism, economic
11 development, new trail systems, certain rights that people in
12 the community would have that they wouldn't have before, access
13 to certain recreational assets. I saw this personally as a
14 real opportunity to have a partnership between the project and
15 the community.

16 MS. CARUSO: So on page six, Section 7, subsection A,
17 it requires that WMRC, at CMP's request, would provide oral and
18 written testimony to any jurisdictional permitting agency and
19 require WMRC to testify that the MOU represents an appropriate
20 offset to various impacts of the project. Am I interpreting
21 that correctly?

22 MR. DICKINSON: Yes, I think you are.

23 MS. CARUSO: Okay. Is it typical practice for an
24 agreement like this to include a quid pro quo that requires the
25 entity that will receive compensation funds to proactively

1 support the project at the funder's request?

2 MR. DICKINSON: So this is a representation of the
3 common feeling that we arrived to at the signature of the MOU.
4 The dialogue, the numerous meetings that we had, the
5 conversations that we had all led to a point where the
6 signature -- signatories of Western Mountains & Rivers were
7 agreeing to this was consistent with their expectations. So I
8 wouldn't characterize it the way that you have.

9 MS. CARUSO: Do you consider the need to provide
10 mitigation for impacts related to things like our tourism
11 industry or potential negative impacts to local property
12 values?

13 MR. DICKINSON: Well, the -- you know, we're
14 obviously talking about within this proceeding the benefits and
15 the need for the project. In the DEP process, we'll be looking
16 at all the pieces within that, and I think those are all
17 considerations that happen within that context.

18 MS. CARUSO: Well, it appears that you did mitigate
19 for the crossing of the Kennebec, but I'm wondering if you
20 considered the need to provide mitigation for non-Kennebec
21 River related tourism impact.

22 MR. DICKINSON: Well, you know, I -- my own
23 expectation based on what I've learned is that there are going
24 to be significant opportunities for expanded tourism in this
25 region that -- you know, new access for ATVs, new access for

1 snowmobile accesses, new trail systems, along with funds that
2 we've designated to go towards encouragement of new tourism in
3 that area.

4 MS. CARUSO: Did you direct Daymark or the University
5 of Maine to account for economic impacts in all four seasons?

6 MR. DICKINSON: No.

7 MS. CARUSO: Okay. Have you completed any studies as
8 to why people come to the region of the new portion of the line
9 to hunt, fish, raft, hike, or snowmobile?

10 MR. DICKINSON: No, as I said, I think my
11 understandings from the -- why I believe there's opportunities
12 for new expanded tourism in the region come from conversations
13 that I had had with people in the region.

14 MS. CARUSO: Right, and I understand that. You -- I
15 understand the few companies that you spoke with that are on
16 the board at the time that you came up with this agreement.
17 I'm just asking if you did any studies, that's all.

18 MR. STINNEFORD: There are use surveys that are done
19 as part of the DEP permitting process but not associated with
20 this proceeding.

21 MS. CARUSO: That was done this fall but not prior to
22 coming up with the agreement. And that was for the Kennebec
23 River.

24 MR. DICKINSON: Yeah, I guess the only thing I'll
25 just say, I don't want it to be represented that the only

1 conversations I've had with people in the community are the
2 people that were -- we were working together on the agreement
3 over time. You know, I've talked to snowmobilers, ATVs,
4 hunters, other people that all see some of the opportunities
5 that come from a new corridor that exists.

6 MS. CARUSO: Right, but those conversations were had
7 after the MOU became public, correct?

8 MR. DICKINSON: No, I think the -- you know, we have
9 done, from the beginning of this project, an effort to reach
10 out to people along the corridor.

11 MS. CARUSO: Okay. We'll just move on and we'll come
12 back to that later. Did you -- in the visual rendering
13 presentation of August 17th you presented -- or your company
14 presented to the PUC some pictures of Parlin Pond, Enchanted,
15 Coburn Mountain, Rock Pond, Spencer Road, the Kennebec River,
16 and they appear to be uninhabited without visible recreational
17 usage or unusual scenery. And then it was stated at that
18 meeting that you were trying to minimize the impact of a
19 national scenic byway by putting the line to the east and to
20 the west. Did you analyze the usages of areas you chose to
21 place the line beyond it being a working forest?

22 MR. STINNEFORD: Well, I think as we have presented
23 in technical conferences here in this proceeding, you know, a
24 great deal of thought was put into the choice of the new
25 corridor location, siting it, to the maximum extent possible,

1 avoiding conserved and preserved lands. And, again, I think
2 we've provided maps that demonstrate that as well.

3 MR. DICKINSON: And I think I would just --

4 MS. CARUSO: -- but did you analyze the usages of the
5 areas?

6 MR. DICKINSON: You know, I'm not aware of that. You
7 know, I was just going to also point out that, I think as we've
8 also presented at that time, there -- these lands are owned by
9 two private companies. And, you know, they have made it very
10 clear publicly and particularly in a letter that was addressed
11 to the Commission in the middle of December that they have --
12 you know, their primary utilization (sic) of that land is as a
13 working forest and that --

14 MS. CARUSO: Right, I said beyond it being a working
15 forest was my question.

16 MR. DICKINSON: Well, no. So I was just making the
17 point that they have made it very clear that they, as a
18 secondary and on their own goodwill, have made those lands
19 available for other utilizations. But that utilization
20 shouldn't interfere with their ability as a private landowner
21 to utilize those lands how they see fit.

22 MS. CARUSO: Of course. So now there were three
23 pages that were distributed separately from my packet, and it's
24 a state of Maine report, recreational hunter and angler market
25 report. It's prepared by Southwick Associates, fish and

1 wildlife economics and (indiscernible) in April of 2015. And
2 this was prepared for the Maine Office of Tourism and the
3 Department of IF&W. On the second page, it's sort of a summary
4 of the report, and it says key insights. (Indiscernible) from
5 the Maine license and traveling sportsmen surveys. It says,
6 "The state of Maine is well positioned as one of the, quote,
7 best destinations among Maine licensed hunters and anglers
8 across a majority of attributes that are important to them,
9 ranging from climate, safety, pricing, and amenities. Maine's
10 particular strengths among traveling sportsmen are its
11 attractive natural setting and its sense of safety. The
12 state's natural amenities, beauty, and sense of security or
13 safety are also identified to be among the most important
14 characteristics of a site that hunters and anglers say are
15 important when making the decision to hunt or fish." On the
16 third bullet it says, "Interestingly, one of the key
17 destination factors for hunters and anglers is the remoteness
18 of the location." So are you aware in tourism surveys that
19 they show the primary reason people come to Maine to hunt and
20 fish is the remoteness and scenic quality of it?

21 MR. DICKINSON: That would -- I mean, that would make
22 sense to me.

23 MS. CARUSO: Okay. And have you studied how a
24 transmission line would affect these people's experiences?

25 MR. DICKINSON: I mean, we have, as we've already

1 talked about, done a significant amount of work demonstrating
2 the impacts both on the natural environment and on the visual
3 resources that are there. And, again, you know, my
4 conversations have led me to the belief that the -- that
5 there's a real opportunity for an increase in tourism, not a
6 decrease.

7 MS. CARUSO: But beyond discussing it with the people
8 in the agreement, you haven't done a study.

9 MR. DES ROSIERS: Objection to form, assumes facts
10 not in evidence. And compound question.

11 MS. CARUSO: I didn't hear that.

12 MR. TANNENBAUM: Okay, so maybe the question should
13 be have you done a study of the impacts on tourism?

14 MR. DICKINSON: Yeah, there's no specific study that
15 we did.

16 MR. TANNENBAUM: Okay.

17 MS. CARUSO: Okay. So there is no study on the
18 effects of the variety of the lodging, the restaurants, all the
19 associated -- the trickle-down effect of tourism --

20 MR. DICKINSON: Well, no, actually --

21 MS. CARUSO: -- this area?

22 MR. DICKINSON: Well, but that was a different
23 question I guess from my perspective. You know, the project
24 has substantial benefits associated with both a drop in energy
25 prices that have an overall effect on GDP that trickle down

1 throughout the Maine economy. Also, the property taxes that
2 the region will experience. And then specifically to what
3 you're talking about is a significant amount of both direct and
4 indirect jobs around the project, something we saw very clearly
5 with MPRP that had positive effects on, you know, restaurants
6 and hotels and other businesses indirectly related to the
7 project.

8 MS. CARUSO: Right. But there are studies that show,
9 and you're familiar with them in other proceedings, that people
10 -- tourists don't come to the remote areas -- or there was one
11 study, I'm not sure if you recall it, the John (Indiscernible)
12 Trust of 2017 where 55 percent of the tourists would not return
13 to an area of wilderness with a transmission line in it.

14 MR. DES ROSIERS: Objection to form, assumes facts
15 not in evidence.

16 MS. CARUSO: -- were just --

17 MR. TANNENBAUM: Thorn, are you familiar with that
18 study?

19 MR. DICKINSON: No, I'm not.

20 MR. TANNENBAUM: Okay.

21 MS. CARUSO: Okay. Oh, I thought it was. I thought
22 that was -- had been part of the proceedings. I apologize.
23 Moving on. So there were, in the visual rendering, some of the
24 additions that you submitted, pictures of snow on the ground,
25 but did you actually do a study in leaf-off conditions?

1 MR. STINNEFORD: I'm not sure what you mean by a
2 study. We did, in response to requests in the DEP permitting
3 process, provide additional renderings under winter snow cover
4 conditions.

5 MS. CARUSO: Okay. So have you studied winter
6 snowmobiling in the affected area of the proposed new corridor?

7 MR. STINNEFORD: We have not conducted a study,
8 although we have had numerous conversations with the Maine
9 Snowmobile Association and they are very supportive of the
10 project.

11 MR. DICKINSON: You know, I mentioned some of the
12 comments and conversations we had, and actually at the Somerset
13 County, the head of the MSA spoke. And I thought it was very
14 interesting and what he said he receives on a daily basis
15 complaints from all their members on a numerous amounts of
16 things. You know, he said you'd be amazed at how much people
17 complain about various things about their experience, but never
18 once in his whole period did he ever get a complaint that
19 somebody said they saw a transmission structure.

20 MS. CARUSO: Right. But have you studied how -- have
21 you done any studies in -- it seems like you -- there's a lot
22 about the Kennebec River that you're familiar with, but have
23 you studied how winter snowmobiling season affects the local
24 businesses, the year-round residents such as outfitters,
25 lodges, restaurants, the associated staff members, the

1 snowmobile guides, the grooming operations, and the -- as
2 travelers come up north, they -- they're spending in the gas
3 stations and the grocery stores, it all is affected by the
4 snowmobiling season. And have you studied what would happen to
5 the economy of the region during the construction period of the
6 new corridor --

7 MR. DICKINSON: We have not --

8 MS. CARUSO: -- there, you know -- okay.

9 MR. DICKINSON: We have not studied that, but again,
10 my belief in conversations with people in the snowmobile
11 communities, this actually will be a net positive effect. So I
12 would see that as a net benefit of addition, but we did not do
13 a study for that.

14 MS. CARUSO: Do you -- have you snowmobiled in the
15 area?

16 MR. DICKINSON: I snowmobiled when I was in -- up to
17 when I was in fourth grade but not since.

18 MS. CARUSO: Okay. So do you know the difference
19 between snowmobiling in trails and woods versus under power
20 lines?

21 MR. DICKINSON: I believe I've snowmobiled in both
22 conditions, but I wouldn't consider myself an expert.

23 MR. STINNEFORD: And I certainly have.

24 MS. CARUSO: Okay. So do you know what happens when
25 there's not enough snow on the trails? For example, when

1 spring starts to set in and the snow pack is melting, dirt
2 starts to be uncovered, the grooming operations cease. And you
3 know, when grooming operations cease, so does the flow of
4 riders, of course, both in state and out of state on the
5 trails.

6 MR. STINNEFORD: It's a sad time of --

7 MS. CARUSO: Does that make sense?

8 MR. STINNEFORD: Yeah, it's a sad time of year for
9 snowmobilers, I'll grant you that.

10 MS. CARUSO: Yeah. And when -- you know, if --
11 because when grooming operations stop, people don't want to
12 snowmobile on the trail. It's not as smooth. And when the
13 snowmobilers don't come, and the restaurants and lodges, of
14 course, they're losing their customer base. So did you know
15 that the snowmobile trails under transmission lines
16 historically are the first to be rutted and bare due to the
17 absence of the forest canopy and the resulting exposure of the
18 sun?

19 MR. STINNEFORD: That would not surprise me, no.

20 MS. CARUSO: Right. So you have -- so in terms of --
21 you know, you mentioned that you're adding new -- you're
22 excited about the possibility of new trails for snowmobiling
23 because of the transmission line. Did you account for that --
24 the differentiation between the snow cover in your economic
25 studies and economic impact?

1 MR. DICKINSON: No.

2 MS. CARUSO: What about -- if this -- if this -- if
3 you get the permits and this corridor is being constructed --
4 the area around Johnson and Coburn Mountains, which are so
5 heavily traveled by snowmobilers coming from Rangeley, Jackman,
6 Greenville, The Forks area, it's a destination spot. Are you
7 aware that the Coburn Mountain would be shut down during that
8 proposed construction?

9 MR. DICKINSON: I mean, our perspective would be when
10 we get to the period of staging our construction, to do it in a
11 way that has the least impact on whatever operations are going
12 on in the region.

13 MS. CARUSO: Okay. Well, regarding the line under
14 the Kennebec, have you started your test soils?

15 MR. STINNEFORD: Test --

16 MS. CARUSO: -- burying the line.

17 MR. STINNEFORD: The test boring, is that what you're
18 referring to?

19 MS. CARUSO: Yes.

20 MR. ESCUDERO: Yes, we have. We conducted that end
21 of last year.

22 MS. CARUSO: Okay. And did you need a permit to do
23 that?

24 MR. ESCUDERO: I believe we needed some sort of
25 permit and we got it, but I would need to confirm that.

1 MS. CARUSO: So because of the scenic and economic
2 impacts from this corridor, especially in the new corridor area
3 but also in the existing corridor area with all the camp owners
4 and the people who are impacted, did you ever consider burying
5 the line for the entire length of the new construction?

6 MR. DICKINSON: No, we didn't.

7 MS. CARUSO: Did you ever study the potential
8 difference on the economy of the region between burying the
9 line and not burying the line?

10 MR. DICKINSON: No, we did not.

11 MS. CARUSO: Did you ever evaluate the scenic or
12 visual impact of burying the line versus not burying the line?

13 MR. DICKINSON: No, we did not. And we also didn't
14 evaluate the various impacts of a buried DC line through a new
15 corridor.

16 MS. CARUSO: So you chose to bury the line under the
17 Kennebec but not for the entire 53 miles?

18 MR. DICKINSON: Well, our original --

19 MS. CARUSO: Was cost the primary --

20 MR. DICKINSON: I'm sorry.

21 MS. CARUSO: Sorry?

22 MR. DICKINSON: Sorry, go ahead.

23 MS. CARUSO: Was cost the primary reason for not
24 burying the line?

25 MR. DICKINSON: We believed it was the simplest, and

1 obviously cost was a component of that. But we also believed
2 it was the one that made the most sense.

3 MR. TANNENBAUM: Can I just follow up quickly? Did
4 -- I wasn't sure I heard this right. Did CMP conduct an
5 analysis of what it would cost to bury the line in the new
6 corridor?

7 MR. DICKINSON: No.

8 MR. TANNENBAUM: Okay, thank you.

9 MS. CARUSO: So you mentioned earlier this morning
10 that on a project in the Hudson Valley you buried the line for
11 aesthetic reasons. And it didn't occur to you to bury the line
12 here through this high tourism area and with all these camp
13 owners having their property abutting a huge DC transmission
14 line?

15 MR. DICKINSON: So the project you're talking about,
16 Connect New York, is a project that is -- I would put in the
17 dream category of project development portfolio that we have.
18 It's -- so far has not got momentum within New York state.
19 Maybe part of that is the cost related to it, but, again, what
20 the strategy there is we knew we were submitting into a request
21 for information in New York a number of years ago. We knew
22 that there were existing AC overhead projects that already were
23 in place, and our idea was to find a corridor that already was
24 predisturbed. So a predisturbed corridor and putting a buried
25 line along the thruway means that you're not disrupting, you

1 know, a new area, an area that currently wasn't dug up. You're
2 doing one that was just previously disturbed. So again, there
3 was a specific rationale and reason. But again, that -- the
4 RFI was not selected or moved forward with.

5 MR. TANNENBAUM: Thorn, a follow up. Excuse me.
6 What do you mean by predisturbed?

7 MR. DICKINSON: Yeah, so the -- there -- you know, I
8 actually don't know what was there before the New York State
9 Thruway, but you know, let's assume that that was a green field
10 area at least for some of the --

11 MR. TANNENBAUM: I thought -- excuse me, I thought
12 when you were talking about predisturbed, you were talking
13 about the corridor at issue here.

14 MR. STINNEFORD: No.

15 MR. DICKINSON: No, no. No, I was talking about the
16 corridor along the New York Thruway.

17 MR. TANNENBAUM: Okay, sorry.

18 MR. DICKINSON: Okay.

19 MS. CARUSO: So just to summarize, you didn't
20 evaluate the cost of burying the line, and likewise, you didn't
21 evaluate the cost to the region for the impact of property
22 values and viewshed and scenic issues and the health issues of
23 herbicides and other sorts of things by having an above line --
24 above-ground line.

25 MR. DICKINSON: Yeah, that's right. I also would say

1 that there were a lot of other things that we didn't evaluate.
2 Another example would be what happens if, for a 20 or maybe
3 even a 40-year period, we're not able to pull three million
4 metric tons of carbon out of the atmosphere and what happens to
5 the region, to the tourism, to the people that go and count on
6 that land to visit if, you know, these kind of steps aren't
7 made in order to abate climate change.

8 MS. CARUSO: Do you -- in comparing -- in addition to
9 -- if you had buried the line, in addition to fewer visual
10 impacts, would burying the line lessen the amount of herbicides
11 required to be sprayed along the route?

12 MR. STINNEFORD: Well, the corridor would still need
13 to be cleared of vegetation even if the line were buried. You
14 know, it may be a less cleared area, but it would still need to
15 be cleared and maintained.

16 MS. CARUSO: So how wide an area would you need to
17 clear?

18 MR. STINNEFORD: We haven't evaluated that.

19 MS. CARUSO: So if TDI in Vermont is willing to bury
20 their line and they're still delivering a significant
21 mitigation package, how can CMP refuse the cost to bury the
22 line?

23 MR. STINNEFORD: I guess first I would point out that
24 TDI has not found a customer that's willing to pay the cost to
25 do that. They have a proposed project, but no one's agreed to

1 pay for it.

2 MS. CARUSO: Is it a fair statement that burying the
3 line would have significantly fewer visual impacts and fewer
4 impacts on human health?

5 MR. STINNEFORD: It certainly would be less visible.
6 I can't speak to the health impacts. I don't think anyone on
7 this panel is an expert in this area.

8 MS. CARUSO: Okay. Moving on to tab two, please.
9 This is an article from the November 18th edition of the
10 Portland Press Herald. If you could turn to page five as noted
11 in the bottom right-hand corner. It starts with the headline
12 Merchant Versus Reliability, quote/unquote. Let me know --

13 MR. DICKINSON: Oh, I'm sorry, yeah, yeah, I'm there.

14 MS. CARUSO: Okay. Do you know Mr. Don Jessome who
15 is described here as a chief executive of the TDI project in
16 Vermont and who is a competitor under the 83D RFP?

17 MR. DICKINSON: No, I do not.

18 MS. CARUSO: In the first paragraph under that
19 headline, he was reported as saying that, quote, "all three
20 projects," end quote, which I assume related to the three
21 Hydro-Quebec proposals, including TDI, Northern Pass, and
22 NECEC, are so-called merchant lines. Would you agree with that
23 characterization that NECEC is a merchant project?

24 MR. DICKINSON: Yeah, I see that that is -- oh, would
25 I agree that NECEC is a merchant project?

1 MS. CARUSO: Uh-huh.

2 MR. DICKINSON: No, I'd never consider it a merchant
3 project.

4 MS. CARUSO: So would -- do you agree that the three
5 projects are not, quote, "reliability projects"?

6 MR. DICKINSON: So maybe just to clarify what I mean
7 by merchant. You know, we have a tariff. If this project is
8 built and constructed, it will have a tariff that's FERC
9 regulated and will result in revenues as long as we operate the
10 line that we're supposed to be in a tariff that dictates how
11 those revenues are provided from a counterparty of a utility.
12 So from a transmission perspective, I would say it was
13 consistent with other types of transmission except for the fact
14 that it's a fixed price and we take more risk associated with
15 that.

16 When I think of a merchant project, I think of a
17 project that might be built between two ISOs and takes an
18 arbitrage risk between those. Those revenues are uncertain.
19 They're taking the merchant power risk in order to generate
20 their profits. But I would put it in a different category than
21 reliability as you're saying. I just wouldn't put it in a
22 merchant category. I would put them into competitive
23 solicitations. Now I do think that there are reliability
24 benefits associated with the project, but clearly the prime
25 focus is on delivering clean energy to New England.

1 MS. CARUSO: Well, my understanding is that what are
2 generally referred to as, quote, "Reliability projects are
3 designated by ISO New England as pool transmission facilities
4 or PTFs. They're built to address a reliability need" --

5 MR. STINNEFORD: Yeah, I think you --

6 MS. CARUSO: -- "as identified by ISO New England."

7 MR. STINNEFORD: I think you've conflated several
8 things there. I mean, reliability projects are not necessarily
9 PTF projects, but they are built to address an identified
10 reliability need through a planning process, whether that's ISO
11 New England's process or our local transmission planning
12 process.

13 MR. TANNENBAUM: Let me follow up on this. Does the
14 term merchant transmission have a meaning within the industry?
15 Is there a --

16 MR. STINNEFORD: I'm not sure there's a standard
17 definition, but I think most people would agree with how Thorn
18 has represented this. If the project is fully secured through
19 long-term contracts with a secure counterpart, that would
20 generally not be considered merchant, just as it would with a
21 power plant. If a power plant is built on spec to sell into
22 spot markets without firm contracts, it would be considered a
23 merchant plant. But if it's secured with long-term power
24 purchase agreements, it generally wouldn't.

25 MS. CARUSO: Let me rephrase the question.

1 MR. VANNOY: Just a follow up. Sorry, one follow up
2 here. So how would you put Order 1000 and merchant in that,
3 just real briefly?

4 MR. DICKINSON: Yeah, at least from my perspective,
5 if there's a competitive solicitation around an opportunity,
6 for example, to take advantage of a congestion or a constraint
7 that exists across an interface like central east or one that
8 might exist between, you know, some PJM and MISO or something
9 like that, if the -- in my mind what determines a merchant from
10 a non-merchant is what is the buyer, where is the revenue
11 source that's from that. I think both of those could be in
12 competitive solicitations through an Order 1000, but if the
13 revenues are based on some market mechanism that involves
14 energy and/or capacity prices and the project developer is
15 taking that risk, that's what I would put into the merchant
16 category.

17 MR. TANNENBAUM: Thank you. Elizabeth, please
18 proceed.

19 MS. CARUSO: Okay, thank you. So I guess do you
20 agree that it's a for-profit project rather than a project
21 that's designated to meet a reliability need?

22 MR. STINNEFORD: I think those are two very different
23 things. Even reliability projects --

24 MS. CARUSO: Is it a for-profit project?

25 MR. STINNEFORD: Yes, as are most reliability

1 projects.

2 MS. CARUSO: So the article states that these three
3 projects -- again, we're referring to TDI, Northern Pass, and
4 NECEC -- are, quote, "being developed for clean energy goals
5 and to make money for Hydro-Quebec and the builders," end
6 quote. And by builders we assume he means investors. Do you
7 agree that these three projects, including NECEC, were proposed
8 to address public policy goals and make money for Hydro-Quebec
9 and the transmission line investors?

10 MR. DICKINSON: Yeah, I would say that I wouldn't
11 limit it to the three -- these three projects, though. There
12 were 53 proposals that were bid, some by solar developers, some
13 by wind developers, some by battery technology. All of those
14 individual developers all had a similar motivation to provide a
15 competitive project and earn a return.

16 MS. CARUSO: Right, but this article is about these
17 three right now. So is it true that these three 83D projects
18 that Mr. Jessome talks about are designed to meet a public
19 policy goal rather than an identified reliability need and
20 these are electric transmission upgrades?

21 MR. STINNEFORD: Yes, I mean, -- well, I can't speak
22 for the other two projects. I can only speak for CMP's NECEC
23 project. It was definitely proposed to -- in response to a
24 public policy initiative launched by the Massachusetts
25 utilities and the DOE. So, yes, I would agree with you that

1 it's a creature of public policy.

2 MS. CARUSO: Okay.

3 MR. DICKINSON: But I would just add one additional
4 piece is that there was a major focus in the RFP on firmness.
5 And what firmness implies is that when that energy is needed,
6 it will be able to be delivered. And we had some testimony
7 yesterday around the benefits of having a firm amount of energy
8 available when you're running out of oil on that day when --
9 within the ISO. So from that perspective, the fact that the
10 RFP didn't include firmness as a key component, I think there
11 is a component of the bid related to reliability.

12 MR. STINNEFORD: In fact, if you read, you know, both
13 Section 83D as well as the RFP itself, one of the stated
14 criteria is specifically that -- to ensure greater reliability
15 through, you know, reduced reliance on natural gas,
16 particularly during winter delivery periods.

17 MS. CARUSO: Okay. But as far as ISO is concerned,
18 is it an ETU?

19 MR. STINNEFORD: It will be an elective transmission
20 upgrade.

21 MS. CARUSO: Okay. And given that it's intended to,
22 you know, meet this public policy goal as you discussed, is it
23 fair to characterize NECEC as a for-profit project for Avangrid
24 and Hydro-Quebec?

25 MR. STINNEFORD: As I said, any transmission project

1 is going to earn a profit or return for the investors in that
2 project, including this project.

3 MS. CARUSO: Okay. Now, does it -- it looks to me
4 like in the statute it talks about, quote, "public need" but
5 doesn't specify whether or not it has to be a Maine need. Is
6 that correct?

7 MR. STINNEFORD: Could you specify what statute
8 you're referring to?

9 MS. CARUSO: The statute for the PUC that says
10 petition for approval of proposed transmission lines, Title 35-
11 A.

12 MR. STINNEFORD: I believe that's 3132 that you're
13 referring to, in which case I would agree it's -- the statute,
14 when it defines public need, is not specific in stating whether
15 that is a Maine need.

16 MS. CARUSO: So, you know, just help me out here
17 because I'm not a lawyer, but just hypothetically, could
18 someone in Maine apply for an ETU project in a different state
19 because of a public need in Maine?

20 MR. STINNEFORD: I'm not sure I followed that
21 question.

22 MS. CARUSO: Well, is it correct to assume that you
23 believe the Commission can grant a certificate for an out-of-
24 state need just because the statute doesn't specifically
25 prohibit that?

1 MR. STINNEFORD: I thought your question was to build
2 something out of state, in which case permitting under 3132
3 wouldn't be required.

4 MS. CARUSO: No, but could -- but it seems the
5 understanding of the company that they believe the Commission
6 can grant a certificate for an out-of-state need like
7 Massachusetts just because the statute doesn't specifically
8 prohibit -- that it doesn't specifically say it has to be a
9 Maine public need (sic).

10 MR. STINNEFORD: That's not --

11 MR. DES ROSIERS: Objection, assumes facts not in
12 evidence.

13 MR. STINNEFORD: Yeah, I was going to say --

14 MR. DES ROSIERS: Misstates the position of the
15 company.

16 MR. STINNEFORD: That is not the company's argument.

17 MR. TANNENBAUM: That's also a legal question too
18 that might not really be appropriate for the panel.

19 MS. CARUSO: Okay. Okay, thank you so much. Moving
20 on to tab three, I have a number of questions about CMP's
21 community outreach effort, mainly related to the pre-
22 application phase. There is a public outreach section in your
23 CPCN application which states that, quote, "CMP recognizes the
24 importance of public involvement and is committed to
25 transparent and responsive stakeholder agreements," end quote.

1 Will you accept that that's a direct quote from your
2 application, the statement represents CMP's corporate policy?

3 MR. STINNEFORD: I'm sorry, we're not finding the
4 language you're quoting.

5 MS. CARUSO: I don't -- hold on, I'm pulling up on my
6 screen. Let me find that, and I'll -- let me just move on
7 right here.

8 MR. TANNENBAUM: Elizabeth, we do need to take a
9 lunch break pretty soon. So I don't know if this is a good
10 time --

11 MS. CARUSO: Sure. You want to do it right now?
12 Because I'm --

13 MR. TANNENBAUM: We could. About how much more time
14 do you anticipate?

15 MS. CARUSO: I'm not sure. It's taking longer than I
16 expected so I think lunch right now would be fine. I have --

17 MR. TANNENBAUM: Okay, let me ask --

18 MS. CARUSO: -- four more tabs to get through.

19 MR. TANNENBAUM: Okay, let me ask NRCM. Do you have
20 an estimate?

21 MS. ELY: I have a very small number of questions. I
22 would expect no more than ten minutes.

23 MR. TANNENBAUM: Okay. All right, so we'll take a
24 lunch break for an hour now. What I'm wondering, if people
25 could think about and maybe we'll talk after, is if we do

1 finish early, which it looks like we will, should we proceed
2 with the Daymark panel today? Again, people might not be
3 prepared for that and maybe that doesn't make sense, but I'm
4 just asking a question and we could talk about it after.

5 MR. DES ROSIERS: Another suggestion I might have is
6 I think we were down to not that many questions left for a few
7 witnesses for Ms. Bodell that may fit better. You know, to --
8 instead of have the portion of her examination fall on Friday
9 because Friday will be a busier day I think than Thursday.

10 MR. TANNENBAUM: Okay, well, let's think about that
11 over lunch.

12 MR. FLUMERFELT: Excuse me, Mitch. John Flumerfelt
13 here. Could we wait until Mr. Shope's back in the room to have
14 that decision?

15 MR. TANNENBAUM: I assume he'll be back after lunch.

16 MR. FLUMERFELT: No, he -- I think he just took a
17 quick (indiscernible) break. In terms of your question.

18 MR. TANNENBAUM: Okay, but we'll break for lunch, and
19 then we'll talk about it after lunch. Okay? Thank you.

20 CONFERENCE RECESSED (January 9, 2019, 12:13 p.m.)

21 CONFERENCE RESUMED (January 9, 2019, 1:16 p.m.)

22 MR. TANNENBAUM: Okay, Elizabeth, please --

23 MS. CARUSO: I can't see the video, but --

24 MR. TANNENBAUM: You should in a second.

25 MR. DES ROSIERS: Mitch, before -- there was one

1 question of Mr. Escudero that he was going to check on. He can
2 give a confirmatory answer right at the beginning.

3 MR. TANNENBAUM: Okay. Bernardo?

4 MR. ESCUDERO: Yeah, thank you. You asked me if we
5 needed a permit for doing the borings at the Kennebec River,
6 and I confirmed with the (indiscernible) that we actually -- we
7 didn't need it. We checked with the land use planning
8 commission, and they confirmed that it wasn't needed. So I
9 wanted to make that (indiscernible).

10 MR. TANNENBAUM: Great, thank you. Okay. Elizabeth,
11 please proceed with your questions.

12 MS. CARUSO: Okay, thank you. So we are in tab
13 three, and the statement that I made was on page 88 of your
14 CPCN application. It states what it states in there, that CMP
15 recognizes the importance of public involvement and is
16 committed to transparent and responsive stakeholder engagement.
17 So my question is do you feel that statement represents CMP's
18 policy well enough?

19 MR. STINNEFORD: Yeah, we stand by the words in our
20 petition. We still feel that's true.

21 MS. CARUSO: Okay. Is it fair to assume you included
22 a discussion related to public outreach because you feel it is
23 important -- an important issue for the Commission?

24 MR. STINNEFORD: Yes.

25 MS. CARUSO: Okay. So the application describes the

1 first phase of NECEC communication plan as, quote, "prefiling
2 communications to ensure key stakeholders are well-informed and
3 not surprised by CMP's proposal," end quote, and it refers to a
4 more comprehensive discussion later on in the plan presented as
5 Exhibit NECEC-9. Going to this exhibit, on page one, the
6 language in the second paragraph reads, quote, "The NECEC team
7 began its outreach campaign to introduce and advance the
8 project on July 17th, 2017 with a series of conversations with
9 targeted stakeholders," end quote. Are you with me?

10 MR. DICKINSON: Yes.

11 MS. CARUSO: Okay. So who were the stakeholders that
12 were targeted during this phase?

13 MR. DICKINSON: I'm looking at our response to data
14 request NRCM-02-01 where we list a number of the meetings that
15 we've had throughout the process. And starting at July 17th,
16 we have city of Lewiston, Franklin County, Greater Franklin
17 Development Council, town of Farmington, Somerset County
18 Commissioners, Somerset Economic Development Corp., town of
19 Bingham, town of Moscow, town of Farmington, Jay, Androscoggin
20 County Commissioners. And then -- well, that's into August at
21 that point. I don't know if -- were you interested in further
22 meetings?

23 MS. CARUSO: No, I was just curious who the
24 stakeholders -- who you consider the stakeholders. Are these
25 the same stakeholders that were part of the board on the MOU?

1 MR. DICKINSON: No. No, these would be the city of
2 Lewiston -- obviously --

3 MS. CARUSO: Right, I heard -- yeah.

4 MR. DICKINSON: Yeah.

5 MS. CARUSO: Okay. Was there any public notice to
6 residents of the affected communities about any pre-application
7 meetings with community leaders or any other broader outreach
8 to invite public comment?

9 MR. DICKINSON: Yeah, was there any at any time
10 during the project, is that your question?

11 MS. CARUSO: Well, before the -- was there any public
12 notice about any pre-application meetings, like, before you
13 applied?

14 MR. DICKINSON: I mean, the challenge here is in a
15 competitive process letting your competition know what your
16 project looks like creates a challenge. You know, we had a
17 number of different bids, both wind, solar, battery technology
18 along with the two different Hydro-Quebec bids. We weren't
19 sure how much of our competition even knew that we were going
20 to be bidding or what we were going to be bidding, and
21 providing them any details around that is dangerous. And why
22 we end up having these meetings so close to our bid for these
23 kind of key meetings would be one way to mitigate that.

24 MS. CARUSO: Right. Well, you mentioned earlier that
25 you had met for two years with some stakeholders. So I'm

1 wondering why you chose not to meet with others, aside from
2 your competitive concerns. I mean, you didn't have to put it
3 in the newspaper.

4 MR. DICKINSON: Yeah, so the -- so, well, maybe one
5 comment is that the original conversations with the group that
6 then became Western Mountains & Rivers emanated out of our
7 earlier bids in the tristate RFP. So really the bids that we
8 had submitted into that solicitation also included wind and
9 solar opportunities. Again, they weren't selected in that RFP
10 process, but the dialogue really began well before that and
11 continued through on. As far as communications to the towns
12 along the corridor, you know, we've had multiple meetings with
13 every town along the corridor. We've -- all of those meetings
14 were publicly noticed and put onto the agenda for public
15 comment.

16 MS. CARUSO: Right, but I was referring to after the
17 bid but before the application. So on page two of the NECEC-9,
18 do you see under phase one of the plan where it says, quote,
19 "Prior to the filing and a broad public announcement, the
20 project team made contact with key stakeholders to provide an
21 overview of the project, including the route map, the economic
22 benefits, and plans to avoid sensitive areas," end quote?

23 MR. DICKINSON: I see that, yes.

24 MS. CARUSO: Okay. And do you also see on page three
25 under, quote, "phase one pre-filing communication," end quote,

1 the second sentence that says, quote, "Even before the project
2 was announced publicly or drew media attention, elected
3 officials, business and community leaders, and economic
4 development officials were provided with the project details,
5 answers to their questions, and an understanding of the project
6 benefits and impact," end quote?

7 MR. DICKINSON: Yes, I see that.

8 MS. CARUSO: Do you happen to recall when the project
9 first drew media attention?

10 MR. DICKINSON: There was Hydro-Quebec -- when we're
11 talking about this project specifically, not necessarily the
12 wind ones which obviously go back multiple years, but the --
13 Hydro-Quebec first announced that they were going to have a
14 project through wind -- through -- originally Hydro-Quebec only
15 had announced one bidding partner which was Northern Pass. And
16 I think it was in the spring of 2018 that they announced that
17 they were actually going to have multiple bids, one through New
18 Hampshire and one through Maine. At that point they didn't
19 specifically designate us as the provider of the transmission
20 services. And then as I noted in my earlier communication, we
21 began to brief people on the project really kind of closer to
22 the bid at the end of July.

23 MR. DES ROSIERS: Mr. Dickinson, in your answer you
24 said 2018. Did you mean 2017?

25 MR. DICKINSON: Oh, yeah, thank you. 2017, thank

1 you.

2 MS. CARUSO: So in that quote that we just read, I'm
3 assuming that when it says elected officials, you refer to
4 including people like mayors and selectmen and town managers.
5 Is that correct?

6 MR. DICKINSON: Yeah, so again, the city of Lewiston
7 would be an example. The Somerset County Commissioners, you
8 know, the other towns that I mentioned all would be examples.

9 MS. CARUSO: Okay. And did you meet with these
10 elected officials in each town along the route before you filed
11 your application?

12 MR. DICKINSON: The towns that are listed -- so this
13 is a complete list, I believe, of the formal meetings that we
14 had, and the -- you know, you can see the meetings that --
15 between the end of 2000 -- you know, summer of 2016 through
16 2017.

17 MS. CARUSO: I can't see it but --

18 MR. DICKINSON: Oh, okay, all right.

19 MS. CARUSO: -- that's okay.

20 MR. DICKINSON: Yeah, and I think one -- go ahead,
21 sorry.

22 MS. CARUSO: So those are the towns that you met with
23 before, but why didn't you meet with all the towns?

24 MR. DICKINSON: I think our -- again, I think there's
25 a balance of a number of factors. As I already mentioned, we

1 have to be very careful to not tip our hand associated to the
2 competitive nature of the bids that we're going into with --
3 you know, we had an idea there were going to be a lot of bids.
4 Fifty-three was a pretty big number, and that it -- the more
5 information you provide even an hour before a bid is due could
6 change somebody's strategy associated with how they bid,
7 balanced against a desire to get out there, as we laid out in
8 phase one, and then we identified those key areas to have those
9 contacts before the bid was submitted.

10 MS. CARUSO: So you chose to tell some towns
11 beforehand, but you -- it was kind of a secret to other towns
12 beforehand?

13 MR. DICKINSON: Yeah, there was no purposeful --

14 MR. DES ROSIERS: Objection. Can you define
15 beforehand? What time period are you referring to?

16 MS. CARUSO: Before the application.

17 MR. DES ROSIERS: And by the application, you mean
18 the application to the PUC?

19 MS. CARUSO: Right. So would you be surprised to
20 learn that the very first time any CMP representative discussed
21 NECEC with our selectboard in Caratunk was around on March 21st
22 of 2018, around five months after you filed the CPCN
23 application?

24 MR. DICKINSON: So I'm sorry, I thought there was a
25 follow up to your earlier question. Could you repeat that

1 again, please?

2 MS. CARUSO: Sure. Would you be surprised to learn
3 that the very first time that any CMP representative discussed
4 NECEC with the Caratunk selectboard was on March 21st of 2018
5 which was about five months after you filed the application?

6 MR. DICKINSON: I see that date on the data request.
7 That's correct, March 21st.

8 MS. CARUSO: And would you accept my representation
9 as the chair of the Caratunk selectboard that CMP's March 21st
10 meeting or presentation was not much more than a relatively
11 short pitch to request that Caratunk file a letter in support
12 of the project?

13 MR. DICKINSON: I mean, I would -- I'm pretty
14 familiar with the presentations that were used to provide
15 information to the communities along the border where we were
16 going. I wouldn't represent it the way you did, but I'm pretty
17 -- I think I'm somewhat familiar with what that presentation
18 looked like.

19 MR. STINNEFORD: But it's my understanding that each
20 of the towns, including Caratunk, was offered to have
21 additional presentations with additional information and we
22 would follow up if that was desired. And in fact, I think in
23 almost every town, we did follow up and had multiple meetings
24 with town officials.

25 MS. CARUSO: With regards to Caratunk, do you recall

1 that -- I believe that our first -- by the way, our first
2 meeting was pretty short. It wasn't a special meeting. It was
3 just part of our monthly selectmen meeting. So it wasn't like
4 we had a separate meeting open to the public to discuss this
5 project. I think you didn't expect to need much of our time if
6 I recall correctly so --

7 MR. DES ROSIERS: I'm going to state an objection.

8 MS. CARUSO: -- that's why I asked that question.

9 MR. DES ROSIERS: This appears to be testimony as
10 opposed to questioning of the witnesses.

11 MS. CARUSO: Well, I was just responding to what you
12 said.

13 MR. TANNENBAUM: Okay, just proceed.

14 MS. CARUSO: Do you recall that while Caratunk filed
15 a support letter after the March 21st meeting, we subsequently
16 retracted our support once we became more educated about the
17 project and that was submitted into the docket as a public
18 comment at that time?

19 MR. DICKINSON: You know, subject to check, I will
20 accept that.

21 MS. CARUSO: Okay. Would you also accept my
22 representation that Mr. Carroll told the selectmen at the March
23 21st meeting that Caratunk would be included as a party in
24 local mitigation discussions that were apparently underway?

25 MR. DICKINSON: I mean, my tendency is not to accept

1 that as a precept. I would want to talk to Mr. Carroll myself
2 and understand the nature of the dialogue that he had. I mean,
3 again, our approach was to make ourself (sic) available, and
4 every town along the corridor, as I understand it, every
5 organized town we met with multiple times so -- and we're open
6 to any request for any meeting anywhere. Something I think our
7 whole outreach team was incredibly about is our ability to make
8 ourselves available for people in the community to talk about
9 the project.

10 MS. CARUSO: So as you have earlier testified that
11 there was a lot of promise for community benefits with this
12 mitigation package and that it was supposed to go towards the
13 greater community and specifically it was stated from Caratunk
14 to Parlin Pond. Is that correct?

15 MR. DICKINSON: Yeah, that's correct.

16 MS. CARUSO: Okay. And so would you accept that, as
17 far as I'm saying it, the first time we heard about the MOU
18 with Western Mountains & Rivers Corporation was after it had
19 been executed, CMP did not request any input whatsoever from
20 Caratunk, and Caratunk was not, in fact, included in the
21 discussions leading up to the MOU?

22 MR. DICKINSON: Again, my perspective as I had
23 answered earlier was that there was a great deal of outreach
24 from the folks that were representing the community and Western
25 Mountains & Rivers to the community about what was -- that

1 there were discussions going on with CMP.

2 MS. CARUSO: So were there any elected officials from
3 Caratunk that were a part of those discussions?

4 MR. DICKINSON: There were none that were directly in
5 the meetings that I had, but my understanding were those
6 conversations were -- not specifically necessarily that one but
7 other ones were happening throughout the community.

8 MS. CARUSO: I'm not following.

9 MR. DICKINSON: So what I'm saying is that we
10 encouraged, and my understanding are the people that we were in
11 dialogue with, on numerous occasions, spent time outreaching
12 into the community to discuss the nature of the discussions and
13 the project that we were doing.

14 MS. CARUSO: So would it -- would you accept my
15 representation again that the first time any elected official
16 from the town of Caratunk, from selectmen to planning board
17 members to any officer, we had never heard about the MOU until
18 after Mr. Carroll told us that we would be a part of the
19 process and Caratunk would be represented in the mitigation?

20 MR. DES ROSIERS: Objection to form, assumes facts
21 not in evidence.

22 MS. CARUSO: I'm just asking if you would trust me
23 that that's my understanding of it.

24 MR. STINNEFORD: We have no way of knowing your
25 understanding. I'm sorry.

1 MR. TANNENBAUM: Eric or Thorn, are you --

2 MS. CARUSO: So if you --

3 MR. TANNENBAUM: Excuse me. So I think the question
4 is are you aware or can you -- do you know whether any officer
5 or elected official from Caratunk was informed of the MOU
6 before it was finalized?

7 MR. DICKINSON: Well, I think what -- to answer your
8 question is I don't have a way of knowing. I don't actually --

9 MS. CARUSO: Okay. Well, I'm not under oath, but I'm
10 not -- I'm telling the truth about it.

11 MR. TANNENBAUM: Okay.

12 MS. CARUSO: And it's my understanding that The Forks
13 -- the West Forks, the areas of this new part of the corridor,
14 were not knowledgeable or a part of the representation on that
15 board before it was signed.

16 MR. DES ROSIERS: I'll object to that --

17 MR. TANNENBAUM: And then --

18 MS. CARUSO: Is that your understanding as well?

19 MR. TANNENBAUM: Was that your understanding as well?

20 MR. DICKINSON: No, I -- you know, my belief was
21 there was a significant understanding around the community that
22 there was a dialogue going around about an MOU encouraged by
23 our discussions and our goals of representing a mitigation
24 package and an agreement that would provide benefits throughout
25 the community.

1 MS. CARUSO: So you're saying it was up to other
2 people? The other people on the MOU had to communicate that
3 with the members of the community?

4 MR. DICKINSON: Well, I think there's -- I can think
5 about all the trips I've made up to The Forks and sat around
6 picnic tables and showed maps of people (sic) and talked about
7 the project. Throughout this process, the outreach team has
8 proactively reached out to every town. Throughout this process
9 we've -- every time there's been a request for a meeting, we've
10 made ourselves available, and it's something I'm incredibly
11 proud of, the way we have managed the project. In addition to
12 all that, we encouraged the members of the Western Mountains to
13 reach out to the community to make sure that this represented a
14 broad sense of what was happening. So not alone, but in
15 addition to.

16 MS. CARUSO: I think it was maybe early to mid-March
17 when several entities like the generators and the Renewable
18 Energy Association intervened in opposition. Was it around
19 then? Do you know?

20 MR. STINNEFORD: I don't know exactly when
21 interventions were filed.

22 MS. CARUSO: At that time, were you more concerned
23 that the docket might become more complicated or controversial
24 because the interveners were participating in it?

25 MR. DICKINSON: I mean, we believe in this project.

1 We think this project provides significant benefits for Maine.
2 And we put together a team, a project, and a filing that we're
3 proud of, and I don't think we would have done it any different
4 if there had been just two or three interveners or 30 or 40.

5 MS. CARUSO: Okay. I just didn't know if it was a
6 coincidence that we were -- that the town of Caratunk was
7 approached by Mr. Carroll after that or -- I don't know when
8 CMP started to meet with officials in other towns to get
9 letters of support in the local area of the new corridor.

10 MR. DICKINSON: Well, again, we -- an NRCM data
11 request that I said, we listed all the formal meetings. So if
12 you refer to that, you can see the, you know, two long pages of
13 very small font set of meetings that we had over that period of
14 time.

15 MS. CARUSO: Okay. The last bullet on page three of
16 NECEC-9, it discusses that one of the objectives of pre-filing a
17 communications plan was to, quote, "build and maintain valuable
18 relationships along the route." Then continuing on on the top
19 of page four it says your additional objectives were to, quote,
20 "identify and address issues of importance to key stakeholders
21 and to use early input to develop the project worthy of
22 expedited permitting." Do you see that?

23 MR. DICKINSON: Yes, I do.

24 MS. CARUSO: Okay. Since we didn't -- we weren't met
25 with prior to the filing, and I suspect Caratunk wasn't the

1 only town, do you think it was an effective execution of phase
2 one of your communications plan?

3 MR. DICKINSON: Yes, I do.

4 MS. CARUSO: Okay. On the bottom of page four, it
5 says -- there's a second bullet regarding the project brochure
6 and some one pagers, and included in the pre-application
7 communications it says, quote, "outline the NECEC in a clear
8 and concise fashion and include a map as well highlights of the
9 project benefits," end quote. And then on page five, the first
10 bullet says, quote, "project maps." Is it fair to say that the
11 property taxes were one of the primary benefits you were
12 promoting in order to encourage support of local -- of elected
13 officials?

14 MR. DICKINSON: Yeah, I think it was one of a key of
15 -- a group of them, yes.

16 MS. CARUSO: Okay. And then on the first bullet on
17 page five, you refer to an overview map which delineates the
18 route and location of existing transmission-related
19 infrastructure, and you refer to the route maps that depict the
20 corridor on a town-by-town basis and include, quote,
21 "geographical features such as water bodies," end quote. And
22 the final sentence says that between the overview map and the
23 route map you provide a full understanding of the project
24 elements. Is that correct?

25 MR. DICKINSON: Yes, I see that.

1 MS. CARUSO: Okay. So does this imply that the map
2 showing the general route, the existing transmission
3 infrastructure, and water bodies provide a, quote, "full
4 understanding of the project elements of NECEC"?

5 MR. DICKINSON: Yeah, I mean, we've developed
6 numerous maps for numerous purposes throughout the process.

7 MS. CARUSO: Okay. So would you agree that things
8 like the height of the proposed towers, the width of the
9 corridor, the need to manage vegetation with herbicides, the
10 crossing of streams and wetlands, and the need to address local
11 fire control or emergency response requirements or the
12 temporary -- potential temporary interruption of the use of
13 snowmobile trails and other impacts to recreational resources,
14 would they be project elements? None of which were discussed
15 in our first meeting -- presentation at the town office.

16 MR. DICKINSON: I mean, the purpose of that --

17 MS. CARUSO: -- they were --

18 MR. DICKINSON: I'm sorry, go ahead. The purpose for
19 the town meetings were to provide a comprehensive understanding
20 of the project and then be available to questions. And, you
21 know, to the degree that people had a specific question, we
22 would do our best to get back and provide that information,
23 but, you know, I can't imagine the size of a presentation. It
24 would be at least a two-day long presentation if we went to
25 every element that you described in the project. So the idea

1 is we make ourself available, we listen to what people's
2 concerns are, and we do our best to respond to those.

3 MS. CARUSO: Right. So do you think that the -- so
4 you say that one of the goals of the pre-application
5 communications was to, quote, "identify and address issues of
6 importance to key stakeholders."

7 MR. DICKINSON: Yes.

8 MS. CARUSO: Since they weren't part of your initial
9 target audience, is it fair to say you felt that the
10 landowners, the guides who are using the area, and other
11 residents of the affected communities were not the, quote, "key
12 stakeholders"?

13 MR. DICKINSON: No, and I think, you know, again,
14 there is a balance here before submitting a project on how much
15 you can disclose about the project. What we did, and I think
16 what we're very proud about in the way that we built this
17 project, is to utilize most of it through an existing corridor
18 and then to -- largely through two private landowners that
19 currently log the land, utilize, site, the project at that
20 location. Now in our conversations and in our own analysis we
21 identified some areas that we knew would be a specific concern,
22 Moxie Lake, Appalachian Trail crossing, the Kennebec River.
23 And we actually modified some of our plans in order to mitigate
24 those impacts after speaking with people in the community about
25 those areas.

1 MS. CARUSO: So it was my understanding that one of
2 the groups opposing this is the landowners on Moxie Lake. Did
3 you meet with the -- those camp owners, the associations that
4 are along Moxie Lake?

5 MR. DICKINSON: Yes, I met with them.

6 MS. CARUSO: Before this and before the mitigation?

7 MR. DICKINSON: Well, we modified -- based on our own
8 analysis, we reduced the pole size along the -- there's a
9 transmission corridor that parallels Moxie Lake with an
10 existing 115 structure in it, and when we first designed the
11 line, we imagined having 95-foot poles, monopoles, in that
12 structure. And both of our own understanding, our own outreach
13 team, and conversations with the public, we believe that by
14 reducing the pole size to 75 feet, even though it costs more
15 money for us, it meant more structures, more pieces in there,
16 we actually brought the pole size down to the -- similar as the
17 topography in the area so those camp owners on the opposite
18 side of the lake would not see the structures. So that would
19 be, you know, an example where we -- you know, both our own
20 knowledge of our outreach team which involved people that know
21 Maine very well, our conversations with people in the public,
22 and then we made a modification to our project to incur
23 additional cost in order to mitigate the visual impacts of the
24 -- of that project.

25 MS. CARUSO: So -- but you didn't meet with the Moxie

1 landowners before you filed and, given the fact that they sent
2 a letter of opposition, apparently the lower tower height
3 didn't get them to support the project. Did you offer to bury
4 the line there?

5 MR. DICKINSON: No.

6 MS. CARUSO: Would you agree that a broader public
7 outreach -- you know, just given the fact of all the public
8 comments that have been posted on the PUC site, that perhaps a
9 broader public outreach at the beginning of the process might
10 have allowed CMP to develop a better understanding about the
11 issues of concern in the various communities before you
12 finalized the application or --

13 MR. DICKINSON: I -- you know, my own feeling is I'm
14 incredibly proud of the outreach team that we brought to bear
15 here. It's not one or two people. We have a, you know, large
16 group of people, both internal and external, some with years of
17 experience in siting projects and understanding the issues that
18 get raised. I can't point to a specific thing that we would do
19 differently. I mean, obviously we believe the project is a
20 good one. We believe that the benefits are real, and obviously
21 we've gone through that in extensive detail in this proceeding.
22 And unfortunately there are people that are -- for whatever
23 purpose and reason, don't see it the same way. Obviously
24 that's up to everyone to weigh the benefits here. But, no, I'm
25 incredibly proud of the outreach team and the efforts that

1 they've done on this project.

2 MS. CARUSO: Well, that's good. So do you think that
3 anything could have been done different to eliminate the huge
4 public backlash of the six or 700 comments of opposition, the
5 different organizations, and the towns that are rescinding
6 their support?

7 MR. STINNEFORD: I would say, you know, that just has
8 to be kept in perspective. I think it's still in excess of 90,
9 95 percent of the communities along the corridor are still
10 supporting the project. It's a small minority of communities
11 that are not. And, yes, there are several hundred individuals
12 who have filed comments and organizations that have filed
13 comments against the project, but I think a project of this
14 scale and this magnitude, you have to anticipate that there's
15 going to be some level of opposition.

16 MS. CARUSO: Okay. Did CMP at that time think it
17 might have been harder to show NECEC was worthy of expedited
18 permitting if they started having more broader public outreach?
19 You know, information sessions instead of talking to just a
20 targeted audience?

21 MR. DICKINSON: I'm sorry, I'm not sure I --

22 MS. CARUSO: What is expedited permitting in your
23 opinion?

24 MR. STINNEFORD: Well, I think it's been our
25 experience that the permitting process, for example, this

1 process that we're in today, although it has the possibility as
2 we've seen in the past, to run on for years on some projects, I
3 think to the extent that we hold this project to its current
4 schedule, we would consider that to be expedited relative to
5 history.

6 MS. CARUSO: But the PUC regulations say that there's
7 -- that is has to be decided within a certain amount of time.
8 So you're kind of limited on that, correct?

9 MR. STINNEFORD: That time is routinely extended.

10 MR. DES ROSIERS: Someday I'm going to get one done
11 in that time.

12 MR. TANNENBAUM: Don't count on it.

13 MS. CARUSO: Have you ever asked the affected
14 communities whether the very rural areas like in Somerset
15 County, like the area of the new corridor, if they logistically
16 can provide accommodations for such a large construction work
17 force or whether they have adequate fire and other emergency
18 response resources to deal with, you know, potential project-
19 related hazards during the construction and the operation?

20 MR. DICKINSON: I mean, the -- our -- I mean, we have
21 a great deal of experience in managing these types of projects
22 and understanding the communities that we host them within.
23 And those are conversations that, yeah, there were times where
24 that came up in our dialogue, and I would expect that if this
25 project continues to go forward, there will be continued

1 coordination and efforts along that front.

2 MS. CARUSO: But just I guess (indiscernible) answer,
3 did you ask the affected communities whether or not they could
4 accommodate such a large construction workforce or if they had
5 the fire and emergency response resources to handle it?

6 MR. DICKINSON: So the -- I don't think -- I think
7 the simple answer is no. Obviously we've done an analysis over
8 the employment that will be required in order to get the
9 project done through the work at the University of Southern
10 Maine.

11 MR. STINNEFORD: And I would just say that, you know,
12 setting aside the issues you raised around public safety which
13 I acknowledge, one community's challenge is another's
14 opportunity. I mean, to the extent that this construction
15 process is going to inject a great deal of economic value into
16 the community, I think many view that as a positive.

17 MS. CARUSO: So have you spoken with, for example,
18 you know, the towns of Jackman or West Forks, The Forks, or
19 Caratunk to see if they had accommodations to -- that were
20 available, aside from their tourist accommodations, like the
21 hotels that are hosting the tourists that come to the area, do
22 they have an excessive amount of rooms available? Do they have
23 fire departments? Do they have emergency resources to support
24 this kind of construction project?

25 MR. DICKINSON: Yeah, I mean, we continue to be in

1 dialogue in the specific example of Jackman. I was just up
2 there a few weeks ago, and we were talking about some of the
3 topics that you mentioned. So, yeah, I think it's -- in our
4 view it's an ongoing dialogue that will continue to happen in
5 the towns to make sure that we provide the most value we can
6 related to the project with having the least impact.

7 MS. CARUSO: Right. But have you ever built such a
8 large project in Somerset County? An area like this that is
9 not really inhabited? Do you really know if there's enough
10 resources or not to support this construction? Or the
11 operation of the line once it's up in terms of fire and
12 emergency? You don't really know right now, right?

13 MR. STINNEFORD: You asked about four questions
14 there, and I haven't had a chance to answer any of them yet.
15 Yes, we have built projects in Somerset County, not in this
16 specific area. We have built projects in areas that are
17 equally remote and have not encountered problems with the
18 housing and lodging, feeding of construction crews. We've
19 managed to work those issues out in areas that are equally
20 remote. But in terms of, you know, have we had conversations
21 with those municipalities around the public safety issues that
22 you've raised, I think Thorn has addressed that question.

23 MR. DICKINSON: And then from an operations
24 perspective, you know, we have thousands of miles of
25 distribution and transmission system throughout Maine. So, you

1 know, the --

2 MS. CARUSO: Well, I'm only asking this because I
3 hear the communities themselves are expressing real concerns
4 that they don't have the housing or the fire should there be
5 fires like what happened in California. So what the question
6 is is have you addressed these concerns beforehand? And do you
7 know that, should there be fires like that, that there is a
8 response crew in the location that's there? Do you know if
9 there's -- for example, do you know if they have five
10 departments? Are they volunteer fire departments? Is there an
11 ambulance service? Is there a hospital there?

12 MR. STINNEFORD: We have transmission lines that
13 traverse areas of Maine that have -- are equally remote, if not
14 more remote, than what we're talking about in this corridor
15 through many unorganized townships that have no fire
16 departments, no public safety resources. So it's not a new
17 issue. It's an issue that we're accustomed to.

18 MS. CARUSO: Okay, moving on to tab four, you'll see
19 that the first page from the printout -- is a printout from a
20 January 2nd post on Facebook that invites people to visit a
21 specific portion of the website, the NECEC website, if they
22 want to find out more information about how the project affects
23 their community. Do you see that?

24 MR. DICKINSON: Yeah.

25 MS. CARUSO: And then there's a link that takes

1 visitors to the map on the website where people can click on
2 individual towns, and here you'll see a relevant page for
3 Caratunk. At the bottom of the second page on tab four,
4 there's an estimate of the new tax revenue Caratunk will
5 receive in one year -- in year one. And there's an asterisk
6 that refers to a sort of disclaimer on the following page that
7 says it's an estimate based on the 2017 preliminary design and
8 it is subject to change. Do you see that?

9 MR. STINNEFORD: Yes.

10 MS. CARUSO: So your tax estimates were performed by
11 the Maine Center for Business & Economic Research. Is that
12 correct?

13 MR. STINNEFORD: That's correct.

14 MS. CARUSO: And as I understand it, the total
15 estimated property taxes are approximately 18 million per year.
16 Is that correct?

17 MR. STINNEFORD: Yes.

18 MS. CARUSO: And the process that they developed --
19 they used to develop the \$18 million estimate was the same that
20 Daymark used as an assumption in how they modeled the overall
21 economic impacts. Is that true?

22 MR. STINNEFORD: Well, I think both Daymark and Mr.
23 Wallace will be testifying later in this proceeding. I'd
24 probably ask them directly.

25 MS. CARUSO: So if the numbers -- but this was to say

1 if the numbers are lower -- if the actual number is lower than
2 their estimate, would that mean that Daymark had over estimated
3 the economic benefits?

4 MR. STINNEFORD: Or if the taxes end up being higher,
5 then they have under estimated the benefits. That's correct.

6 MS. CARUSO: Okay. Are you familiar with the sworn
7 testimony during the public witness hearings from the tax
8 assessor for the town of Caratunk and other towns, Mr. Garnett
9 Robinson?

10 MR. STINNEFORD: I'm generally aware of the
11 testimony, not the details.

12 MS. CARUSO: Okay. Are you aware that, you know, in
13 his professional experience, he works as an assessor for
14 various other towns throughout the state and towns also in
15 which CMP has recently built large transmission projects?

16 MR. STINNEFORD: Was there a question there?

17 MS. CARUSO: Are you aware of that?

18 MR. STINNEFORD: Yes.

19 MS. CARUSO: Okay. Do you recall that he provided
20 specific examples of how CMP had tax declarations and lower tax
21 payments -- under-reported tax declarations and lower tax
22 payments than the initial revenue projections which had been
23 provided to those towns during the development or permitting
24 stage of the projects?

25 MR. STINNEFORD: Yeah, I think one of the things that

1 happened, particularly -- and I think most of these issues have
2 arisen as -- around the Maine Power Reliability Program, the
3 MPRP project. And I think what happened in those instances was
4 the property tax projections were calculated based on the
5 specific investment to be made in each community and assumed
6 that that value would be assessed at its installed cost
7 effectively, at least in the initial year. What it didn't take
8 into account is the way that Maine Revenue Service handles the
9 assessment of transmission line. It's unique. It's somewhat
10 complex. But in general terms, transmission lines are assessed
11 on an average unitized basis by voltage class. So, for
12 example, all of CMP's 345,000 volt transmission facilities are
13 all assessed at the same average value per mile based on an
14 initial investment, less 30 percent depreciation, and then that
15 value is fixed. And then all transmission across our -- across
16 the state is assessed on that same average value basis. So the
17 result of that was that some communities that had significant
18 transmission line investment from MPRP did not see the full
19 benefit of that property tax assessment in their community, but
20 conversely, there were many other town who did not host any of
21 the project that saw an increase in the assessed value. Now,
22 in the case of the NECEC project, we'll see a significantly
23 diminished impact of that methodology because NECEC's costs
24 will have to be fully segregated from CMP's other transmission
25 costs. The DC corridor will be separately assessed, separately

1 costed and assessed. So the full assessed -- assessment impact
2 of those facilities will be realized in the host communities
3 where it's located. It still will be subject to this fixed 70
4 percent depreciated value calculation, but it will not be, in
5 effect, socialized across other communities.

6 MR. TANNENBAUM: Okay. We have a follow up.

7 MR. WILLIAMSON: Eric, I have a question. To what
8 extent does CMP face payments in lieu of taxes in towns as
9 opposed to assessed valuations and so forth? I mean, it is
10 used in some states and some other jurisdictions.

11 MR. STINNEFORD: Yeah, I'm not aware of any of the
12 host communities for this project where that will be the case.

13 MR. WILLIAMSON: Okay.

14 MR. TANNENBAUM: Hold on, Elizabeth.

15 MS. CARUSO: So --

16 MR. TANNENBAUM: Yeah, Elizabeth, hold on. We -- the
17 bench has another follow up. Go ahead, Chris.

18 MS. COOK: So just so I understand what you just
19 said, Eric, does that mean that the \$18 million of property tax
20 value is actually only going to be 70 percent of that?

21 MR. STINNEFORD: It's not as simple as that,
22 unfortunately. The initial property tax assessments that had
23 been done that I believe fed into both Ryan Wallace's work and
24 Daymark's I believe assumed that they -- that property would be
25 depreciated over time and its assessed value would depreciate

1 over time. So that analysis probably overstated the assessed
2 value on the front end but understated it on the back end
3 because the 70 percent is fixed through time. You know, the
4 decision under this Maine Revenue Service bulletin that we
5 subscribe to was done as a simplification. You know, rather
6 than tracking actual depreciation on every asset through time,
7 this was a simplified way to establish a fair assessed value,
8 but it is fixed.

9 MS. COOK: So do you have a view right now as to
10 whether what Daymark and Mr. Wallace have done is an over
11 estimate or an under estimate?

12 MR. STINNEFORD: I think there are many assumptions
13 in that analysis. You know, we assumed it was based on current
14 mil rates, for example. There was no escalation of mil rates
15 so -- there are other assumptions that would probably push that
16 in the other direction if we were to adjust for this
17 methodology.

18 MS. COOK: Okay, thank you.

19 MR. TANNENBAUM: Okay. Elizabeth, please continue.

20 MS. CARUSO: Okay. So, for example, what you're
21 saying is that 100,487 for Caratunk is really split to some
22 extent between the town and the state?

23 MR. STINNEFORD: No. The --

24 MS. CARUSO: So -- go ahead.

25 MR. STINNEFORD: No, I mean, the process I described

1 is the process by which CMP comes up with an assessed value for
2 transmission lines. So we will calculate the assessed value
3 using that methodology, report that to the town of Caratunk,
4 and that will be the basis for Caratunk's issuance of a
5 property tax bill to CMP.

6 MS. CARUSO: So do you see the concern, though, that
7 towns have when CMP comes in order to get a permit and they
8 have a wonderful revenue projection for the town who issues the
9 permit, and then when it comes down to it, the permit actually
10 is about, you know, 17 or 30 percent or something far less than
11 what they expected? Do you see that concern for town assessors
12 and selectmen?

13 MR. STINNEFORD: Well, I can understand the concern,
14 yes.

15 MS. CARUSO: And do you think that there's a
16 difference between the tax treatment for an ETU versus a rate-
17 based utility asset?

18 MR. STINNEFORD: They're all rate-based assets. I
19 mean, the purpose of this assessment methodology is to
20 recognize that fact that, unlike many other classes of
21 property, transmission line assets, their ability to earn is
22 based on their depreciated book value. And that's no different
23 whether it is a rate-based reliability transmission line or an
24 ETU that is recovering its revenue through some other tariff.

25 MS. CARUSO: So if this -- you know, as a for-profit

1 project, if the actual revenue performance is less than
2 projected once it's in operation, wouldn't we expect the
3 property value of the line to drop?

4 MR. STINNEFORD: We might argue for that, but that's
5 not the methodology that Maine Revenue Service prescribes.

6 MS. CARUSO: Well, are you familiar with the wind
7 farm in Bingham and the unorganized territory where, just
8 within two years ago, they put it up, they -- and then within
9 two years, their performance dropped significantly, they were
10 filing for abatements, and want to sue the town for their tax
11 bill?

12 MR. STINNEFORD: You're talking about the assessment
13 of a generation project, not a transmission line who recovers
14 its revenues through a completely different mechanism.

15 MS. CARUSO: But it's still a for-profit project, and
16 if it doesn't -- part of the assessing -- part of the
17 components for assessing is based on the performance of that
18 business component of that line. And at some point, CMP could
19 say, well, we're not really producing what we expected to be
20 producing, we're not entering the market, it's really not --
21 it's not as valuable as we thought it would be and we don't
22 want to pay these taxes.

23 MR. STINNEFORD: Yeah, again, transmission lines are
24 not assessed based on their market value. Unlike generation
25 projects, paper mills, other types of property, transmission

1 lines are uniquely assessed based on the methodology that I've
2 described. It's not based on value. Market value I should
3 say.

4 MS. CARUSO: But your earnings are locked in by the
5 PPA, is that right, and -- per the 20-year contract?

6 MR. STINNEFORD: Forty-year contracts, yes.

7 MS. CARUSO: Okay. And you recover your revenue as
8 well?

9 MR. STINNEFORD: Yes, independent --

10 MS. CARUSO: -- that?

11 MR. STINNEFORD: Yes, we do.

12 MS. CARUSO: Okay. So are you aware that when
13 selectboards and town assessors review the tax impact of any
14 new development, we also consider the potential offsetting
15 impacts to existing property values?

16 MR. STINNEFORD: I'm not aware of that, no.

17 MS. CARUSO: Okay, so we need to look at -- so you
18 don't know if the value from MCBER included any offsetting
19 impacts that the towns have to assess?

20 MR. DES ROSIERS: I'm going to object and indicate
21 that Mr. Wallace of the Maine Center will be testifying on
22 Friday and can be a much better witness to answer that
23 question.

24 MR. TANNENBAUM: Eric, do you an opinion one way --

25 MR. STINNEFORD: I do not. I mean, I don't believe

1 he factored that into his analysis, but that's something he
2 should confirm.

3 MR. TANNENBAUM: Okay. Sustained.

4 MS. CARUSO: At the bottom of the first page of the
5 website printout provides information that Caratunk is in
6 Somerset County, provides the distance that the corridor will
7 travel through Caratunk, and provides the estimated new tax
8 revenue. Do you see that?

9 MR. STINNEFORD: Yes.

10 MS. CARUSO: And then the next page has four bullets
11 of additional benefits. Is that right?

12 MR. STINNEFORD: Yes.

13 MS. CARUSO: So -- and then are there any other
14 information on the Caratunk page?

15 MR. STINNEFORD: Again, I don't know. This -- we did
16 not produce this so I'm not sure whether there was other
17 information that was not included or not.

18 MS. CARUSO: No, that's it. So when someone follows
19 the link for more information about NECEC in their community,
20 this is what they get, assuming we didn't leave any pages out,
21 correct?

22 MR. STINNEFORD: Yeah, I'm not sure whether there is
23 additional information for other communities or if they're all
24 the same. I don't know.

25 MS. CARUSO: Well, at least for Caratunk. So will --

1 on this issue, will CMP -- so CMP can't make a firm commitment
2 that they'll actually pay the estimated amount that is being
3 published as part of the company's efforts to solicit local
4 support. You're saying you can't make a firm commitment that
5 you will definitely be paying this?

6 MR. STINNEFORD: No.

7 MR. DES ROSIERS: In paying the "this," is "this"
8 referring to the tax amount?

9 MS. CARUSO: Yes.

10 MR. STINNEFORD: As the footnote says, we will not
11 know the actual assessed value until we know the actual cost of
12 the project. This is all based on estimated project cost.

13 MS. CARUSO: Uh-huh. Okay, the next document, tab
14 four, is a filing that was made at FERC on August 20th, 2018.
15 I assume you're familiar with this.

16 MR. STINNEFORD: Yes.

17 MS. CARUSO: The pages are from Exhibit 3-1, Schedule
18 1. I understand it -- the way I understand it, this is
19 analysis CMP provided to FERC as part of a proceeding where
20 FERC would approve the rate of return under your transmission
21 contracts for NECEC.

22 MR. STINNEFORD: No.

23 MS. CARUSO: Is that right?

24 MR. STINNEFORD: No, that's not correct.

25 MS. CARUSO: It's not?

1 MR. STINNEFORD: We were filing approval of the
2 transmission service agreements, not specifically a rate of
3 return but the terms and conditions of the entire agreements.

4 MS. CARUSO: Okay. On line 18 of each page you
5 provide a number for property tax expense under the category
6 Revenue Requirements. And in year one of the project it says
7 you expect to incur 20.533 million in property tax expense.
8 And it looks like that stays relatively consistent over the
9 first 20 years of the project. Is that true?

10 MR. STINNEFORD: That is what this indicates, yes.

11 MS. CARUSO: Okay.

12 MR. STINNEFORD: I believe it is --

13 MS. CARUSO: Was this estimate also provided by
14 MCBER?

15 MR. STINNEFORD: No, it was not. This is based on
16 assumptions that were in a different financial model, and,
17 again, it's -- it was based on an estimate of the initial cost
18 and assessed value. I don't even know if the assumed mil rates
19 in that analysis were -- equivalent to the analysis that was
20 used by Mr. Wallace.

21 MS. CARUSO: Okay, so I guess you can understand my
22 confusion because on one hand we -- there's 18 million that has
23 been touted as one of the major economic benefits of the
24 project, and then we have our professional tax assessor who
25 testified under oath that CMP often pays much less than the

1 initial estimate and then we have this estimate to FERC which
2 is more than 20 million. So it's hard to know which it is, you
3 understand?

4 MR. STINNEFORD: I think that just points to the
5 challenges of estimating future property taxes.

6 MS. CARUSO: Okay.

7 MR. STINNEFORD: I'm assuming that the communities
8 would not be upset if we -- turned out our estimate of 20
9 million was correct.

10 MS. CARUSO: Just a minute, please. Okay. Well,
11 thank you for your interpretation. This is something that, you
12 know, the public needs to know because it's the outreach that
13 we are receiving that we want to be able to understand it and
14 be confident in it. Okay, moving on to tab five, this is an
15 article published on December 12th in the Times Record which
16 reports on a public information meeting that was held in the
17 town of Durham. Do you see that?

18 MR. DICKINSON: Yes.

19 MR. STINNEFORD: Yes.

20 MS. CARUSO: Okay. So I just want to point out that
21 this was a meeting organized and hosted by NRCM, and I was in
22 attendance and also spokesperson for Avangrid, John Carroll,
23 attended. On the seventh paragraph on the second page of the
24 article toward the bottom, I'll read a quote. It says, that
25 CMP representative John Carroll called the opposition, quote,

1 "bizarre and shameful, lamenting that instead of seeing Hydro-
2 Quebec as a leader in the clean energy movement," he said we --
3 quote, "we are immediately suspicious," end quote. And I
4 assume by "we" he means project opponents. Do you see that
5 statement?

6 MR. STINNEFORD: I see the statement, yes.

7 MS. CARUSO: Okay. So do you think it's helpful for
8 the project spokesman to accuse or insult stakeholders like
9 that?

10 MR. DES ROSIERS: I'm going to object to the use of a
11 newspaper article for this purpose. I believe we've excluded a
12 whole bunch of other press articles, and to ascribe -- to use
13 it in this purpose is inappropriate and calls for hearsay and
14 assumes facts not in evidence.

15 MR. TANNENBAUM: Well, I think the -- go ahead and
16 allow the question on the assumption or hypothetical that Mr.
17 Carroll did say those things, but I will restrict lengthy
18 questions regarding a newspaper article. So you can respond.

19 MS. CARUSO: Okay.

20 MR. STINNEFORD: Yeah, I don't think any of us here
21 were present at that meeting so I have no understanding of the
22 context in which these partial quotes were made. So I can't
23 offer an opinion on whether Mr. Carroll's intent here was to be
24 insulting or whether he was expressing his view on an issue
25 that's critical to the project. I think it's very difficult to

1 make any kind of assessment with this very limited context.

2 MS. CARUSO: Okay. Do you know if CMP has any kind
3 of code of conduct with -- or other employee communications
4 policies governing whether or not -- you know, how CMP
5 representatives comment?

6 MR. STINNEFORD: We have general codes of conduct. I
7 don't know whether the -- our corporate communications group
8 has a specific code of conduct as you've described it. I don't
9 know.

10 MS. CARUSO: Okay. There was also a radio interview
11 on December 12th on WVOM with Mr. Carroll, and there -- did you
12 know that -- did you listen to it?

13 MR. STINNEFORD: I have not, no.

14 MS. CARUSO: He referred to people who disagree with
15 CMP's projected benefits as being --

16 MR. DES ROSIERS: I really object to this one because
17 we don't even have a document with a transcript for this radio.
18 So there's no basis for the question in the record.

19 MR. TANNENBAUM: Okay, that objection's sustained.

20 MS. CARUSO: Okay. So my concern is and the concern
21 of other residents --

22 MR. DES ROSIERS: I'm going to that too, assumes
23 facts not in evidence.

24 MR. TANNENBAUM: Go ahead and proceed.

25 MS. CARUSO: We're wondering if, because towns have

1 come out in opposition to the project, if CMP will be kind of
2 -- with regards to delivering our electricity, with regards to
3 outages, if they would be retaliating against the towns who are
4 in opposition.

5 MR. STINNEFORD: I'm sorry, was that a question?

6 MS. CARUSO: Yes.

7 MR. STINNEFORD: No, CMP does -- will not retaliate
8 against any community for any reason.

9 MS. CARUSO: So we shouldn't have a problem with the
10 electricity being delivered, the outages, the workings of the
11 distribution of electricity in our towns because towns have
12 come out against the project?

13 MR. STINNEFORD: No, we have statutory and regulatory
14 obligations to provide service to all communities, and, you
15 know, a community's position with respect to this project is
16 not going to affect that.

17 MS. CARUSO: So assuming Mr. Carroll's comments are
18 correct, this does not represent CMP's corporate view towards
19 its stakeholders?

20 MR. STINNEFORD: Again, I'm not sure what comments
21 you're referring to.

22 MS. CARUSO: Well, the ones that were already
23 objected to.

24 MR. DES ROSIERS: I'll repeat my objection.

25 MR. TANNENBAUM: Yes, as far as the radio goes, we

1 don't know what Mr. Carroll said. And as far as the newspaper
2 goes, there is a lot of question regarding exactly what
3 somebody might have meant in a quote in a newspaper which is
4 why we don't allow newspapers into the record.

5 MS. CARUSO: Okay, very good. Thank you. Moving on
6 to tab six, this includes pages 26 and 27 from the CPCN
7 application where we discuss municipal permitting requirements.
8 Do you see that?

9 MR. STINNEFORD: Yes.

10 MS. CARUSO: On line five of page 26, you cite the
11 requirements of the statute which require the project developer
12 to provide municipal offices with maps of the project. Is that
13 correct?

14 MR. STINNEFORD: Yes.

15 MS. CARUSO: And I believe the application says that
16 you distributed maps via certified mail prior to submitting the
17 application. Is that correct?

18 MR. STINNEFORD: Yes.

19 MS. CARUSO: Are there any other statutory or
20 regulatory compliance requirements or Commission policies
21 related to public outreach that is applicable to NECEC or is it
22 pretty much entirely your discretion?

23 MR. STINNEFORD: No, there are other requirements, to
24 notify abutting landowners, for example,

25 MS. CARUSO: Okay. On page 26, line nine, there's a

1 discussion that continues to page 27, and it talks about the
2 need for NECEC to address municipal jurisdictional issues and
3 local land use ordinances. And on line three of page 27,
4 there's a statement that says, quote, "CMP anticipates all
5 required local approvals will be obtained by mid-2019," end
6 quote. Is that still what you anticipate given project delays
7 and such?

8 MR. ESCUDERO: The current expectation is that we
9 will initiate the local approvals early this year and that the
10 (indiscernible) will go through early '22, 2022 is the current
11 plan.

12 MS. CARUSO: Okay. Do you plan to initiate local
13 permitting before or after the Commission issues its decision?

14 MR. ESCUDERO: Well, I haven't seen the detailed
15 plans yet. We just got it developed at the end of 2018 so I
16 cannot provide an answer to that.

17 MR. STINNEFORD: I think, you know, each municipal
18 permitting requirements are different in terms -- you know,
19 some may have more substantial permitting requirements that
20 have longer lead times. Others are fairly perfunctory. And
21 there are other considerations, such as the time that is
22 allowed between the issuance of a permit and the time that
23 construction must begin. So all of that feeds into the
24 scheduling of local permitting, and it will be different for
25 different communities and will be driven, in large part, by the

1 construction schedule for the project.

2 MS. CARUSO: Okay. On page 27, line nine, it says
3 that, quote, "In the unlikely event a municipal ordinance
4 severely restricts or prohibits construction of the project,
5 CMP will pursue an amendment of the applicable ordinance," end
6 quote. Then it goes on to say that if that doesn't work -- and
7 this is a quote from the CPCN application -- quote, "CMP will
8 petition the Commission under applicable Maine law for
9 appropriate redress to permit approval and construction of the
10 project." And then there's a footnote that states the relevant
11 statutory language. Do you agree?

12 MR. STINNEFORD: I agree that's what it says, yes.

13 MS. CARUSO: Okay. At this point, do you expect
14 you'll have to submit any petitions for a municipal permit
15 exemption?

16 MR. STINNEFORD: It's -- at this stage, we don't know
17 yet.

18 MS. CARUSO: Okay. Is it a fair summary to say that
19 the way the process works is that CMP has to make best efforts
20 to obtain any and all local permits, but if it fails to obtain
21 one or more, they can and will ask the Commission to give them
22 an exemption?

23 MR. STINNEFORD: I -- that's a very broad
24 summarization, but I think it's a fair one.

25 MS. CARUSO: Okay. Is it fair to use the word pre-

1 exemption to describe a situation where a state agency exempts a
2 project developer from an otherwise applicable local land use
3 requirement?

4 MR. DES ROSIERS: Objection, calls for a legal
5 conclusion.

6 MR. TANNENBAUM: Sustained.

7 MS. CARUSO: So for an elective transmission upgrade
8 or a for-profit project as this is that's not being developed
9 but was -- is for a for-profit investment for a company, would
10 an exemption be a -- something that would be pursued if there
11 were -- if it was missing a permit to continue?

12 MR. STINNEFORD: I guess I still struggle with your
13 characterization of -- distinguishing this as a for-profit
14 investment. Any investment that the utility makes will earn a
15 profit hopefully. There really is nothing that distinguishes
16 this project with respect to profitability from any other
17 investment the company would make. I think what you're asking
18 is an ETU. That is distinguishable. And as far as we're
19 concerned, its status as an ETU as opposed to some other form
20 of transmission upgrade under the ISO New England tariff would
21 not make a difference in terms of whether or not it would
22 require or result in us seeking an exemption from the
23 Commission over a local permitting issue.

24 MS. CARUSO: Okay. Has the Commission ever been
25 asked to approve an elective transmission upgrade over is NECEC

1 the first one?

2 MR. STINNEFORD: To my knowledge, there has not been
3 one in Maine.

4 MS. CARUSO: So are non-utility energy developers who
5 may want to invest in things like solar or wind farms, are they
6 eligible for any exemptions from municipal land use
7 requirements?

8 MR. STINNEFORD: You're asking for my legal opinion?

9 MR. DES ROSIERS: I'm going to object on legal --

10 MS. CARUSO: What is your understanding, yes.

11 MR. DES ROSIERS: I'm going to object on legal
12 grounds. But I will state that to the extent such a developer
13 were building a transmission line, they would be entitled to
14 seek an exemption.

15 MS. CARUSO: Okay. If you are unable to obtain any
16 of the local permits, when would the Commission -- or when
17 should the Commission expect you to file a pre-emption petition
18 that seeks appropriate redress?

19 MR. DES ROSIERS: Objection --

20 MR. TANNENBAUM: Objection sustained on the question
21 using the term pre-emption. Otherwise, Eric, you can answer if
22 you heard the question.

23 MR. STINNEFORD: Well, I think I did. I think, you
24 know, as you summarized before, we have to make good-faith
25 efforts to achieve local permitting through the normal means.

1 If we are unsuccessful either in achieving a required amendment
2 to a local ordinance or achieving a local permit, it would be
3 at that time that we would petition the Commission for an
4 exemption.

5 MS. CARUSO: So, you know, you're aware that Caratunk
6 has rescinded initial support, and are you also aware that
7 other communities have held town-wide votes and some formally
8 oppose the approval of NECEC?

9 MR. STINNEFORD: I'm generally aware of that, yes.

10 MS. CARUSO: Okay. Is it your view that the
11 Commission has the authority to grant an exemption from local
12 permitting requirements in communities that have voted against,
13 formally, the project?

14 MR. DES ROSIERS: Calls for a legal conclusion.
15 Objection.

16 MR. TANNENBAUM: Sustained.

17 MS. CARUSO: Are you aware that the town of Caratunk
18 currently has an electric transmission line moratorium in
19 place?

20 MR. STINNEFORD: I am.

21 MS. CARUSO: Do you believe that the Commission could
22 give an exemption for a town that has a moratorium in place?

23 MR. DES ROSIERS: Objection, calls for a legal
24 conclusion.

25 MR. TANNENBAUM: Sustained.

1 MS. CARUSO: Would CMP ask for an exemption from the
2 Commission for towns that are not -- for towns that, for
3 example, have a moratorium or an ordinance that would not issue
4 CMP the permit for this?

5 MR. STINNEFORD: I think those circumstances will
6 have to be addressed on a case-by-case basis. I can't answer
7 that in the abstract. We have to assess, you know, what our
8 alternatives are in each one of those municipalities where we
9 encounter those circumstances.

10 MS. CARUSO: But you wouldn't agree not to.

11 MR. STINNEFORD: I'm sorting out the double negatives
12 there. I think that's correct, we would not agree not to.

13 MR. TANNENBAUM: Elizabeth, can I ask how much more
14 time you have? You're going to significantly --

15 MS. CARUSO: Yes. Just a couple more and then I'm
16 done.

17 MR. TANNENBAUM: Okay, proceed.

18 MS. CARUSO: I understand that CMP has all the land
19 rights it needs to build the project as currently proposed. Am
20 I correct that the issuance of the CPCN would let CMP use the
21 power of eminent domain for NECEC?

22 MR. DES ROSIERS: Calls for a legal conclusion.

23 MR. TANNENBAUM: Sustained.

24 MS. CARUSO: Well, would CMP need to come to the
25 Commission if it wanted to use eminent domain?

1 MR. DES ROSIERS: Objection, calls for a legal
2 conclusion as a matter of --

3 MS. CARUSO: Would you agree not to use eminent
4 domain?

5 MR. STINNEFORD: We can't do that sitting here today
6 not knowing what circumstances we might encounter in the
7 future, but as we said, for this project as it stands now, we
8 have all of the land rights that we require to build the
9 project. So it would not be necessary under the current
10 circumstances.

11 MS. CARUSO: So you wouldn't seek the PUC -- you
12 wouldn't -- so you wouldn't use eminent domain if you had to or
13 you wouldn't seek the PUC exemption if you had to, as of right
14 now?

15 MR. TANNENBAUM: I don't think that's -- that was the
16 answer. The answer was they have land rights so they don't
17 anticipate needing to use eminent domain, but if eminent domain
18 was required, I think Eric's answer was he can't commit to not
19 doing it.

20 MR. STINNEFORD: That's correct.

21 MS. CARUSO: Okay. I think we're all set. Thank you
22 very much for your time. I have no further questions.

23 MR. TANNENBAUM: Okay. Sue?

24 MS. ELY: Thank you. Sue Ely, Natural Resources
25 Council of Maine. I have just a couple of questions, and

1 apologies to Eric and Mr. Escudero, I think they're mostly for
2 Thorn. But if anyone else on the panel has an answer, by all
3 means, feel free to answer. But, Mr. Dickinson, earlier when
4 you were answering questions from Attorney Shope, you -- I
5 think it was Mr. Shope's questions -- you were talking about
6 speaking to a bunch of people who are bilingual to help
7 translate Hydro-Quebec documents. Do you recall that
8 conversation? It was --

9 MR. DICKINSON: Yes.

10 MS. ELY: Okay. Do you recall who those people
11 where?

12 MR. DICKINSON: Yeah, I -- essentially Hydro-Quebec
13 employees that could speak English.

14 MS. ELY: Okay. You also -- during --

15 MR. DES ROSIERS: Most of them do that very well.

16 MS. ELY: I know, if only it were a different
17 province that didn't have quite a strong leaning towards
18 French, this wouldn't be such a complicated proceeding maybe.
19 There -- you also mentioned that you had to rely on publicly-
20 available data when compiling your rebuttal testimony about the
21 greenhouse gas implications and reservoir levels. Is that
22 correct?

23 MR. DICKINSON: Correct.

24 MS. ELY: And I was wondering if you could elaborate
25 on why you had to rely on publicly-available data.

1 MR. DICKINSON: Well, probably a better way to say it
2 is that was the methodology that I did for putting together the
3 rebuttal testimony. So the plan was for me to address the
4 issues that were prior -- in prior testimony, and I pursued
5 publicly-available information to put that information
6 together.

7 MS. ELY: You relied on publicly-available data, yet
8 you had access to Hydro-Quebec employees. Is that correct?

9 MR. DICKINSON: Yeah, I would -- so Hydro-Quebec
10 employees both, you know, made sure I wasn't making fatal flaws
11 associated with how I were to look at it and, if I was
12 struggling to find a specific reference to publicly-available
13 information, they would point me in the right direction.

14 MS. ELY: What was the purpose in -- if you had
15 access to Hydro-Quebec employees, what was the purpose of only
16 relying on information that was publicly available?

17 MR. DICKINSON: I mean, I guess in my perspective,
18 that made it much easier in providing the information in the
19 testimony. So by that means, I could put the information out
20 there and show -- I mean, the -- and stepping back just maybe a
21 little on the purpose for the analysis, the --

22 MS. ELY: I'm sorry, I just want to know if you had
23 access to an employee who could give you information, why, if
24 they could give you sort of the potential to have real-time
25 information about Hydro-Quebec's system, would you rely only on

1 public information?

2 MR. DICKINSON: For purposes of this specific
3 representation, the goal was to provide a representation of the
4 perspective of their ability to me and define this as
5 incremental energy as an issue that was brought up by a number
6 of environmental NGOs in my discussions with them and to do it
7 in a way that allowed us to share that with everybody. So I
8 never pursued confidential information. I mean, I never asked
9 a question for confidential information. The goal was always
10 to develop a model based on publicly-available data.

11 MS. ELY: Okay. So then I want to ask you, the
12 document that you provided, well, CMP provided in response to a
13 data request by Ms. Kelly was an email from Hydro-Quebec, and I
14 guess it's a different approach is to get Hydro-Quebec to write
15 an email responding to a data request. Was there no publicly-
16 available information that would make that point --

17 MR. DES ROSIERS: Objection to --

18 MS. ELY: -- in the data request?

19 MR. DES ROSIERS: Objection to form. I'm not sure
20 what you're referring to by an email.

21 MS. ELY: Sorry, thank you. The email that was the
22 response to Dot Kelly's data request 004-001 that we have been
23 discussing earlier today.

24 MR. STINNEFORD: So I believe that was a letter, not
25 an email.

1 MR. SHOPE: I think it's the letter of December 14
2 from Bergervin to which I was referring earlier.

3 MS. ELY: I'm sorry. Yes, it is a letter, sorry.

4 MR. DICKINSON: So again, I'm sorry, I lost the
5 question in there.

6 MS. ELY: That's fine. I'm sure that my muddled
7 delivery did not help. The -- I'll try it one more time. So
8 why, for responding to Dot Kelly's data request marked 004-001,
9 did you -- did CMP include a letter drafted by Hydro-Quebec as
10 opposed to publicly-available information?

11 MR. DICKINSON: So the method that we -- when we
12 received the data request, we forwarded it on to Hydro-Quebec
13 and Hydro-Quebec responded with the letter that they provided.
14 So that was the method by which we responded to Dot Kelly's
15 data request.

16 MS. ELY: Okay.

17 MR. STINNEFORD: I would just say specifically there
18 is no public source for this specific information that was
19 requested which is why we addressed it directly to them.

20 MS. ELY: Okay. When you responded, did Hydro-Quebec
21 -- when you asked this question of Hydro-Quebec, did they
22 respond with any additional information besides the letter?

23 MR. DICKINSON: I mean, as I had said earlier in my
24 testimony, not only did this data response get responded to,
25 but we also had meetings with the Portland Press, we had

1 meetings with the Boston Globe. The outreach team also met
2 with a number of other papers and had discussions, and I think
3 in those context of discussions that, you know, other
4 conversations happened, other information, videos on -- showing
5 the water actually spilling, other things like that were
6 exchanged.

7 MS. ELY: Were those conversations in an attempt to
8 answer Ms. Kelly's data request?

9 MR. DICKINSON: Oh, no, I'm sorry, no.

10 MS. ELY: Okay.

11 MR. STINNEFORD: We did have other telephonic
12 conversations with the author of this letter and other HQ
13 employees to get further clarity round this.

14 MS. ELY: But they didn't provide you any underlying
15 data to support the letter? I'll phrase it as a question. Did
16 they provide you underlying data to support the letter?

17 MR. STINNEFORD: I wouldn't say they provided us
18 data. They did provide us with clarifying explanation and
19 information. For example, earlier today we talked about the
20 ordinary spillage that would occur in the Hydro-Quebec system
21 to address environmental permitting restrictions, hydrologic
22 conditions, the normal seasonal spillage that occurs on their
23 system. In those conversations, they clarified that that is in
24 the range of four to five terawatt hours a year pretty
25 consistently through history and that the numbers that are

1 reflected in this letter are incremental above that four to
2 five terawatt hours that would ordinarily be spilled. So, you
3 know, we did have those types of clarifying conversations with
4 them, but they did not provide us, you know, supporting reports
5 or documents for that data.

6 MS. ELY: Okay. Switching gears. Earlier, Mr.
7 Dickinson, you were asked a -- and I don't -- I think you'll
8 remember this generally. I don't have the data request off the
9 top of my head. You had been asked to identify which employees
10 -- well, actually, it's in response to an NRCM request that we
11 were just talking about. It's the meetings that you attended
12 to talk to individuals about the project. And I'm curious have
13 these stakeholder meetings continued after the data request
14 that you responded to? Have you continued to go to those
15 meetings with community members?

16 MR. DICKINSON: Maybe you could -- if you could just
17 restate that? I want to make sure I understand what date
18 you're referring to. Dot Kelly's --

19 MS. ELY: No, the NRCM request for the list of
20 stakeholder meetings.

21 MR. DICKINSON: Oh, yeah. Yeah, I mean, we have
22 continued to offer every town along the corridor and adjacent
23 towns for meetings. They've told us -- I think every town now
24 has told us, no, we're good. We've had multiple meetings in
25 all those towns. We're willing to go anywhere and have a

1 meeting anytime with people that are interested in the project,
2 and, you know, we -- you know, between myself, Eric, Doug
3 Herling, members of the outreach team, we've been all over the
4 state. And, you know, my mantra to the team was always there's
5 only 1.4 million people in Maine, let's talk to them all.

6 MS. ELY: So your testimony is that you have
7 continued to have these meetings throughout this -- throughout
8 the process, they didn't stop when you submitted the data
9 request to the Natural Resources Council of Maine.

10 MR. DICKINSON: No, that's right.

11 MS. ELY: Okay. And you mentioned that Doug Herling
12 has participated in these meetings, that you have participated.
13 Who else is continuing to participate in these stakeholder
14 meetings?

15 MR. DICKINSON: I mean, the short and long of it --
16 and you could -- I mean, depending on how you call these
17 stakeholder meetings, you know, we're trying to come up with --
18 we have meetings right now where we're trying to figure out how
19 to utilize our commitment to bring fiber optic to Somerset,
20 Franklin County and to -- like, for example, we were just in
21 Whitefield the other day. So Whitefield is an area where the
22 345 line goes, and we've now made a commitment to put fiber
23 optic up on that AC transmission line. And we met with the
24 people in Whitefield about the idea of connecting in their
25 existing fiber optic along that place, and in that meeting, it

1 included -- actually Heather Johnson at the point was Connect
2 Maine who is, you know, kind of the fiber optic leader for the
3 state at that point in time. It was Bill Sawyer, an engineer
4 for CMP, and Justin Tribbet who also is an engineer. We were
5 meeting with them to figure out how we can bring value to that
6 community by bringing fiber optic, and those kind of
7 discussions are going on in Somerset and Franklin County. But
8 that's just a specific example. Eric would be in some
9 meetings. Bernardo would be in some meetings. Other
10 management people that are involved. Really the way I see it
11 is everybody that's on the project, not just the core group of
12 outreach teams, should be available to interact with the
13 community on a regular basis.

14 MS. ELY: Does that include going to selectboard
15 meetings?

16 MR. DICKINSON: Yeah.

17 MS. ELY: Does that include going to county
18 commissioner meetings?

19 MR. DICKINSON: Yes.

20 MS. ELY: Okay. You mentioned that you'd made a
21 recent commitment to put fiber optic in the 345 line. Is that
22 writing -- is that agreement in writing?

23 MR. DICKINSON: No, I'd describe it as a handshake
24 agreement, but the engineers and the people that are managing
25 the dollars related to the project understand that it's a

1 commitment.

2 MS. ELY: Okay. Who is the commitment with?

3 MR. DICKINSON: We sat around a table at the
4 Skowhegan Cafe or -- I can't remember the name of the place,
5 and a number of folks from Whitefield and us talked about it.
6 And, you know, I made the commitment there at that point.

7 MS. ELY: Are these members of the community that you
8 made the agreement with?

9 MR. DICKINSON: Yeah, I think they're some of the
10 people that are community members that care, that want to see
11 about value being brought to their community. Some of the
12 people that I believe were on the selectboard of --

13 MS. ELY: Can you be more -- like, so I understand
14 that people who want to see value in their community is a
15 subset of people, but can you be more specific about who you
16 made your agreement with and -- or who they represent?

17 MR. DICKINSON: Again, the -- what -- I think the
18 better understanding of how we have approached this project is
19 every time we get a phone call for an opportunity in a
20 community to have a dialogue about the project, we take it. In
21 that conversation with Whitefield, in that meeting that we had,
22 they asked about fiber optic because they had heard about it
23 related to the DC line. We had -- I think I had one
24 conversation early on with one selectman, who is also on the
25 economic development selectmen for Whitefield. And then that

1 led to a larger group where we sat around and had blueberry pie
2 and coffee around a little plastic picnic table, and at that
3 meeting, we heard what their interests were. I contacted our
4 engineering group, understood the incremental cost that we'd
5 incur, and, for me, I believe that extra cost was worth the
6 value of delivering it. We asked for nothing in return. We
7 asked for nothing from any of the people in Whitefield. I
8 believe this is the kind of thing that we've demonstrated
9 throughout this project.

10 MS. ELY: Will you be signing a memorandum of
11 agreement or any more-formalized documentation?

12 MR. DICKINSON: If the town of Whitefield would like
13 to have a formal commitment from us committing to that, we're
14 happy to do it.

15 MS. ELY: Are there other communities that you've
16 made these types of handshake agreements with?

17 MR. DICKINSON: So the representation of a handshake
18 as a negative thing is interesting to me. To me --

19 MS. ELY: It was not a -- it was --

20 MR. DICKINSON: Okay.

21 MS. ELY: My deadpan delivery might give me away, but
22 I am really just asking are there other communities that you
23 made a handshake agreement with?

24 MR. DICKINSON: Yeah, I think where there's
25 conversations we're having throughout the project to find ways

1 to help deliver value in ways that, to my, are synergistic with
2 the project, and fiber optic is a perfect example. And there's
3 a lot of things going on in the project, a lot of irons in the
4 fire, but, you know, those kind of conversations are happening
5 all along the -- on the project, and we are open to any
6 additional calls from any towns that want to have these
7 conversations.

8 MS. ELY: I'm trying to understand if there are other
9 side agreements that are being made through the -- through this
10 process.

11 MR. DICKINSON: So the -- there's no -- the agreement
12 with Whitefield is -- there's no agreement. There's no
13 negotiation. There's not a document that is looked at to be an
14 MOU. It was me listening to people in the community about what
15 they cared about and me making a commitment to them. And as I
16 said, if they want me to firm that up in a letter or an MOU,
17 we're happy to do that. So there's no side agreements that are
18 currently engaged, but we have conversations with both Somerset
19 and Franklin County around fiber optic, as an example, to try
20 to figure out how to -- we've already committed as part of the
21 project to provide significant amount of splice points along a
22 high-bandwidth fiber optic cable at the edge of our right-of-
23 way, and we're going to provide that at no cost, no -- to
24 people that would be able to connect into that as a way to
25 encourage fiber optic. What we're also interested in are there

1 other opportunities that we could do beyond that, and those are
2 the kind of discussions would be an example in the specific
3 area of fiber optic that we're doing.

4 MS. ELY: I understand you testified earlier that
5 there are no new MOUs that you have signed besides the one with
6 the Western Mountains & Rivers Corporation. Is that a correct
7 understanding?

8 MR. DICKINSON: That's correct.

9 MS. ELY: Are there -- aside from the MOU structure,
10 are there any other agreements that Central Maine Power or
11 Avangrid has made with any other interested parties?

12 MR. DICKINSON: There's no other MOUs that we've
13 signed or executed related to any other interested parties.

14 MS. ELY: It doesn't have to be an MOU. Any type of
15 agreement.

16 MR. DICKINSON: No, I don't believe so.

17 MS. ELY: Okay. That's all I've got for questions.

18 MR. TANNENBAUM: I know Barry's got just an issue.
19 Jared, how much redirect?

20 MR. DES ROSIERS: Not much, five or ten minutes at
21 the most.

22 MR. TANNENBAUM: We've been going for a while. I
23 think we should -- why don't we just take a break now, come
24 back in 15.

25 CONFERENCE RECESSED (January 9, 2019, 2:56 p.m.)

1 CONFERENCE RESUMED (January 9, 2019, 3:16 p.m.)

2 MR. TANNENBAUM: Okay, let's go back on the record.

3 Barry, I know you had some -- a line of questions. Let's --

4 MR. HOBBS: Yes, I do, if you don't mind. Well,
5 good afternoon. It's good to see you. Been a long day so far.
6 I just had a couple questions, and I don't know whether to
7 address them to you, Thorn, or to all of you but collectively
8 why don't we talk about them. We've heard so far from
9 Elizabeth Caruso from Caratunk and also Ms. Eli who was -- Ms.
10 Ely, rather, who represents the Natural Resources Council of
11 Maine, and they talked a little about community benefits and
12 the like. And when you were putting your project together for
13 Massachusetts, you had certain criteria you had to follow under
14 their statute, is that correct, as far as community benefits or
15 that part of your submission to --

16 MR. DICKINSON: The response to the RFP included an
17 RFP document that required specific criteria that needed to be
18 filed.

19 MR. HOBBS: Right. So did -- in your process of
20 having, you know, been selected, did you look to the New
21 Hampshire documents or the Vermont documents or the two
22 proposals that were a competing proposal to look at those
23 documents at all and, in particular, the community benefit
24 elements of those two projects with respect to their
25 submission?

1 MR. DICKINSON: So just so -- just to make sure I
2 understand, the Massachusetts RFP had specific requirements in
3 it for their own state.

4 MR. HOBBS: Yes.

5 MR. DICKINSON: So when you're referencing the
6 community benefits, are you talking about the community
7 benefits --

8 MR. HOBBS: For the state -- for example, looking
9 at the state of Vermont and looking at the benefits that would
10 have gone to the state of Vermont if they would have been
11 successful in their project. The same is true of New
12 Hampshire. I'm more interested in New Hampshire if that could
13 be the case. So did you have an opportunity to look at their
14 applications, their full applications, both -- more so in New
15 Hampshire than Vermont?

16 MR. DICKINSON: Sure. So we did a great deal of
17 market intelligence before we submitted our bid, and because
18 that's a project that's been going on for nine or ten years,
19 there was information out there and available. And part of
20 that was the various agreements that they had made along the
21 route.

22 MR. HOBBS: And did you happen to look at the
23 proposal that was rejected by the site evaluation committee of
24 the state of New Hampshire?

25 MR. DICKINSON: I'm aware that the Northern Pass

1 project was denied by the site evaluation committee.

2 MR. HOBBS: Did any of you -- anyone else, Bernardo
3 or Eric, look at those particular submissions and then look at
4 their -- and look what -- the final rejection or why they were
5 not approved by their respective commissions?

6 MR. STINNEFORD: Yeah, I'm generally familiar with
7 the filings and the decisions. I probably can't quote the
8 details.

9 MR. ESCUDERO: I am aware of the decision, but I
10 didn't review the application.

11 MR. HOBBS: You didn't review the application?

12 MR. ESCUDERO: I did not.

13 MR. HOBBS: You did not. So as far as the state of
14 New Hampshire's proposal, are you familiar with the community
15 benefit package that was submitted fairly --

16 MR. DICKINSON: Yeah, in a broad, yes.

17 MR. HOBBS: Yes. Did you also know that there was
18 an attempt by Public Service Company of New Hampshire d/b/a
19 Eversource -- and who filed a motion for rehearing on the
20 decision an order denying the application? Did you know that
21 there was an extensive submission made? I believe submitted in
22 March of 2018?

23 MR. DICKINSON: Yes, I'm aware of that.

24 MR. HOBBS: And are you of the document itself?

25 MR. DICKINSON: I think I may have read a summary

1 related to it, but I didn't pick it up and read the whole --

2 MR. HOBBS: So you are familiar with the document
3 and --

4 MR. DICKINSON: Yes.

5 MR. HOBBS: I'd like to, if I may, if you -- it
6 sounds like you would -- that I could refresh your
7 recollection, possibly. And how about you, Eric or Bernardo?
8 Did you have an opportunity to look at the final -- because
9 that was the final nail in the coffin. And so obviously I'm
10 sure -- I know that your attorney did and I know that the
11 battery of attorneys and I'm sure your president did. But
12 Eric, I'm sure you must have looked at that particular
13 document.

14 MR. STINNEFORD: I did look at it. I skimmed it
15 briefly. I -- again, I didn't spend a lot of time reading it.

16 MR. HOBBS: And, Bernardo, you probably didn't.

17 MR. ESCUDERO: I remember reading about it in the
18 media, but I don't remember looking at that specific document.

19 MR. TANNENBAUM: Are you familiar with the community
20 benefit aspect of that motion?

21 MR. DICKINSON: Yeah, I believe in a very general
22 sense, yes, yeah.

23 MR. HOBBS: The reason I'm asking you that is that
24 during the process of your successful submission and obviously
25 your petition to this -- to the Public Utilities Commission

1 allowing for permission to go forward with the project here in
2 Maine and before the Department of Environmental Protection and
3 the Land Use Planning Board, you obviously must have thought
4 about what was offered in the state -- Commonwealth of
5 Massachusetts, what they required obviously or what was offered
6 by Eversource and what by -- in New Hampshire -- in Mass. -- in
7 Vermont. Were you --

8 MS. BODELL: So again, I'm confused when -- only when
9 you reference Massachusetts. So --

10 MR. HOBBS: Well, no, the reason I say that is
11 because obviously you were successful with Massachusetts, but
12 then you had to come to Maine. And I'm talking about the idea
13 of permission, just like when they were looking at the project,
14 they couldn't get approval. Eversource couldn't get approval
15 in the state of New Hampshire because they didn't meet the
16 requisite requirements apparently of their site evaluation
17 committee which is different than how we operate here. So the
18 reason I'm asking you that question --

19 MR. TANNENBAUM: I'm sorry, Barry, what exactly is
20 the question that you're asking?

21 MR. HOBBS: Well, what I'm asking for a question is
22 what considerations did you give in putting together some type
23 of community benefit package in Maine? Maybe give us some idea
24 of what you went through, what process.

25 MR. DICKINSON: Yeah, sure. It was very similar to

1 some of the testimony that I've already discussed earlier today
2 where we started off by trying to design a project that had the
3 smallest amount of impact that we could. And I think always
4 the first goal there is to build a transmission line across the
5 existing corridor, and I think just about 70 percent of that is
6 along the existing corridor. Then the second goal would be,
7 can you build a transmission line in an area where the impact
8 is minimized because that area has similar utilization than it
9 does now. And so by having two private landowners where
10 there's a heavily-wooded section, a working forest, putting
11 that line there and avoiding many of the other sensitive areas
12 was the beginning of the project. I also talked about some of
13 the things we did in areas where we thought there would be some
14 concerns and some larger impacts: the Appalachian Trail, Moxie
15 Lake, the Kennebec River. And then ultimately when we put
16 together a price, we have to balance the overall price to
17 Massachusetts, what we think is fair for Massachusetts for what
18 they pay and the benefits they get, versus the benefits that
19 Maine and the impacts in Maine. And that is the balance that
20 we took. And we took in tons of information. We did market
21 intelligence on where our other projects were, our own
22 experience in developing projects, and as I said, our
23 confidence in the way our project was designed.

24 MR. HOBBS: It sounded like, from your testimony of
25 Ms. Caruso, that the only commitment that's present is the

1 commitment that is binding upon your project.

2 MR. DICKINSON: That's right. I mean, specifically
3 to that narrow question, obviously as part of the DEP process,
4 we are currently in discussions about a ton of different types
5 of mitigation associated with the project, and those are things
6 that are still ongoing.

7 MR. HOBBS: And obviously there are some
8 confidential discussions that have occurred in the past and
9 obviously I don't want you to testify to any of those, of
10 course. But I wanted you to take a look, if you could, if all
11 three of you could take a look at community benefits. And I
12 know that earlier I think Mr. Murphy led you through some
13 exhibits of the community benefits for the state of New
14 Hampshire. And it was interesting because I was kind of
15 puzzled with the figure that was used in the state of New
16 Hampshire for the proposal because I think that that was the
17 original amount that was proposed by the developer at the time
18 and that was the amount of money on the table when the site
19 evaluation committee turned down the proposal. But the reason
20 I'm giving you this other document to look at is because the
21 Public Service Company of New Hampshire d/b/a Eversource, in
22 their motion to rehear the case, not only made arguments based
23 upon the original discussion but they also discussed why they
24 wanted to reopen the case and what other possible potential
25 benefits could be put on the table for reconsideration in order

1 to have the proposal decided. So if you could do me a favor
2 and take a look at Attachment C which is in the back of this
3 very big document. And if you could look at -- if you haven't
4 -- I'm just going to give you a couple minutes to look at it
5 because it's really interesting, section Additional Conditions,
6 which they proposed now in this. So essentially what they're
7 attempting to do, to give you a backdrop of why I'm interested
8 in this, they --

9 MR. WILLIAMSON: Barry, is this on page four of
10 Attachment C?

11 MR. HOBBS: No, it's Attachment C.

12 MR. WILLIAMSON: C. And then I find --

13 MR. HOBBS: And then on page four would be the --
14 no, it's page 15. It's number 74, page 15, Additional
15 Benefits.

16 MR. TANNENBAUM: Okay. And Barry, what's the
17 question that you're asking?

18 MR. HOBBS: What I'm asking -- first of all, I want
19 them to take a look and if they could just review that.

20 MR. TANNENBAUM: Okay, so you're reviewing Additional
21 Conditions on page 15.

22 MR. HOBBS: Were you aware, after knowing the
23 backdrop of this, that there was an additional relief benefit
24 that was requested -- that was offered as an offer to the
25 evaluation committee?

1 MR. DICKINSON: At a very high level, yes, but, you
2 know, my focus here would have been more on -- you know, my
3 curiosity would have been on the likelihood that they're going
4 to --

5 MR. HOBBS: What was your understanding of -- at a
6 high level of --

7 MR. DICKINSON: My simple memory of it was that there
8 was an extra amount of benefits that were provided as part of
9 that.

10 MR. HOBBS: And what do you -- what did you know
11 about, for example, the energy cost relief benefits? That's
12 number 74. What do -- does that look familiar to you? That's
13 number 74, page 15. Does that figure of a value up to \$300
14 million over a 20-year period -- are you --

15 MR. TANNENBAUM: Maybe we can cut this a little
16 short. Were you aware, before you saw this document, of what
17 the additional benefits that were proposed?

18 MR. DICKINSON: Not to this detail. I mean, I knew
19 that they -- my understanding was Eversource was making a last-
20 pitch effort to try to throw everything they could in order to
21 overturn the appeal and that they threw a bunch of stuff to see
22 what would stick. But I didn't go through these in detail to
23 review them and understand them.

24 MR. HOBBS: So you -- the \$300 million figure
25 doesn't stand out to you over a 20-year period?

1 MR. STINNEFORD: Well, I --

2 MR. HOBBS: How about you, Eric?

3 MR. STINNEFORD: I guess I would correct the
4 characterization. They're not paying 300 million in cash.

5 MR. HOBBS: No, no.

6 MR. STINNEFORD: They're providing 400,000 megawatt
7 hours in --

8 MR. HOBBS: That's right. I'm asking --

9 MR. TANNENBAUM: Barry, allow him to answer.

10 MR. HOBBS: I apologize.

11 MR. STINNEFORD: They're offering to provide 400,000
12 megawatt hours of environmental attributes whose value may be
13 as much as 300 million based on their representation of the
14 market value.

15 MR. HOBBS: But you would define that as a benefit,
16 wouldn't you?

17 MR. STINNEFORD: Yes, I think that's the intent.

18 MR. HOBBS: Okay. And as far as what the
19 applicants -- what it says here, if I may just read it to you,
20 "The applicants shall monetize such environmental attributes
21 for the purpose of providing a reduction in energy cost to low-
22 income and business customers in addition to the projected
23 wholesale market price benefits of the project." So in your
24 review of your project, was there ever any consideration to
25 utilizing the same type of benefit structure as a community

1 benefit for the state of Maine?

2 MR. DICKINSON: Again, I think our existing proposal
3 provides a significant amount of benefits to Maine that we've
4 already described. And then as I described, in developing our
5 price, we obviously had to consider contingencies around the
6 project, and we tried to balance, in that process, our
7 understanding of the impacts of our project, the real impacts
8 of our project, not some other project that's different than
9 ours, and then balance the price that we were then asking for
10 Massachusetts to pay versus the benefits and the impacts that
11 Maine would have. In the end, that's how we made the decision.
12 So we did consider those types of things went in the
13 development of the price.

14 MR. HOBBS: So in your opinion then what London
15 Economics found or what your company found through your
16 consultants will say -- which we're going to hear about later
17 on is what you feel to be enough community benefits to satisfy
18 the state of Maine as far as having a benefit consistent with
19 our law.

20 MR. DICKINSON: And so we -- just to be clear, we
21 have the incremental jobs for the period of time of the
22 construction. We have the reduction in energy prices, the
23 potential reduction in capacity prices, property taxes, fiber
24 optic, and what we believe is an added benefit for tourism.

25 MR. STINNEFORD: And to your question, you know, that

1 -- those benefits, we've estimated, you know, they're roughly
2 \$100 million over the first ten years of the project. And that
3 is, in our view, more than sufficient to meet the statutory
4 requirement of a public benefit, particularly since the cost to
5 Maine customers for this project is zero.

6 MR. HOBBS: What was the cost of the project in New
7 Hampshire to New Hampshire ratepayers? Was it zero?

8 MR. STINNEFORD: Again, it depends on which -- how
9 you're defining this project. The Northern Pass has been
10 through multiple iterations.

11 MR. HOBBS: No, this last proposal.

12 MR. STINNEFORD: In this last instance in which it
13 was bid into 83D, it would have been supported fully by the
14 Massachusetts customers just as our --

15 MR. HOBBS: Thank you very much, that's the answer,
16 right? Thank you. I have no further questions. Thank you.

17 MR. TANNENBAUM: Jared, redirect?

18 MR. DES ROSIERS: Mr. Dickinson and Mr. Stinneford,
19 you were just asked questions about the benefits packages in
20 Vermont and the benefits packages in New Hampshire. And why
21 didn't CMP promise hundreds of millions of dollars on top of
22 the benefits you described, Mr. Dickinson?

23 MR. DICKINSON: Yeah, I think first of all, I would
24 reference these two specific projects had been developed for
25 multiple years prior to any awareness of any kind of

1 competitive solicitations for transmission, and they made an
2 election how they approached that project, the way they built
3 that out, how they did that, and made their decisions along
4 with that. For us, we started from the point of designing this
5 project in a way to mitigate the impacts as much as we could as
6 we described and then defined that right balance between
7 Massachusetts, what they're going to pay and the benefits
8 they're going to get, versus the benefits that Maine would get
9 and the impacts to Maine.

10 MR. DES ROSIERS: And, Mr. Stinneford, in striking
11 the balance that Mr. Dickinson described, what is the
12 significance with respect to competitive transmission under
13 current FERC policy and the applicable tariffs in New England?

14 MR. STINNEFORD: Yeah, I --

15 MR. SHOPE: Objection, calls for a legal conclusion.

16 MR. STINNEFORD: I'll address it at a policy level
17 rather than with respect to law.

18 MR. TANNENBAUM: Proceed.

19 MR. STINNEFORD: We have significant concerns that if
20 the world proceeds as it appears to be where more and more of
21 our transmission network is going to be built through
22 competitive bidding solicitations, whether that's through Order
23 1000 or through state-specific procurement programs such as
24 we've seen here with 83D, that if projects are continually
25 required to inflate their bids with community benefit packages

1 on the order of hundreds of millions of dollars, the end result
2 of that is going to be pricing for transmission projects that
3 is not going to fulfill the expectations of policymakers, our
4 state regulators, here in New England in particular where we
5 have seen, you know, a strongly expressed desire for lower
6 transmission costs through competitive processes. If those
7 competitive processes continue to be distorted by these types
8 of benefit packages, those benefits will never be realized.

9 MR. DES ROSIERS: In the approach that CMP used in
10 formulating its bid for the NECEC, did the company apply a
11 similar approach with respect to its other bid in 83D or in any
12 other prior solicitation?

13 MR. DICKINSON: Yeah, that would be a consistent
14 approach for the other projects that we bid into this
15 solicitation, including the wind, the solar, and the battery
16 projects in addition to the tristate RFP that we had issued
17 before and similarly to other projects that we've tried to move
18 forward within a development portfolio.

19 MR. DES ROSIERS: What would be the significance --
20 what would be the impact, in your view, of requiring
21 transmission projects built as elective transmission upgrades
22 to deliver renewable resources from Maine, what would the
23 impact be if, in order to build transmission, it were necessary
24 to include significant community benefits along the lines of
25 the TDI or Northern Pass projects?

1 MR. DICKINSON: Yeah, I mean, I think there are two
2 impacts. Obviously one of them is going to be that the
3 resources in Maine, the wind resources, the solar resources,
4 other sources that are also going to require transmission are
5 going to become more pricey, and that has impacts on whoever
6 the end customer is, whether it's Maine customers or other New
7 England customers. And it's also going to disadvantage those
8 projects against other alternative sources that may not be
9 providing that same tax to the price.

10 MR. DES ROSIERS: Shifting gears. Now shifting back
11 to some of the questioning that Mr. Shope did with respect to
12 -- and that's to you, Mr. Dickinson, with respect to your
13 modeling that you did as part of your rebuttal testimony.
14 Since you submitted the rebuttal testimony in July, are -- have
15 you become aware of other information that supports, in your
16 view, the conclusions and opinions you provided in that
17 testimony?

18 MR. SHOPE: Objection, scope.

19 MR. TANNENBAUM: Overruled.

20 MR. DICKINSON: So as I mentioned earlier today, I
21 had a conversation with Hydro-Quebec around the issue where
22 they disclosed to me the spilling of water in '17 and '18.
23 That was coincident with the CEO from Hydro-Quebec publicly
24 committing to that in Quebec, as we mentioned, on an interview
25 publicly. I also already mentioned the conversations we've had

1 with a number of newspaper resources to discuss that same
2 information. I think the other thing that was interesting is
3 that during the discovery process, I became aware of an email
4 that I hadn't read before that, although it's confidential, the
5 -- what -- the subject of it had to do with Hydro-Quebec
6 showing that there was a firm amount of energy that they could
7 get out of Quebec without a new transmission line. And, you
8 know, I can't get into the specifics of the number in the
9 public session, but that number that was in there and that
10 discussion about the fact that, without NECEC, they're going to
11 reach a cap where they're not going to be able to export
12 additional energy because of economics that we talked about
13 earlier is reinforced in that email from May of 2017.

14 MR. DES ROSIERS: Now, Mr. Stinneford, there was
15 questions from the Office of the Public Advocate and the IECG
16 with respect to the potential impacts of having CMP be the
17 owner of the project as opposed to a special-purpose entity.
18 Do you see benefits to CMP and its existing customers if the
19 project were to be owned by CMP?

20 MR. STINNEFORD: There are potential benefits, and
21 I've addressed some of this in earlier testimony that, in
22 financing the project, there will have to be new debt issued.
23 And currently, at rates that are available in the market, that
24 debt could be achieved at a lower cost than CMP's current
25 embedded cost of debt. The result of that would be that our

1 average cost of debt for CMP would go down. If this is
2 separately financed outside of CMP, CMP ratepayers would lose
3 the benefit of that.

4 MR. DES ROSIERS: There was also questions with
5 respect to whether the company believed it was appropriate or
6 -- to -- that the special-purpose entity would pay a -- some
7 kind of a goodwill payment to -- or, excuse me, that the SPE
8 would pay some sort of a goodwill payment as part of a
9 transfer, and I believe your testimony was you did not believe
10 that to be appropriate. And just explain why you don't believe
11 it would be necessary or appropriate in this instance.

12 MR. STINNEFORD: Sure. The basis that we have heard
13 argued for a goodwill payment is that the project would
14 constitute a non-core service under Chapter 820 and that -- and
15 I've heard various reasons or explanations for why it should be
16 considered non-core. Our concerns or my concerns are that
17 those reasons that I have heard expressed would mean that much
18 of CMP's future transmission activity, if not all of it, could
19 potentially be considered non-core. You know, whether that's
20 due to the fact that this was competitively bid or that it was
21 for the benefit of a third party and not CMP's native
22 customers, those kind of criteria are behind much of the
23 transmission that we build today and are likely going to be an
24 increasing amount that we build in the future. And if that's
25 the criteria for determining whether something is core or non-

1 core, you know, much of CMP's activities would be then
2 considered non-core and have to be spun off into an affiliate.
3 And I -- it leads to what I think is an untenable result, and
4 we would have great concerns with that.

5 MR. DES ROSIERS: Now there was also questions,
6 though, with respect to the treatment of the plant held for
7 future use that is currently owned by CMP and that has been put
8 into rates under the -- both the regional tariff and the local
9 tariff and that transmission customers have paid and that what
10 will happen with that plant when the NECEC moves forward. And
11 I guess what is the company's position today with respect to
12 how that plant should be treated both on a prospective basis
13 and then retrospectively with respect to -- retrospectively?

14 MR. STINNEFORD: Prospectively, I don't think there's
15 any disagreement that when the project goes forward, that land
16 would be transferred out of CMP rate base in Account 105 and
17 would be booked to the project. We have promised in
18 confidential settlement discussions that in the context of a
19 CPCN being issued by the Commission here and the project going
20 forward to construction that we would refund to Maine customers
21 the amount that has been previously been collected in rates
22 associated with that land held for future use. That's an
23 amount that is, in rough terms, a hundred million --

24 MR. TANNENBAUM: Hundred million?

25 MR. STINNEFORD: -- a million dollars plus carrying

1 costs.

2 MR. DES ROSIERS: Hold on.

3 MR. STINNEFORD: And I -- you know, I can say today
4 that that is a commitment that we would make even outside of
5 settlement. If that were the desire of the Commission, that
6 that money be returned to customers through a revenue
7 requirement credit upon the issuance of a CPCN and transfer of
8 that property into operating property, we would pledge to make
9 that commitment.

10 MR. DES ROSIERS: There was some questioning with
11 respect to the public outreach and the notice that was provided
12 prior to the submission of the petition in this CPCN
13 proceeding, and at that time, there was some mention of giving
14 notice to abutting landowners. Could you describe that and
15 when that happened?

16 MR. DICKINSON: Sure. So that we were required to
17 make a public information meeting as a result of our DEP
18 application. We -- the requirement was really only one of
19 those information meetings for -- to happen. We actually held
20 three. In prep for those meetings, you need to provide written
21 notice to all abutters, and we made that notice to those
22 parties. We had held those three public hearings in a way to
23 try to provide coverage for the overall project. Again, even
24 though we were only required to do one. One was in Bingham,
25 one was in Lewiston, and one was in Windsor.

1 MR. DES ROSIERS: Were they well attended?

2 MR. DICKINSON: Yeah, they were extremely well
3 attended. There was a lot of dialogue. We had a well --
4 staff, number of outreach people and experts, at a number of
5 stations showing visuals of the project, the route of the
6 project. We had computers manned so that people could see
7 specifically where the line was located. We had follow up with
8 people that had questions and addressed misconceptions that
9 were out there related to the project.

10 MR. DES ROSIERS: There was also some questioning
11 with respect to the outreach to the town of Caratunk. And did
12 CMP -- what was CMP's outreach to Caratunk and the town
13 officials?

14 MR. DICKINSON: Well, we -- you know, we discussed
15 the meeting that was held. My expectation is there was an
16 outreach ahead of that, but since the -- since that meeting,
17 we've continued to, a number of occasions, ask for additional
18 meetings and we've been -- to the town officials, and the town
19 officials have communicated back that they're not interested in
20 us for coming back.

21 MR. DES ROSIERS: That's all I have, thank you.

22 MR. VANNOY: Can I ask a follow up?

23 MR. TANNENBAUM: Yes, you may.

24 MR. VANNOY: Could you flesh out a little bit more
25 for me, Eric, the -- you commented a future where TOs can't own

1 as core business those transmission projects. You called that
2 untenable. Could you flesh out what you mean by that in a
3 little bit more detail?

4 MR. STINNEFORD: Yeah, if you believe that we're on a
5 trend, as I do, that, whether it's reliability projects or
6 public policy projects or state-initiated RFP processes, a
7 significant piece of our future transmission is going to be
8 procured through competitive processes -- and that's going to
9 be reliability upgrades, it's going to be ETUs, it's going to
10 be all sorts of transmission. If, you know, CMP is required to
11 separate its activities around those types of construction
12 projects from its other transmission and distribution
13 activities, it's going to create additional costs,
14 inefficiencies, operational constraints that, in our mind, just
15 don't make sense.

16 MR. TANNENBAUM: The way I see your core business is
17 to provide reliable transmission and distribution service. It
18 doesn't really, in my view, matter whether that -- if it's a
19 reliability project, whether it's procured through a
20 competitive process or through the judicial process. So I
21 don't think that the issue is whether it's a competitive
22 process or not. I think it may go more towards whether it's a
23 core function of CMP to provide reliable transmission service.
24 So, for example, if CMP were to own a generator lead to bring a
25 wind project into the grid, would that generate a lead, be a

1 core business of CMP?

2 MR. STINNEFORD: I'd have to think about the legal
3 definitions behind that, Mitch.

4 MR. TANNENBAUM: I know, it -- well --

5 MR. STINNEFORD: It's -- I mean, to some extent, we
6 infringe on that today when we build generator interconnections
7 under an interconnection request. Although staff may not have
8 raised the competitive bidding issue, other parties have as a
9 criteria for consideration in core versus non-core. But
10 they've also raised the issue of building transmission for
11 somebody other than our native load requirements as being
12 outside of core activities. You know, under that definition,
13 then us building a generator interconnection, whether we own it
14 or it's being built and turned over for the benefit of the
15 generator or system upgrades that we're building on our system
16 to accommodate an independent generator, that would fall under
17 the category of non-core. And I think, you know, that doesn't
18 make sense to us either.

19 MR. WILLIAMSON: This is going back to Eric, to your
20 comments about the benefits, community benefit packages,
21 becoming a part or perhaps a usual part or a commonplace part
22 of transmission projects, that tends to increase transmission
23 costs, project costs overall. How do you regard CMP's -- or as
24 you stated, a policy view, a high-level policy view, how do you
25 regard that view as compared with your peers in the region? Do

1 you find, for example, that Eversource is perhaps excessively
2 generous in what they offer? I mean, do others share that kind
3 of perspective on, while it may need to be done, there is a
4 cost on projects? Because, back to your original point, we are
5 all concerned about transmission costs in New England. That's
6 well known. So let me know your thoughts regards -- CMP as
7 related to the peers --

8 MR. STINNEFORD: Yeah, I mean, I hesitate to speak on
9 behalf of other transmission developers, but, I mean, clearly
10 some are willing to make those commitments and include those
11 costs in the cost of their project. You know, they're not
12 doing it out of their own goodwill and out of their own
13 financial backers. They're asking customers to pay for those
14 mitigation packages. Not all projects, I suspect, are doing
15 that, and I'll admit each state is going to view the
16 requirement for those kind of mitigation packages differently.
17 Our concern is that if we reinforce that requirement by
18 demanding similar mitigation packages here in Maine, we're just
19 contributing to that snowball effect that is going to make this
20 very difficult to reverse in the future.

21 MR. WILLIAMSON: And just do you get the impression
22 that nationally this is a problem? This may be beyond what
23 you're familiar with, but on the other hand, you may have come
24 across --

25 MR. DICKINSON: I mean, we just competed in a project

1 in the MISO region, and it is very clear that the winning
2 bidder, NextEra, did not include a benefits package in that
3 transmission line. So that would be a very recent example of
4 that. But the one difference I think to point out here with
5 Northern Pass as being kind of the prime example -- obviously
6 the Vermont project was not selected -- that was a project that
7 moved for ten years and continued to try to find a way to make
8 that project move forward and had a different strategy on how
9 they approached it.

10 MR. WILLIAMSON: Thank you.

11 MR. TANNENBAUM: I'm kind of caught up in this
12 core/non-core. If CMP participated or constructed a
13 transmission project in another state, would that be core
14 because it's transmission?

15 MR. STINNEFORD: I think if you -- based on my
16 reading of the definitions, you know, right now the definition
17 of core versus non-core does have a hook to franchise service
18 territory. So activities that are outside of that could be
19 considered non-core. So we don't dispute the fact that if we
20 were bidding on a competitive solicitation to build
21 transmission elsewhere in New England or outside of New England
22 that that could be considered non-core.

23 MR. TANNENBAUM: Okay. Anything else for this panel?
24 Okay. You're excused. Thank you very much for your testimony.
25 We have a couple of exhibit issues I want to discuss. So the

1 generator interveners, I believe, asked questions regarding
2 Exhibits 26 and 27.

3 MR. DES ROSIERS: No objection to those and no
4 objection as well to Exhibit 28.

5 MR. TANNENBAUM: No objection --

6 MR. DES ROSIERS: To 26 or 27 or the additional
7 presentation that they passed around today. We have no
8 objection to that as well.

9 MR. TANNENBAUM: And was that marked?

10 MR. DES ROSIERS: I believe it was marked as 28.
11 Yeah, so they --

12 MR. TANNENBAUM: Twenty-eight? Okay. Now, let's
13 see.

14 MR. TURNER: Mitch, sorry, I just -- over here. I
15 just want to -- on number 28, it's clearly a typo, but just for
16 the record it says January 8, 2018. I believe they meant
17 January 8, 2019.

18 MR. SHOPE: Yes, that's the markets committee error,
19 but it's a common error at the beginning of the year.

20 MR. TURNER: Understood.

21 MR. SHOPE: We'll talk to Mr. Fowler about it when he
22 comes on Friday. And by the way, just as a housekeeping
23 matter, should we -- with regard to the exhibits that we've
24 passed around today, should we file them on the website?

25 MR. TANNENBAUM: You mean in the docket?

1 MR. SHOPE: Yeah, in the docket. Because I know some
2 -- CMP has circulated some additional exhibits, and I don't
3 know whether they've yet been filed on the docket.

4 MR. TANNENBAUM: They should be. If they're not data
5 requests, they should be on CMS -- or data responses.

6 MR. DES ROSIERS: And in that regard, because we
7 haven't finished with Ms. Bodell's testimony, I haven't made --
8 checked to make sure all of ours are addressed, but we
9 certainly intend to do that when Ms. Bodell's testimony is
10 complete.

11 MR. TANNENBAUM: Okay. Brian, regarding NextEra's
12 exhibits, we deferred ruling on many of your proposals. I
13 believe what you referred to today were marked in your pre-
14 hearing memo as Exhibits -- well, sorry, I'll get back to that.
15 I'm assuming now at this hour we're not going to move to Ms.
16 Bodell or do parties think we should?

17 MR. SHOPE: Oh, so we're ready to go, and as far as
18 I'm concerned, anything that makes Friday shorter is a good
19 thing, but --

20 MR. TANNENBAUM: Want to go for an hour --

21 MR. SHOPE: But it's -- okay.

22 MR. TANNENBAUM: Why don't we --

23 MR. SHOPE: I'm assuming that we would finish it up.
24 Is that --

25 MR. TANNENBAUM: Okay, so quickly, Brian, I believe

1 you referred to as -- you referred to Exhibit 17, 25, 22, and
2 24. Can I assume -- and then -- so we deferred on those. I
3 assume there's no objection for those exhibits going in the
4 record.

5 MR. DES ROSIERS: It's my understanding, subject to
6 discussion with Mr. Murphy, that for some of them, he intends
7 to only offer the portions that are included in his handout.
8 We have no objection to the inclusion of those portions of the
9 documents, not the complete files that he originally filed. So
10 with that, we have no objection.

11 MR. TANNENBAUM: So maybe that would be worth filing
12 in CMS, just the excerpts. And then the other ones that we
13 deferred ruling on during a case conference, would those be
14 considered withdrawn?

15 MR. MURPHY: I don't think I'm going to use them
16 tomorrow, but if we could wait till tomorrow.

17 MR. TANNENBAUM: All right, let's wait until
18 tomorrow. Okay, Ms. Bodell. Drew, would you like to lead us
19 off?

20 MR. LANDRY: Sure, why not. Good afternoon, Ms.
21 Bodell. I'm Andrew Landry. I'm counsel for Industrial Energy
22 Consumer Group in this proceeding. And I wanted to start with
23 a couple of follow ups from yesterday's hearing. I think you
24 mentioned at some point you discussed the fact that Hydro-
25 Quebec has some flexibility with respect to either delivering

1 power or making a financial make-whole payment in lieu of
2 delivering power. Do you recall making those comments?

3 MS. BODELL: I do.

4 MR. LANDRY: Would you agree that that's not an
5 unlimited right, that there is a certain minimum physical
6 deliverability that has to be done under the contract?

7 MR. SHOPE: I'm going to object to the form because I
8 think you're talking about deliverability versus delivered. I
9 mean, I think since you --

10 MR. LANDRY: Delivery --

11 MR. SHOPE: Delivery. Yeah, you said deliverability,
12 yeah.

13 MR. LANDRY: Thank you. Would you agree that there
14 is a minimum requirement for physical delivery under the
15 contract?

16 MS. BODELL: I would agree that there is a minimum
17 requirement for physical delivery. I think a lot of our
18 discussion yesterday was about the definition of what's
19 incremental to New England, and that definition allows for a
20 significant amount of reduction in what they're currently
21 sending into New England without any penalty whatsoever. And,
22 for example, in 2017 they delivered 18.2 terawatt hours into
23 New England. Under the Eversource and Unitil contracts,
24 they're only required to deliver three terawatt hours. And
25 under the other contract, it has a maximum of 9.45 with

1 adjustments that would take it down. So I think the
2 conversation yesterday did not speak to -- what's in the
3 contract with respect to total deliverable energy was focused
4 on the incremental aspects of delivering into New England which
5 all of the -- well, I'll speak for ourselves -- which the
6 economic benefits analyses was focused on.

7 MR. LANDRY: Okay. I don't want to dive too deep
8 into the PPA because I'm sure we'll bore everybody at this late
9 hour, but would you agree that the contract calls for a hundred
10 percent capacity factor but allows some flexibility to
11 substitute either financial payments or delivery in other
12 hours?

13 MS. BODELL: I would agree that the contract allows
14 for that flexibility. In both of those cases, either a
15 financial payment, which is why I referred to this more as a
16 put, and the second is with respect to the ability to do makeup
17 deliveries at other points during the period designated,
18 whether it's within the year, whether it's in the specific type
19 of hour, or whether it's a longer period.

20 MR. LANDRY: And again, I don't want to get into the
21 details, but is it your understanding that there's a limit to
22 the amount of substitution they can do?

23 MS. BODELL: I would agree with you that there is
24 language that attempts to limit that substitution at which
25 point the make-whole payments -- I think they're called cover

1 damages -- come into play. But I also indicated in my
2 surrebuttal report that the Hydro-Quebec guarantee, parental
3 guarantee, backing the support for these contracts is limited.
4 And therefore, if there is a benefit that Hydro-Quebec could
5 obtain by simply walking away from the contract because there's
6 a higher benefit than that parental guarantee, they would have
7 an economic incentive to do so. So at the end of the day, it's
8 going to be an economic decision, but the contract speaks for
9 itself.

10 MR. LANDRY: Thank you, I agree with that. And one
11 further question about the PPA and then we'll move along.
12 Which is would you agree that the contract requires the power
13 to -- or the contract to satisfy ISO New England's capacity
14 capability interconnection standard?

15 MS. BODELL: I agree that there is language in there
16 and a process by which that's to be obtained. And obviously if
17 there is a deliverability issue with respect to the contract,
18 there are repercussions with respect to whether or not the
19 contract and the project can proceed.

20 MR. LANDRY: Okay, thank you. And would you -- and
21 moving past the PPA, would you agree that the capacity
22 capability interconnection standard of ISO New England is
23 intended to ensure that energy is -- from particular units
24 seeking to interconnect is capable of qualifying for the
25 capacity market, at least physically capable of delivering the

1 power that -- for which capacity is proposed, it doesn't say
2 anything as to the MOPR or anything we'll talk about on Friday?

3 MR. SHOPE: I'm going to object to the form of the
4 question because --

5 MR. LANDRY: Sorry.

6 MR. SHOPE: -- it -- there -- it's a very complicated
7 clause that you're asking about and there were, like, three
8 different --

9 MR. LANDRY: Okay --

10 MR. SHOPE: -- concepts getting mashed up there.

11 MR. LANDRY: I'll maybe ask an open-ended question
12 which is could you describe your understanding of the capacity
13 capability interconnection standard of ISO?

14 MS. BODELL: I'd actually want to review that before
15 I gave you a description of that, but on a high level I can
16 say, in general, any ISO is going to want to ensure that a
17 connection is not going to adversely impact the reliability of
18 their system.

19 MR. LANDRY: Okay, thank you. Now, there's a lot of
20 discussion -- I'm sure we're going to have a lot of discussion
21 on Friday about the minimum offer price rule, and I really
22 don't want to talk about that today at all except to note that
23 in terms of whether Hydro-Quebec is able to qualify this energy
24 in the capacity market, one possibility is that it could have
25 -- or could qualify by having a low enough price under the

1 minimum offer price rule to be able to participate in an
2 auction. Is that fair?

3 MS. BODELL: So you're talking about a minimum offer
4 price which would be calculated as part of the minimum offer
5 price rule?

6 MR. LANDRY: Right, I'm saying if Hydro-Quebec seeks
7 to qualify this power in the capacity market, one possibility
8 is it would actually -- would satisfy the minimum offer price
9 rule and would be able to bid in the market?

10 MS. BODELL: I think that we'll talk more about this
11 on Friday. I would call it a theoretical possibility because I
12 think there's very strong evidence, including the spirit of the
13 minimum offer price rule as well as specific information that
14 we've provided about what we know publicly about Quebec's
15 system, that makes that theoretical.

16 MR. LANDRY: And another possibility is that it
17 doesn't qualify, but it does participate in a substitution
18 auction and replaces some existing units.

19 MS. BODELL: That most certainly is a possibility.

20 MR. LANDRY: And you discuss in your testimony, I
21 believe -- your initial testimony, I believe, at page 27 the
22 fact that Wyman might be one of the units that might seek to
23 retire. Is that -- or -- is that your recollection or is that
24 fair?

25 MS. BODELL: That is fair. In my original testimony,

1 I identified Wyman as a plant potentially at risk of being an
2 obvious choice for the substitution given its size but also the
3 fact that it is -- has been identified already as a plant at
4 risk of retirement by ISO New England. And so given that, plus
5 given the general characteristics of Wyman which I described, I
6 would see Wyman as being a candidate for potential
7 substitution. But then again, Wyman provides fuel diversity
8 and that has allowed for an RMR contract in other cases in this
9 market.

10 MR. LANDRY: And you also identified, I think on page
11 28, a number of gas units that you thought might be candidates
12 for substitution?

13 MS. BODELL: That's right. Again, my analysis did
14 not look at the details of their financials because I don't
15 have access to a critical component of that which is their
16 fixed costs. But just basically assuming that if they're not
17 operating to provide energy, they're not generating as much
18 revenue, and if they're large, they have larger fixed costs.
19 That would imply that the larger plants that are not operating
20 are potential candidates for substitution.

21 MR. LANDRY: Now, let's assume in your hypothetical
22 that ISO New England stepped in to support Wyman and, in fact,
23 some gas units retired in the substitution auction. In that
24 case, would a Hydro-Quebec contract with a capacity supply
25 obligation enhance the fuel security of Maine and New England?

1 MS. BODELL: Not necessarily, and let me tell you
2 why. And this goes to your first question about the contract
3 and the flexibility in the contract. Because there is this
4 minimum level that theoretically could be required to be
5 delivered under this contract and there is this contract in
6 place, it would make sense for Hydro-Quebec to deliver the
7 energy that it has available through NECEC and also potentially
8 bid capacity through NECEC but take that capacity away from
9 what they're currently bidding into New England through New
10 Brunswick and through New York. And the reason is because they
11 have to pay wheeling costs for selling that capacity and the
12 energy associated with it through New Brunswick and through New
13 York. And so, therefore, it would be less costly if -- under
14 our conclusion that they have very limited capacity to be able
15 to sell anyway, it would make economic sense for them to simply
16 shift their capacity supply obligations from the other
17 interties into NECEC, which would cause no net benefit
18 whatsoever, no net impact on capacity prices. As far as the
19 fuel diversification is concerned, the reality is Maine is the
20 most diversified fuel part of ISO New England, and some of the
21 gas that's supplied to those plants comes through a separate
22 line that is unrelated to the Algonquin city gate TETCO 3
23 congestion that has occurred during peak periods. So I'm not -
24 - I haven't done a thorough analysis, but there are just
25 general aspects of the way the gas plants in Maine are

1 connected that would make me believe it's not going to have a
2 benefit for the rest of New England from a fuel diversification
3 point of view even if those gas plants did retire.

4 MR. LANDRY: With respect to imports or delivery of
5 capacity through New York or Hydro-Quebec, does Hydro-Quebec
6 have a capacity supply obligation through those points?

7 MS. BODELL: Yes. So Hydro-Quebec has -- I mean,
8 this is in one of my workpapers. Hydro-Quebec has a capacity
9 supply obligation -- or qualified -- I'd have to look, but I
10 think they also did win their capacity supply obligation. They
11 both qualified and won the capacity supply obligation for I
12 think it's 300 megawatts through New York and -- I would have
13 to look up the number, again, it's in my workpapers -- but for
14 a certain amount through New Brunswick as well.

15 MR. LANDRY: Would they have to surrender those
16 capacity supply obligations?

17 MS. BODELL: If they, as we conclude, have a limited
18 amount of capacity and, therefore, they're trying to optimize
19 the capacity that they have, they would not have to surrender
20 that. It would just make an economic -- it would make economic
21 sense that if they have no more capacity to bid, that they
22 redirect the capacity they're currently bidding through New
23 York and New Brunswick into NECEC. Again, because they have
24 the lower cost of delivery since they're not paying the
25 wheeling charges.

1 MR. LANDRY: I understand that, but they have an
2 existing capacity supply obligation, yet they transfer to a
3 different delivery point?

4 MS. BODELL: They only do one year-to-year capacity
5 supply bid, and I think that's in part because it -- well, I
6 suspect it's because of the volatility of the water supply and
7 the capacity that they could have available on any year.

8 MR. LANDRY: So theoretically, it might not be
9 available at any particular time.

10 MS. BODELL: That's right. And in fact, as I showed
11 in the supplemental report, there were two years, FCA 9 and FCA
12 10 I believe, where Hydro-Quebec only qualified for 200
13 megawatts into the market. And they've recently been able to
14 qualify for more, but that just shows it was following a dry
15 year in 2013, and come 2014/'15 I think they bid conservatively
16 into the FCA. But I think it's important to see the variation
17 in what their historical qualification and clearing has been.

18 MR. LANDRY: Now if they didn't qualify, or didn't
19 seek to qualify, in the capacity -- forward capacity market,
20 would they still be eligible to receive payments from
21 generators who are penalized under the pay for performance
22 rules?

23 MS. BODELL: The pay for performance is tied to the
24 capacity supply obligation, and so if Hydro-Quebec does not
25 have a capacity supply obligation, they would not be subject to

1 those penalties or rewards.

2 MR. LANDRY: But if another unit, let's say a gas
3 unit in Maine, was unable to satisfy its obligation during a
4 peak period and had to pay a penalty, if Hydro-Quebec were
5 delivering during those hours, would they be eligible to
6 receive a portion of the payments?

7 MS. BODELL: The pay for performance which is part of
8 a capacity supply agreement, the answer -- I believe it's part
9 of the capacity supply agreement obligation, and so the answer
10 would be no. And that's part of the reason why some of these
11 plants are putting delist bids out, because there's a pay for
12 performance penalty that goes into their calculation.

13 MR. LANDRY: Let's say when they pay the penalty, the
14 money goes into a pool that's used to fund -- to pay folks who
15 do show up and provide capacity or are available during those
16 hours, is that right?

17 MS. BODELL: That's right. But I think, again,
18 subject to check, and we can look at this on Friday, but I
19 believe the pay for performance is a capacity supply obligation
20 payment. I know the penalties are only tied to whether or not
21 they had a capacity obligation and did not pay. I'd want to
22 check to make sure that the payment only goes to those that
23 did. But if it does go to all of the plants, then your theory
24 would be correct.

25 MR. LANDRY: All right, thank you.

1 MR. VANNOY: Just a follow up. If you take the
2 hypothetical that it goes to anybody who's supplying energy
3 during that scarcity period --

4 MS. BODELL: Correct.

5 MR. VANNOY: -- that they receive a payment in that
6 pay for performance incentive piece, how would you view that
7 with respect to some of the other economic incentives they have
8 to move their capacity around. I mean, does that change in any
9 way what you're saying with respect to their incentives?

10 MS. BODELL: It still would change what I'm saying
11 with respect -- it would not -- I don't think it would change
12 what I'm saying with respect to the incentives because there's
13 energy that would be flowing through NECEC. They'd be getting
14 a high price under the contract for that. And so under most
15 conditions, they're going to want to flow the energy under that
16 contract, especially because of some of these contractual
17 provisions, even though they have flexibility not to. So if
18 they're going to get paid no matter what, does it matter where
19 they're shifting their energy? No, but they still want to be
20 able to get the capacity supply payment. And, again, I'd want
21 to go back to the pay for performance to refresh myself on the
22 details of how the payout goes before I make a conclusion, but
23 I think generally, they still save on the New Brunswick
24 wheeling charge which is why they would put it through NECEC
25 irregardless -- if the pay for performance -- so let me step

1 back. If the pay for performance payment occurs just because
2 they're delivering energy, that in and of itself would not
3 impact whether they sell it through New Brunswick or through
4 NECEC. It's the fact that there's a wheeling charge through
5 New Brunswick that they have to pay that would have to be
6 compared to a fixed payment that they already have to make
7 under the TSA. So they can avoid the New Brunswick
8 transmission fee if they sell it through NECEC. I hope that
9 makes sense.

10 MR. VANNOY: No, I followed. Thanks.

11 MR. LANDRY: We talked a little bit about delisting
12 here and the possibility of some units in Maine seeking to
13 delist. Am I correct there's two types of delist bids that
14 plants can pursue? One is a dynamic delist bid and another is
15 a static, is that the right term?

16 MS. BODELL: That is correct.

17 MR. LANDRY: And one of those is -- contemplates the
18 full retirement of the unit and the other one contemplates that
19 the unit would remain operational and simply participate in the
20 energy market or whatever else it wants to do?

21 MS. BODELL: Yes.

22 MR. LANDRY: If the unit selected the option of
23 remaining open, would those -- are those units eligible to
24 receive payments from the pay for performance penalties? Maybe
25 it's the same question I asked before.

1 MR. SHOPE: I'm sorry, you said remaining open, and
2 I'm not sure what -- I guess formally it's an objection to the
3 form of the question, but I -- maybe you could rephrase it.

4 MR. LANDRY: Yeah. Would those units be eligible to
5 receive any payments in the event that there was units paying a
6 pay for performance penalty?

7 MR. SHOPE: Drew, again, objection because I'm not
8 sure what unit -- you said units that are open which I don't
9 think is a term.

10 MR. LANDRY: Right. I'm referring to the units that
11 have delisted but have remained operational. If they remain
12 operational and they are able to operate during peak hours when
13 pay for performance penalties are incurred by some units, would
14 they be eligible to receive payments as a portion of the
15 penalties?

16 MS. BODELL: Again, I'd really like -- you know,
17 sometimes these rules are very complex and they have clauses
18 and subtle aspects. I'd like to refresh myself on the pay for
19 performance rules and get back to you on that.

20 MR. LANDRY: Sure.

21 MS. BODELL: My original thought is that the pay for
22 performance penalties and rewards are only paid to companies
23 and plants that have a CSO, that have qualified and cleared the
24 capacity market. But there may be some exceptions or clauses
25 or under -- you know, they're just -- or state of emergency.

1 So I just -- I really would like to review those rules before I
2 make a definitive statement to say that somebody who no longer
3 has a CSO and is operating as an energy-only resource, whether
4 or not they would be eligible for the upside of a penalty -- of
5 a performance pays program but not the downside. They most
6 certainly would not be part of the downside. I just need to
7 review the rules to see if they'd be part of the upside.

8 MR. LANDRY: All right, thank you.

9 MR. SHOPE: And it's not within the scope of his
10 testimony, but if you'd like to ask that question of Mr. Fowler
11 on Friday, then certainly by all means.

12 MR. LANDRY: Thank you. Now those units -- a unit
13 that does choose to remain open if it's a -- after they delist,
14 presumably it might be -- a lot of these units in Maine have
15 been running as peaking units. Is that fair?

16 MS. BODELL: That is true.

17 MR. LANDRY: And if they did have available fuel
18 supply and were able to run during peak hours, whether that's a
19 winter unit that has oil available or a unit in the summer, a
20 gas unit, any -- during the summer, they would be -- have the
21 opportunity to receive some of those high prices during those
22 extreme peak hours.

23 MS. BODELL: That is true. However, a lot of those
24 plants are receiving revenues under the capacity market, and
25 the question is, from an economic decision point, they now have

1 less flexibility with respect to the source of their revenues.
2 They're permanently out of -- if they substitute out through
3 CASPR, they're permanently out of the capacity market, and,
4 therefore, changes in energy prices -- they'd be more sensitive
5 to changes in energy prices.

6 MR. LANDRY: Sure, okay, thank you. Now, with
7 respect to these -- the low-capacity factor units that you had
8 identified, again, I think at pages 27 and 28 of your
9 testimony, I believe a number of them were operating in the,
10 you know, 15 percent capacity factor plus or minus. Is that
11 your recollection?

12 MS. BODELL: I'll say that the chart speaks for
13 itself because we did calculate what the capacity factors are,
14 but most certainly they are not operating very often. They are
15 not even peak operators, they're super-peak operators that
16 operate during the most extreme pricing situations.

17 MR. LANDRY: And when do those most extreme pricing
18 situations occur?

19 MS. BODELL: Those extreme pricing situations
20 generally occur during the summer peak hours when load is
21 highest. They also can occur in the winter because of the
22 higher gas prices that happen not just in New England, but most
23 of the markets, just because of the winter cold, results in a
24 higher demand for gas from residential and industrial and
25 commercial consumers, mainly for the heating. So generally the

1 peak prices in New England occur in the summer and the winter.
2 However, as we discussed yesterday, there are some anomalies
3 that can occur during the shoulder months tied to the fact that
4 that's when a lot of the generators are scheduled for
5 maintenance. And so, therefore, often that tight supply can
6 create some anomalous price spikes. Generally, the higher
7 prices are going to occur -- the super peaks are going to occur
8 in the winter and the summer.

9 MR. LANDRY: Now, with respect to the gas units that
10 you'd identified in your chart on page 28, if the price spike
11 is being caused by a shortage of gas, those units probably were
12 not running during the gas period -- the peak winter period?

13 MS. BODELL: I would say no. I think if the gas
14 plants are not operating during the winter peak period, it's
15 generally because they're not economic and the oil is a lower-
16 priced option. And so the oil plants will be coming online,
17 the dual-fuel units will be coming online, and oil will start
18 to set the price instead of natural gas. So I don't think that
19 you can't look at a gas plant as being unable to get the supply
20 and that's why they're not operating. I think the market
21 prices send a very good price signal which say, look, you can
22 operate, you can get the gas, but it's going to be very
23 expensive, but there's a cheaper alternative, which is this oil
24 plant over here, so we're going to operate the oil plant
25 instead. And that's the nature of the New England system with

1 the dual-fuel capability and the oil units. New York has a
2 similar type of situation.

3 MR. LANDRY: Do you think that a fair number of the
4 hours that the gas units are running are summer afternoons?

5 MS. BODELL: I would expect that to be the case, yes.
6 Again, summer and winter, but summer afternoon I would expect,
7 if it's a very hot summer, that there'd be a summer day they'd
8 be operating.

9 MR. LANDRY: You agree that the development of
10 additional solar facilities in Maine and New England may tend
11 to cause the capacity factor of these units to reduce as well?

12 MS. BODELL: So the answer -- the question is simple.
13 The answer is more complicated because I think what you're
14 talking about now is what's called the duck curve and that's
15 where there's actually a dip in the load in the middle of the
16 day in the summer because the solar is providing energy and
17 offsetting the need for energy to be delivered to residential
18 consumers who would otherwise have air conditioning load
19 because the solar panels on the roof are offsetting that. And
20 in that case, what you would expect is that an inefficient gas
21 unit might not operate but, in fact, those inefficient gas
22 units happen to have the fastest ramp up speeds. And so they
23 happen to be needed often to be able to make up the difference
24 when the solar gets covered by a cloud. If a cloud comes over
25 all of a sudden, the load gets up. And so there's a lot more

1 volatility that requires ramping capability, and that can be
2 paid for through ancillary services and that can be a valuable
3 revenue source for these inefficient but fast ramp up/ramp down
4 plants.

5 MR. LANDRY: The capacity factor only reflects the
6 hours generation, it doesn't reflect ancillary services.

7 MS. BODELL: Well, the ancillary services are a non-
8 spinning reserve or spinning reserve. But to the extent
9 they're required to inject into the system to cover when the
10 cloud comes over, then there's energy being injected into the
11 system to do that. And so you would see that would go into the
12 capacity factor calculation. But again, I said it's a
13 complicated answer to what seems like a simple question. You
14 really have to run the analysis to see what the solar load is,
15 how these plants are needed, and how increased solar is going
16 to impact their capacity factor. But, in general, I would
17 expect with lower super peaks, there could be a lower capacity
18 factor for those units.

19 MR. LANDRY: Thank you. One more area. Would you
20 agree in general that the cost of energy has a direct impact on
21 whether businesses are -- can be profitable if energy's an
22 important part of their cost structure?

23 MS. BODELL: Yes, to the extent that energy is an
24 important input to a manufacturing process or any business,
25 then the price of that energy impacts their profitability.

1 MR. LANDRY: So to the extent that you see a
2 reduction in the price of energy, businesses would have --
3 potentially have available funds to hire new workers or to
4 expand their property, their -- expand their business
5 locations.

6 MS. BODELL: I think it depends on how big that price
7 reduction is and how much of the cost that energy component is
8 of the total cost structure as well as what the investment
9 requirements are and even if there is an opportunity to expand
10 to produce more. So it's not a simple relationship. There's a
11 lot of threshold numbers that would need to be analyzed.

12 MR. LANDRY: But the tendency would be, if you have
13 more available money, you -- I mean, you may just decide to
14 keep it as a business owner, but you also may decide that,
15 given the lower cost structure, it's an opportunity to expand.

16 MS. BODELL: Again, I will agree with you that lower
17 costs are beneficial to businesses. What they do with that is
18 very unique to those businesses.

19 MR. LANDRY: Do you have a sense of how significant
20 energy costs are to the operation of paper mills and similar
21 manufacturers?

22 MS. BODELL: My understanding is that it's a large
23 portion of their costs, but I don't know the relative portion
24 or how that compares to the fixed costs.

25 MR. LANDRY: Are you aware that a number of paper

1 mills have permanently closed in Maine over the last four or
2 five years?

3 MS. BODELL: I am aware of that, but I don't know
4 what the cause is, whether it's tied to energy prices, whether
5 it's tied to a change in the market, or if there are other
6 costs that have increased like gas or any of the other costs
7 that go into producing and delivering.

8 MR. LANDRY: Fair enough. Thank you very much.

9 MS. BODELL: Sure. You're welcome.

10 MR. TANNENBAUM: Dot?

11 MS. KELLY: Thank you. Thank you, Ms. Bodell. My
12 questions are all going to be about the same kind of topic to
13 better understand how if, let's say, the TDI transmission line
14 was built or the Northern Pass line was built or if the CMP
15 line was built, how it impacts things like the indirect savings
16 to energy costs, CASPR, LMP in Maine, and zonal separation in
17 Maine. So I'm going to start from the beginning, but I was
18 just giving you a flavor.

19 MS. BODELL: Thank you.

20 MS. KELLY: So referring back to Mr. des Rosiers'
21 questions on the TDI proposal, are you familiar with that 83D
22 project to kind of use that or would it be better to use the
23 Northern Pass or can you do both?

24 MS. BODELL: Why don't we use a generic project?
25 Because I think whatever your questions are, I don't have

1 enough detail about any of the projects, and if I did, I
2 wouldn't be able to share it. So let's talk about a general
3 transmission project.

4 MS. KELLY: Okay, located in different areas.

5 MS. BODELL: And coming from Quebec into New England
6 is, I assume, your condition.

7 MS. KELLY: Correct.

8 MS. BODELL: Okay.

9 MS. KELLY: Is it fair to say that you're going to do
10 that response in a way that's an evaluation as done as a but-
11 for analysis? So it's -- you're going to try to just have that
12 be the one thing that's changing in the answers that you're
13 going to give to me?

14 MS. BODELL: That's exactly right. And when you do a
15 benefits analysis for transmission, you look at what are the --
16 what would happen without the project, what would happen with
17 the project. And the only thing you change is the addition of
18 the project when you run the models. There may be some
19 ancillary things that have to be adjusted because of the
20 project, but generally you would just change that one thing. I
21 haven't seen a benefits analysis that does a comparison where
22 you take an historical number even though you know the future
23 is going to be different and put it in. Generally, you do your
24 projection forward, what is it going to be, and then put in the
25 new project.

1 MS. KELLY: And so I recognize it's difficult
2 because, from your testimony of yesterday, there's that
3 additional question of is this incremental power that's coming
4 in or how much from Hydro-Quebec will impact it. So I'm hoping
5 in your answers you'll address what your basis is. So I'd like
6 to start from where Mr. Landry was questioning you. Assuming
7 the transmission line through Maine and then a transmission
8 line leading into Massachusetts from New Hampshire or Vermont,
9 would that have any significant impact on the price of energy
10 in Maine due to the indirect savings?

11 MS. BODELL: So in general, as our analysis showed,
12 an injection of energy into market is going to have an impact
13 on prices. I think what is critical in this case is if there's
14 a contract that's going to determine how much energy is going
15 to be injected into the system, you would -- and you have
16 access to that contract, you would want to take those details
17 into account. So given that the supplier is the same in the
18 three examples that you provided, I think it would be important
19 to get the details of that contract and analyze what the
20 economic incentives are and how that impacts the benefits in
21 New England. We assumed, as I've already said, that this is an
22 injection that comes in. There's not a redirection from New
23 England even though we did look at the economics and assume a
24 diversion from New York. Again, you'd want to look at the
25 details of ow much is going to be delivered and under what

1 conditions given the contract. If you don't have the contract,
2 you try to make an educated guess about what the injections of
3 energy are going to be.

4 MS. KELLY: So yesterday some of the questions were
5 just assuming what you assumed in your original modeling which
6 showed a pretty significant indirect benefit. Can you speak to
7 how that would be the same or different with a line that was
8 not going through Maine but an adjacent location into
9 Massachusetts?

10 MR. SHOPE: I guess I'm going to object to the form
11 of the question. I'm not sure what is meant by significant or
12 what is meant by indirect. I think the modeling related to the
13 effect on the wholesale energy market prices. And I think
14 indirect has been a discussion at least in the expert reports
15 with regard to jobs or perhaps a multiplier effect, that sort
16 of thing.

17 MS. KELLY: Okay, please ignore the indirect part.

18 MS. BODELL: So, Dot, could you please repeat the
19 question?

20 MS. KELLY: Sure. Using your model that you did for
21 the original testimony, could you describe whether there would
22 be a difference between a line in Maine, like CMP, and a
23 similar line in an adjacent state?

24 MS. BODELL: Okay.

25 MR. TANNENBAUM: So I think the question is if you

1 had a similar line in New Hampshire or Vermont, would there be
2 similar benefits in terms of energy and capacity reductions.

3 MS. BODELL: Right, and I think also she's asking us
4 to use our original assumption that doesn't get into the
5 details of the economics of the contract and when energy would
6 be injected but simply looks at -- assume it all comes into New
7 England and anything else that would have been sold into New
8 England continues to be sold into New England. So under that
9 -- under those conditions, there would be differences between
10 the impacts of a line that's coming directly into Maine and a
11 line that's coming into, say, Vermont or New Hampshire. You'd
12 have to run the model to know how that impacts the locational
13 marginal prices because it is about transmission constraints,
14 and I don't think anybody can do that in their head. It's very
15 complicated. But I think the key difference that we did
16 emphasize is the impact on the capacity market, the fact that
17 Maine, with NEC (sic) coming into Maine, it would bind. We
18 talked about this yesterday, that that would not be the case if
19 it was going into another marketplace. And so our conclusion
20 is that there is a higher likelihood you would have the
21 retirements in Maine with NECEC and, although there's still a
22 risk, it's a lower risk with respect to a transmission line
23 that would go into another part of the region.

24 MS. KELLY: And could you address the zonal
25 separation that has been described? Would that still be the

1 same? Would Maine be considered a separate zone at this point?

2 MS. BODELL: So again, it depends where that other
3 transmission line would be coming in. If that other
4 transmission line is coming into New Hampshire or Vermont, it
5 would still be part of the northern zone which is already a
6 separate capacity zone. If it were going into Massachusetts,
7 for example, then it wouldn't -- it'd have a different impact.
8 But, again, we're getting into some of the details of the way
9 that the capacity markets work, and Mr. Fowler is, frankly, an
10 incredible expert on that because he has sat in those meetings
11 multiple days and hours across the year.

12 MS. KELLY: As always, thank you very much for your
13 responses.

14 MS. BODELL: Thank you, Ms. Kelly.

15 MR. TANNENBAUM: Sue?

16 MS. ELY: Actually, my question was the zonal
17 question, and that was just covered. So no questions.

18 MR. TANNENBAUM: Okay. John, redirect?

19 MR. SHOPE: Yes, Ms. Bodell, when you were being
20 questioned by Mr. des Rosiers, you -- he asked you about, you
21 know, your observation that in light of what you now know about
22 Hydro-Quebec's exports to New England last year -- and I think
23 you had mentioned the 18 terawatt hours -- in relation to the
24 thresholds for incremental under the Massachusetts contracts
25 and you had mentioned three terawatt hours for Eversource and

1 Unitil and around nine and a half terawatt hours for National
2 Grid, at the end of that -- and you had mentioned in connection
3 with all of that that you believe that potentially all of the
4 power that was currently being -- or that would be sold on
5 NECEC could be redirected from power that was already being
6 sold to New England. You remember that generally?

7 MS. BODELL: I do remember that, yes.

8 MR. SHOPE: And you had mentioned that this would
9 very significantly affect the determination of whether there
10 was any price benefit in Maine.

11 MS. BODELL: That's correct.

12 MR. SHOPE: Okay. And I believe Mr. des Rosiers
13 asked you a question just in general, well, if there's not
14 going to be price suppression or at least to the same extent,
15 why do the generators care about that. So I guess the question
16 would be why would generators in Maine care about the proposed
17 NECEC project or be concerned about it in light of the
18 information that you now have about the historical Hydro-Quebec
19 sales in relation to the thresholds under the contracts?

20 MS. BODELL: Yes, so if what Hydro-Quebec ends up
21 doing is, without NECEC, it would have sold into Maine through
22 New Brunswick but instead decides to sell that energy through
23 NECEC, there would be no difference in the energy price for the
24 most part. There might be some minor changes, but generally
25 it's going to be about the same. So that would mean no energy

1 market benefits or impacts in Maine. On the other hand, if it
2 came out of, say, western Massachusetts and was injected into
3 Maine, all else equal, you would have the higher congestion,
4 the higher losses. And, therefore, since the LMP that the
5 generators receive is composed of the energy price plus the
6 losses, plus the congestion, there would still be an impact on
7 the energy market price in Maine, that LMP price in Maine, but
8 it would be less than what I calculated. That said, there
9 could still be an adverse impact on the energy market price for
10 the generators. So I would think they would be impacted --
11 adversely impacted by that.

12 MR. SHOPE: Now, Mr. des Rosiers asked you about a
13 cold snap that had occurred just about a year ago in late
14 December of 2017, the very beginning of January of 2018.

15 MS. BODELL: Yes.

16 MR. SHOPE: You recall that? Okay. And I believe
17 you had testified that you had some familiarity with that
18 situation.

19 MS. BODELL: I did. For a client that I can't
20 disclose, they asked us to do a detailed analysis of what
21 happened during that cold snap, what caused it, why did it
22 happen, what happened with prices in New England, is this a
23 capacity constraint on the gas pipelines coming into New
24 England, is it something else. So we did that analysis. And
25 part of what we looked at as part of that analysis was where

1 was the energy coming from in New England, who was supplying
2 the energy during that cold snap, that period of time.

3 MR. SHOPE: And did you -- well, actually maybe we
4 can just circulate the next document and you can tell us what
5 that is.

6 MS. BODELL: Yeah, so one of the things we looked at
7 was the imports, how were the imports impacted during the cold
8 snap, did they stay the same, did they go up, did they go down.
9 And this, what's being passed around, is one of the slides from
10 the presentation that we made to our client. It was slide six
11 -- I don't know off the top of my head, maybe it was around 25
12 pages, 30 pages, the entire deck -- analyzing what had
13 occurred. We also did some memos and we did some commentary on
14 some of the public statements that were issued by ISO New
15 England as part of our analysis. But this particular page, and
16 this was -- could I get a copy, Steve? Thank you. So this
17 particular page, I was trying to pull it up yesterday -- and
18 when you're on the stand, you can't do things as quickly as you
19 think -- because I vaguely remembered that we had found that
20 the imports have gone down. And, in fact, what this shows --
21 it comes from the ISO New England morning reports, and the gray
22 box in this chart is during the cold snap, December 26th, 2017
23 to January 8th, 2018. It looks at, on these colored bars,
24 whether something's coming in from New York ISO across each of
25 the three interties, whether it's coming into New England

1 through New Brunswick, or whether it's coming in through Phase
2 II which, as you know, is directly connected to Quebec, or
3 whether it's coming in from High Gate which is also directly
4 connected to Quebec but tends to be a pretty standard contract.
5 And what you see is during that cold snap -- and again, this
6 was just a statement that we made in April at the bottom in the
7 brown box -- Canadian imports from Quebec fell by around one-
8 third and that's specifically the Phase II line. It was
9 predominantly the Phase II line, although, as you can see from
10 some of the blue bars, High Gate also went down. And
11 interestingly, if you look at the orange bars, those are
12 imports coming in from New Brunswick, and you see that those
13 also had some variation as well. And the conclusion is, from
14 this, that during that very cold peak period in the winter of
15 2017 and '18 the Quebec imports into New England fell by around
16 one-third.

17 MR. SHOPE: But what was happening to prices in New
18 England at the time of the cold snap?

19 MS. BODELL: Prices -- as we discussed yesterday,
20 prices were very, very high. They weren't necessarily being
21 set by the gas price, although some of the hours were. There
22 was also prices being set by the oil price, but it was still a
23 very high-priced period in New England. It would be a time
24 when you would have the most incentive to sell every single
25 megawatt of energy that you could into New England. And yet,

1 during that time, it was also cold in New York, it was also
2 cold in Quebec, and there were other competing needs. We don't
3 know exactly what was going on with those systems. All we know
4 is that the total imports coming into New England from Quebec
5 during that period was one-third lower than the surrounding
6 days.

7 MR. SHOPE: Okay, and I think Mr. des Rosiers had
8 asked you about what potential benefit the NECEC line would
9 have if there -- a similar cold snap were to occur if the
10 project goes forward. And so could the same thing happen?

11 MS. BODELL: So assuming they haven't shifted their
12 capacity supply obligation into NECEC, there's enough
13 flexibility in the contract that during the super peak cold
14 days Quebec does not have to deliver. As long as they were to
15 make it up during other hours, they would be fine and wouldn't
16 suffer any penalty. And then, of course, the incremental
17 calculation is on a year-by-year basis. But with respect to
18 fuel security or deliverability during the time when New
19 England needs it most, there's so much flexibility in that
20 contract that I wouldn't count on it.

21 MR. SHOPE: That's it for the generator interveners.

22 MR. TANNENBAUM: Okay. Anything else for this
23 witness?

24 MR. SHOPE: Oh, yes. I'm sorry, yes. Just to
25 clarify, we would like to have what's just been passed around

1 as Generator Intervener 29.

2 MR. WILLIAMSON: Do you have an extra copies of that?

3 MR. BARTLETT: Yes, we do actually. Sorry.

4 MS. BODELL: Steve, there are three important people
5 in addition to all the other important people in this room.

6 MR. TANNENBAUM: So --

7 MR. SHOPE: I'm sorry, did you folks not have copies
8 of that when we were going over it?

9 MR. WILLIAMSON: I have it.

10 MR. TANNENBAUM: Okay, so any objections?

11 MR. DES ROSIERS: Since we've just been provided this
12 and this is an Energyzt report as opposed to an ISO New England
13 report, I would want to do -- have a better understanding. The
14 source is listed as analysis of ISO New England morning
15 reports. It's not necessarily identifying the source of the
16 data, and this is ISO data. So we have some foundational
17 issues as to --

18 MR. SHOPE: Well, it is ISO data, and so we -- I'm
19 happy to -- then we can have that emailed to Mr. Simpson and
20 then we can circulate that as well if you'd like or we can have
21 -- or if you'd like to cross examine Ms. Bodell as to what the
22 source of the data is, that's fine too. But I --

23 MR. DES ROSIERS: If I may suggest, if counsel for
24 the generator interveners can share the source data, we can
25 look at it and then -- and reserve on an objection or reserve

1 on asking any questions of Ms. Bodell with respect to her
2 analysis that's just been provided to us.

3 MR. TANNENBAUM: Okay, so we'll defer ruling.
4 Anything else for today? Thank you, Tammy.

5 MS. BODELL: Thank you.

6 MR. TANNENBAUM: See you Friday. We'll probably see

7 --

8 MS. BODELL: All right, we'll see you Friday.

9 MR. SHOPE: And tomorrow is nine o'clock if my memory

10 --

11 MR. TANNENBAUM: Yes, it is.

12 CONFERENCE ADJOURNED (January 9, 2019, 4:51 p.m.)

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Kennebec Valley

2017 Regional Tourism Impact Estimates

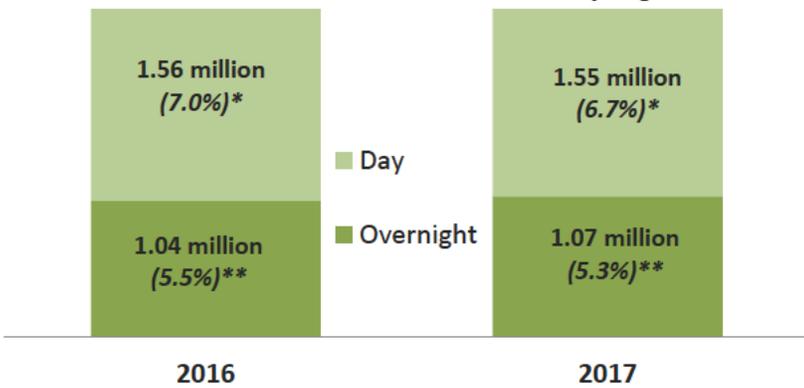


An estimated **2.6 million visitors** came to the Kennebec Valley region in 2017, a **0.7%** increase over 2016.

2016 Total
 2.60 million
 (6.3% of All Maine Visitors)

2017 Total
 2.62 million
 (6.0% of All Maine Visitors)

Number of Visitors to the Kennebec Valley Region



* Percent of estimated total Maine day visitors
 ** Percent of estimated total Maine overnight visitors

Year-over-year changes in visitation estimates fall within standard statistical margins of error and, therefore, should not be interpreted as absolute, significant fluctuations in visitation. Valid indicators of change include ongoing trends over multiple years, as well as noted statistically significant changes.

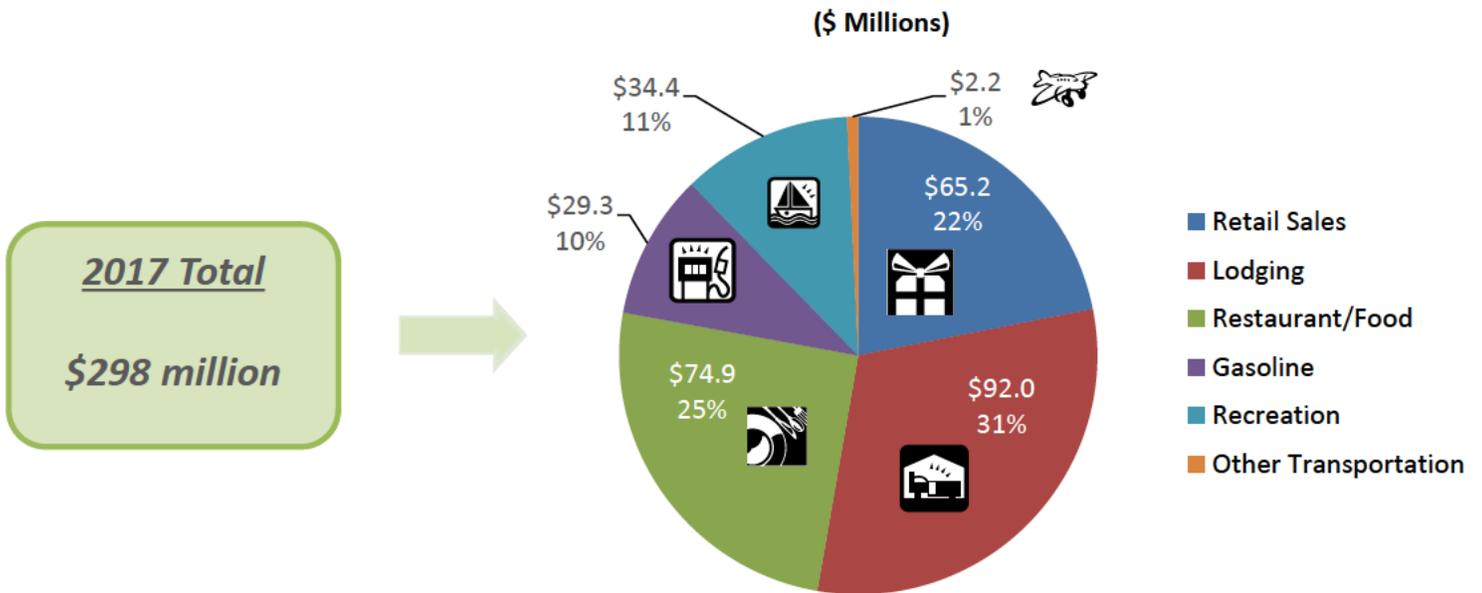
For the purposes of visitation and visitor expenditure estimates, only visitors on tourism-related trips are included. Tourism-related trips include: All leisure trips, trips that are a general visit to see friends or relatives, a wedding, a holiday visit, and business trips that are for a convention/conference/trade show or training/professional development.



Kennebec Valley

2017 Regional Tourism Impact Estimates

In 2017, Kennebec Valley visitors spent nearly **\$298 million**, down 1.9% from 2016.



The \$298 million spent by visitors in the region supported...

Economic Impact begins when a visitor spends money in an area. The benefits to the local economy go beyond the basic impact of these dollars spent – these dollars create a chain effect. The effects of these expenditures are evident as the direct recipients of these expenditures in turn pay wages, earn income, and pay taxes. Further these secondary recipients spend *their* income and thereby create more impact.

4,901 jobs

\$95.7 million in total earnings

\$27.6 million in total taxes

- For the purposes of visitation and visitor expenditure estimates, only visitors on tourism-related trips are included. Tourism-related trips include: All leisure trips, trips that are a general visit to see friends or relatives, a wedding, a holiday visit, and business trips that are for a convention/conference/trade show or training/professional development.
- For the purposes of expenditure estimates, visitors are defined as all overnight visitors and all out-of-state day visitors on tourism-related trips.
- Economic Impact is estimated using DPA visitor expenditure estimates, and the RIMS II Economic Impact model.

**Winter Recreation Impact Survey
February 2019
Conducted by Sandra Howard, PhD**

Summary:

This online survey was distributed electronically and participants responded during a 4-week period between January 18-February 18, 2019. The prompt to participants read as follows: “We are collecting data about the winter recreation experience in western Maine. These data will be used in response to a proposed 145-mile transmission line through Maine, which would include crossing many mountains, wetlands, and waterways in an undeveloped region of western Maine.”

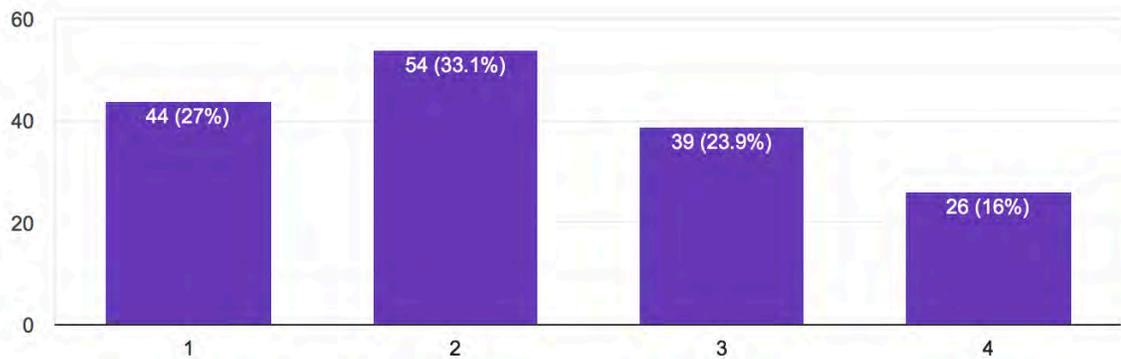
- 163 Participants
- State of Residence
 - Connecticut (8.0%)
 - Maine (65.6%)
 - Massachusetts (17.8%)
 - New Hampshire (4.3%)
 - Other – Maryland, New York, Virginia, Pennsylvania (4.3%)
- Year of most recent trip to Maine
 - 2019 (84.6%)
 - 2018 (13.5%)
 - 2017 (1.9%)
- Duration of most recent trip to western Maine
 - 1-2 days (14.1%)
 - 3-4 days (40.4%)
 - 5 or more days (30%)
 - Seasonal Resident (3.9%)
 - Year-Round Resident (11.6%)
- Number of times traveled to area to participate in winter rec. activities
 - 1-5 times (8.6%)
 - 6-10 times (11.6%)
 - 11-15 times (7.4%)
 - 16-20 times (7.4%)
 - 20+ times (65%)
- Activities engaged in on most recent trip to area (*select one or more)
 - Purchased Fuel (91.4%)
 - Purchased Meals/Drinks at Local Restaurant (90.8%)
 - Snowmobiling (86.5%)
 - Purchased Grocery Items (81.6%)
 - Viewed scenery (75.5%)
 - Purchased Retail Items (68.1%)
 - Stayed at Area-Owned Home (55.2%)

- Stayed at Area-Lodging Accommodations (50.3%)
- Snowshoeing/Winter hiking (39.9%)
- Ice Fishing (39.3%)
- Cross-country skiing (19%)
- Rented Snowmobile (6.7%)
- Other (6.6%)
- Hired Snowmobile Guide (1.8%)

• RATE EACH FACTOR FOR SELECTING A SNOWMOBILE DESTINATION:

Driving distance from home

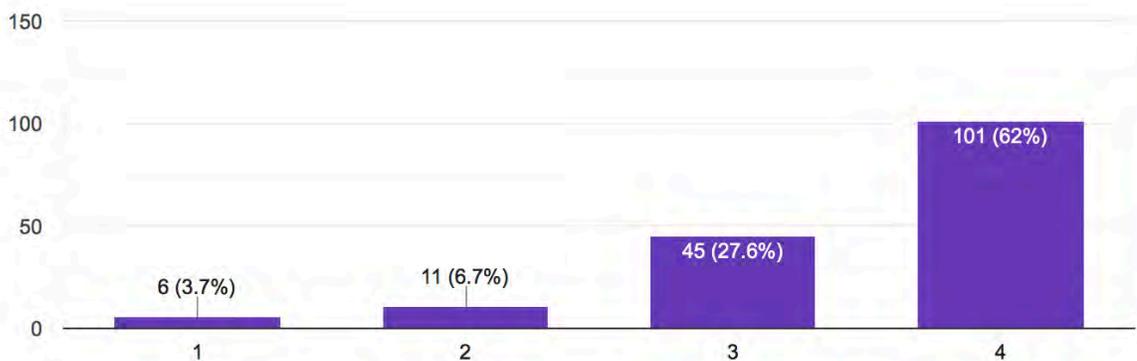
163 responses



SCALE (1 = Less Important; 4 = Very Important)

Trail conditions

163 responses

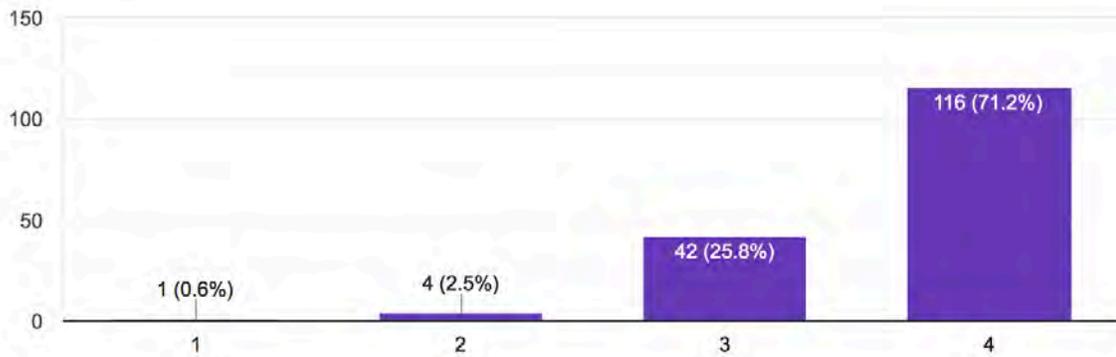


SCALE (1 = Less Important; 4 = Very Important)

Scenic beauty along snowmobile trails



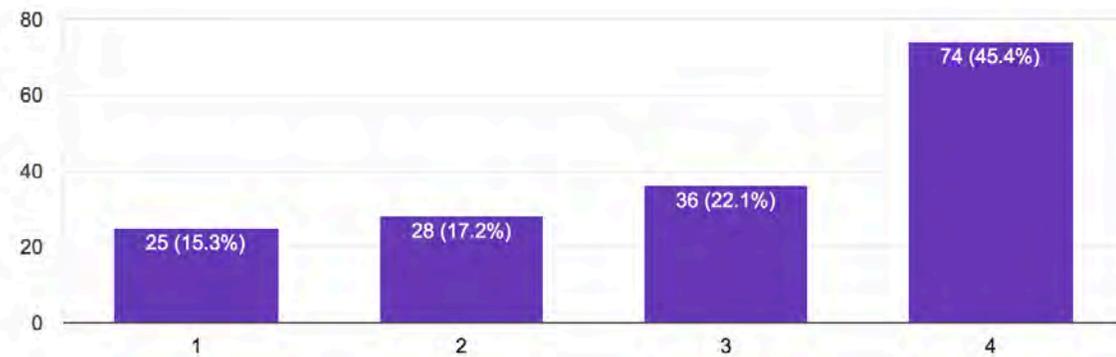
163 responses



SCALE (1 = Less Important; 4 = Very Important)

Ability to participate in other recreation activities (i.e. ice fishing, snowshoeing, x-country skiing, etc.)

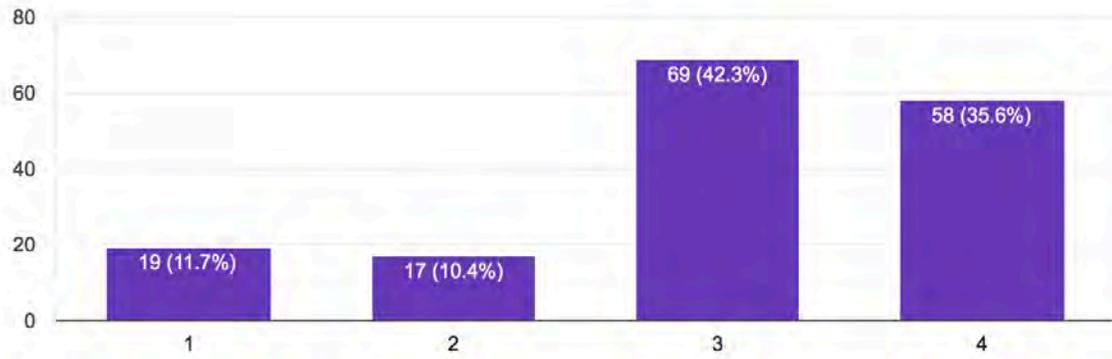
163 responses



SCALE (1 = Less Important; 4 = Very Important)

Area Accommodations

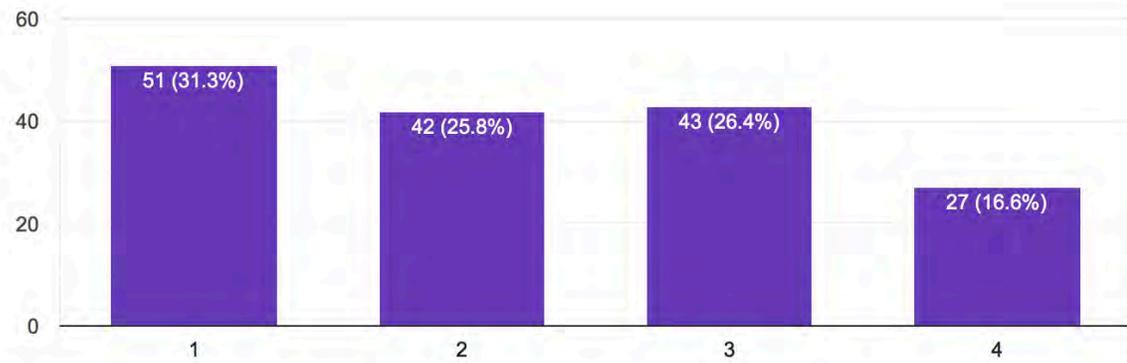
163 responses



SCALE (1 = Less Important; 4 = Very Important)

Internet Access

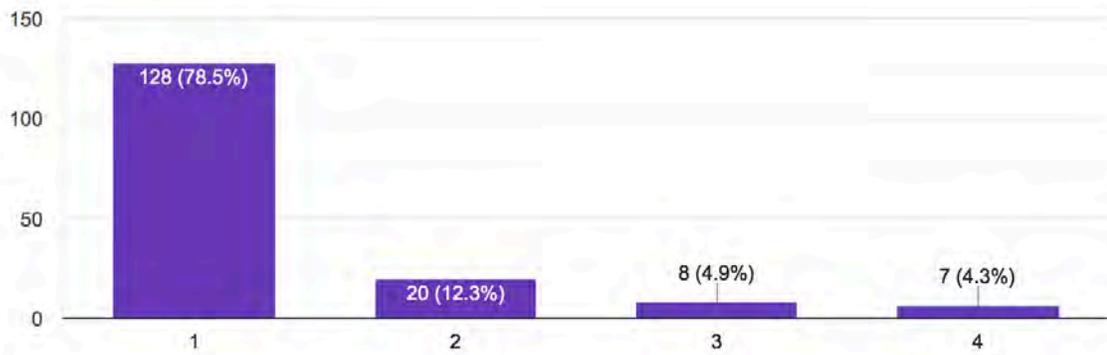
163 responses



SCALE (1 = Less Important; 4 = Very Important)

Opportunity to view large-scale utility infrastructure in the area

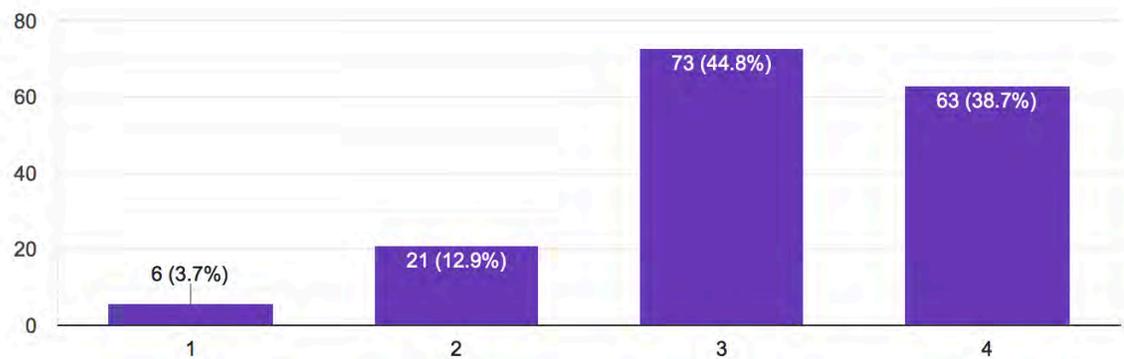
163 responses



SCALE (1 = Less Important; 4 = Very Important)

Area Restaurants

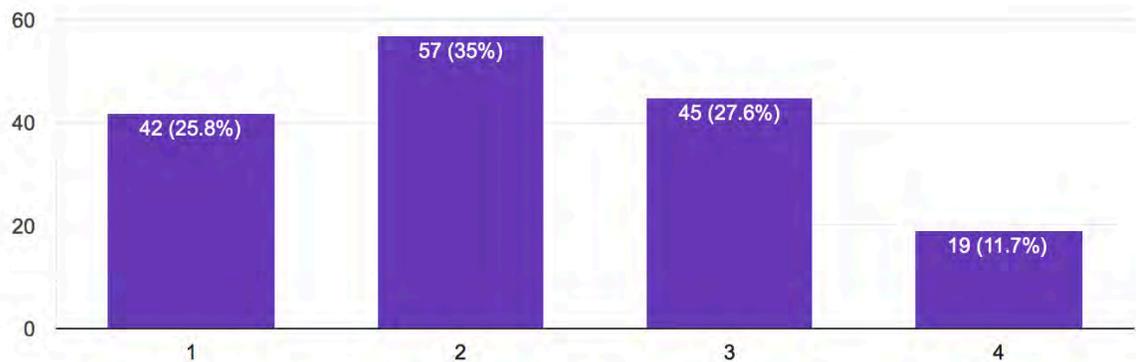
163 responses



SCALE (1 = Less Important; 4 = Very Important)

Area Shopping

163 responses

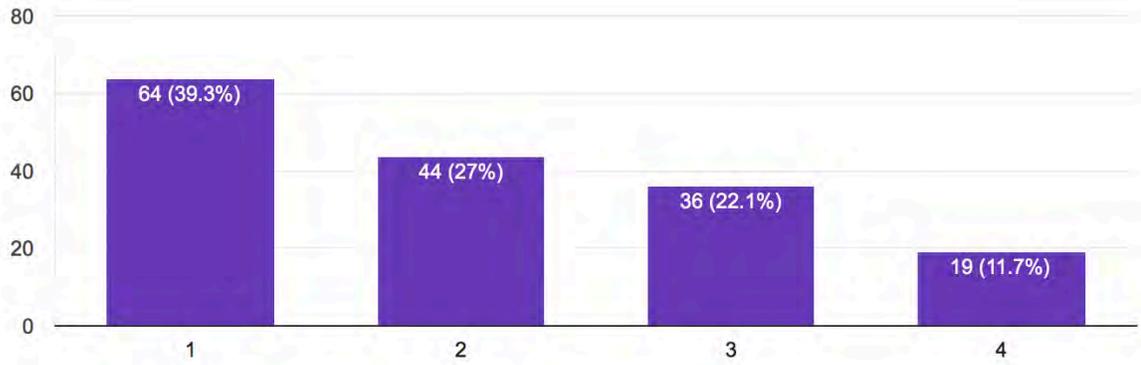


SCALE (1 = Less Important; 4 = Very Important)

Area Rentals



163 responses

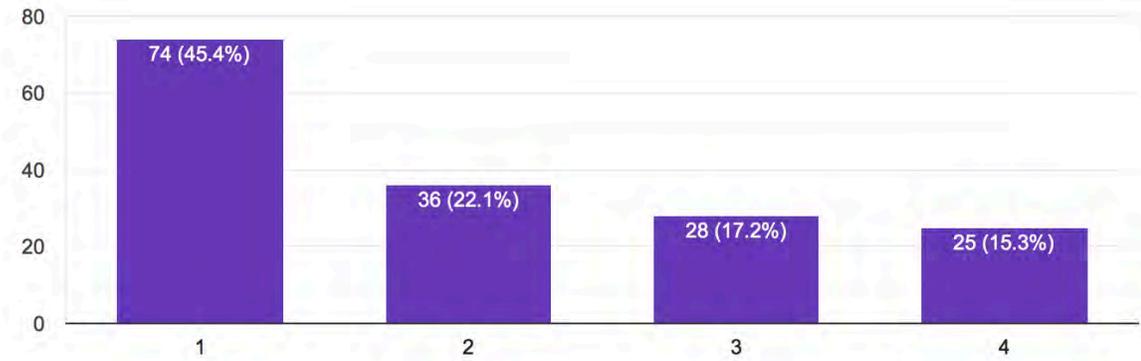


SCALE (1 = Less Important; 4 = Very Important)

Area Guides



163 responses

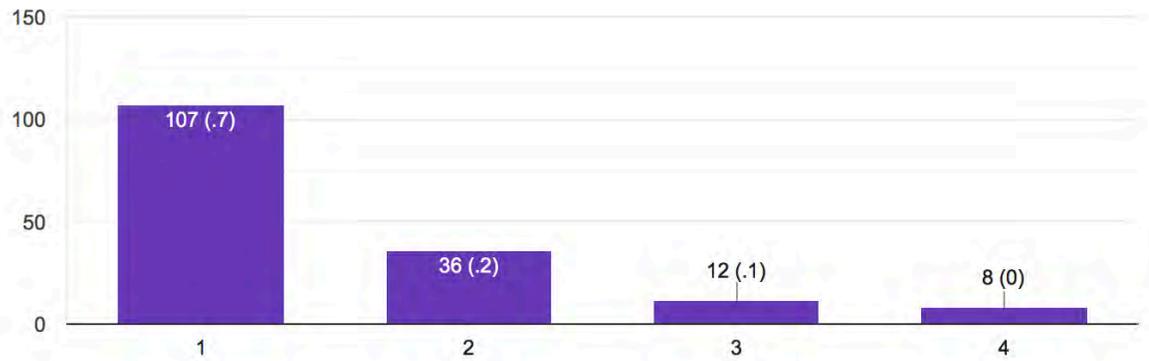


SCALE (1 = Less Important; 4 = Very Important)

- RATE YOUR PREFERENCE FOR EACH TYPE OF SNOWMOBILING EXPERIENCE BELOW:

Riding along a power line trail

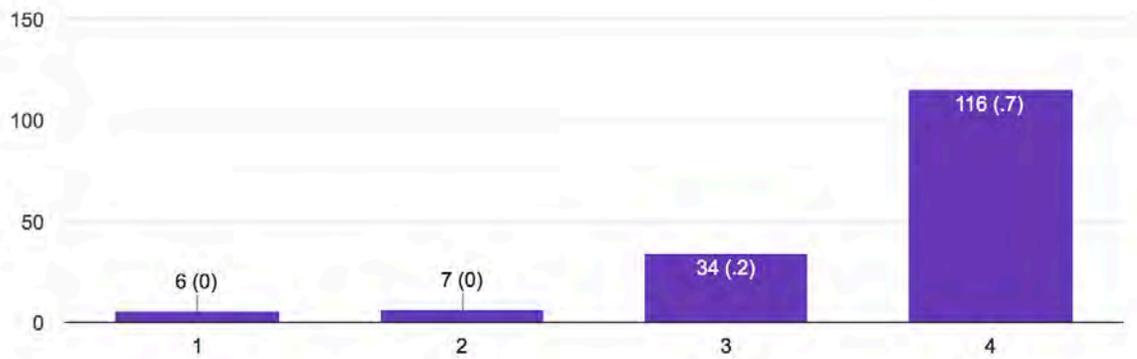
163 responses



SCALE (1 = Least Preferred; 4 = Most Preferred)

Groomed trail riding in forested areas

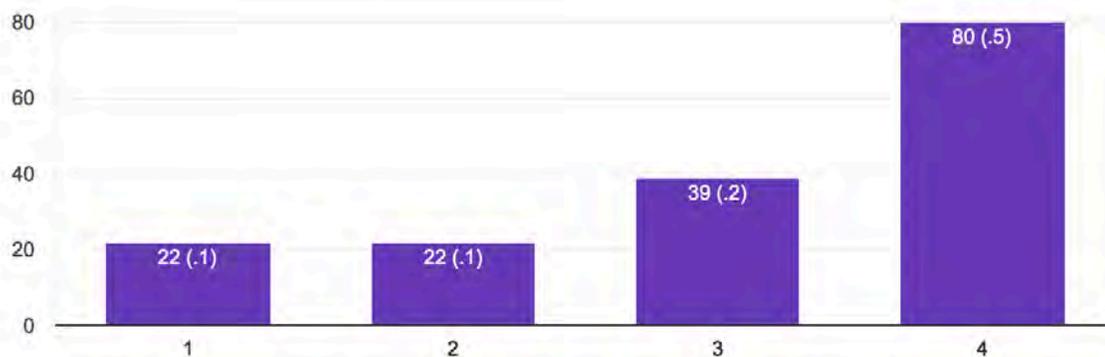
163 responses



SCALE (1 = Least Preferred; 4 = Most Preferred)

Riding with few road or power line crossings

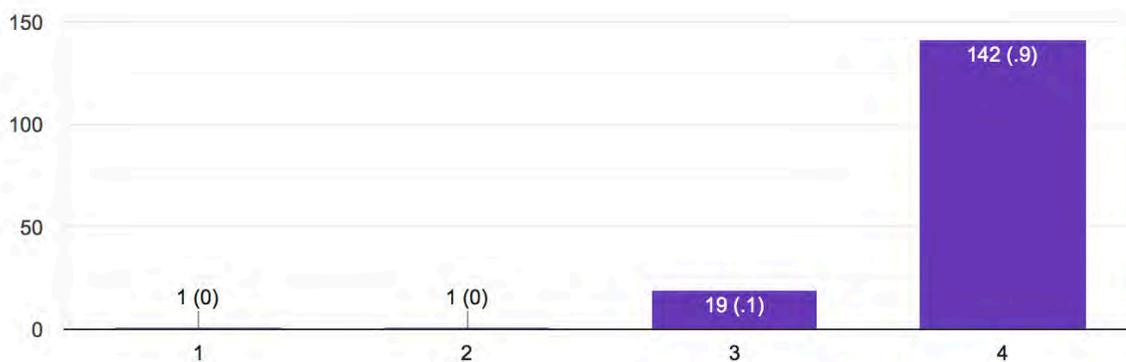
163 responses



SCALE (1 = Least Preferred; 4 = Most Preferred)

Riding along mountain view trails with overlooks

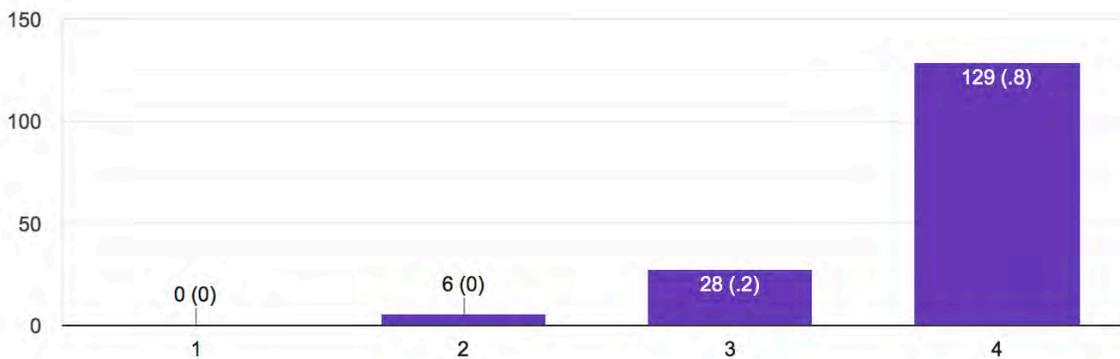
163 responses



SCALE (1 = Least Preferred; 4 = Most Preferred)

Seeing wildlife in their natural setting

163 responses



SCALE (1 = Least Preferred; 4 = Most Preferred)

- Participants were asked to “look at the scenic photos and GIS simulation photos that show a 150-foot wide cleared corridor with 100-foot transmission towers.”

GIS simulation of proposed transmission corridor at Coburn Mountain



Snowmobilers at the top of Coburn Mountain



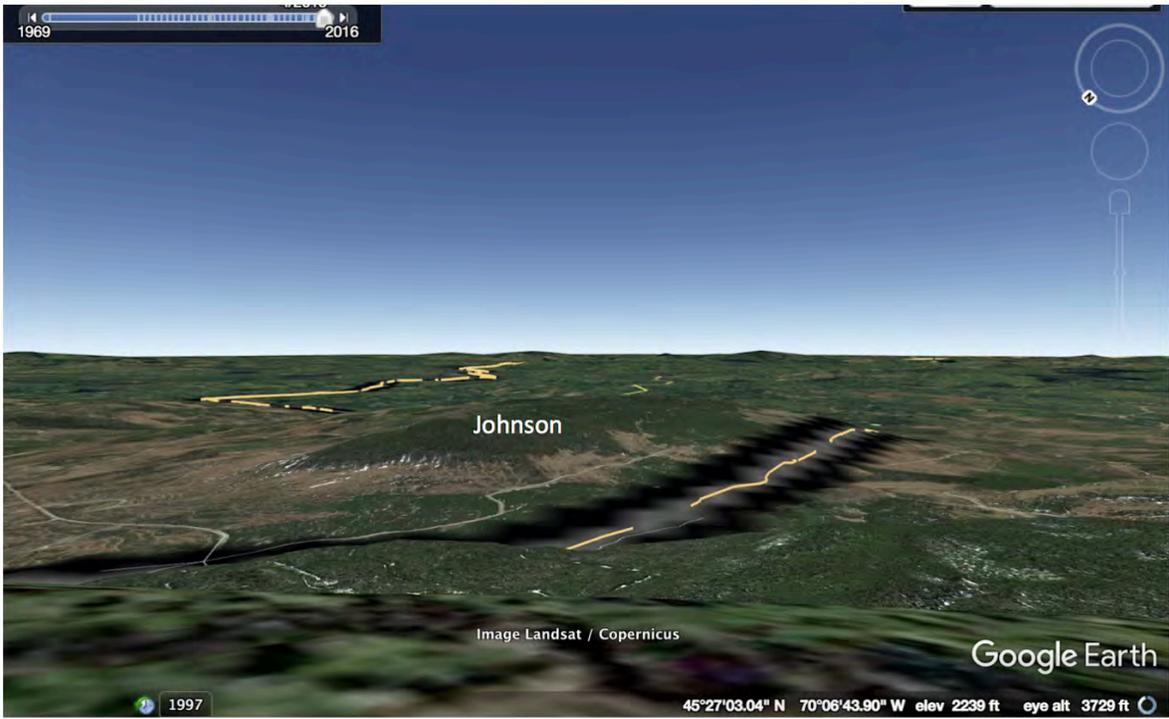
View of Grace Pond from the top of Coburn Mountain - GIS simulation of transmission corridor



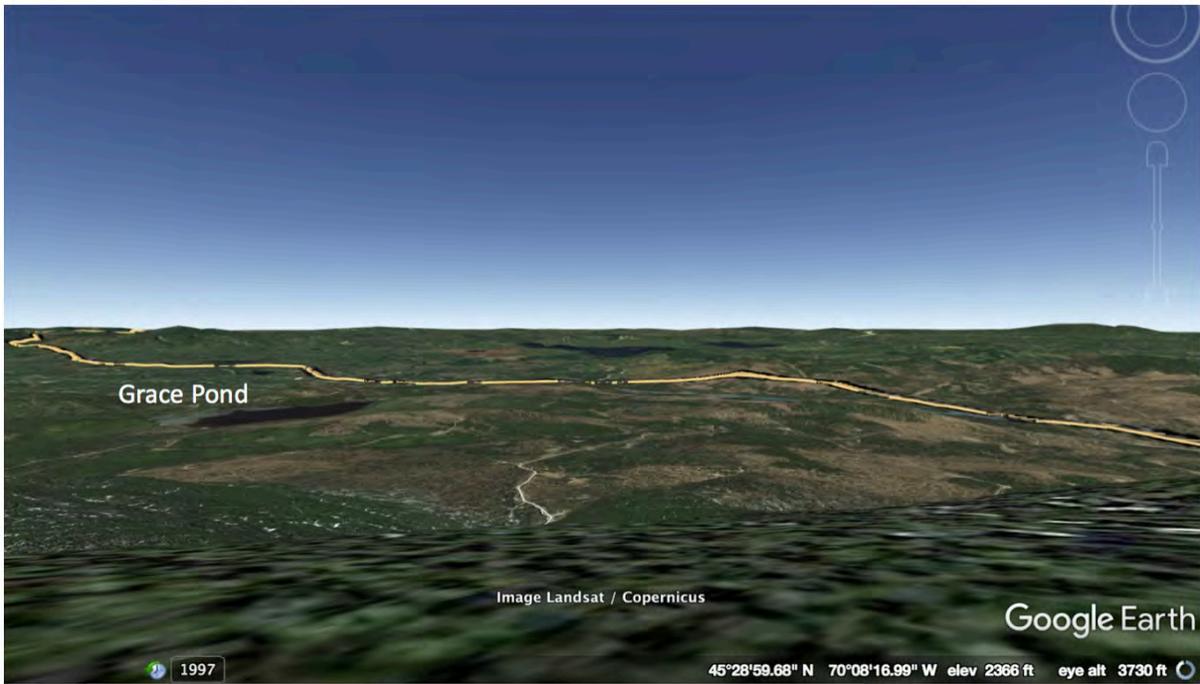
View of Grace Pond from the top of Coburn Mountain



View of Johnson Mountain from the top of Coburn Mountain - GIS simulation of transmission corridor

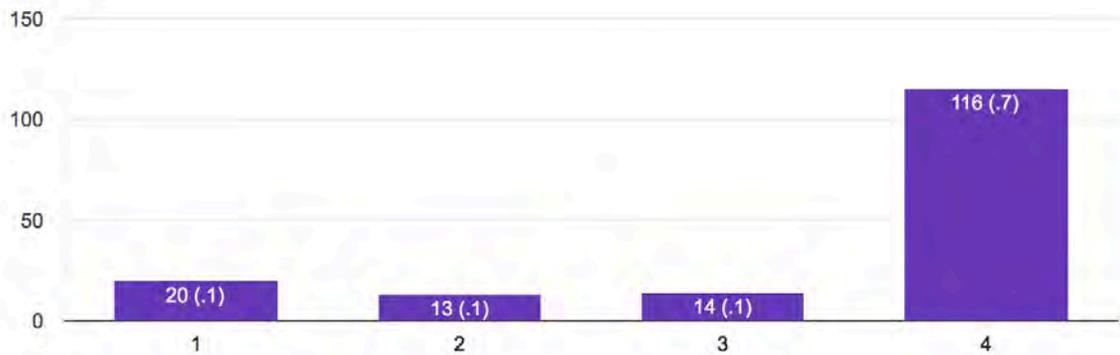


View of Grace Pond from the top of Coburn Mountain - GIS simulation of transmission corridor



What visual impact would a 150-foot wide cleared corridor with 90-foot transmission towers have on your wilderness snowmobiling experience?

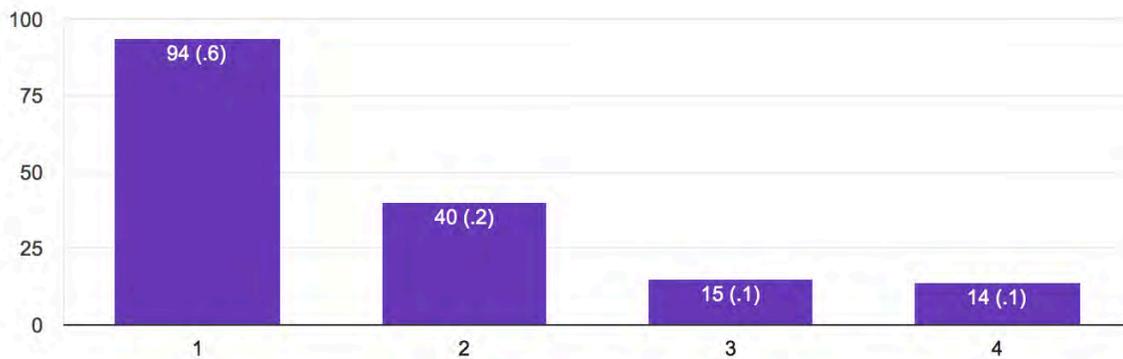
163 responses



SCALE (1 = Little Negative Impact; 4 = Strong Negative Impact)

Would you be more or less likely to visit a scenic area which contains large-scale developments for a snowmobiling destination?

163 responses

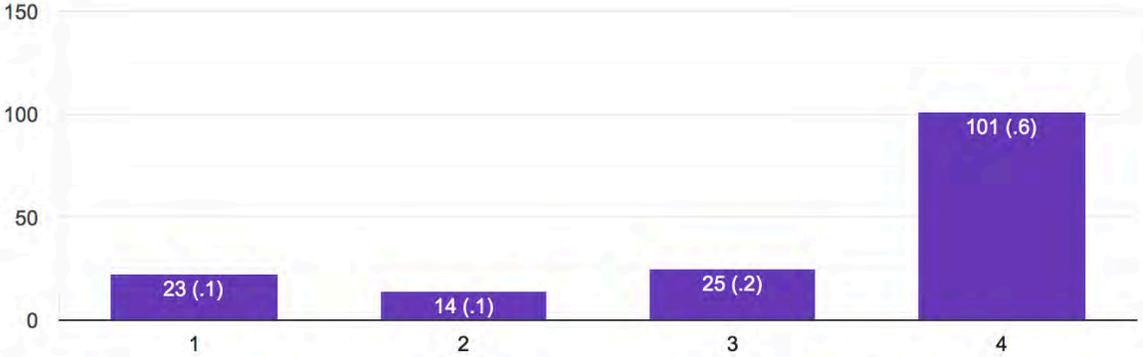


SCALE (1 = Little Negative Impact; 4 = Strong Negative Impact)

What impact would the presence of a 150-foot wide cleared corridor with 90-foot transmission towers have on your decision for a return visit the area in the future?



163 responses



SCALE (1 = Little Negative Impact; 4 = Strong Negative Impact)

“Connect New York”

Introduction

The respondent group detailed below is proud to provide the following submission to the New York Energy Highway Request for Information (RFI). The information contained within this response addresses the requirements of the RFI and includes additional information regarding property, interconnection, operational, socio-economic, and environmental issues among others. An Index is also included to map the projects benefits to the Energy Highway’s objectives.

Simply stated, the Connect New York proposal:

- Provides for the construction of a 1,000 MW DC underground transmission line, with the option of an additional 1,000 MW’s, utilizing existing public and private rights-of-way which become a main route on the “New York Energy Highway” and will satisfy many of the Cuomo Administration’s energy goals;
- Satisfies “New York’s energy policy goals of providing affordable and reliable energy, while improving the environment, creating and retaining jobs, and promoting economic growth, as New York transitions to a more efficient, lower carbon and cleaner, greener energy economy; and
- Reduces transmission system congestion that prevents the delivery of power from northern and western generating stations to southern load centers, reducing a significant financial burden on ratepayers.

Section I – Respondent Information

Iberdrola USA, 52 Farm View Drive, New Gloucester, ME 04260
Thorn Dickinson, Vice President – Business Development
(207) 688-6362
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Iberdrola USA, a subsidiary of global energy leader Iberdrola S.A., is an energy services and delivery company serving about 2.7 million customers in upstate New York and New England. Its primary subsidiaries are New York State Electric & Gas, Rochester Gas and Electric and Central Maine Power.

Iberdrola USA, and its parent, bring tremendous experience and investment capabilities to New York. Iberdrola USA is in the midst of a \$1.4 billion upgrade of its transmission system in the state of Maine. The project, called MPRP, includes over 400 miles of new transmission lines, five new substations, and upgrades to numerous existing lines and substations. The company is about 1/3 of the way into the 5 year project and the project is on time and on budget. This project has created over 3,300 direct and indirect jobs for the state of Maine. Importantly, the project’s DART rate (a measure of safety incidents) is .09 through March 2012 vs. a national

average of 2.1. The completion of this project in early 2015 fits well with the likely construction schedule for this proposal.

Iberdrola is also a leader in the utilization of technology. For example, the MPRP project will be fully compliant with IEC 61850, an international best practice standard for substation automation and communications. Iberdrola USA subsidiary, Central Maine Power, recently completed the full installation of automated or “smart” meters that will provide tremendous environmental and customer benefits. Consumers are able to better manage their energy usage. CMP eliminated over 2 million vehicle miles per year.

Our parent, Iberdrola S.A., is a global investor-owned company with experience forged over more than 150 years of history that provides service to 31 million customers in 38 countries and four continents.

After a significant process of growth and internationalization, which involved an investment of over \$100 billion in the last eleven years, Iberdrola is today one of the five largest global utilities, the world leader in the wind sector, and the leading Spanish energy group.

Our 33,000 employees manage assets worth \$130 billion that in 2011 produced revenues worth \$42 billion and a net profit over \$3.5 billion.

Iberdrola will continue to grow its core businesses: power generation through clean technologies and the build up and management of transmission and distribution networks. In addition, the continuous improvement of operational efficiency will remain one of the basic foundations of the Group’s activities.

The path to sustainable growth in size, efficiency and profitability has brought Iberdrola a number of international awards, such as the nomination as leading electric utility on the “Global 100 Most Sustainable Corporations in the World”. In addition, Iberdrola has been member of the “Dow Jones Sustainability Index” for the last eleven years.

The Cianbro Companies, 101 Cianbro Square, Pittsfield, ME 04967

Peter G. Vigue, Chairman & CEO

207-679-2192

pvigue@cianbro.com

Throughout its 63-year history, Cianbro has safely and efficiently planned, managed, and constructed many technically complex, historic, and environmentally sensitive projects for a wide variety of public and private clients. A total commitment to safety combined with the enthusiasm of an innovative team of construction professionals, has enabled Cianbro to build a durable reputation for completing projects safely, on schedule, and within budget. Founded in 1949 by the Cianchette brothers, Cianbro is now one of the largest, most diverse, successful, 100% employee-owned, construction and construction services companies based on the East Coast. Presently operating in more than forty (40) states, in twelve markets, and employing over 4,000 team members, Cianbro self-performs civil, structural, mechanical, electrical, transmission, fabrication, and coating work.

Cianbro is also the managing member of Atlantic Energy Partners, LLC; the developer of the Neptune Regional Electrical Transmission System (Neptune). The Neptune Transmission System provides up to 660 MW of electric power from the PJM system to the LIPA grid on Long Island via a 500-kilovolt (kV), high voltage direct current (HVDC) cable. The HVDC cable extends between two converter stations, one in Sayreville, New Jersey, and one on Duffy Avenue in the community of New Cassel in the Town of North Hempstead. The Sayreville converter station takes alternating current (AC) power from the PJM system and converts it to DC power, while the Duffy Avenue station converts DC power back to AC for use on the LIPA system. The DC cable runs approximately 50 miles under the Raritan River in New Jersey and the Atlantic Ocean, and an additional 15 miles buried alongside the Wantagh Parkway. The Neptune Transmission System interconnects to PJM in Sayreville at a nearby First Energy substation, and interconnects to the LIPA system at the Newbridge Road substation in Levittown.

Since starting operation in mid-2007, Neptune has provided, on average, nearly 25 percent of the electric power used on Long Island, and runs at its full capacity of 660 MW most of the time. In addition, Neptune has performed as well or better than expectations, averaging nearly 98 percent availability. The Neptune HVDC cable allows LIPA to tap into a diverse range of power generation from PJM, including renewables such as wind and hydro, as well as oil, coal, nuclear, and natural gas. This diversity of generation sources is not available on Long Island. Because wholesale energy prices in PJM are generally much lower than on Long Island, power brought over the Neptune cable is less expensive than most of what can be generated on the island.

For LIPA, the Neptune HVDC cable was seen as an environmentally friendly, cost-effective solution to future power needs. According to LIPA, an economic assessment conducted prior to construction projected that the Neptune cable would provide about \$1.4 billion in net benefits to LIPA, which was significantly more than any other project proposed to meet Long Island's long-term energy needs. As former LIPA Chairman Kevin Law has said, *"The Neptune cable provides LIPA with the opportunity to acquire lower-cost energy to meet customer needs while providing more flexibility in selecting the markets from which we acquire that energy. It is a significant win-win for Long Island."*

Gilberti Stinziano Heintz & Smith, P.C., 555 East Genesee St., Syracuse, NY 13202
William Gilberti, CEO and Managing Partner
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For more than twenty-five years, Gilberti Stinziano Heintz & Smith, PC (GSH&S) has served the needs of clients in the energy field, including large, multi-plant power producers, natural gas pipeline operators, and electric transmission line developers, as well as the developers, installers and operators of various renewable energy systems and other smaller generating facilities. We have been counsel on power generation projects that total more than 5,000 megawatts of generating capacity and have counseled both gas pipeline and electric transmission companies on projects involving more than 450 miles of transmission line.

Together with the firm's CEO and Managing Partner, William J. Gilberti, Jr., the lawyers in the GSH&S energy group combine decades of in-depth industry knowledge and experience and include leading practitioners in the industry, such as a former executive vice president and

general counsel of the New York Power Authority, the largest state-owned power organization in the nation, and a former counsel to the U.S. Nuclear Regulatory Commission.

The firm's understanding of, and experience with, the applicable financing structures, regulatory requirements and governmental approvals needed for large infrastructure and commercial development projects in New York, including large scale energy generation and transmission projects, is unparalleled. From the initial planning and feasibility phases of a project through environmental review and permitting to completion of construction and beyond, GSH&S provides counsel and strategic advice to clients on every aspect of energy development.

GSH&S has successfully completed the permitting and environmental review for various power plants firing a wide variety of fuels and for hundreds of miles of transmission line in the State. The firm has served as lead counsel in several landmark cases under the State's Environmental Quality Review Act (SEQRA), including litigation establishing that certain previously approved industrial operations were "grandfathered" and not subject to review. GSH&S has also provided strategic legal counsel on the approvals needed for various major generation and transmission projects in New York, including, among others, a 130-mile underground electric transmission line, an aboveground 190-mile electric transmission line and a 50-mile overhead electric transmission line.

GSH&S often engages in complex litigation involving State and federal agencies regarding permitting and environmental issues. The firm served as lead counsel in such a case for the second largest independently owned cogeneration plant in North America. As a result of the firm's strategy and effort, the U.S. Court of Appeals for the 4th Circuit vacated and remanded the Federal Energy Regulatory Commission (FERC) interpretation of the Energy Policy Act of 2005 in a case of national first impression, knocking out federal licensing regulations that would displace state regulation of electric transmission lines; and the U.S. Court of Appeals for the 9th Circuit vacated and remanded to the federal Department of Energy, its determination to create the Mid-Atlantic National Interest Electric Transmission Corridor, the designation of which is a prerequisite for any shift of transmission line licensing from the states to FERC.

GSH&S regularly assists in the drafting and negotiation of various energy contracts, most recently having negotiated power purchase and interconnection agreements for the developer of a utility-scale solar photovoltaic project.

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Robert C. LaFleur, President
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rlafleur@spectraenv.com

Spectra was formed in 1993 and is a self-certified, federal Small Business Enterprise (SBE). Spectra maintains its corporate office in Latham, New York, just minutes away from the New York State capital office buildings in Albany, and has branch offices in Syracuse and Poughkeepsie, NY. Spectra has 47 employees that specialize in areas of infrastructure engineering, environmental analysis, planning, permitting, and compliance.

Spectra's engineers and scientists are leaders in integrated engineering solutions for a sustainable energy future. In the energy service market, Spectra provides environmental management,

permitting, conceptual design, site/civil engineering, project management, surveying, and construction management.

Spectra is owned and operated by Robert C. LaFleur and John H. Shafer, PE. Mr. Shafer has over 40 years in the field of transportation and infrastructure systems. Prior to joining Spectra, Mr. Shafer served as Executive Director of the New York State Thruway Authority (NYSTA) and Chief Engineer for the New York State Department of Transportation (NYSDOT). Mr. Shafer currently serves on several State advisory committees, including the committee overseeing the replacement of the Tappan Zee Bridge. Mr. LaFleur has 39 years of experience as an expert in environmental planning and permitting projects. He has been called upon to provide expert testimony in a number of legal proceedings concerning environmental and planning matters. Mr. LaFleur has acted as Project Manager on an extensive power transmission project under Article VII of the Public Service Law.

Spectra has experience working with a variety of federal and state regulatory agencies. Among these include the New York State Power Authority (NYPA), the New York State Office for Technology, the New York State Department of Environmental Conservation, the United States Environmental Protection Agency, as well as the NYSTA and NYSDOT. These are all agencies with an interest in this energy highway project being proposed by the Power Authority.

Section II – Project Description

“Connect New York” is a 1,000 MW DC bulk transmission line running from the Utica area to New York City (Zone E - Mohawk Valley to Zone J - New York City). This underground transmission initiative would utilize existing public and private right-of-way to build a new bulk transmission line that would enable the fulfillment of the “New York Energy Highway” and many of the Cuomo Administration’s energy imperatives. It would include 244 miles of high voltage DC cable, two AC/DC converter stations and a small amount of high voltage AC cable. There is also the option to add a second 1,000 MW line. This is a technology that is in use in the United States and overseas. The permitting process is expected to be completed within two years, and the project is expected to be completed within four years, unless those timeframes are shortened as discussed in Section V below.

Section III – Project Justification

“Connect New York” is a bulk transmission initiative that would utilize existing right-of-way to build a new bulk transmission line that would enable the fulfillment of many of the Cuomo Administration’s supply side energy imperatives. “Connect New York” is a practical, feasible and necessary prerequisite to the successful realization of many of the important energy precepts outlined in “Power NY” and the “New York Energy Highway”.

“Power NY”

“Power NY states that... “New York’s energy policy must meet the interrelated goals of providing affordable and reliable energy, improving our environment and creating jobs and economic growth through energy policy as we transition to a more efficient, lower carbon and

cleaner, greener energy economy. (“Power NY” Page 1) “Power NY” delineates its guiding principles as follows:

- **Affordability**... take steps to reduce energy costs
- **Energy Efficiency**
- **Smart Transmission and Distribution**
- **Economic Development** – job creation
- **Environmental Quality** – cleaner fuels and renewables
- **Reliability** – dependable and emergency prepared
- **Equity** – demands that one region or neighborhood not bear most of the costs of a certain policy while another receives the benefits
- **Good Execution and Government’s Role** – facilitate and encourage private sector investments that supports our energy goals and these guiding principles
- **Transparency and Accountability**

“Power NY” delineates several supply side energy imperatives that form the foundation of the Cuomo Administration’s energy policy. These ambitious energy goals include:

1. Upgrade and Expand the Transmission Grid

“Improve Reliability and Reduce Costs by Upgrading our Transmission Infrastructure and Bringing Reliable, Low Cost Clean Energy to Areas Where it is Needed Most While Maintaining Regional Equity”

2. Improve the Environment Through Renewables and Clean Energy

“Expand Wind and Solar Power and Repower Old Plants to Make them Cleaner and More Efficient”

“Make New York the Nation’s Leader in Wind Power”

“Enact a New Power Plant Generation Siting Law”

“Close Indian Point... We must find and implement alternative sources of energy generation and transmission to replace the electricity now supplied by the Indian Point Power facility.

3. Improve Energy Independence

“By... supporting in-state energy resource development, New York will reduce outflow of dollars to pay for energy imports” (2009 State Energy Plan).

4. Renewable Portfolio Standard

Renewable increased to 30% by 2015

5. Greenhouse Gas Emissions Reductions

Executive Order #24: Decreased by 80% by 2050

While these energy precepts are logical, sensible and progressive there are many significant challenges confronting their realization. Some of these challenges are administrative, including permitting and siting. Some involve the limitations of older fundamental infrastructure, including in particular, the bulk transmission grid that constricts the flow of energy from existing and prospective generation sites to the marketplaces.

Transmission: The Foundation of a Progressive Energy Policy

Irrespective of what generation options are utilized, adequate bulk transmission is a necessary prerequisite to bring new age power to market and to realize the supply side energy imperative outlined in “Power NY” and in the “New York Energy Highway”. This view is supported from almost every authoritative vantage point.

- NYISO Wind Generation Study (2010)
“Although the addition of wind to the resource mix resulted in significant reduction in production costs, the reduction would have been even greater if transmission constraints between upstate and downstate were eliminated.”
- 2009 State Energy Plan
“(Transmission) investments are also necessary to support the state’s transition to a clean energy economy, and will be driven by longer-term strategic needs, including the need to reduce GHG emissions.”
- NYISO 2010 Comprehensive Reliability Plan
“The Indian Point Plant retirement scenarios... show that loss of ISOs expectations would exceed criteria... thermal violations... and voltage performance on the system would be degraded.”

The “Connect New York” Option

Simply stated, “Connect New York” is our vision of how to best advance the major supply-side energy objectives delineated in “Power NY”. It would include a 1,000 MW DC bulk transmission line running from the Utica area to New York City. There is also the option to add a second 1,000 MW line. The routing would be underground utilizing existing public and private right-of-way. In doing so we can mitigate environmental and right-of-way concerns that derail most bulk transmission projects and avoid eminent domain and NIMBY issues. By burying an efficient, underground DC bulk transmission line, line losses will be reduced and aesthetic and health based concerns eliminated.

This bulk transmission path will significantly mitigate two of the three major transmission bottlenecks at the Central East interface costing Southeast New York over a billion dollars per year. In addition, the project will bring much needed new capacity to some of New York’s most active wind development sites and existing cleaner gas fired plants in Upstate NY. Because the project will use public right of ways, it will provide a new source of revenue to the state. Additionally, this project will be a life-line to older upstate generating facilities that may currently be less environmental friendly by allowing them to repower with new technologies and to continue to support their local economies.

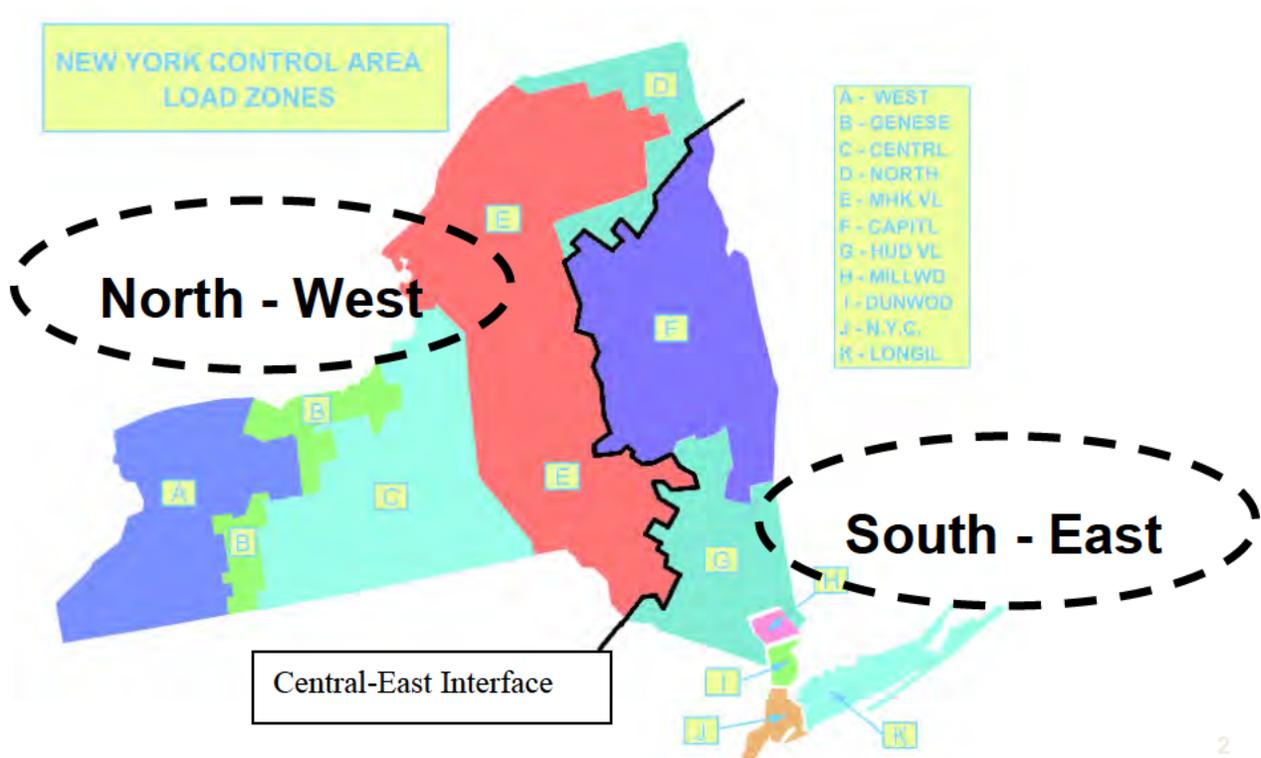
The Central-East Interface – Transmission Congestion

The Central-East Interface is the name given to a conceptual transmission boundary that separates the bulk transmission capabilities located in the North and West regions of New York from the load (demand) centers located in the South and East. Essentially it is the choke point where the ample generating capacity located in the North and Western regions are constricted from supplying the markets in the South and East regions. Figure 1, below, illustrates the Central-East Interface.

Figure 1

Central – East Interface

Divides New York into 2 distinct zones: North-West and South-East.



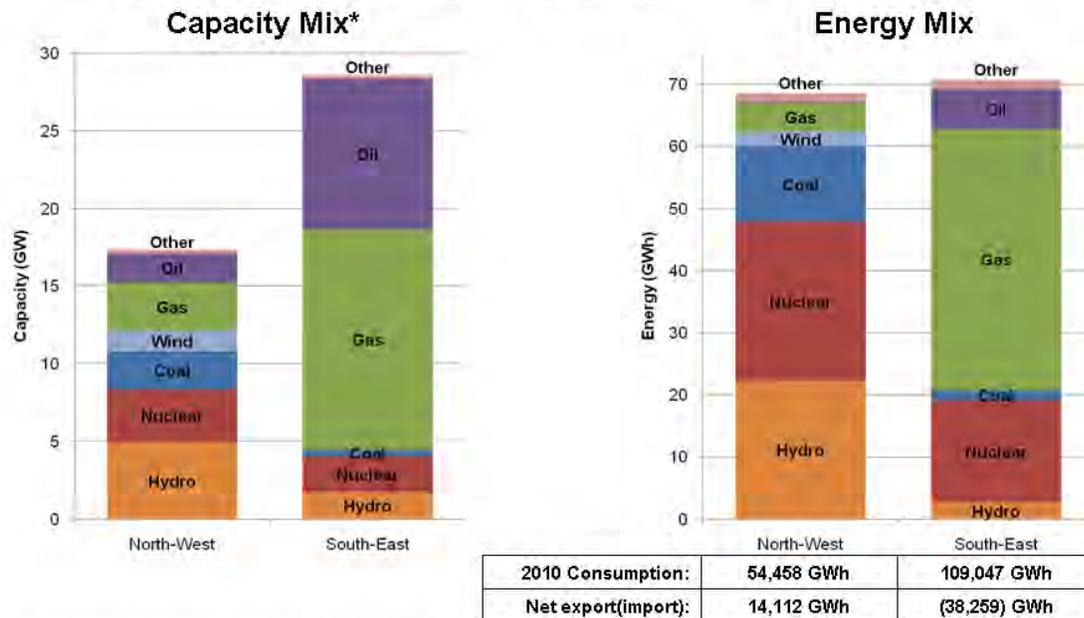
This interface creates two very distinct energy markets. These markets have different energy generation portfolios and demand profiles and accordingly different prices and different greenhouse emissions.

The bar graph below, Figure 2, illustrates the capacity mix of the generators in the North-West and the South-East. It also discloses the energy generated from these facilities.

Figure 2

Regional Capacity and Energy Portfolios

Note: Includes resources physically located in region only.
Does not include imports from other states/provinces.



* Values based on nameplate capacity (2011 NYISO Gold Book)

Several observations can be made from this chart.

- The South-East is much more dependent on gas/oil base load capacity.
- As shown below, much of this gas/oil fixed capacity is older, less efficient steam units that rely on fuel with higher green house gas emissions
- Without Indian Point, the South-East generating facilities would be almost entirely gas/oil.
- The North-West regions produce more energy than they consume (net exporters).
- The North-West region's production is less than it would be if the bulk transmission transfer capability across the Central-East Interface were greater than it is.
- The South-East region is a net importer (38,259 GWh) with 14,112 GWh or 36% of these imports coming from the North-West. The remainder comes from out of state, i.e., representing a missed opportunity for in-state generators.

Figure 3

Pre-1970 downstate peaking generators

Owner/Operator	Generator & Unit	Town	Year in Service	Primary Fuel	Nameplate (MW)	2010 net GWh	Capacity Factor
Consolidated Edison Co. of NY, Inc.	East River 6	Manhattan	1951	Oil	156.2	480.6	35%
Long Island Power Authority	Glenwood ST 04	Glenwood	1952	Gas	114.0	95.3	10%
Long Island Power Authority	Far Rockaway ST 04	Far Rockaway	1953	Gas	100.0	189.9	22%
Consolidated Edison Co. of NY, Inc.	East River 7	Manhattan	1955	Oil	200.0	471.0	27%
Long Island Power Authority	Barrett ST 01	Island Park	1956	Gas	188.0	518.4	31%
Astoria Generating Company L.P.	Astoria 3	Queens	1958	Oil	376.0	728.3	22%
Long Island Power Authority	Port Jefferson 3	Port Jefferson	1958	Oil	188.0	238.2	14%
NRG Power Marketing LLC	Arthur Kill ST 2	Staten Island	1959	Gas	376.2	530.3	16%
Long Island Power Authority	Port Jefferson 4	Port Jefferson	1960	Oil	188.0	192.0	12%
Astoria Generating Company L.P.	Astoria 4	Queens	1961	Oil	387.0	636.9	19%
Astoria Generating Company L.P.	Astoria 5	Queens	1962	Oil	387.0	411.7	12%
TC Ravenswood, LLC	Ravenswood ST 01	Queens	1963	Oil	400.0	633.2	18%
TC Ravenswood, LLC	Ravenswood ST 02	Queens	1963	Oil	400.0	502.9	14%
Long Island Power Authority	Barrett ST 02	Island Park	1963	Gas	188.0	562.9	34%
TC Ravenswood, LLC	Ravenswood ST 03	Queens	1965	Oil	1,027.0	1,143.3	13%
Long Island Power Authority	Northport 1	Northport	1967	Gas	387.0	1,153.4	34%
Long Island Power Authority	Northport 2	Northport	1968	Gas	387.0	854.9	25%

Source: 2011 NYISO Gold Book

Price Impacts in North-West after Relieving Congestion

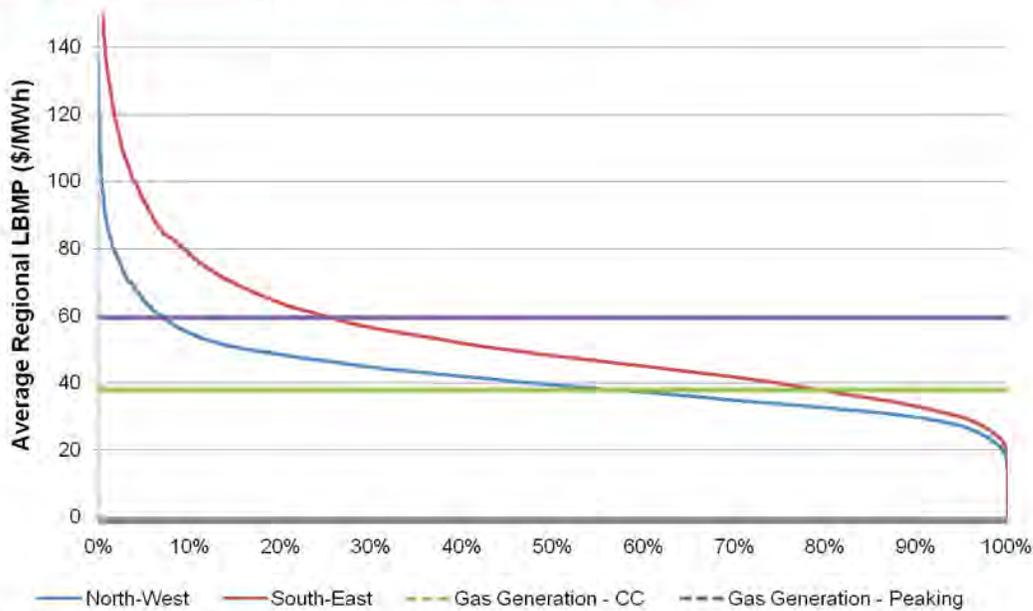
Some have suggested that new bulk transmission designed to relieve the bottlenecks at the Central-East Interface would materially increase the price of energy in the North-West. Comprehensive modeling would need to be completed to accurately forecast the various effects on prices throughout the state if new bulk transmission were built. This would be done as part of our proposal. Nevertheless, one can deduce that there is ample excess generating capacity in the North-West, capable of creating power that would flow into the South-East and not significantly increase the marginal cost of power in the North-West.

Specifically, the North-West had a nameplate capacity for gas of 3,100 MW and in 2010 had net generation of 4,630 GWhs representing a low 17% capacity factor. Of the 3,100 MWs of gas generating capacity, 2,292 MWs or 74% was combined cycle gas and ran at a low capacity factor of 19.8%. Again while comprehensive modeling would spell out the specifics, one can infer that given the low capacity for the combined cycle fleet, these units were setting the market price in the North-West market. More interestingly, the North-West combined cycle fleet has the capacity to export an additional 8,100 GWhs, assuming that they operated at a 60% capacity factor and that the bulk transmission's transfer capability at the Central-East Interface could accommodate it. Currently, the bulk transmission system cannot accommodate any additional exports from the North-West into the South-East. That is why the combined cycle gas fleet in the

North-West region operated at a 19.8% capacity factor and why the less efficient, more expensive, less reliable and dirtier gas/oil steam units listed in Figure 3 filled the void. The regional energy price duration below, Figure 4, graphically makes these points demonstrating the regional price difference.

Figure 4

Regional Energy Price Duration (2010)



- Graph is illustrative of regional price differences in 2010.
- Data is comprised of hourly averages of day-ahead LBMPs for each NYCA zone within region.
- Gas generation marginal prices calculated using 2010 average gas price of \$5.41/mmmbtu and average heat rate of 7,000 btu/kWh (CC) and 11,000 btu/kWh (peaking)

The Cost of Transmission Congestion

The practical consequences of the Central-East Interface transmission congestion increased the state-wide annual cost of power by an average of 12% over the period from 2004 through 2010. This represented an average annual cost of \$1.4 billion included in the average state-wide cost of energy of \$11.7 billion. Although 2011 numbers are still being finalized, it is estimated that total congestion for last year will be \$1 billion. See Figure 5.

Figure 5

Historical New York Congestion Costs by Zone

Zone Name	Load Zone	Congestion Costs to NY Electric Consumers*							Average (\$ M)
		2004	2005	2006	2007	2008	2009	2010	
West	A	-1	-5	1	-14	-25	-14	-1	-8
Genesee	B	1	-1	2	-14	-9	4	6	-2
Central	C	1	-1	4	9	18	8	11	7
North	D	0	-1	0	0	-2	-3	-1	-1
Mohk. Valley	E	0	0	2	5	10	4	5	4
Capital	F	8	19	27	74	143	53	62	55
Hud. Valley	G	5	20	54	87	176	57	73	67
Milwood	H	3	12	27	31	78	16	23	27
Dunwoodie	I	4	24	44	56	124	41	49	49
NY City	J	582	809	673	700	1,403	503	560	747
Long Island	K	230	508	708	518	624	274	350	459
Total		833	1,384	1,542	1,452	2,540	943	1,136	1,404
Total Energy Cost to Load		10,059	15,314	11,969	12,831	15,485	7,397	9,005	11,723
Congestion % - original		8%	9%	13%	11%	16%	13%	13%	12%

Cost to New York consumers averaging \$1.4B per year

86% of that cost borne by New York City and Long Island

Congestion has averaged 12% of consumer energy costs

*Source: Congestion costs results from NYISO's PROBE analysis, a model designed to reproduce market prices as closely as possible.

2008 results are high due, in large part, to very high natural gas prices which can occur periodically in a commodity's life cycle.

Highlighted areas represent load zones that will benefit from the transmission project.

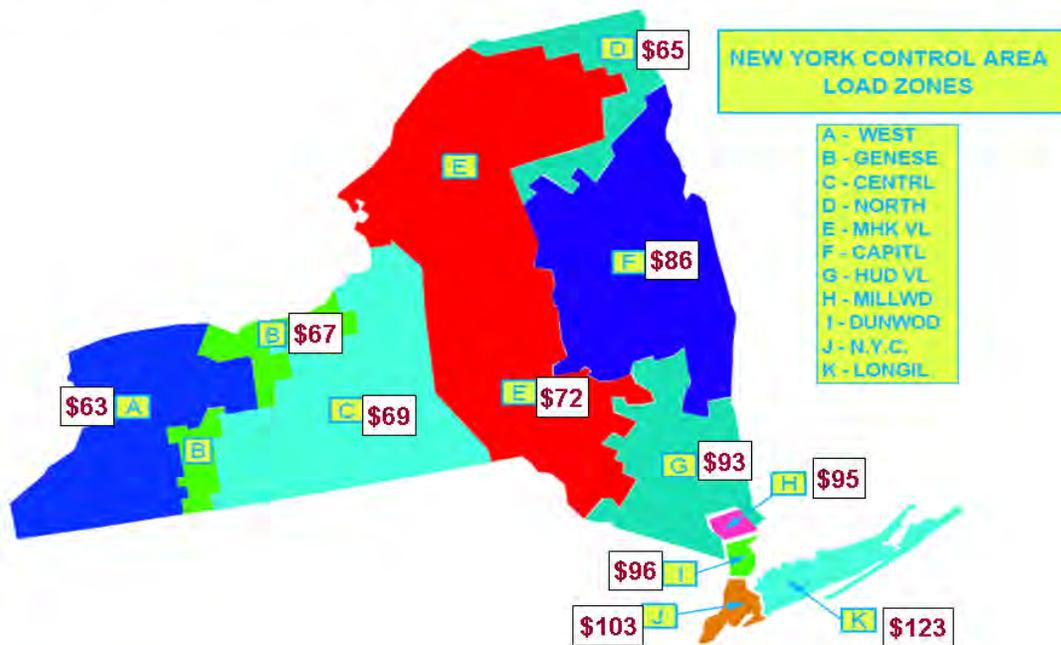
Several observations can be made including:

- New York City and Long Island have paid nearly 86% of this annual congestion cost averaging \$1.4 billion.
- The congestion peaked in 2008 at 16% due to very high natural gas prices which can and will occur periodically in a commodity's life cycle.
- Even during the historical economic downturn in 2009 and 2010 the congestion cost was \$1.0 billion each year.
- This additional cost of energy for New York and Long Island consumers could have been avoided if new bulk transmission across the Central-East interface had been in place.

The map below, Figure 6, illustrates the 2010 average market prices by Load Zone during the highest 1,000 hours of congestion.

Figure 6

**2010 Market Prices by Load Zone
Average Prices During Top 1,000 Hours of Congestion (\$/MWh)**



It is the reduction of these congestion costs that represents the primary commercial justification for building “Connect New York”. Nevertheless, other important strategic benefits are associated with this proposal and will, in time, bring commercial returns.

Reinvigorating Renewable Development

If New York State is committed to meeting its RPS goal, several initiatives could be introduced that would reverse the downward momentum for wind development. Principal among these is relieving the congestion that prevents export of low cost North-West wind power to high cost South-East load centers. This commitment could also be backstopped by requiring utilities and state agencies to enter long-term fixed-price bundled contracts with credible wind developers with proven track records. Utilities have traditionally been hesitant to sign long-term contracts due to rating agency implications, but there are regulatory means to address these concerns.

To realize the potential of the State’s renewable resources, bulk transmission must be expanded to reach north and west into the most promising wind development zones. This bulk transmission must be supplemented with a plan to develop new secondary transmission lines to gather the newly developed wind energy and deliver it to the newly developed bulk transmission system.

Second, the reauthorized Public Service Law Article X process, with its 25 megawatt threshold and application to renewable generation projects, needs to be implemented in a way that maximizes the potential benefits of single entity (Public Service Commission) approval within one year from complete application (or 6 months for certain modifications of existing facilities). Further consolidating and/or streamlining the State Environmental Quality Review Act process for smaller renewable generation sources is necessary and might be accomplished by establishing time limits for completion of hearings, decisions and appeals for renewable projects of certain dimensions/features, regardless of whether they are reviewed under SEQRA or under the Public Service Law.

Finally it is conventional wisdom that off-shore wind is significantly more expensive than on-shore wind. The state's agencies should focus on the most realistic renewable options to meet the RPS mandate that is only four years away. Now is not the time to experiment with the exotic alternatives.

Environmental Compatibility

“Connect New York” will utilize a combination of existing public and private right-of-ways, which have been previously disturbed and will significantly minimize, if not entirely eliminate, impacts to visual, historic, archaeological and other important environmental resources. By proposing efficient, buried transmission lines, the proposal will also address many of the concerns associated with aerial transmission lines and towers, such as their visual impacts and aesthetics, electromagnetic radiation effects and impacts on property value. Connect New York will also allow for the transmission of energy from wind farms and other clean upstate generating facilities that produce less greenhouse gas emissions than the older generating facilities downstate.

The Indian Point Question

The Fukushima nuclear accident refocused attention on the Indian Point nuclear plant and the effort to renew the plant's two operating licenses when they expire in 2013 and 2015. The practical reality is that the plant's 2,000 MW capacity is currently a vital piece of the energy portfolio for southern and eastern New York. Its power is “clean” and low priced. Nevertheless it represents a recognized potential safety risk to the greater New York City metropolitan area.

There cannot be a serious discussion about closing Indian Point without simultaneously proposing an alternative energy supply that meets the reliability requirements of the region. New bulk transmission is a necessary prerequisite to filling this potential energy void.

“Connect New York” is not the exclusive answer to replacing the potential loss of Indian Point energy but it could be an important piece of the puzzle that could, with the right support delivered in an urgent manner, come to the market in a reasonably timely fashion.

Summary of Benefits

How Connect New York Could Advance

Governor Cuomo’s Supply-side Energy Imperatives and Satisfy the Goals of the New York Energy Highway

There are many compelling benefits associated with the “Connect New York” initiative but perhaps the most important one is that it is achievable. Many of the mine fields threatening the approval of customary transmission proposals are avoided with the “Connect New York’s” approach. Environmental and NIMBY challenges are largely circumvented by utilizing the existing right-of-way. Eminent domain is similarly not an issue.

Equally important “Connect New York” is all about New York. It will foster New York’s desire for energy independence by building an energy highway that will change the financial dynamics of repowering upstate plants while encouraging new investment in on-shore wind development east of Lake Ontario. It will reduce the state’s annual energy bill by reducing congestion and allowing lower cost, cleaner energy upstate to flow into New York City and Long Island. This will finally reduce downstate energy bills at a time when consumers need some relief.

The energy most likely to be transmitted on “Connect New York” (gas and renewables) will displace more expensive and higher green house gas energy produced by the older vintage fossil fuel plants in the metropolitan New York/Long Island regions thereby reducing greenhouse emissions as well as energy costs.

Finally, “Connect New York” will create thousands of New York jobs not only during the construction period but subsequently by enhancing prospects for older upstate coal plants to invest in repowering as a new downstate energy market is opened up. The same holds true for renewable development east of Lake Ontario, assuming that long-term power purchase contracts can be put in place to support the 2015 RPS mandate.

In summary, the time has come for this transmission infrastructure proposal to be implemented as the foundation for Governor Cuomo’s “Power NY” vision and the “New York Energy Highway”.

Section IV – Financial

As a privately funded capital project, the business case for developing “Connect New York” is predicated on securing long-term capacity purchase contracts with New York State’s load serving entities. The high level business case for “Connect New York” is commercially attractive:

1. Build a 1,000 MW DC line with two converter stations, with the option to add a second 1,000 MW line;
2. Underwrite the investment with a fixed price transmission contract; and
3. New York electric consumers realize a significant annual reduction in energy costs attributable to reduction in congestion costs.

Alternative approaches could be used to determine how the project costs would be allocated among the load serving entities. Some regions in the country utilize an allocation methodology based on which customers benefit from the project. Although this may be the most fair approach, the process of determining beneficiaries is complicated and can become contentious. Other regions in the country use a postage stamp allocation. Under this approach, the project is determined to have benefits for the state or region as a whole and the costs are allocated on a prorated usage basis. This is by far the simplest approach, but it could be argued that those customers that are not receiving the large majority of the projects benefits should not pay an equal share. It may be determined that some combination of the two approaches, one that recognizes the allocation of project benefits but that does not get bogged down into detailed and potentially contentious modeling discussions is the correct middle path.

Section V – Permit/Approval Process

The current administrative and regulatory construct would require the following approvals, each of which will be sought concurrently, with the associated time frames running in parallel. The list below includes an approximation of the time required to secure those approvals based on historical precedents and assuming conventional approach to gaining these approvals. Vigorous support and follow through by the Administration could reduce these timeframes.

A. Public Service Commission Article VII Application – 2 years

An Article VII proceeding before the Public Service Commission (PSC) typically requires approximately two years to complete. The Respondents control the rights to certain application materials and intellectual property that have been maintained on the active docket before the PSC. If utilized as part of the current conceptualized proposal, this position on the active docket could potentially shorten the time frame for permitting, as well as the overall construction date, by approximately six months or more.

B. NYISO System Reliability Impact Study

- Preparation of system impact study – 6 months
- NYISO review and approval – 6 months
(A similar project was previously evaluated and a system reliability impact study was performed and approved)

C. FERC authorizations to sell transmission rights at negotiated rates – 6 months

D. Acquisition of right-of-ways

- Various public entities

Index

As a final reference, the table below indicates that all four of the Energy Highway objectives, detailed on Page 11 of the New York Energy Highway RFI, are satisfied by “Connect New York”. The following table provides the appropriate Energy Highway RFI page references.

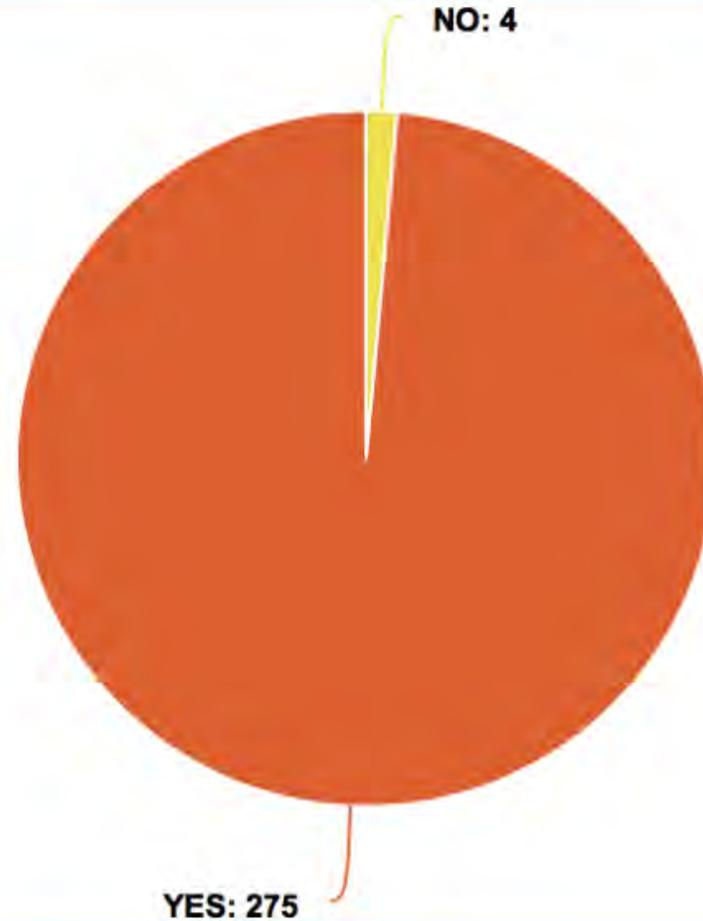
Energy Highway Objectives		Page Reference
Reduce constraints on the flow of electricity	√	4, 7-13
Assure long-term reliability	√	7-10, 13-14
Encourage development of renewable generation	√	13-14
Increase efficiency of power generation	√	4, 7-14

Page 13 of the New York Energy Highway RFI listed additional benefits that should be addressed in the submission. The table below demonstrates that these have been met by this submission and provides the appropriate page references.

Additional Project Benefits		Page Reference
Create Jobs	√	15
Environmentally Sustainable	√	4, 9-14
System Performance and Operation	√	4, 7-14
Rate Payer Value	√	7-13
Demonstrate ability to go through NYISO SRIS/SIS Process	√	16

Kennebec River Visitor Impact Study

Response to Visual Impact of Kennebec River Crossing on Wilderness Experience
279 Recreational and Commercial River Users



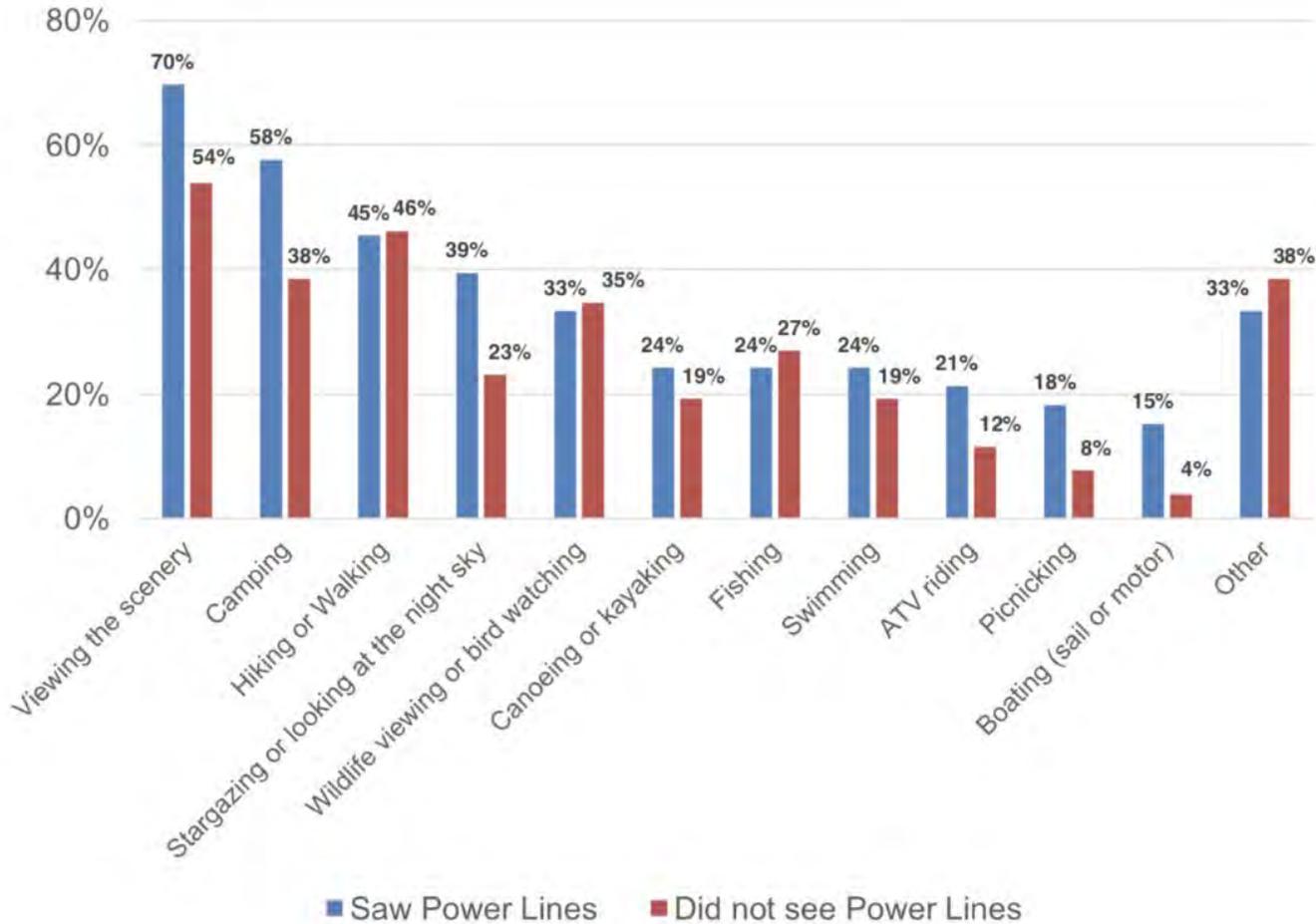
■ NO ■ YES

Updates on River Crossing

- While CMP has decided to drill under the river, that minimizes scenic impact in only that ONE area. There will *still* be sign of infrastructure on shoreline and huge visual impacts throughout the remainder of the corridor.
- Will those access roads to the river provide additional access to river enthusiasts? Will it result in overcrowding like on the Deerfield River?
- What are the impacts on river ecology, water quality & fish habitat?
- If it takes months to complete, how would that impact the rafting season and river flows during construction?
- What about the larger environmental issues of the entire construction and concerns about the source of hydropower?
- The Kennebec River is important, but it's not the only area to be concerned about in Somerset County and remaining corridor.

Visits to Area and Activities

Q4. Thinking about your visit to the upper Kennebec River area, what are your plans other than rafting?



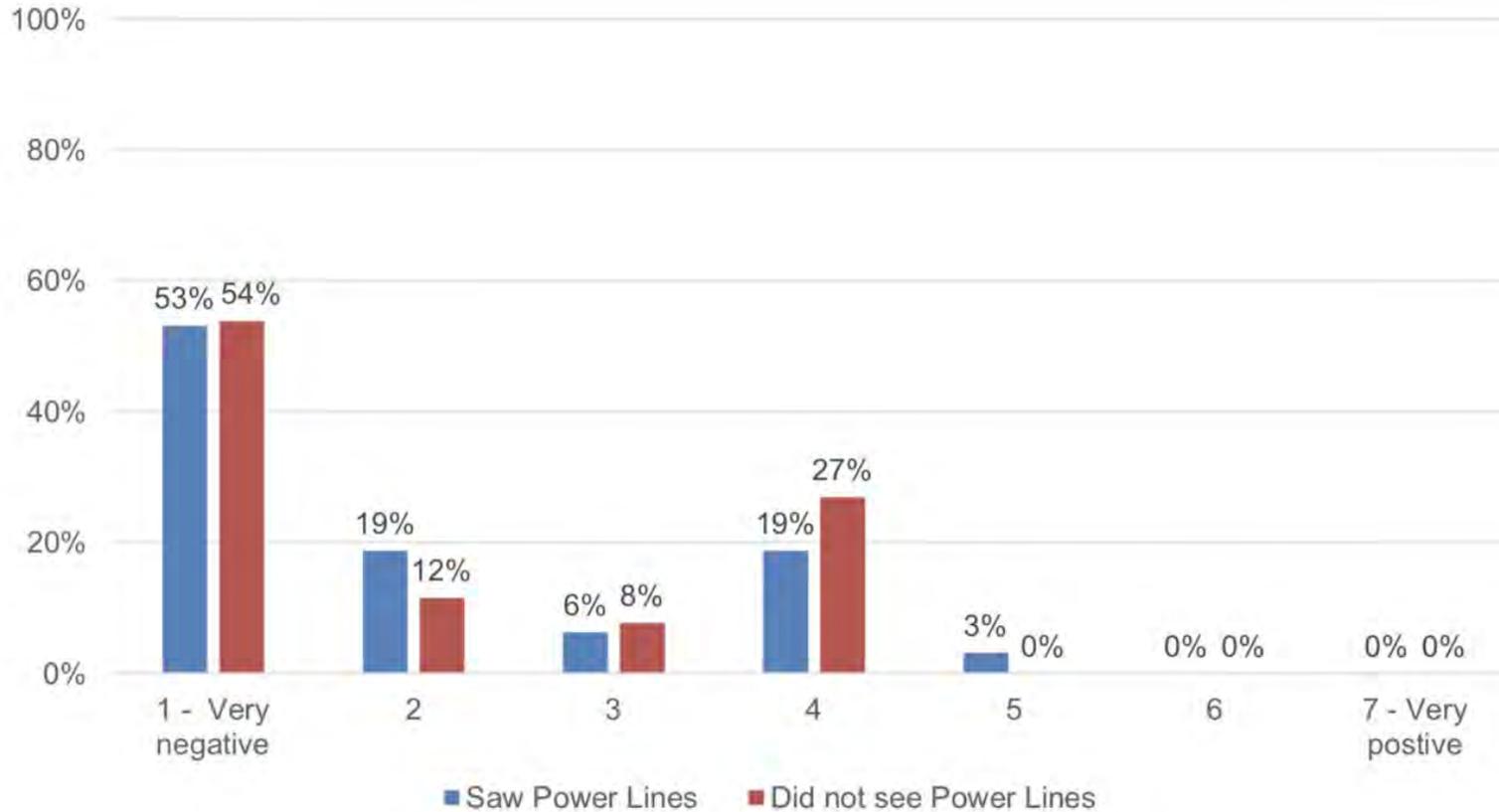
Summary

Beside rafting, viewing the scenery, camping, hiking or walking were the most common activities for rafters visiting the upper Kennebec River area.

Even CMP's river user survey submitted to PUC-DEP-LUPC revealed that tourists prioritized viewing the scenery in Somerset County.

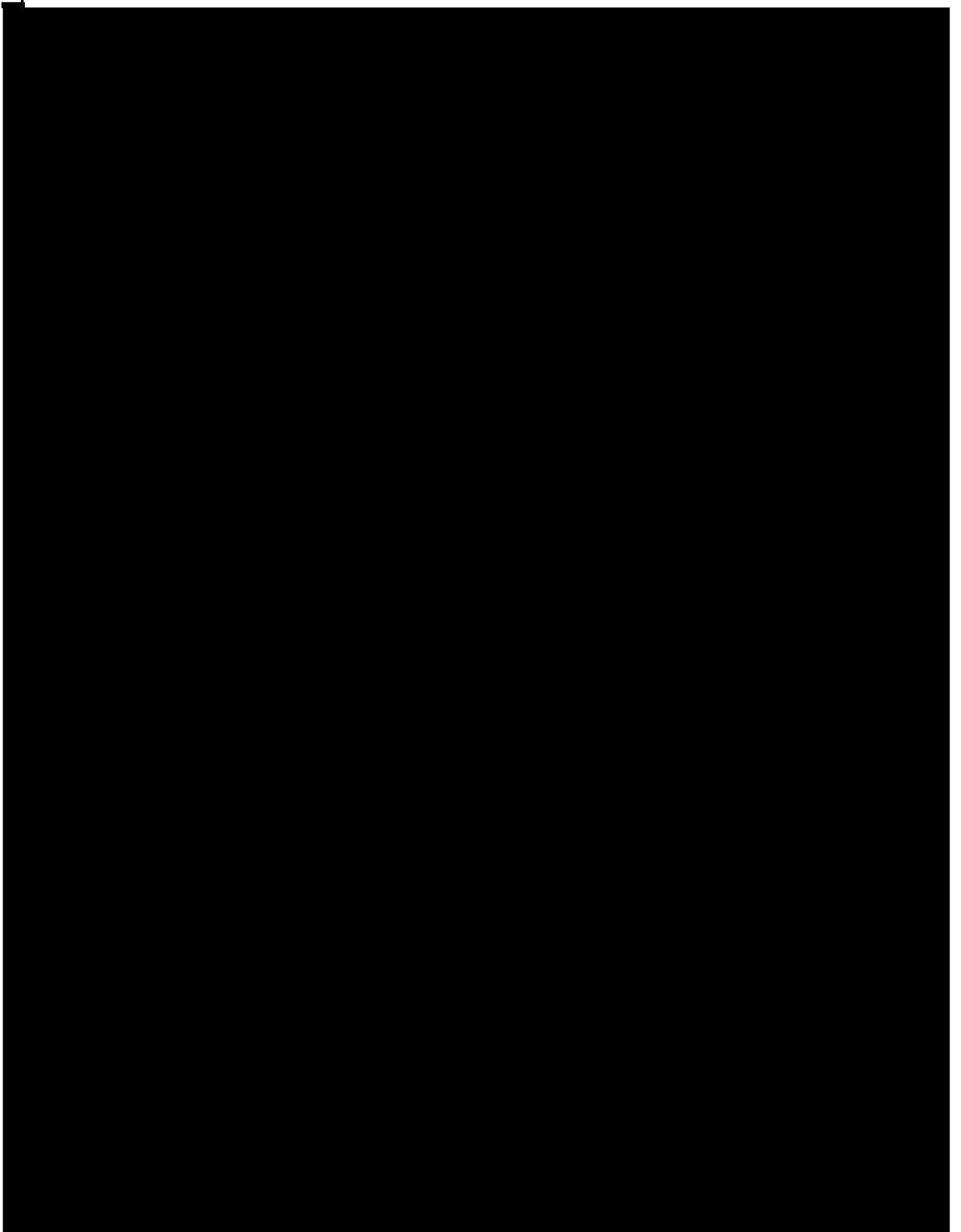
Impact of Human Activity

Q10. Please rate the impact this sign of activity may have on the quality of your experience today. - Views of powerlines on hillsides.



Rate on a scale 1 to 7 scale where 7 means a very positive impact on your experience and 1 means the factor would have a very negative impact on your experience.

The majority of respondents said that power lines on hillsides would be negative. How will this impact their decision to return to this area for a wilderness experience in the future?



[Redacted text block]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

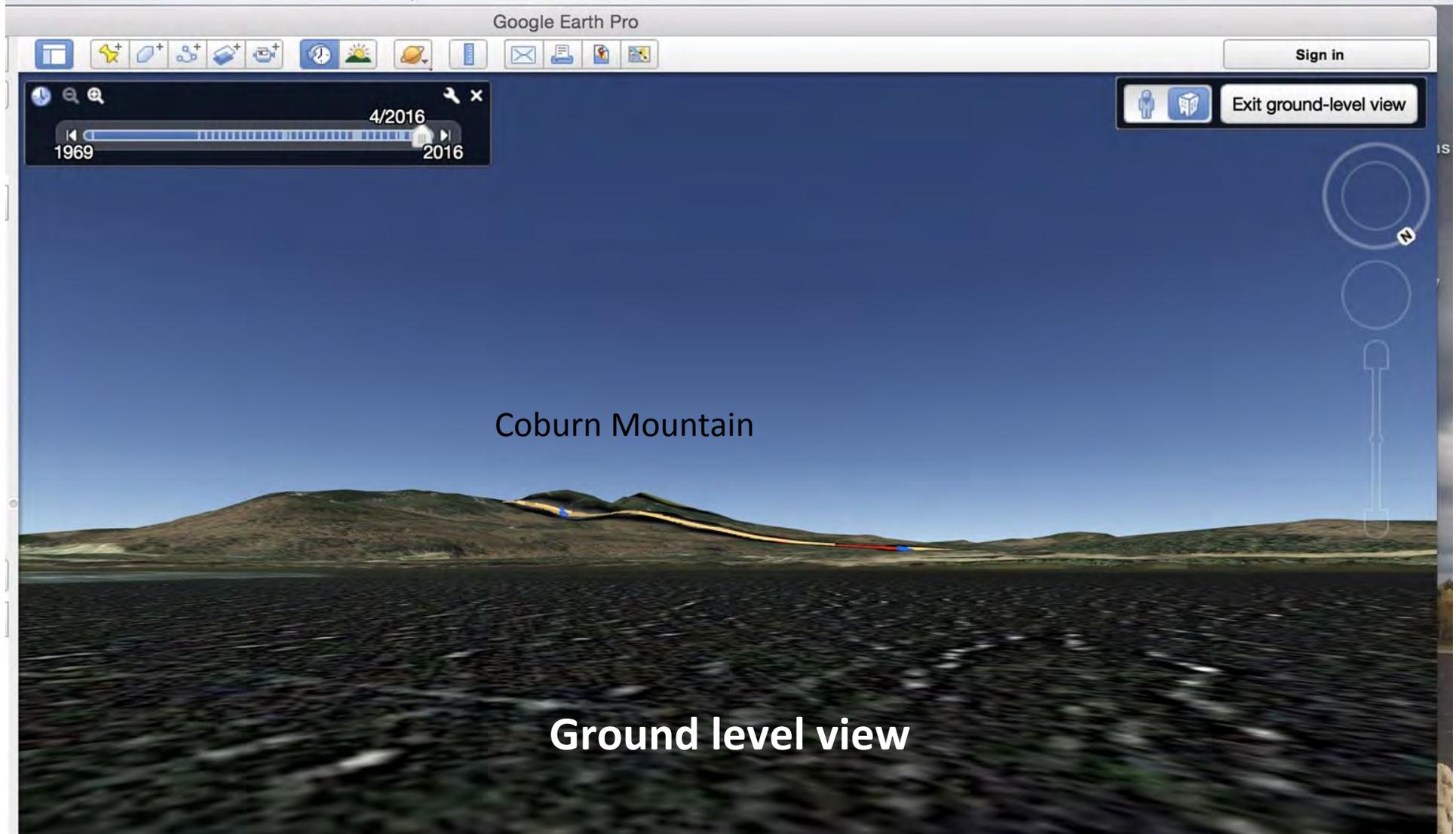
[REDACTED]

NECEC's Negative Impacts to Scenic View Shed and Year-Round Recreational Tourism

CMP's rendering of Parlin Pond Claims: uninhabited & no Corridor view



Google Earth's Parlin Pond: Corridor is indeed VISIBLE



From northern end
of PP looking
southwest.

**60-80 ft Average
Tree Height
vs.
100' Towers**

Ground level view

*see Forest Trees of Maine: https://www.maine.gov/dacf/mfs/publications/handbooks_guides/forest_trees/individual_spp_index.html

Parlin Pond: Corridor to Impact Business

Who would want an industrial transmission line as a backdrop of their wedding venue?



Joe Kruze

Lake Parlin Lodge: Winter Recreational Usage



Joe Kruze

- ❖ Hundreds of meals served daily during the snowmobile season.
- ❖ Tourists ride in from Eustis, Jackman, Forks, Greenville, Bingham

Parlin Pond: Heavy Winter Recreational Usage



Joe Kruze

Parlin Pond Tourism Economy

Where are the
**winter user
studies?**



Joe Kruze

A photograph showing a long line of snowmobiles descending a snowy slope. The snowmobiles are arranged in a single file, with their headlights on, creating a trail of light on the snow. The background is a dark, overcast sky.

Lodging
Restaurants
Guides
Rentals
Sales
Groceries
Retail

Joe Kruze

The Forks Area to Jackman is a Maine Tourism Winter Destination.

**Where's the user data for
scenic and economic
impact?**

**How deeply are the
employees and families
going to be impacted?**

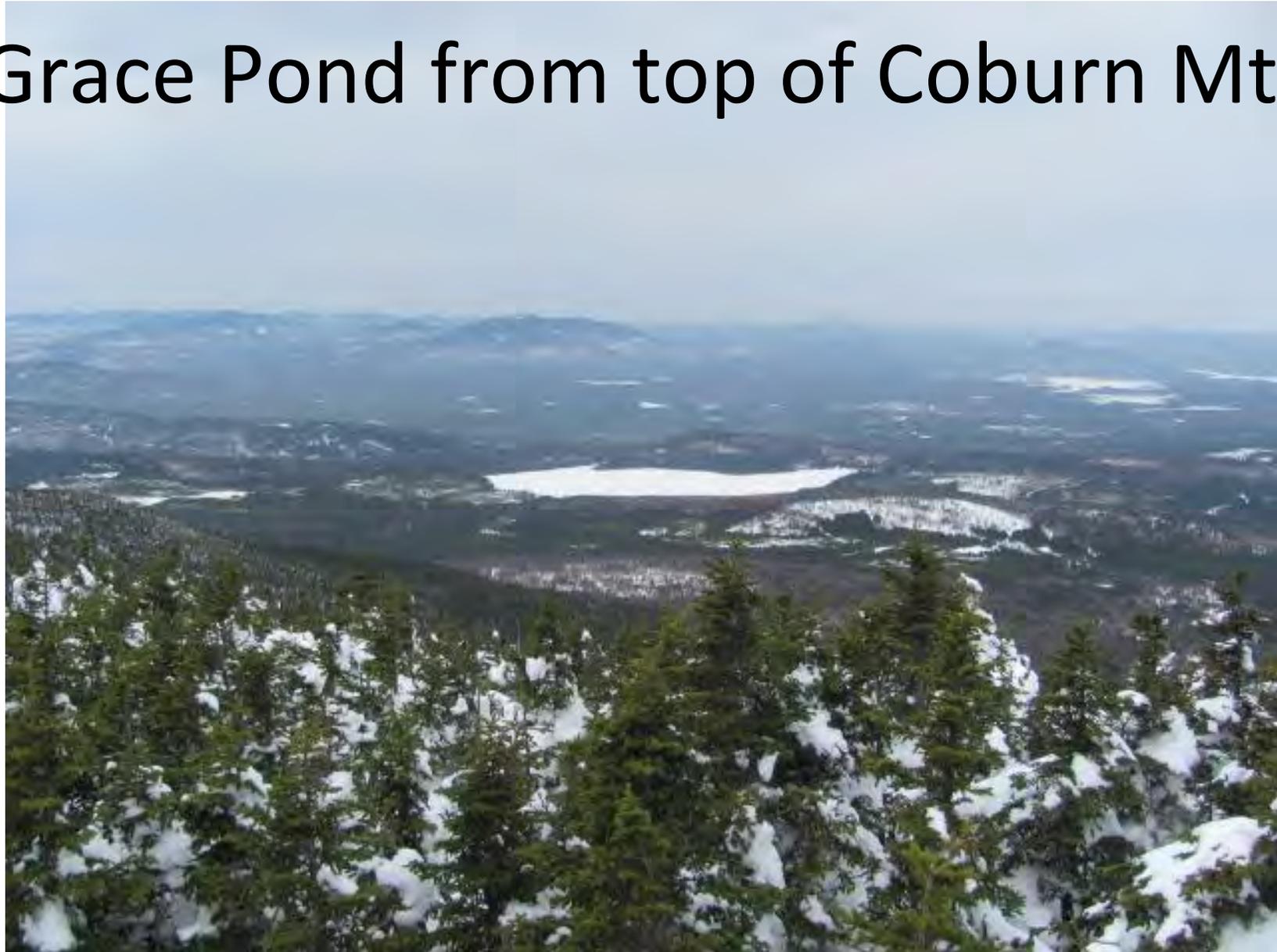
Coburn Mountain, 360 view of NECEC



Tallest ITS peak in New England

Host to hundreds of snowmobilers a day

Grace Pond from top of Coburn Mtn



Ed Buzzell

Coburn Mountain View of Corridor Facing NW

Grace Pond

Image Landsat / Copernicus

Google Earth

1997

45°28'59.68" N 70°08'16.99" W elev 2366 ft eye alt 3730 ft

1969 2016

From the Top of Coburn: Corridor Visible around Johnson Mountain



Johnson

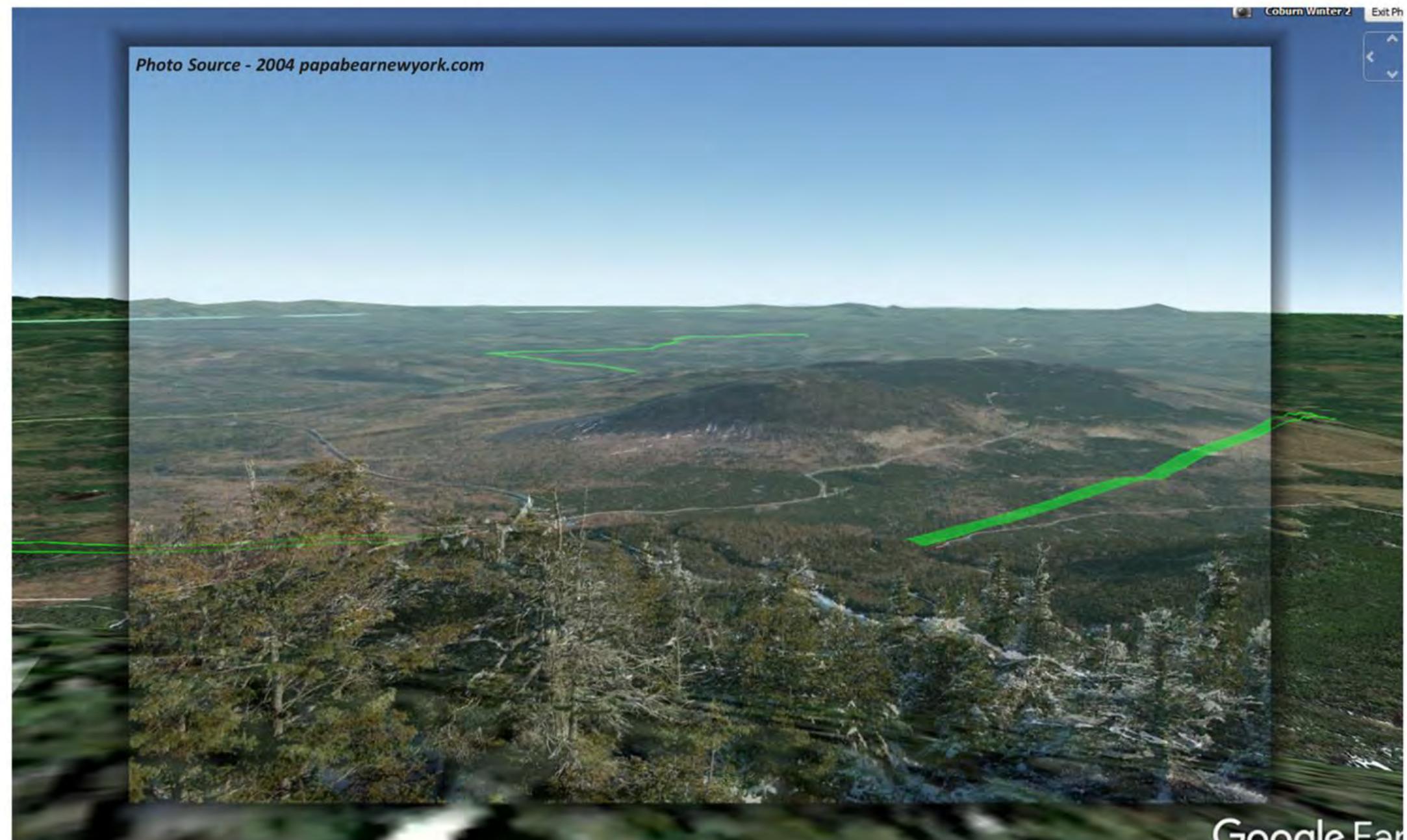
Image Landsat / Copernicus

Google Earth

1997

45°27'03.04" N 70°06'43.90" W elev 2239 ft eye alt 3729 ft

Coburn Mountain Google Earth Overlay 2





Enchanted Pond

Mike/Shirley
Johnson

Shutdown Mountain from Enchanted Pond



Mike/Shirley
Johnson



Exit ground-level view

Corridor from Shutdown Mtn Trail

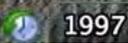


Enchanted Pond

Image Landsat / Copernicus

Google Earth

Preview



Imagery Date: 4/23/2016 43°25'44.70" N 70°10'03.56" W elev 1788 ft eye alt 2083 ft

Spencer Access Road

Not just a “logging road”



Spencer Road is a highly used, beautiful and scenic access road to Enchanted, Grace, Rock ponds, #5 Mtn., access to 16,000+ acres of conservation land...



Spencer Access Road



Spencer Road Recreational Usage



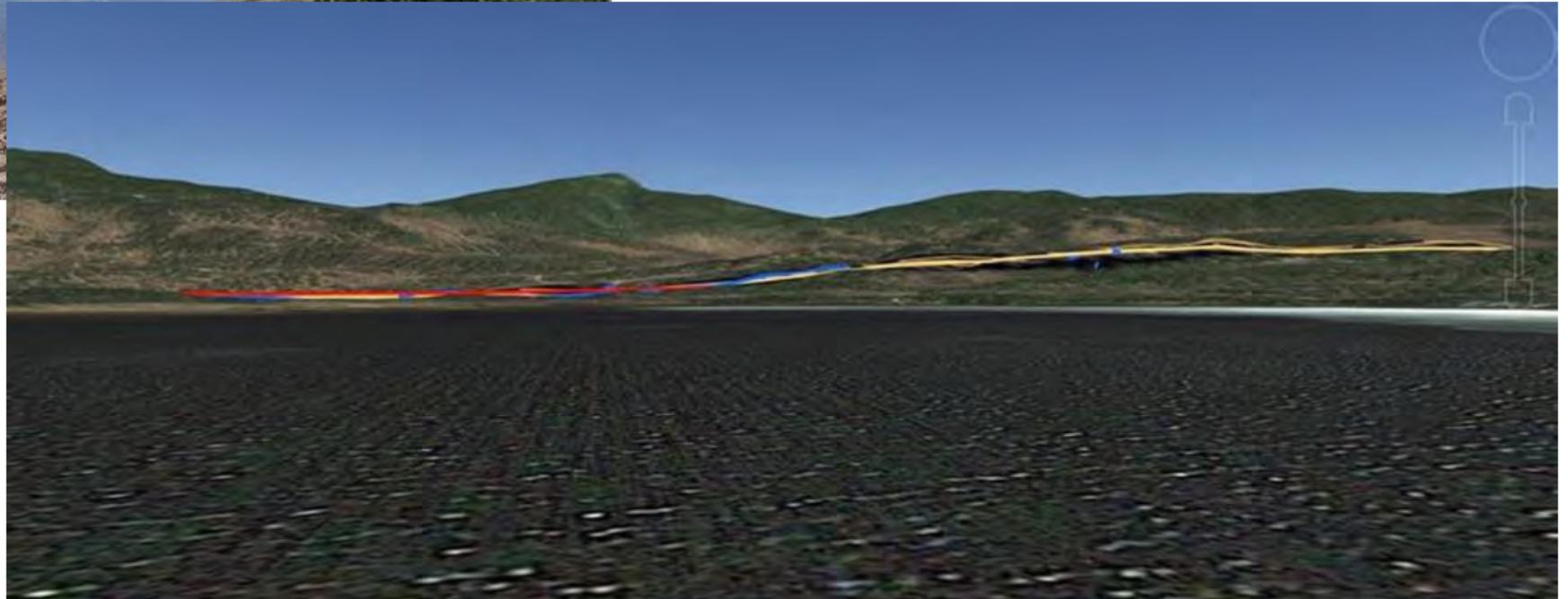
Kimberly Nadeau– Spencer Road



Rock Pond now



Rock Pond after



Three Slide Mountain from Rock Pond



Three Slide Mtn

Rock Pond



Corridor View From Three Slide Mtn

4/2016
1969 2016

Exit ground-level view

Rock Pond

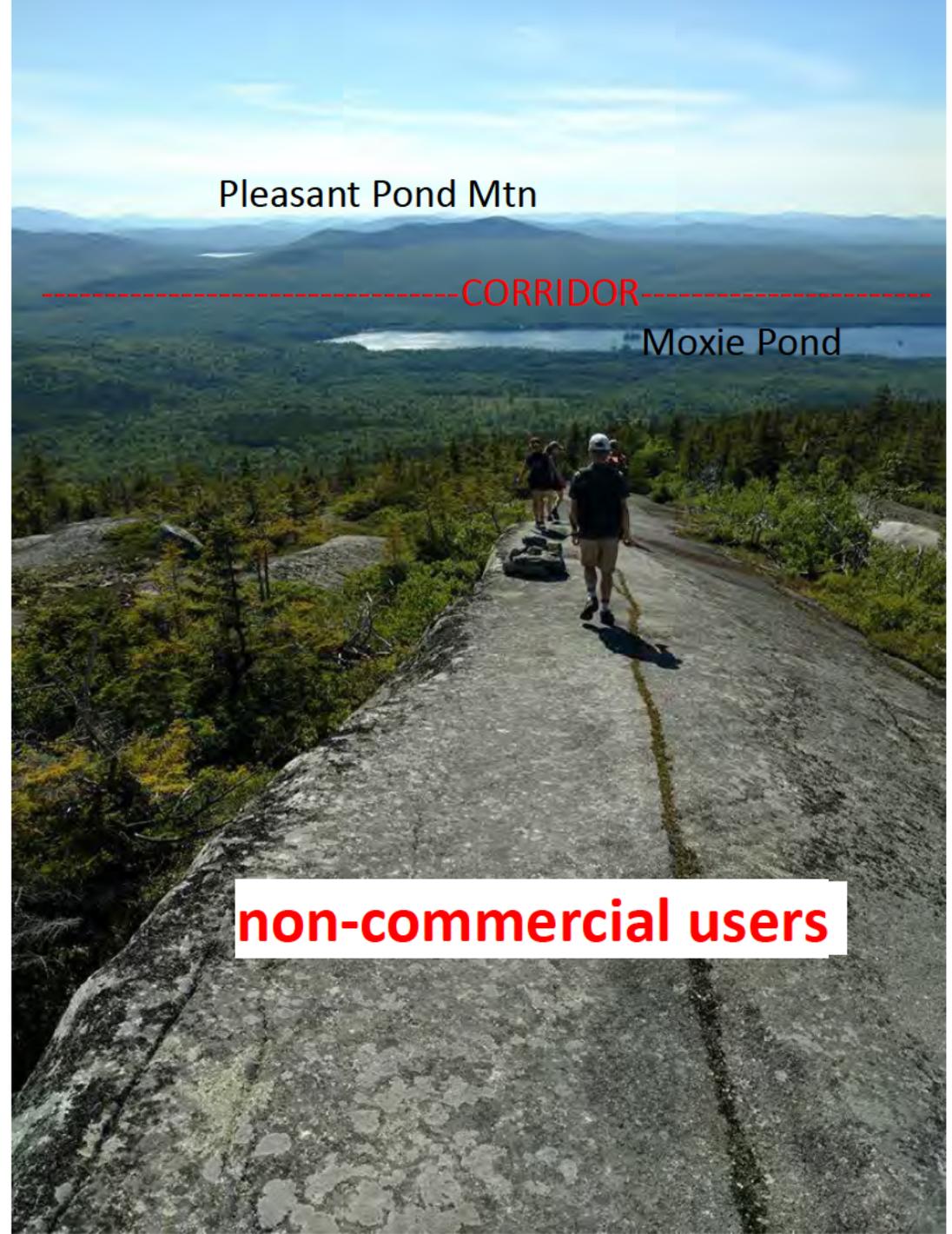
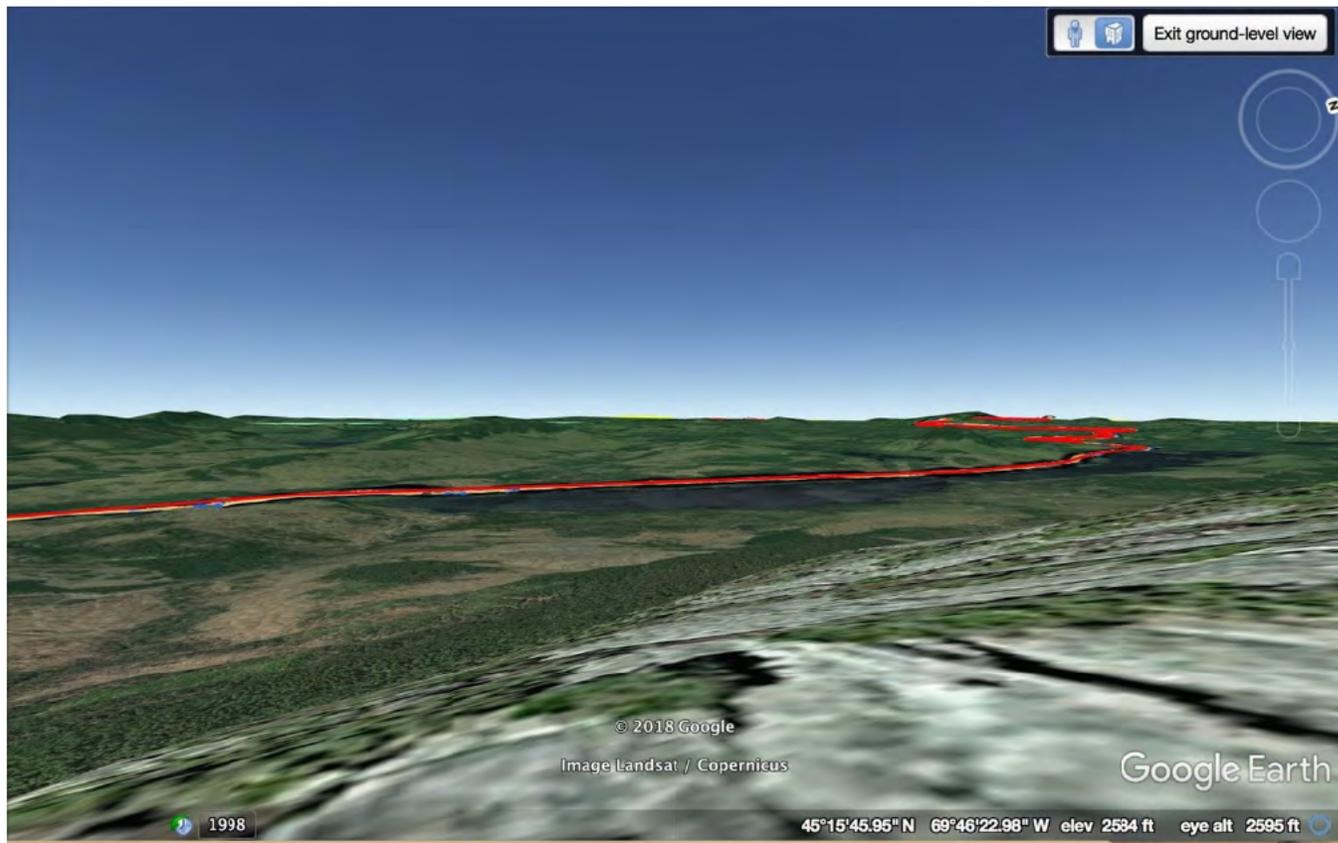
Image Landsat / Copernicus

Google Earth

1997

45°29'28.17" N 70°23'27.05" W elev 2559 ft eye alt 3009 ft

Summit of Moxie Bald Mountain Appalachian Trail



non-commercial users

Moxie Pond as seen from summit of Mosquito Mtn.

Moxie Bald Mtn

From Top of
Mosquito

Moxie Bald Mtn

© 2018 Google
Image Landsat / Copernicus
Data SIO, NOAA, U.S. Navy, NGA, GEBCO
Top of Mosquito

Google Earth

2019
The Forks Area
SNOWMOBILE MAP
Ride ITS 86, 87 & 89

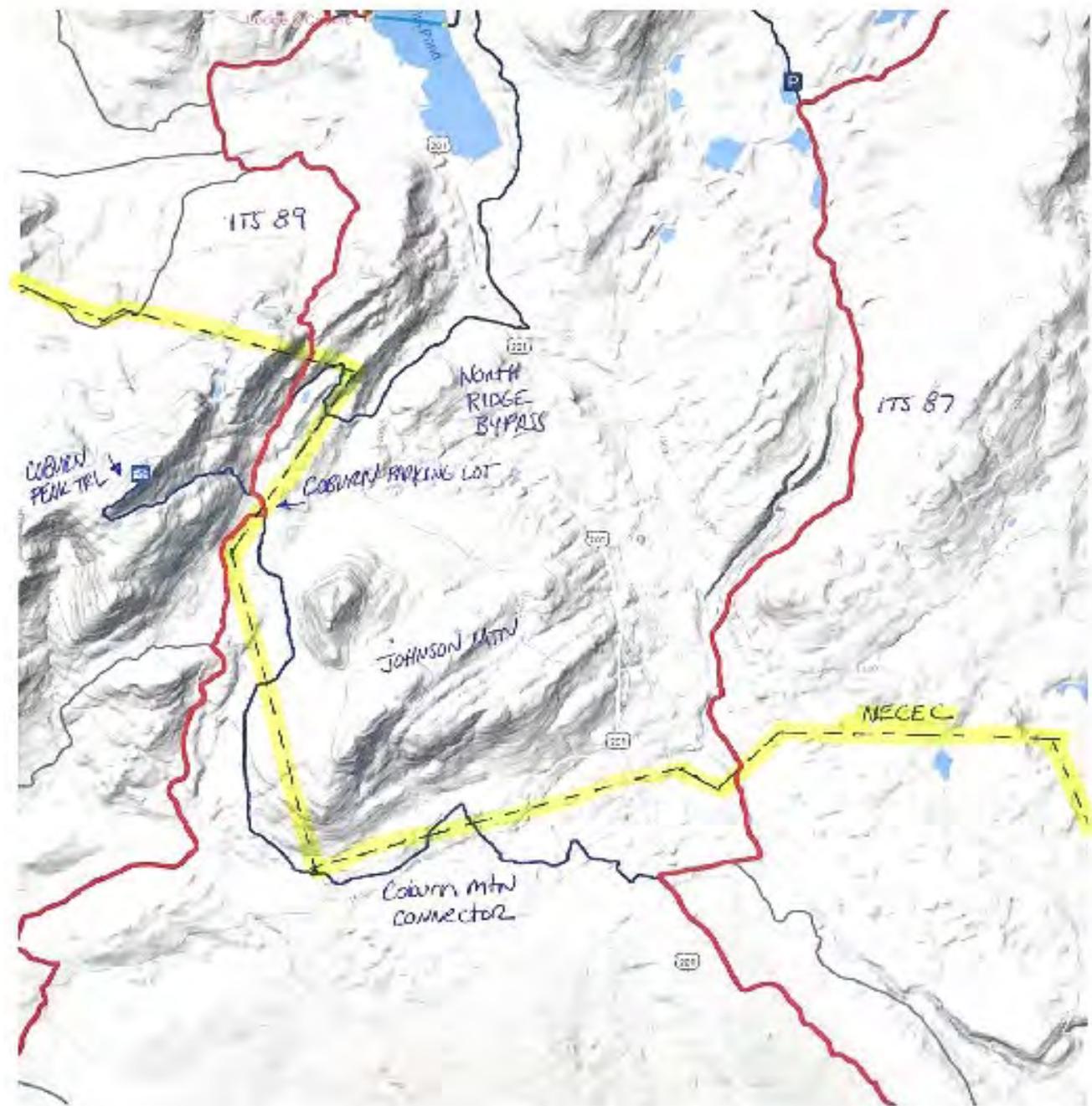
Bingham • Caratunk • The Forks • West Forks
TWP Parlin • Jackman • Eustis • Rangeley
Rockwood • Greenville • Kokadjo • Abbot

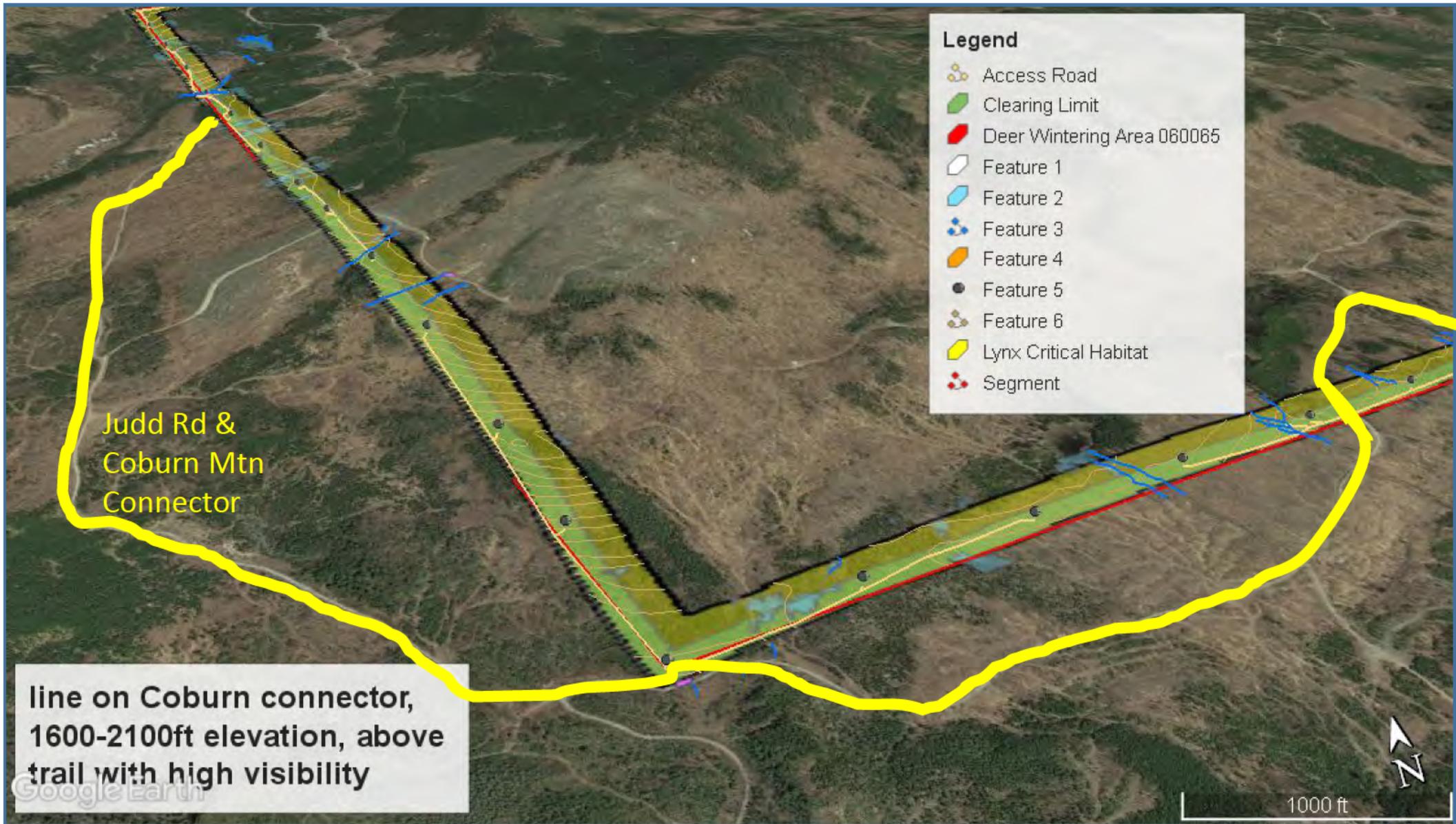
like us 

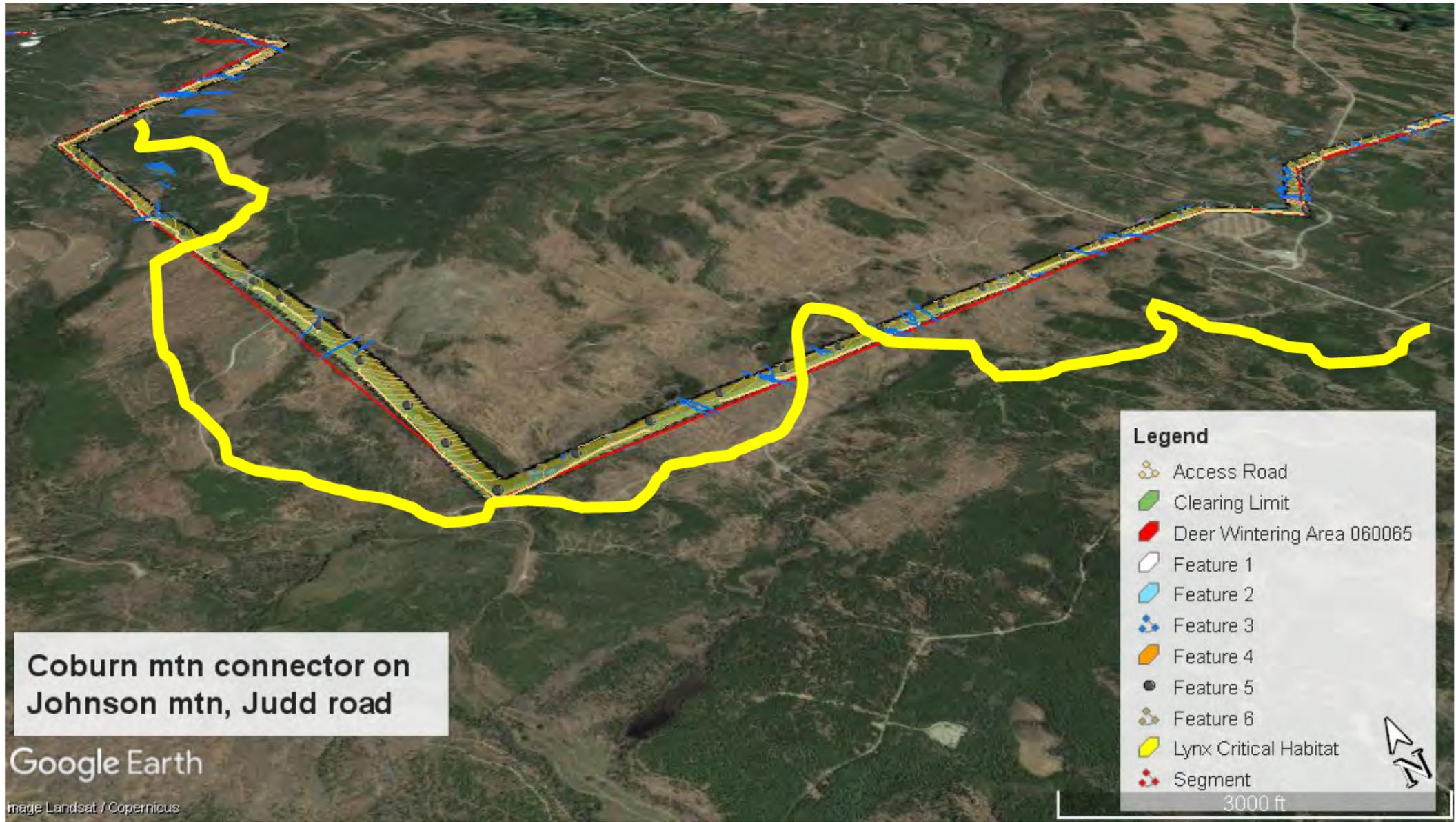
Coburn Mt. Maine's Highest Groomed
Snowmobile Trail at 3750ft

The Forks Area Chamber of Commerce
Route 201, PO Box 1 | West Forks, Maine 04985
www.forksarea.com









Private camp on ITS 89,
salmon stream valley,
Coburn connector Johnson
mtn.

- Legend**
- Access Road
 - Clearing Limit
 - Deer Wintering Area 060065
 - Feature 1
 - Feature 2
 - Feature 3
 - Feature 4
 - Feature 5
 - Feature 6
 - Lynx Critical Habitat
 - Segment



Google Earth

800 ft



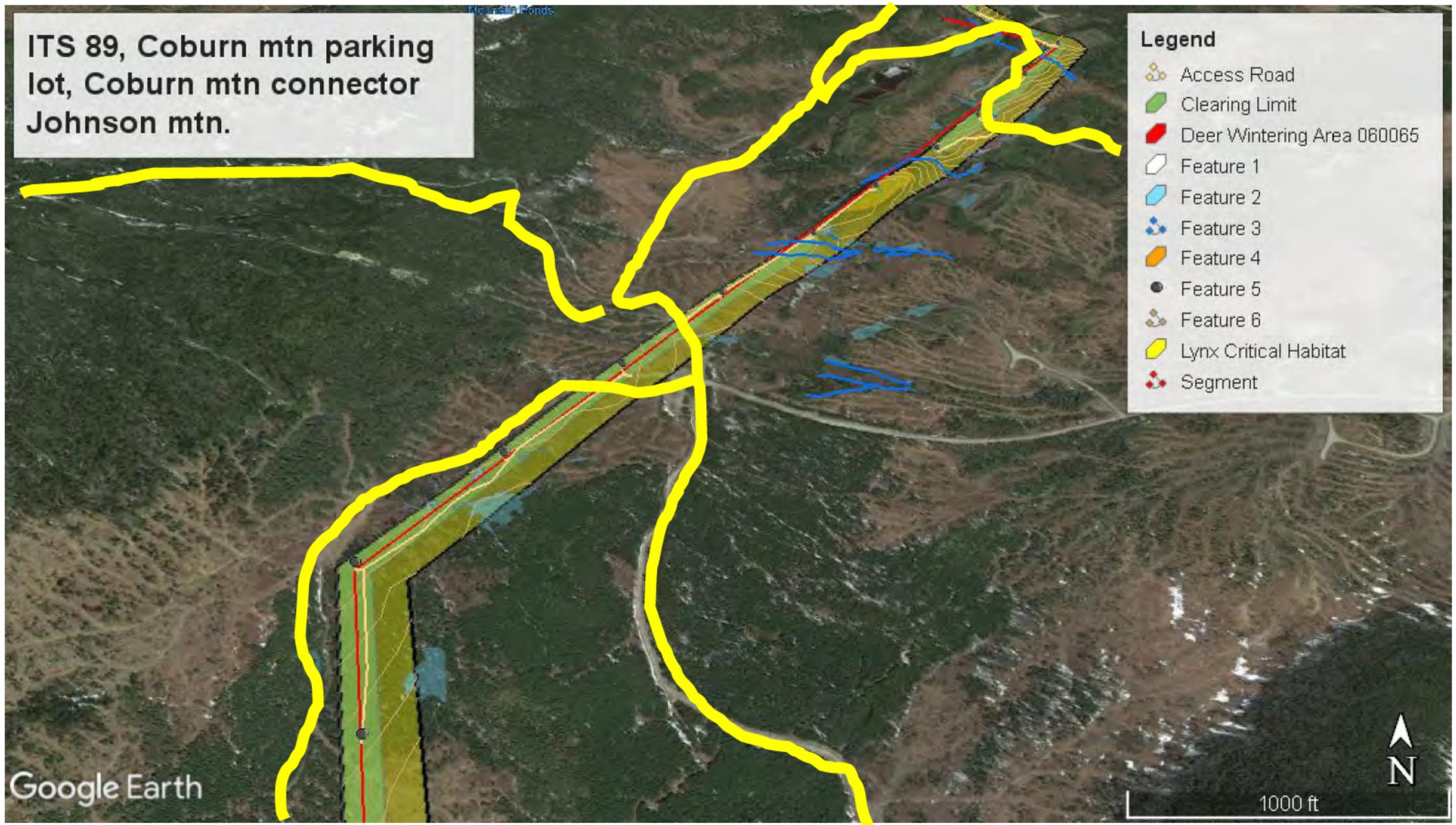
ITS 89, Coburn mtn parking lot, Coburn mtn connector Johnson mtn.

Legend

- Access Road
- Clearing Limit
- Deer Wintering Area 060065
- Feature 1
- Feature 2
- Feature 3
- Feature 4
- Feature 5
- Feature 6
- Lynx Critical Habitat
- Segment

Google Earth

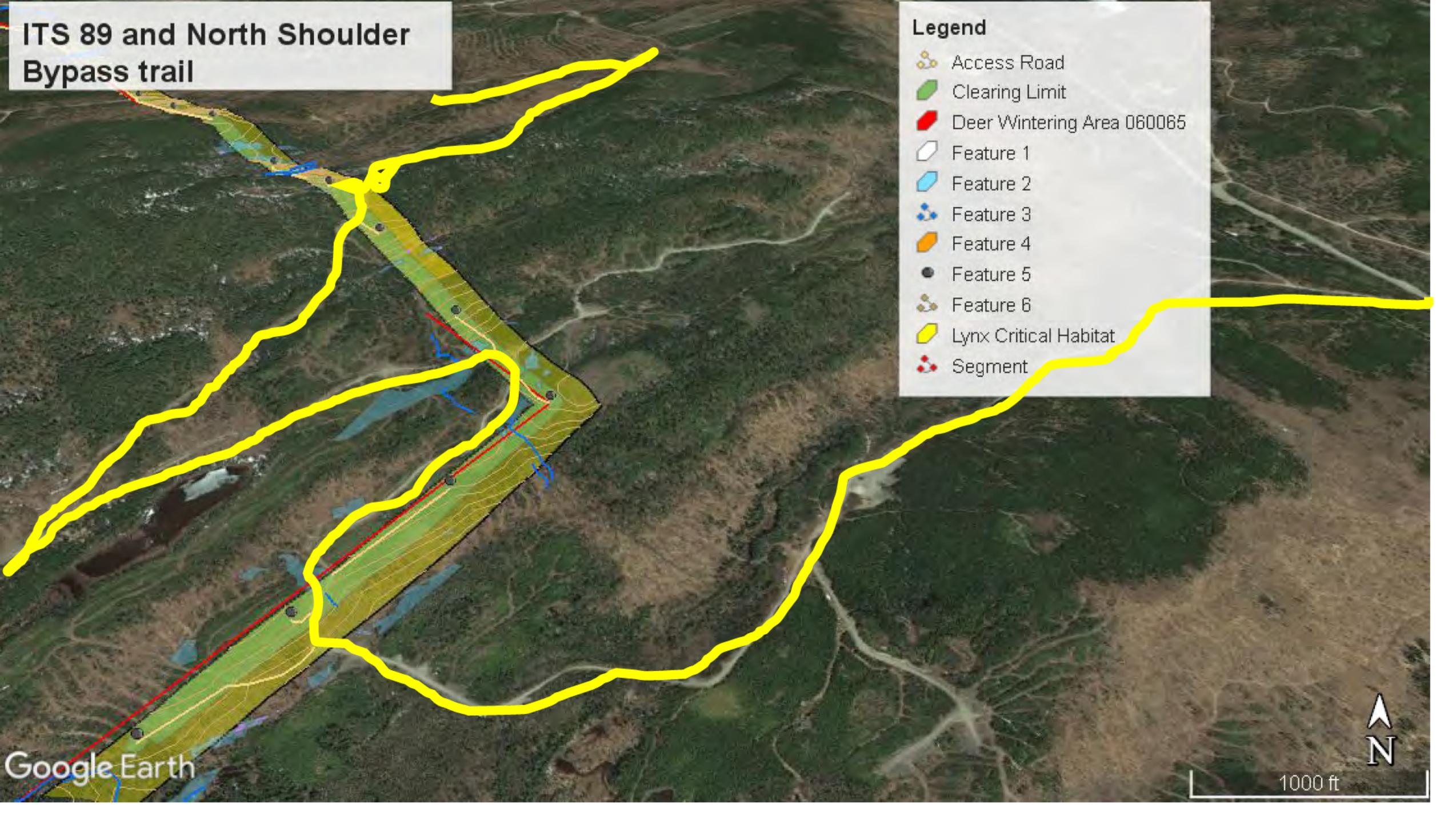
1000 ft



ITS 89 and North Shoulder Bypass trail

Legend

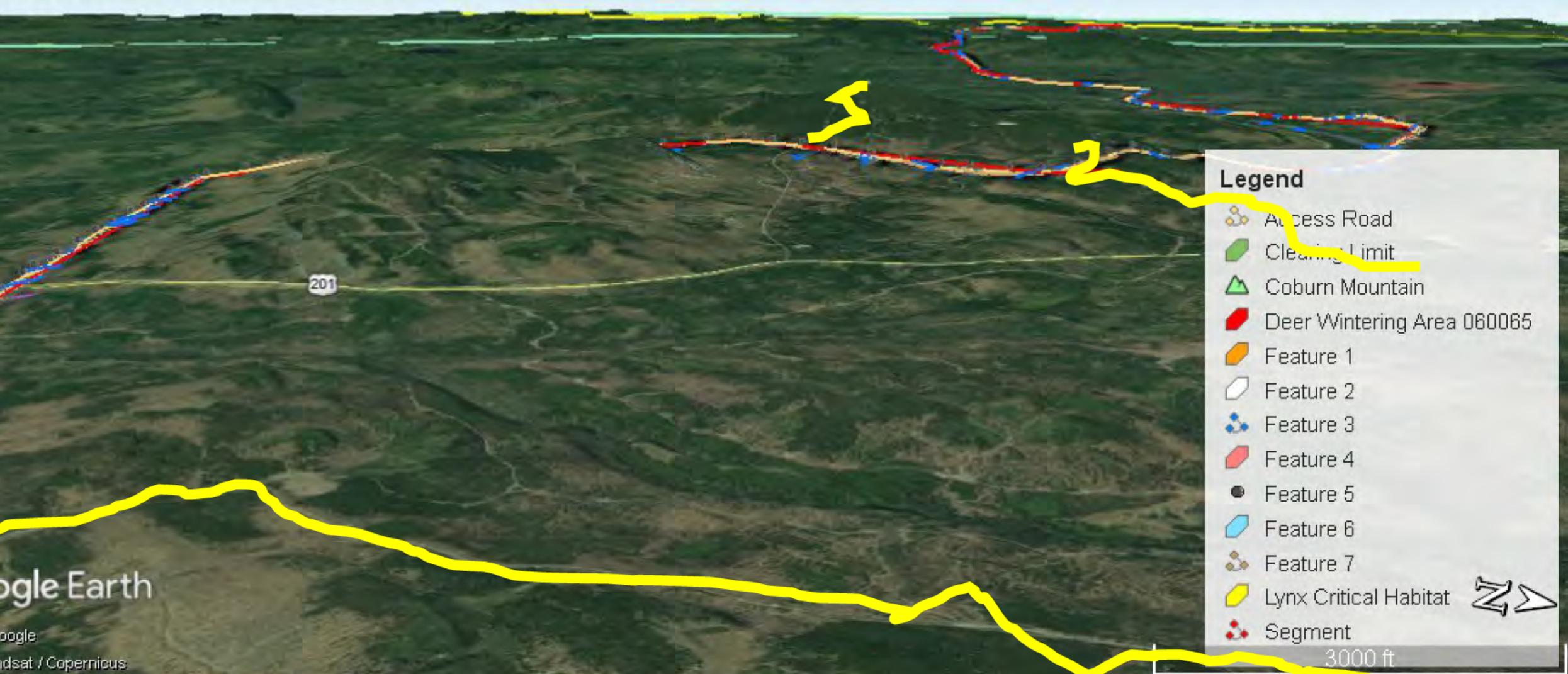
- Access Road
- Clearing Limit
- Deer Wintering Area 060065
- Feature 1
- Feature 2
- Feature 3
- Feature 4
- Feature 5
- Feature 6
- Lynx Critical Habitat
- Segment



Google Earth

1000 ft

S 87 from Cold Stream mountain
road looking toward Johnson and
Coburn mtn(ITS 89 and Coburn
connector and bypass trail



Legend

- Access Road
- Clearing Limit
- Coburn Mountain
- Deer Wintering Area 060065
- Feature 1
- Feature 2
- Feature 3
- Feature 4
- Feature 5
- Feature 6
- Feature 7
- Lynx Critical Habitat
- Segment

3000 ft

S 89 line crossing North Shoulder Coburn Mtn 2700ft

Legend

- Access Road
- Clearing Limit
- Deer Wintering Area 060065
- Feature 1
- Feature 2
- Feature 3
- Feature 4
- Feature 5
- Feature 6
- Lynx Critical Habitat
- Segment





Wild Land

Conducted by YouGov on behalf of John Muir Trust

Fieldwork Dates: 18th - 22nd May 2017

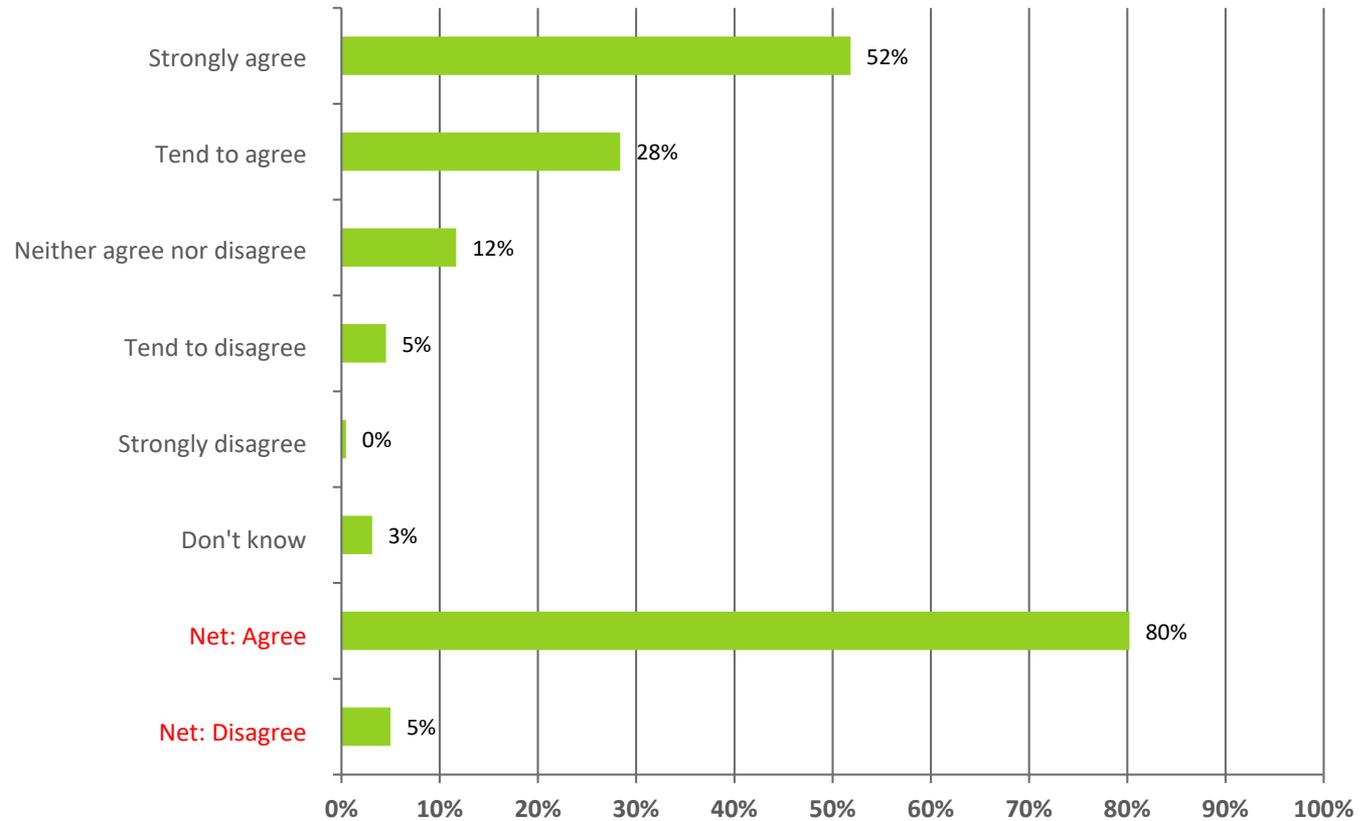


Exhibit 10

Wild Land

SJW_q1. For the following question, by "Wild Land Areas", we mean places that are rugged, remote and free from major human structures. To what extent, if at all, do you agree or disagree with the following statement?

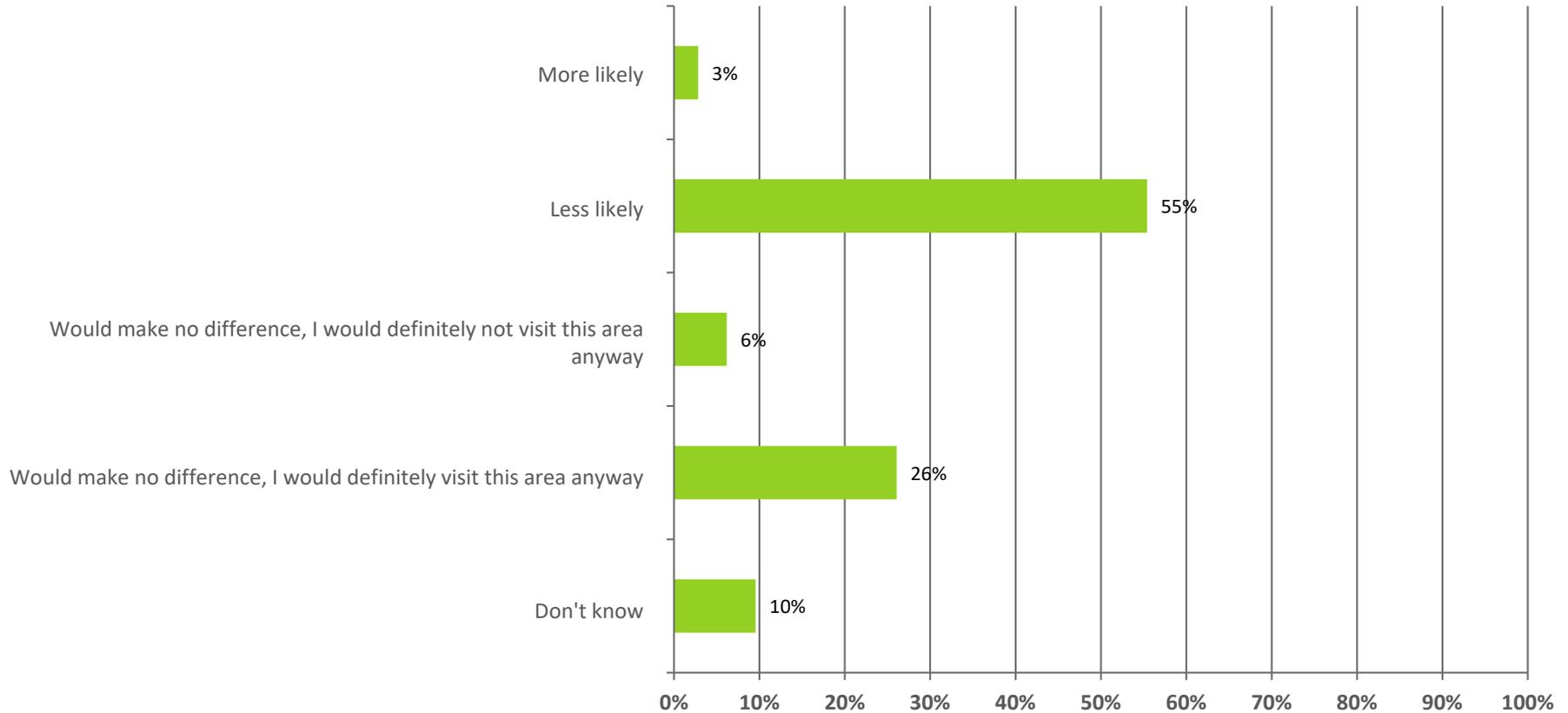
"Wild Land Areas should continue to be protected in the future from large scale infrastructure, such as industrial-scale wind farms, major electricity transmission and super-quarries"



Unweighted base: All Scottish adults (1028)

Wild Land

SJW_q2. Would you be more or less likely to visit a scenic area which contains large scale developments (e.g. commercial wind farms, quarries, pylons etc.), or would it make no difference?



Unweighted base: All Scottish adults (1028)

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MAINE RIVERS STUDY

Final Report

State of Maine
Department of Conservation

U.S. Department of the Interior

National Park Service
Mid-Atlantic Regional Office

May 1982

Electronic Edition August 2011

DEPLW-1214

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Financial assistance was also provided by the Maine Department of Conservation and the US Department of the Interior, National Park Service.

Section I. Major Findings

1. The State of Maine is unique in the Northeastern United States in the number and diversity of significant natural and recreational river resources that it possesses.

The Maine Department of Inland Fisheries and Wildlife estimates that there are 31,806 miles of permanently flowing rivers and streams in the state, a figure equivalent to one linear mile of stream for every square mile of land surface. Rivers vary in size from the long and wide Penobscot River which drains 8570 square miles to the short and narrow Rapid River and Grand Lake Stream. Over sixty rivers enter the ocean along the Maine coast and three rivers form the U.S. / Canadian International Boundary. Among these water resources are select quantity of rivers which are widely recognized for their outstanding values.

Important river resources include:

- a. 17 river gorges, 61 waterfalls, and 38 white water rapids identified as being outstanding geological or hydrological features with state-wide significance.
- b. More miles of undeveloped free-flowing rivers than any other state in the Northeast United States
- c. River corridor segments which provide habitat for diverse populations of rare and endangered plant species of state and national importance.
- d. Coastal rivers which provide significant habitat for northern bald eagle and shortnosed sturgeon, on the Federal Threatened and Endangered Species List.
- e. 192 miles of high quality river habitat for an internationally known landlocked salmon fishery and 22,000 miles of primary brook trout habitat known for its excellence throughout New England
- f. The only rivers in the eastern United States containing significant self-sustaining Atlantic Salmon runs, and, due to federal and state restoration efforts, the East coast's most heavily fished Atlantic sea run salmon river.
- g. Three rivers which together account for over 60% of the state's commercial alewife catch and a number of other coastal rivers which have the potential to become profitable commercial fisheries
- h. The only two stretches of Class V white water and the longest single stretch of Class II-IV rapids in the entire New England region.
- i. The longest and most popular extended back country canoe trips in the Northeast and over 4000 miles of other rivers suitable to boaters of all ability levels.

2. The Maine River Study has identified 4264 miles of rivers and river segments which possess significant natural and recreational resource values.

Maine rivers have been inventoried and analyzed to identify important river areas and to rank these areas according to their overall significance as unique and/or multiple value natural and recreational resources. The final ranking represents a synthesis of objective resource analysis and a consensus of opinion among resource experts and state river conservation interests.

Rivers, river segments and related tributaries identified as possessing significant natural and recreation resource values were placed in one of four significance categories, identified as rating A, B, C, and D. These categories represent a hierarchy of cumulative resource values, and are defined in the following manner.

River Rating Hierarchy:

- A** Rivers and related corridors on the "A" list possess a composite natural and recreational resource value with greater than state significance.
- B** Rivers and related corridors on the "B" list possess a composite natural and recreational resource value with outstanding statewide significance.
- C** Rivers and river-related corridors or specific areas on the "C" list possess a composite natural and recreational resource value with state-wide significance.
- D** Rivers and river-related corridors or specific areas on the "D" list possess natural and recreational values with regional significance.

The total mileage of rivers and streams in each of the categories is summarized in the following table:

Significance Category Rating	Number of Rivers	Total Miles of Main Segments	% of the State's Total River/Stream Resource	Total Miles including Significant Tributaries	% of State's Total River/Stream Resource
A	20	867.0	2.7	1663.5	5.2
B	18	698.0	2.2	1176.0	3.7
C	41	843.5	2.6	1152.5	3.6
D	23	262.0	0.8	272.0	0.9
Total	102	2670.5	8.4	4264.0	13.4

A number of rivers included on the study's B list have been identified as possessing specific resource values of highest importance to Maine river constituents. These rivers are therefore deserving of special efforts to maintain the identified outstanding resource values. These rivers and their corresponding values are as follows;

Inland Fisheries Values:

- Crooked River
- Grand Lake Stream
- Kennebago River

Commercial Anadromous Fisheries Values:

- Damariscotta River
- St. George River

Whitewater Boating Values:

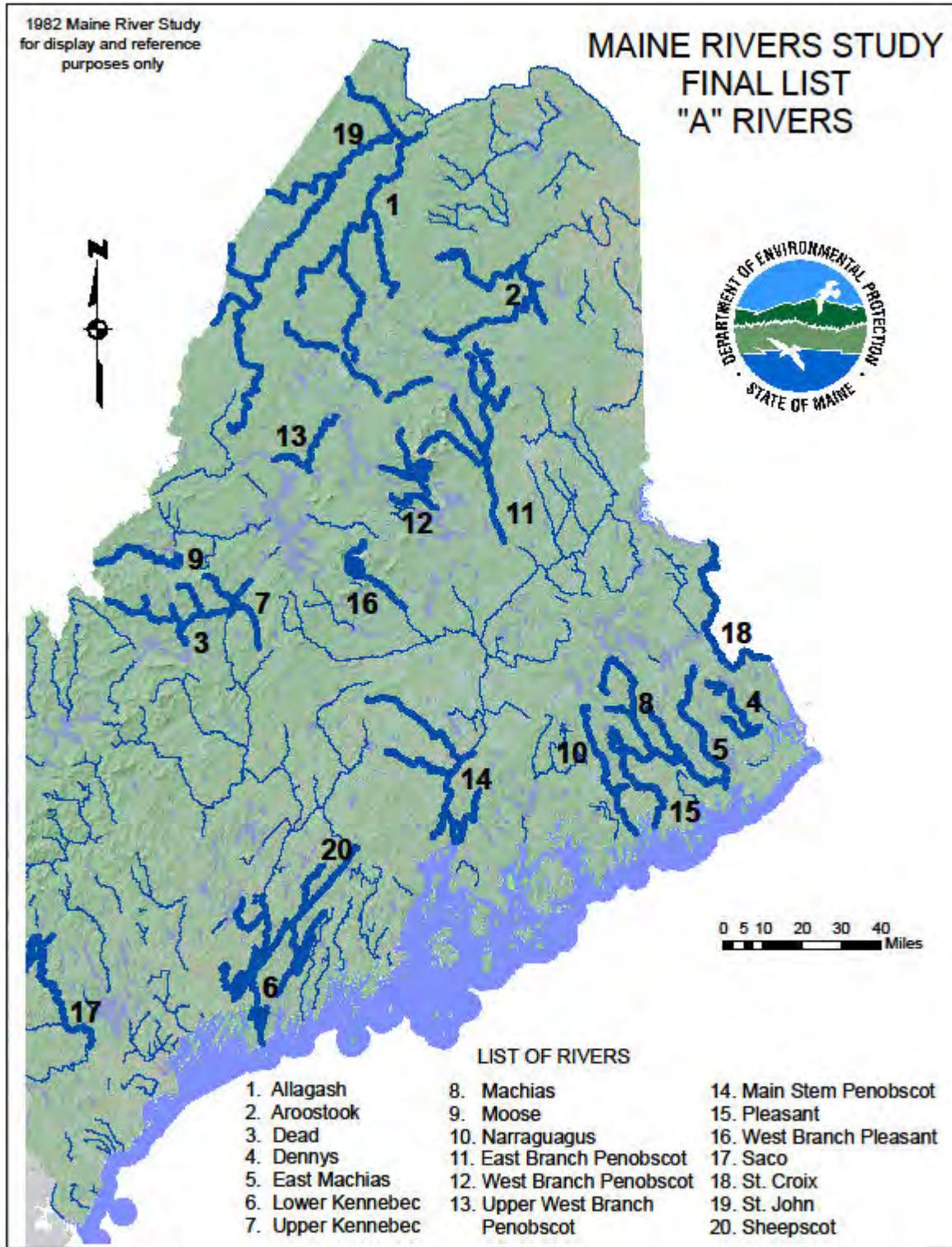
- Carrabassett River
- Rapid River

Critical Botanic Values

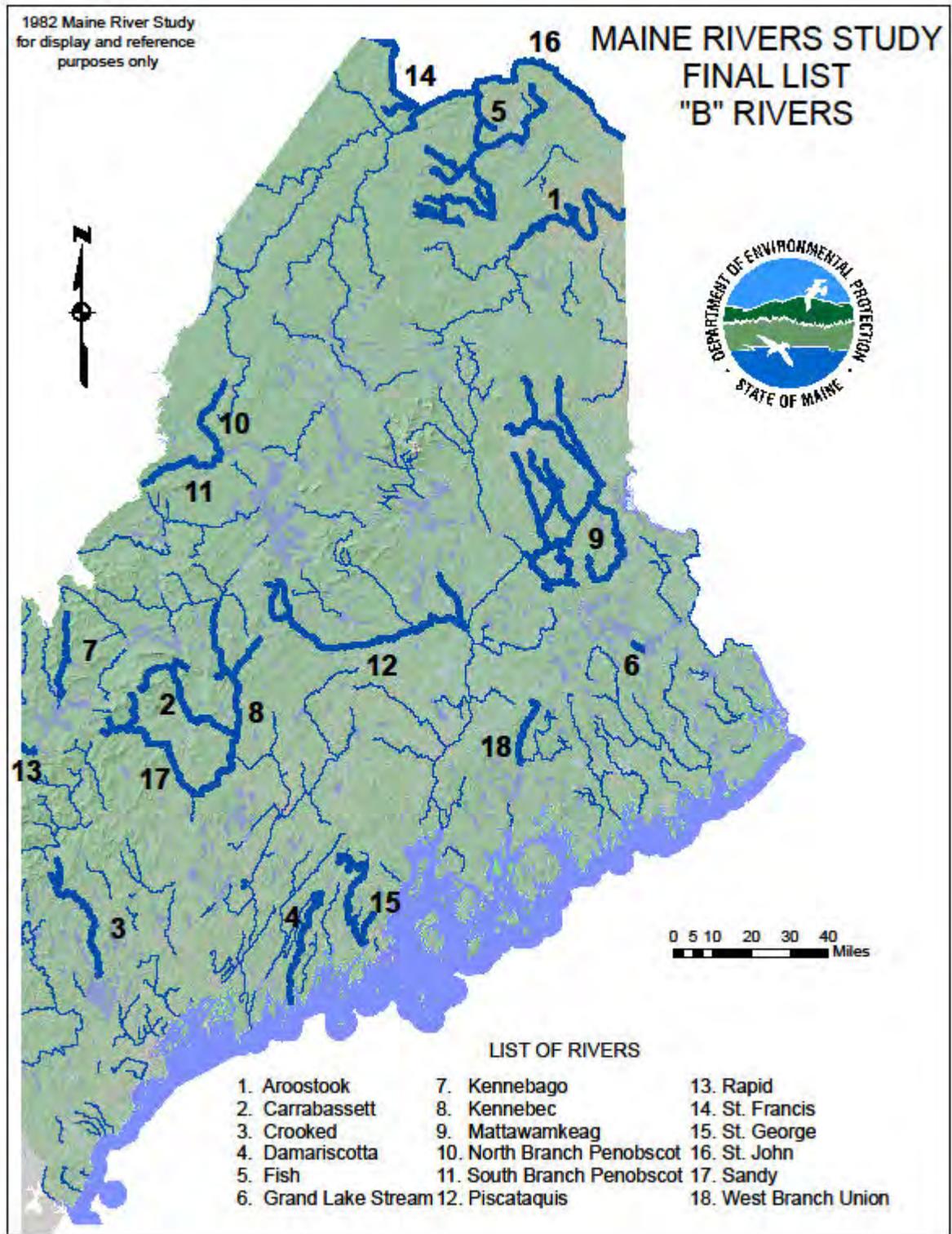
- St. John river
- Aroostook River

Maps identifying rivers and river segments included in the study's "A" and "B" significance categories follow.

"A" Rivers Map and River segments



“B” Rivers Map and River segments



3. The potential exists in Maine for the conservation of complete watersheds or river ecosystems, an opportunity unparalleled by few, if any, states in the Northeast.

A specific river segment does not function independently but instead, both affects and is affected by adjacent land areas, connecting segments, lakes and tributaries. This physical and biological interdependence of rivers and tributaries within a watershed provides the basis for the principle that a systems approach to water resources planning and management is both prudent and necessary. This is particularly so in riverine systems which are in a natural state.

The Maine River Study has identified a number of relatively large watersheds within the state which are of high significance as undeveloped and interdependent hydrologic units. These sub-basins are characterized by a general lack of major artificial river impoundments, minimal river corridor development, a high degree of hydrologic and ecologic interdependence, and a consistency of resource quality among all segments. These include:

- a. The upper St. John watershed including the Northwest, Southwest, and Baker Branches, and the Little and Big Black Rivers.
- b. The East Branch of the Penobscot watershed, including the Seboeis River and Wassataquoik Stream.
- c. The Aroostook and Big Machias watershed above Sheridan.
- d. The Allagash watershed.
- e. The Mattawamkeag watershed.
- f. The Fish River watershed, including the Fish Lakes Chain.
- g. The Machias River watershed in Washington County

4. Potential conflicts between hydroelectric development projects and significant natural and recreation rivers exist in the State of Maine.

Estimates of the total hydropower potential in the state (including both undeveloped sites and existing dam sites capable of being retrofitted) vary between 600,000 kilowatts and 1,200,000 kilowatts. Preliminary assessments of feasible hydroelectric sites on the study's A, B, and C rivers by Maine's Office of Energy Resources have identified 72 sites capable of producing 400,000 kilowatts of power.

Of the river segments identified on the Maine River Study's A list, Federal Energy Regulatory Commission preliminary permits are pending for 5 sites with a total generation potential of over 125 megawatts. These projects are located on the West Branch of the Penobscot, the Kennebec, the Aroostook, and the East Machias. A 500 kilowatt project is currently being constructed on the Pleasant River in Washington County. Twenty additional potential sites are located on "A" list rivers. "B" list preliminary permit applications include projects on the St. George, Rapid, Kennebago, Mattawamkeag, Piscataquis, and Aroostook rivers with a total generation potential of over 60,000 kilowatts.

The extent of the conflict between significant river resource areas and hydropower development vary according to the specific resource characteristics associated with a particular site. In many instances, resource impact will be minimal or can be mitigated or avoided through proper facility sizing and placement, fishway design, and/or water release scheduling. However, while the impact on river related resources will be minor for many potential projects, a select number of developments could significantly alter a river's character and destroy irreplaceable resources, some with multi-state or national significance.

Corridor land development and resources use may also impact river resource values with adverse effects occurring on water quality, wildlife habitat, user access, and scenic values. Again, conflict can often be minimized through proper planning which recognizes the resource values associated with the particular river area.

5. There is a significant base of citizen and public agency support for the conservation and sound management of the river resources of Maine.

River conservation interests in the state vary widely. Such interests include recreational boating and fishing, commercial boating and fishing, education and scientific research, wildlife preservation, water quality maintenance, and miscellaneous recreational interests. While these interests vary and sometimes conflict, an underlying consensus exists that rivers in their natural condition constitute a valuable resource to the State of Maine. There also appears to be a consensus among river interests regarding which rivers are most important and warrant conservation action.

In addition, there appears to be a public recognition of the need to balance the goals of hydroelectric development and river conservation, and a desire for the use of hydropower where compatible with the resource values of a river and where impacts of development are avoided or minimized.

6. A variety of alternatives are available within the local, State and federal government and the private sector to conserve and manage Maine's significant natural and recreational rivers.

The natural and recreational resources of Maine's rivers are extremely significant, diverse and complex. These river areas contain a mix of public and private land ownership in the form of existing parks, recreation areas, agricultural lands, historic sites, natural areas, forests and villages. Natural resources in some areas are interwoven with the fabric of existing communities. These "living or working river areas" contribute to the uniqueness, quality, and resource value of the areas from a State and National perspective.

In addition to the importance of the river corridor resources, there appears to be a base of public agency and citizen support for improved management and enhancement of these resources. The State and local jurisdictions as well as private groups and citizens have committed themselves to conserve and enhance river areas throughout Maine. As strong as the support is for improved management of Maine's rivers, so are the feelings of a need for local control and private stewardship. Indications are that proposals for the conservation of Maine's rivers should be initiated and developed at the State and local level.

In this regard, no single level of government or existing system of parks, regulations, recreation areas, programs or preserves can be expected to conserve and manage Maine's rivers. Only through the shared responsibility of the several levels of governments and the private sector, can the significant natural and recreational values of the State's rivers be conserved or enhanced.

A coordinated application of existing government programs, consistent with varying river area goals, could result in significant economic benefits and will support federal, State and local conservation and enhancement efforts.

II. INTRODUCTION

On June 22, 1981, Governor Brennan released the Energy Policy for the State of Maine. The hydropower section of the policy directed that:

“The Department of Conservation, working with environmental, economic, energy and other appropriate interests, should identify river stretches in the State that provide unique recreational opportunities or natural values and develop a strategy for the protection of these areas for submission to the Governor.”

In response to this directive, and as a continuation of the State’s ongoing efforts to conserve Maine’s significant rivers, the Department of Conservation initiated the Maine Rivers Study. The U.S. Department of the Interior, National Park Service’s Mid-Atlantic Office, as part of their ongoing river conservation technical assistance to the State, has provided staff to conduct this study.

The purpose of the study is two-fold. The first is to define a list of unique natural and recreation rivers, identifying and documenting important river related resource values as well as ranking the State’s rivers into categories of significance based on composite river resource value. The second purpose of the study is to identify a variety of actions that the State can initiate to manage, conserve, and where necessary, enhance the State’s river resources in order to protect those qualities which have been identified as important.

III STUDY METHOD AND PROCESS

Introduction – Each of Maine’s rivers and major streams were assessed during the course of this study to identify the State’s unique natural and recreation rivers. The method used to identify and rank Maine’s rivers, prepared in cooperation with the River Basin Subcommittee of the State’s Land and Water Resource Council, was designed to:

- a. Rely on existing quantitative and qualitative research information.
- b. Rely on information from recognized river resource experts
- c. Use a “systems” or river-ecosystem approach of analysis which recognized the relationships and interrelationships of rivers, their tributaries and watersheds.
- d. Incorporate public and expert input into the evaluation process

The study process was intended to not only develop an objective and factual base of information on Maine’s rivers, but also a consensus among river experts regarding the most important rivers in the State.

The method used is based on the following five step process.

Step 1 – Identification and Definition of Unique River Values

The first step in the study identified unique recreation and natural river categories. These categories, selected by the study team and the River Basin Subcommittee, were used to serve as a framework for the collection and analysis of river information. The unique natural river categories selected for analysis included:

- 1) geologic and hydrologic features (gorges, waterfalls, etc)
- 2) critical and rare species of plants and wildlife (bald eagle wintering areas, etc)
- 3) undeveloped river corridors
- 4) scenic river corridors (river areas with outstanding views, visual diversity, etc)

The categories selected for unique recreational river areas included:

- 1) anadromous fisheries (salmon runs, etc)
- 2) inland fisheries (trout streams, etc)
- 3) whitewater boating (areas with rapids)
- 4) canoe touring (areas for canoe boat trips)
- 5) backcountry excursion boating (areas for extended wilderness trips)
- 6) river related historic sites with national significance

Once these categories or “types” of unique rivers and river segments were identified each category was described and defined in detail.

To help determine which rivers or river segments possessed resource values of regional or greater significance, a set of standards were established for each category. These standards serve as minimum “threshold” criteria to determine which rivers should be considered for further evaluation.

The specific criteria for each natural and recreational river category and the evaluation method used to identify qualifying river areas is described in Section IV of this report.

Step 2 – Identification of Significant River Resource Values

The second step of the study process involved the identification of those rivers and river segments which met the natural and recreation river category criteria. River areas were identified through a review of existing sources of information (canoe guidebooks, natural area studies, previous river inventories, etc) and through discussions with various government and private sector river experts. Rivers which met or exceeded the category criteria were identified on the Preliminary Draft List of Rivers Under Evaluation released in November 1981. This list of more than 120 rivers and river segments was distributed to public and private interests for review and comment.

Each of the rivers and river segments on the Preliminary Draft List was researched by natural and recreation river category, and river values were systematically identified. The Preliminary List and documentation of river values served as a basis for subsequent analysis.

Step 3 – River Category Evaluation

The next step of the study process focused on the evaluation and detailed documentation of river values by specific category. With assistance from resource experts all rivers and river segments identified as unique or significant in a given category were further inventoried and analyzed in detail to substantiate river values. The results of this analysis were recorded on lists by river category. These lists of rivers represent a culmination of the river evaluation, documentation and expert review process and are judged to possess resource values of regional, statewide, and greater than statewide significance.

Step 4 – River Category Synthesis

River information collected, evaluated and documented in earlier steps was combined in an effort to summarize all of the natural and recreation values associated with particular river segments and to connect adjoining river segments which possess similar values.

To help simplify the recording and display of river values a matrix was used. The matrix identified the total number of resource values associated with each river segment and highlighted those areas of statewide or greater than statewide significance. New river segment descriptions were defined using the following general guidelines.

1. Where a river possesses a combination of overlapping natural and recreation values, a composite river segment is identified with the outer boundaries of the overlapping segments determining the boundary of the entire river area.
2. A tributary stream which flows into, and is connected to a larger river area is included in the larger river segment description if the tributary stream: a) possesses natural or recreation values consistent with those of the main river area, and/or b) significantly enhances the overall value of the larger river segment's resources.
3. A tributary stream with natural or recreation values greater than those of a connecting main river area is listed separately from that area.
4. Larger connecting rivers have been listed as tributaries to a river system in certain unique situations (i.e. Big Machias River in the Aroostook River watershed), where: a) the rivers are free-flowing and within an undeveloped watershed; b) the rivers in the watershed exhibit a high degree of hydrological and ecological interdependence.

Following the combination of rivers and associated tributaries, river segment descriptions and resource values were revised and displayed on a matrix.

Rivers or river segments with related resource values which have been determined to be the state's most significant in a specific resource category were identified on a matrix with an asterisk. These resources possess greater than state or national significance, related to the distribution and rarity of the resource value.

Step 5 – Comparative River Evaluation

The combined unique and significant natural and recreational resource values of all river segments were evaluated on a comparative basis to determine their relative importance within the State of Maine. Each of the rivers from the Preliminary Draft List were ranked and placed into one of four categories of river resource significance ranking. These categories, identified as A, B, C, and D, represent a range of river values, from areas which are greater than that of State significance to those of regional importance.

Rivers and river segments were placed within particular categories based on the number and significance of various river values. The final river ranking scheme recognizes rivers which have a variety of significant values as well as importance due to specific unique resource qualities.

River Ranking Criteria – The criteria used to place rivers within the four categories are as follows:

“A” Rivers

1. River or river segments possessing six resource values with regional, statewide or greater than statewide significance in a specific resource category.
2. Rivers or river segments possessing two or more resource values which are recognized to be some of the State’s most significant in a given resource category. Included within this category are rivers providing important habitat (defined as self-sustaining viable runs or significant restoration efforts producing fishable populations) for the nationally significant Atlantic sea run salmon.

“B” Rivers

1. Rivers or river segments possessing four or five resource values with regional, statewide or greater than statewide significance in a specific resource category.
2. Rivers or river segments possessing one resource value which is recognized to be one of the State’s most significant in a given resource category.

“C” Rivers

1. Rivers or river segments possessing one to three resource values with regional, statewide or greater than statewide significance in a specific resource category.

“D” Rivers

1. Rivers or river segments possessing one or more resource values of regional significance

Using the aforementioned criteria, rivers and river segments were identified in the Draft Final List of Rivers Under Evaluation released in February 1982. This list of rivers was distributed to public and private interests for review and comment, and copies of the list were made available through a statewide news release.

In addition, a series of public meetings in Bangor, Presque Isle, Machias, and Lewiston were held to solicit input. Public comments, and additional information where appropriate, were incorporated in final revision of the Draft Final List.

Thus, the Final List of Rivers released in April 1982 reflects the results of a comparative and cooperative river evaluation process which incorporates factual, objective information and the consensus opinion of numerous diverse river interests.

IV. RIVER RESOURCE CATEGORIES

Unique Natural Rivers – Overview

This section of the final report will outline the process of identification, documentation, and evaluation of Maine's "unique and natural rivers". The focus here is on these natural resources that make a river important:

- an absence of development within the land corridor adjacent to the river
- the presence of a variety of habitats for the fauna and flora
- uncommon and unique features like bedrock formations
- rare and threatened plant and animal species
- critical ecologic areas
- scenic waterfalls and vistas
- National Historic Sites and National Natural Landmarks

The combination of the wide scope of this study and the limited time allocated did not allow for the collection of new information or field work on a river by river basis. Rather, the emphasis was on the gathering and organizing of existing information from a variety of sources and experts. State and Federal resource management agencies were of help in this section of the study, and will be cited in discussion on the appropriate resources.

Much of the river-related resource information was taken from statewide assessments of natural resources by the Maine Critical Areas Program, a part of the State Planning Office. The groundwork for this program was laid in 1972 with the Maine Natural Areas Inventory, a report which attempted to identify the most significant natural areas around the state. After this study was issued, it became clear that additional work was needed for the systematic evaluation of the relative values of natural resources of the state, in order to identify which areas were the most unique or significant.

In 1974, the State Legislature passed an act establishing a state Register of Critical Areas, and charged the State Planning Office with initiating a Critical Areas Program designed to identify, document, and conserve statewide critical natural areas through management agreements and donation or acquisition of property. Primary emphasis in the program at this time is on identification and registration of critical areas.

The kinds of critical areas evaluated by the program primarily correspond to the definition of "historic and fragile lands," from U.S. Senate Act 268, 93rd Congress.

“ . . . lands where uncontrolled or incompatible development could result in irreversible damage to important historic, cultural, scientific, or esthetic values, or natural systems which are of more than local significance, such lands to include shorelands of rivers, lakes and streams, rare or valuable ecosystems and geological formations, significant wildlife habitats, and unique scenic or historic areas. . . .”

Other natural resource experts with important contributions to the study included wildlife resource experts from the University of Maine at Orono, Maine Department of Inland Fisheries and Wildlife, and U.S. Fish and Wildlife Service, who were helpful in the identification and documentation of significant river related wildlife resources. The prior assessment of the state's rivers by the National Park Service for the Nationwide Rivers Inventory was the primary source of information for the evaluation of corridor development and scenic resources of the rivers in Maine.

A. GEOLOGIC/HYDROLOGIC FEATURES

Introduction

The majority of bedrock formations of the State were originally deposited as sediments on the bottom of the ocean during the Lower Paleozoic era (hundreds of millions of years before the present), as well as being formed from molten rock material from deep within the earth. Later in the Paleozoic period during the building of the Appalachian Mountains, these sediments were subjected to intense pressures and temperatures causing them to become folded, faulted, and uplifted, accompanied by intense volcanic activity. Today these durable igneous and metamorphic rocks are exposed in the Mountains of New England upland section of the state, as well as along parts of Maine's rocky coast. The finest examples of bedrock features – such as waterfalls, gorges, and fossils – are distributed in these areas of Maine.

Many of the bedrock materials outcropping along the banks of streams and rivers in northern Maine contain traces of organisms and plants called fossils, which once lived in the early marine environments hundreds of millions of years ago. The majority of these river related fossil localities lie within a band of non-to-partially metamorphosed rocks which sweeps across the central part of the state, ending in the northeastern corner of Aroostook County. Most of these fossils are marine vascular plants and invertebrates from the Lower to Middle Paleozoic era.

During the Quaternary glaciation, the state was covered with a mile thick accumulation of snow and ice, a much larger version of the glaciers which survive today in the European Alps and Canadian Rockies.

As the glaciers from Laurentide Ice Sheet moved southward from eastern Canada they scoured the bedrock formed millions of years earlier, shearing off the tops of many hills, ridges, and mountains. Approximately 10,000 years ago this ice began to melt, leaving behind a watery landscape of lakes, ponds, streams, rivers, and wetlands.

A veneer of boulders, sand, gravel, and clay also remained to blanket the landscape, testimony to the tremendous erosive power of the slowly moving glaciers. These deposits of glacial sediments formed many of the state's lakes by damming valleys widened and deepened by the glaciers. The hydraulic action of glacial meltwater initiated the process of erosion on underlying bedrock material, occasionally encountering cliffs or abrupt jumps in the landscape, and forming waterfalls. Normally, these hydraulic features degenerated into whitewater rapids as the bedrock eroded. For a waterfall to remain in a landscape, one of two conditions must have been present. Either the flow of the stream was insufficient to significantly erode the bedrock, or the rock contained a particular feature (such as cracks or joints) which allowed the waterfall to maintain itself as erosion proceeded. In this situation, the falls would migrate upstream with time, excavating a downstream gorge. Waterfalls also resulted from streams selectively eroding areas of weakness in the bedrock.

Many interesting surficial geologic formations were formed at the margins of the melting glaciers in the central and southern areas of the State; many of these glacial deposits are the finest examples in the northeast region. Surficial formations related to rivers include linear ridges called eskers or horsebacks, intricately braided streams with complexes of river islands, rivers with sinuous meander complexes, glacial outwash plains, glaciofluvial marine deltas, and washboard moraines.

1. Definition

There are river-related physical features in the state whose location and distribution are controlled by the structure and composition of the bedrock, by the surficial geology and by natural geologic processes including weathering and erosion.

Towering waterfalls, steep-walled granite gorges, systems of lakes, ponds, and wetlands, and surficial glacial formations are among these unique physical features. The distribution of these resources is a function of the geologic events occurring hundreds of millions of years ago, as well as resulting from events occurring after the melting of more than one mile of ice which covered Maine until approximately 10,000 years ago.

2. Significance

a. Scientific – Many of the geologic features associated with rivers have unique importance for scientific research. These features (such as glacial eskers, fossils, or gorges) are useful in the research of past geologic processes which affected the distribution and composition of rocks and minerals on the earth, as well as understanding present-day geologic processes changing the world.

Gorges and waterfalls contain large areas of steam washed and exposed bedrock, important in a state where most bedrock areas are obscured by glacial drift making scientific study difficult if not impossible. Waterfalls are also important geologic sites for study because they are not accidental features in a landscape; their location is a function of the bedrock geology and / or glacial history of an area.

The scientific study of the fossils found in the rocks of the state has greatly affected the understanding of the State's paleogeographic history and the knowledge of the types of ancient forms of life which once lived in what is now Maine. Some of the state's fossil sites are widely known and well-documented localities and have yielded specimens of museum quality; many are the finest found in the world. Still other sites have been discovered only recently and deserve more detailed study.

One river-related geologic locality which is reportedly crucial to the understanding of central Maine geology is Ripogenus Gorge. The Gorge, which contains a wide variety of sedimentary, igneous, and metamorphic rock types; displays significant geologic structures in addition to being an important Silurian fossil locality; was recently recognized by the National Park Service as a potential National Natural Landmark.

b. Scenic / Recreational – Because of their scenic and esthetic qualities, waterfalls and gorges are often linked to local and regional tourist economies serving as camping or fishing sites or scenic roadside vistas. Some gorges have large rapids run by commercial whitewater rafting interests which bring dollars into local areas.

c. Historic – The rivers of Maine are intimately tied to the State's history because of their importance as traditional transportation routes. Many gorges and waterfalls presented obstructions to former log running and have legendary significance. Others have since been modified by channel improvements for log running, or obliterated by downstream dams for hydroelectric generation. Occasionally, waterfalls and gorges were the sites for mills or small towns and have associated historic buildings with state and national significance.

d. Ecologic – Gorges and waterfalls often contain a great diversity of hydrologic and ecologic environments, and a variety of habitat for flora and fauna. These environments may include flatwater above the hydrologic feature, ledges, rapids, and shooting flow through the gorge or waterfall, with gravel floodplains and rapid water downstream. Ravines, gorges, and streamside cliffs are often more shaded, with higher humidity than most environments, and many species of rare plants are known to grow in such areas. Sandy glacial outwash plains are another river-related geologic feature which have a unique association of plants. The droughty infertile soils are often maintained as blueberry barrens, supporting the cultivation of wild blueberries.

3. Standards for Inclusion

Unique and significant geologic and hydrologic features in Maine are studied on a continuing basis by the Critical Areas Program. The physical resources studied to date include bedrock fossil localities, eskers, waterfalls, and gorges. Significant white water rapids in the state have also been identified by this program, and their findings were incorporated into the assessment of recreational boating by the Maine Rivers Study.

Geologic and hydrologic features meeting the significance criteria defined by the Critical Areas Program are recommended for inclusion on the Register for Critical Areas; at this time, 61 waterfalls and 19 gorges have been recommended. Significant eskers and fossil locations have also been added to the Register.

River-related geologic features recognized by the National Park Service in the Nationwide Rivers Inventory as important because of their uniqueness, rarity, or scarcity (one-or-two-of-a-kind nature, or having significance for a particular region of the state) were also included in this study. These features included reversible falls, glacial outwash plains, river-linked lake systems, and river meander complexes.

4. Evaluation Method and Criteria

During the assessment of the State's geologic and hydrologic features, general criteria were used to identify significant river-related physical features. These criteria were developed in order to identify areas of geologic and hydrologic importance associated with rivers which deserved recognition by this study, but had not been comprehensively studied on a statewide basis. These criteria included the following:

a. Scarcity: a resource with extremely limited distribution in the State, New England region, or United States; distinctly unusual, rare, one-or two of a kind features.

b. Diversity of values: significant physical features occurring in association with other values (i.e., a gorge which is a classic geologic type locality with habitat for endangered bald eagles and high recreational value).

c. Susceptibility to human activities; features which could be degraded or destroyed by human presence or activities.

d. Ecologic significance: resource sites which contain a variety of habitats and ecological values.

e. Historic value: features that were involved in the settlement, transportation, or early industrial activities of the State. A site was considered significant historically if: a) it had interesting military history; b) it was an important industrial or economic site; c) it was important in 19th century log driving activities.

f. Scenic / Esthetic value: resource features which were important to the local and regional recreation and tourist economies. A feature was considered to have outstanding scenic attributes if: a) it was of large magnitude in some way (length, depth, overall size); b) had good potential or existing vistas, and c) it had a diversity of hydrologic elements including rapids, chutes, flumes or falls.

g. Scientific attributes: a site was considered geologically outstanding if any one of the following criteria existed: a) it was a type locality or best exposure of a geologic formation; b) it had an exceptional display of bedrock structures; c) it displayed exceptional hydrologic features.

The fossil sites were considered scientifically significant if meeting on or more of the following criteria:

1) Areas which are the type of locality of a particular fossil (i.e. The area where there first specimens known to science were collected).

2) Areas containing a unique fossil assemblage, index fossils, and/or fossils useful for scientific age determination and correlation work.

3) Areas with educational value and frequently visited by school groups.

The following rivers were recognized by experts as having outstanding river related geologic resources and highlighted on the Final List of Rivers with an asterisk:

Upper Kennebec River
West Branch Penobscot River
West Branch Pleasant River

5. Information Sources and Expert Review

The following references were used by the study team to identify and document resource values.

Waterfalls in Maine and Their relevance to the Critical Areas Program of the State Planning Office;
Brewer, Thomas, 1978

Gorges in Maine and Their relevance to the Critical Areas Program of the State Planning Office; Brewer,
Thomas, 1978

A Preliminary Listing of Noteworthy Natural Features in Maine; Center for Natural Areas, June 1976.

Significant Bedrock Fossil Localities in Maine and Their Relevance to the Critical Areas Program;
Forbes, William H., 1977

Nationwide Rivers Inventory; U.S. Department of the Interior, National Park Service, Mid-Atlantic Regional Office, Philadelphia, PA, 1981

Dr. Thomas Brewer of Boston College, Boston Massachusetts, and Janet McMahon and Harry Tyler of the Critical Areas Program within the State Planning Office provided information and expert opinion to the study team.

B. RIVER RELATED CRITICAL/ECOLOGICAL RESOURCES

Introduction

The State of Maine possesses an unusual abundance of water and related land resources, having more miles of river and more lakes per square mile than any other state in New England, as well as the highest percentage of land covered by forest of any state in the United States. Of the 19.8 million acres of land in Maine, 17.4 million acres (approx 88% of the state) is in forest, and 1.5 million acres (7% of the state) is covered by inland fresh water. This figure does not reflect areas of bogs and wetlands which are perennially wet or flooded for certain seasons of the year.

The topographic relief in Maine has produced a complexity of terrestrial ecosystems, which for the purpose of this discussion can be grouped into basic vegetative types: Alpine tundra, Northern hardwood spruce-fir, Northeast spruce-fir, transition hardwood-conifer, and transition hardwood. With the exception of Alpine tundra, any of these major vegetative associations may be found along a river corridor, depending on the altitude of the area, as well as other influencing factors such as soil type, steepness and aspect of slopes, and amount of moisture present.

Just below the alpine areas and on the tops of many of the lesser peaks in the White Mountains is the Northeast spruce-fir association, usually consisting of pure fir forest just below timberline, with red spruce increasing at lower elevations. These conifer forests grade into Northern hardwood spruce-fir forests downward, the transition occurring at about 2500 feet in the White Mountains. These forests contain a variety of hardwood and conifer species. Some of the conifers such as red spruce and fir drop out at lower elevations and in the more southern portions of Maine. Transition hardwood-conifer forests, found in extreme southwest Maine and along lower valleys in other parts of the state, have a greater number of southern species like white ash, black birch, black cherry, and increasing concentrations of red oak, white oak and hickory.

Soils throughout the state are largely developed from glacial tills and stratified drift, tending to be podsoles (soils with upper horizons depleted of plant essential nutrients) at higher elevations under spruce-fir forests, and brown podsolics at lower elevations. Most of the soils are acidic, although limestone areas throughout the state often have unique calciphile (or calcium loving) vegetation, occasionally with associations of rare and endangered plant species.

These are other special types of river-related vegetation in Maine found with certain types and conditions of soils. Areas of coarse sandy glacial outwash along many rivers support pitch pine barrens. In some cases these areas are maintained in a lower successional stage as blueberry barrens by controlled burning and other management practices.

White pine is another species that grows well in glacial outwash areas, where it can reproduce without competition from other species of trees. This tree also grows well on steep-sided riparian areas (along rivers, streams, lakes, and ponds) in a variety of soil conditions. The vast majority of the immense pines which once grew along the rivers of Maine have been cut, although a few stands of old growth white pine exist in the state. The most notable example of these is The Hermitage stand along the West Branch of the Pleasant River.

Low, cool, poorly drained sites in Maine often support classic bog ecosystems, with typical acid peats resulting from the accumulation of sphagnum moss. These bogs are important natural areas, supporting many endemic, unique, or peripheral species of plants (especially orchids) which are found only in these unusual biotic systems. A special type of bog forest characterized by Eastern Atlantic or coastal white cedar is found in some parts of mid-coastal and southeastern Maine. Another unique type of bog sometimes within river corridor areas is the raised bog, formed in depressions on drier ridges surrounding bogs. A mound several feet high is formed by the accumulation of sphagnum moss, while water is retained by the sponge-like consistency of the moss.

Of all the various ecosystems associated with rivers, perhaps the most significant are the wetlands, the transition zones between the terrestrial and the aquatic environments. Wetlands have outstanding natural value (for the production of photosynthetic oxygen, as catchments for flood waters, pollution filters, and aquifer recharge areas and for species habitat) as well as significant economic value, supporting the important statewide hunting, fishing, and trapping recreational community. Inland wetlands have primary importance as feeding, nesting, and rearing areas for waterfowl.

Although generally associated with waterfowl, wetlands provide habitat for many furbearing animals as well. Otter, beaver, muskrat, mink, and others are directly dependent on these areas for their food and shelter. Other species such as deer, woodcock, and hare often inhabit areas bordering these wetlands. In addition to the previously mentioned furbearers and game animals, numerous non-game species depend on wetlands to supply some or all of their life requirements. Tidal rivers and salt marshes have plants which are adapted to changes in water level, salinity, temperatures, and nutrients. These coastal rivers and wetlands serve as resting areas for spring and fall migrations of waterfowl, as well as wintering areas for waterfowl and raptors, including the endangered bald eagle.

There are other areas associated with rivers that support unusual assemblages of plants, including certain relict and endemic species. These are highly specialized species, influenced by subtle changes in sunlight, humidity, temperature, and soil moisture, texture and composition. These areas include cliffs, where plants are subjected to fluctuations and extremes of light, temperature, climate, and erosion, as well as ravines and gorges which have shaded, humid conditions preferred by certain species.

BOTANIC CRITICAL / ECOLOGIC RESOURCES

1. Definition

There are over 2,100 species of vascular plants known to occur in the State of Maine. Of these, 318 species are considered scarce or rare. The Critical Areas Program has identified 97 species known to inhabit riverine areas. Significant habitats for vascular plants include cliffs, gorges, river and stream banks, pond and lake margins, bogs, and wetlands.

The causes of the rarity of these plants can be difficult to define at times, although the majority of the rare plants can be identified in one or more of the following categories, according to the Critical Areas Program:

- a. Species with scarce habitat within the State (although more common elsewhere)
- b. Species at the northern or southern limit of their range.
- c. Species with a very restricted natural range (endemics).
- d. Species with seriously declining populations.
- e. Species which, for a variety of reasons, are rare throughout their entire range.

The definition of rarity can be complex, since it is a function of the actual limited distribution of the plant in its habitat, as well as its perceived value to our society. The Critical Areas Program has defined rarity primarily by its biological distribution. A plant species is considered to be rare if it has been found in ten (or fewer) towns in the state; a species may be found in more than 10 towns and still be considered rare if it is at the limit of its range, is declining or vulnerable, or is restricted in distribution throughout its range.

2. Significance

The values of plants to our society and to other animals of the land and waters of this world are infinite. Plants regulate temperature near the earth, maintain the atmospheric balance of carbon dioxide to oxygen, convert solar energy into stored chemical energy needed by animals, have educational and aesthetic value, and supply an endless variety of medical and chemical products for humans. Communities of plants are important for soil development, prevention of erosion, storage of water, and providing food and shelter to many species of animals.

The many varieties of rare and unusual plant species are found in habitats which are unstable and changing, and subject to climatic extremes. The gene pool of these plants is a storehouse for traits necessary for breeding new species, as well as representing unknown potential as a source of new chemicals and drugs to serve mankind.

3. Standards for Inclusion

Using data on the distribution of rare plant species, as well as the previously mentioned rarity criteria, a group of botanists has assigned levels of importance to rare plants in the New England region. The Critical Areas Program has adopted this system for its own work in the state, assigning each listed plant species to one of three levels of importance; National, New England, or State.

National level rare species are of two types;

- 1) Presently listed as a Federal Endangered or Threatened Species, or proposed for review or under review for listing by the Office of Endangered Species of the U.S. Fish and Wildlife Service, or
- 2) found in few areas outside of New England, although not having official recognition as nationally threatened.

Species considered rare within New England are vascular plants listed through a joint effort by the U.S. Fish and Wildlife Service and New England Botanical Club. Some of these species may be rare throughout New England, but are common in Maine, and are obviously not included on this list.

Species rare at the state level are those species not considered rare through most of their range, but are rare within this state. The majority of species in this level are species reaching their northern limit in Maine.

In addition to identifying rare vascular plants, the Critical Areas Program has also assessed unusual stands of old growth white pine around the state. Significant river-related stands on the Presumpscot River, West Branch Pleasant River, and Vaughan Brook have been included in this study.

4. Evaluation Method and Criteria

The known or suspected locations of critical botanic species along the rivers in Maine were mapped, and segments containing the range of distribution of the plant species were defined using the following criteria;

- a. Plant species were considered to be river-related if found within the one-quarter mile land corridor adjacent to either bank of the river.
- b. A one-mile buffer zone in both directions of a species locality was included within the segment description, in order to account for possible disjunct populations of rare vascular plant species.

Once all localities of plant species were mapped, the river segments were analyzed to determine their overall significance for critical and rare plants, based on the diversity of species at the various levels of importance (National, New England, State).

A system of points was assigned to each of the particular levels of significance, as follows.

	Points
a. Species on the Federal Endangered and Threatened List. <i>Pedicularis furbishiae</i> (Furbish lousewort) is the only riverine plant species on the list at the present time.	5
b. Species under review for inclusion on the Federal Endangered and Threatened List. These species are: <i>Listeria auriculata</i> <i>Oxytropis campestris</i> var. <i>johannensis</i> <i>Viola novae-angliae</i> <i>Cardamine longii</i>	4
c. Other species with National level significance	3
d. Species with New England level significance	2
e. Species with state level significance	1

One half (0.5) points were deleted from the score for each species if a particular plant location of a species was based on historical records of botanists, and the location is only suspected and has not been verified in recent years by Critical Areas Program or other approved botanists. Thus, based on this scoring system, a river segment with a known location of *Oxytropis campestris* var. *johannensis* (National level significance), and suspected location of *Gentiana amarella* (New England level of significance) would be awarded a score of 5.5 points (4+ 1.5 points).

Based on this system of scoring, the following rivers were judged to be clearly outstanding on the basis of critical/rare vascular plant species, and identified with an asterisk on the Final List of Rivers;

St John River, between Hamlin and Hafford Brook

Arroostook River, between the Canadian Border and Pudding Rock

Information was also gathered on ecologic plant areas which have been recognized as having national significance by the Department of the Interior under the National Natural Landmarks Program. The following rivers with related National Natural Landmarks have been highlighted on the Final List of Rivers with an asterisk:

Dennys River – Meddybemps Heath, in the headwaters of Meddybemps Lake

Mattawamkeag River - Thousand Acre (Crystal) Bog, along Fish Stream & East Branch Molunkus Stream

Passadumkeag River – Passadumkeag Marsh, along Cold Stream

West Branch Pleasant River – The Hermitage Old Growth White Pine Stand

5. Information Sources and Expert Review

The following references were used by the study team to identify and document resource values.

Rare Vascular Plants in Maine, Critical Areas Program Report, June, 1981

A Preliminary Listing of Noteworthy Natural Features in Maine, Maine Critical Areas Program, June 1976

Mr. Harry Tyler and Ms. Susan Gawler of the Critical Areas Program within the State Planning Office provided information and review to the study team.

ZOOLOGIC CRITICAL / ECOLOGICAL RESOURCES

1. Definition

The reduction and deterioration in habitat of many species of river related wildlife is of major concern to the scientific community in the perpetuation and continued viability of these resources. When a type of habitat or significant ecologic area having certain necessary and indispensable qualities is destroyed or degraded, certain zoologic species suffer a reduction in abundance and may ultimately be threatened with extinction. For the purposes of this report, the following definition of critical or endangered zoologic species is offered.

a. Endangered – A species whose prospects of survival and reproduction are in immediate jeopardy. Its peril may be the result of a single cause or variety of causes, including the following:

1. Habitat: loss or change of habitat, high specialization of habitat, and restricted distribution.
2. Reproduction: small size of litters, long period of gestation, slow maturation of young
3. Behavior Patterns: poor adaptability to changing conditions.
4. Competition and predation
5. Over exploitation
6. Disease

b. Rare or Critical – A species, not presently threatened with extinction, but having such a small population or area of habitat throughout its range that it could face endangered conditions in the future if its environment worsens.

2. Significance

Critical zoological resources are of importance to the environment in the State of Maine by insuring the preservation of natural diversity in an ecosystem. The maintenance of a heterogeneous species pool allows a particular species to more readily adapt to changing environmental conditions. The preservation of critical and endangered species has a cultural significance as well, which comes from a deep-seated psychological and philosophic evaluation of the environment, including a refined reverence for life. This view holds that all plants and animals have value as intrinsic components of the living part of our planet and should not be destroyed through man's intentional or inadvertent activities upon the environment. In this view, species extinction brought about by man's activities is considered a cultural disaster.

3. Evaluation Method and Criteria

Due to the absence of a well developed data base a comprehensive assessment of river related wildlife and ecologic areas was not possible in the time allocated for this study. Where information was available on the statewide distribution and significance of certain species (such as bald eagles), then this data was incorporated into the study. Some wildlife resource experts did contribute information on regionally significant river related ecologic areas, which was noted in the documentation section of this report for the study's "A" and "B" rivers.

a. Federal Endangered Wildlife Species

The State of Maine has the only significant population of bald eagles in the northeast United States. The northern subspecies of bald eagles was officially listed as endangered in the state in February 1978. Coastal areas and river estuaries provide important habitat for the majority of Maine's wintering and breeding populations of eagles; Inland rivers, ponds, and lakes also have seasonal importance to nesting and summering eagles, although the use of these areas undergoes a marked decline during the winter months when ice cover limits their opportunities for foraging.

Wildlife biologists from the University of Maine at Orono have assessed river-related areas in the state for the presence of important habitat for bald eagles.

Important rivers are those with a significant concentration of birds for a particular region of the state, including:

- a. Areas with active nesting sites
- b. Areas with historic nesting sites
- c. Areas which are used by significant concentrations of wintering eagles

Based on these criteria, the following rivers have been rated as outstanding for the presence of very significant concentrations of nesting and/or wintering populations of bald eagles and have been identified with an asterisk on the matrix with the Final List of Rivers:

Lower Kennebec River: including Merrymeeting Bay

Main Stem Penobscot River: Bucksport to Old Town

Dennys River: Hinkley Point to headwaters of Meddybemps Lake

b. Critical Zoologic Species with Statewide Significance

The Critical Areas Program is involved in an ongoing process of assessment of critical zoological species in the state. At the present time heron rookeries, horseshoe crabs, and American oysters are the only river-related critical species that it has evaluated on a statewide basis. Significant habitat areas for these species (such as nesting areas and breeding grounds), have been listed on the Maine Register of Critical Areas.

When assessing the significance of a particular zoologic species, the Critical Areas Program uses the following criteria:

- 1) **Peripherality:** the degree to which a species is at the edge of its typical geographic breeding range.
- 2) **Endemicity:** the range of distribution to which species is restricted (i.e. Found only in Maine out of the entire Northeast, out of the entire U.S., out of North America, out of the entire world).
- 3) **Relative Scarcity:** the number of sites where a particular species is known to be found
- 4) **Probable Status Change:** a measure of a species trend in population and sites of location over a specified period of time.
- 5) **Relative Specialization of Habitat:** the environmental requirements of a particular species and its degree of specialization to certain habitats; including its vulnerability to loss of habitat.
- 6) **Scarcity of Habitat:** the relative scarcity of potential or actual suitable habitat of a species.
- 7) **Susceptibility to Disturbances:** the relative degree of tolerance of a species to immoderate human presence.
- 8) **Relative Knowledge:** the amount of information available on the distribution and scarcity of a particular species.
- 9) **Relative Use:** the general level of public interest in a species.
- 10) **Spatial Distribution:** a measure of the pattern of distribution of a species over its geographic range.
- 11) **Probable Site Persistence:** the relative probability of species presence at a certain location for a majority of years over a given span of time (usually 20-25 years).
- 12) **Seasonal Mobility:** the conditions of seasonal movements of a species
- 13) **Area Size Needs:** the area required by a species for all life needs (breeding sites, feeding grounds, territory) during its breeding season.

c. Critical Ecological Areas

The Maine Department of Inland Fisheries and Wildlife has identified and inventoried eight inland and six coastal types of wetlands located around the state. The Land Use Regulation Commission has also zoned fish and wildlife protection sub-districts for deer wintering yards and wetlands in the unorganized territories. Regional biologists associated with the Department of Inland Fisheries and Wildlife were able to document the more important ecologic areas for many of Maine's rivers. These areas included critical coastal salt marshes important for shorebirds and migratory and wintering waterfowl, significant acreages of inland wetlands and their associated fauna, and large deer wintering areas.

4. Information and Expert Review

The following references were used as sources of information for this study:

A Preliminary Listing of Noteworthy Natural Areas in Maine:

Center for Natural Areas; South Gardiner, Maine 1976

Register of Critical Areas,

Maine Critical Areas Program, Maine State Planning Office

An Ecological Characterization of Coastal Maine,

U.S. Department of the Interior, Fish & Wildlife Service; Newton Corner, Mass., 1980

Bald Eagle Management Plan, Ray Owen and Charlie Todd,

University of Maine at Orono, School of Forest Resources

Expert opinion and review was provided by Ray Owen and Charlie Todd from the University of Maine at Orono, resource biologists from the Maine Department of Inland Fisheries and Wildlife, and the U.S. Fish and Wildlife Service.

C. UNDEVELOPED RIVER AREAS

1. Definition

Any physical alteration of the land surface will influence the natural processes along the river corridor. Construction activities can cause increased soil erosion and runoff to enter a stream; septic tank effluent from seasonal homes along river banks can cause changes in water quality. Development in the river corridor may have a negative or positive impact on the resources of a river depending upon how it alters the essential elements which compromise it.

2. Significance

Undeveloped lands contiguous to the rivers of Maine represent some of the more significant natural resource areas in the State. The interface between the adjacent land and the flowing water of a river is an important area, providing food, cover, and habitat for a variety of fauna and flora. Wetlands associated with rivers have special importance in the hydrologic and biological systems, serving as areas for aquifer recharge, acting as catch basins for flood waters, filtering out pollution, producing oxygen by photosynthesis, and providing species habitat. Forests and ground cover lining the river banks cool the waters by providing shade, and prevent soil erosion. River corridors in the natural state often have high quality scenery for recreational users of the river. It is clear for all these reasons that undeveloped corridor lands warrant the conservation and protection of their special qualities.

3. Standards for Inclusion

Rivers and river segments in Maine which were evaluated for the amount of existing corridor development must have met the following qualifying criteria.

- a. The main stem of a segment must be greater than 10 miles in length (tributaries to the main segment could be less than 10 miles in length) .
- b. The river or river segment must be free from significant hydrologic impoundments, modifications, and diversions.

Once the river evaluations were conducted, a cutoff value of 30 development points per mile was used to define the more significant undeveloped rivers in Maine. An explanation of the development point system of evaluation follows in the next section.

4. Evaluation Method and Criteria

The National Park Service of the Department of the Interior developed a process for evaluating the undeveloped character of a river corridor in its work on the Nationwide Rivers Inventory. The method used for the Inventory was adapted for use in this study. The assessment of land use development in river corridor areas was made using the most recent USGS 7.5' or 15' quadrangle maps available. This information was supplemented in some cases with aerial photos and local road maps and atlases.

Each river and river segment was measured on the map and divided into one mile intervals beginning with the downstream segment boundary. The study river corridor (defined as contiguous lands within one quarter mile of each river bank) was also defined on the map.

Using data sheets, all land use development was recorded for each mile interval, and numerical values were assigned to the various land uses. Development having a greater impact on natural values, (i.e. bridge crossings, parallel railroads and power lines, and small towns) were given more points than lower impact development (i.e. footpaths and unpaved roads).

The following is a list of land use features typically found within river corridors and their corresponding development points.

<u>Land Use Development Features</u>	<u>Points</u>	<u>Land Use Development Features</u>	<u>Points</u>
Primitive road ending	1	Railroad parallel	20
Footbridge	2	Paved road parallel (red)	
Gaging station		Pipeline parallel	25
Primitive road parallel (trail)	3	Powerline parallel	
Small dock	4	Water storage tank	
Unpaved road ending (plain)		Bulkhead	
Orchards, farms, dwellings, cemetery	5	Rip rap	
Abandoned rail line ROW	6	Small Tributary reservoir	
Outfalls		Gravel pits	
Railroad ending	8	Developed recreation area	30
Powerline ending		Marina (site check)	
Fire tower		Country club	
Outbuildings, schools		Swimming pool	
Unpaved road		Radio tower	35
Light duty bridge (plain)		Power substation	
Paved road ending (red)	10	Pumping station	
Paved boat ramp		Paved road bridge (4 lanes)	40
Campground		Sewage plant	
Picnic area		Apartment building	
Unpaved road parallel (plain)		Hospital (site check)	
Pipeline and powerline crossing	15	Village (up to 499 pop / site check)	
Railroad bridge	18	Dam (small)	
Paved road bridge (red)			

After the land use development features for the river segment were identified, the numerical scores for each one mile interval were tabulated. By totaling all interval scores, and dividing through by the number of intervals (river miles), an average mile by mile index of the river's corridor development was calculated.

Outstanding River Segments

Examination of previous National Park Service work for the Nationwide Rivers Inventory has shown that rivers with an average of less than 15 point per mile are equivalent to the least developed rivers in the northeast United States. Outstanding undeveloped rivers in the State with a corridor development index of 15 points or less and a length greater than 25 miles were identified with an asterisk on the matrix accompanying the Final List of Rivers; and are as follows:

- Allagash River Aroostook - Machias System
- East Machias River
- Machias River (Washington County)
- East Branch Penobscot – Seboeis River System
- Upper West Branch Penobscot River
- Pleasant River (Washington County)
- St Croix River
- St Francis River
- St John River (including the Big Black, Little Black, and Baker Branch)

5. Information Sources and Expert Review

The following references were used as sources of information for this study:

Wild and Scenic Rivers System Study – Northeast Region, US Department of the Interior, Heritage Conservation and Recreation Service, Northeast Region, Philadelphia, Pennsylvania.

Wild and Scenic Rivers System Study – Northeast Region, Guidelines for Evaluating Wild, Scenic and Recreational Rivers.

Nationwide Rivers Inventory, Criteria for River Evaluation; US Department of the Interior, Heritage Conservation and Recreation Service, Northeast Regional Office, J. Glenn Eugster, October, 1979

Nationwide Rivers Inventory – Final List of Rivers, State of Maine, US Department of the Interior, Heritage Conservation and Recreation Service, Northeast Regional Office, January 1981

Nationwide Rivers Inventory, Criteria for Establishing River Priorities; US Department of the Interior, Heritage Conservation and Recreation Service, Northeast Regional Office, J. Glenn Eugster, April, 1980

J. Glenn Eugster from the National Park Service in Philadelphia provided information and expert review for this portion of the study.

D. SCENIC RIVER RESOURCES

1. Definition

Different river areas in Maine possess different types of scenery. Traditionally, scenic river resources have been identified by user preference studies and professional evaluations. To determine user preferences, groups of people are usually shown a series of river area photos, and asked to rate them according to preference or quality. Results are then analyzed to determine which river and landscape corridor elements or mix of elements correlate highly with preferred areas.

In professional evaluations, river areas are analyzed by trained planners according to a set of fixed criteria using either design principles, ecological and cultural criteria, or a quantitative scale.

In both instances the objective is to focus on specific variable river and river corridor characteristics which have been determined to be major influences on perceived scenic or landscape quality.

2. Significance

For many years there has been a growing recognition of the concept that certain landscape elements such as scenery are unique resources worth identifying and protecting. In fact, there are many federal and state laws and regulations which address the growing need for management of visual resources. Until the 1960's the area of public environmental management and policy related to scenic resources developed mostly in the context of outdoor recreation. The focus was predominantly on the management and preservation of specific areas with unique or outstanding scenic attributes. Concern with scenic values in the context of a larger landscape area or the relationship of scenic values to a wider range of resource issues are a side effect of environmental legislation within the last 15 years. For example, at the federal level, scenic and aesthetic considerations were addressed in the National Environmental Policy Act of 1969, the Coastal Zone Management Act of 1972, and the Wild and Scenic Rivers Act of 1968. The State of Maine followed the approach of these laws when it formulated the Mandatory Shoreland Zoning Act and Site Location of Development Act.

Scenic values and qualities have been recognized for years in the real estate field, which has assigned higher market values based on public demand to certain scenic features, such as properties with mountain views, or locations on river or lake waterfront areas. The Maine tourism industry also recognizes the scenic qualities of the State's river environment in many of its programs.

3. Minimum Standards for Inclusion

Initially rivers, river segments and other landscape areas were identified using recognized sources of scenic or visual information such as the Nationwide Rivers Inventory, various Critical Areas Program reports, canoe guides, travel information and other documents. To be placed on the Preliminary Draft List of Rivers Under Evaluation, rivers had to be recognized or documented as being scenic or possessing a high degree of visual quality due to a specific feature, characteristic or element. All sources of information, whether subjective or objective, were treated equally.

4. Evaluation Method and Criteria

The two basic components of the scenic river resource assessment are land form and pattern. The quality of any scenic river experience is dependent on the synthesis of land pattern into the overall land topography.

Land forms are the natural forms of the surface of the earth, the mountains, rolling hills and valleys which form the overall context of a natural landscape. The study of land forms constitutes an important part of a scenic river resource assessment, through the visual impact of dominant landscape forms, as well as affecting the patterns and distribution of other components of scenic river areas.

Land use pattern is the interlocking texture of fabric of the landscape including man and the by-products of his technology and culture. Patterns of land uses are a function of combinations of the parts of the natural and built environment and their overall composition. The composition of these parts is an important determinant of the visual quality of a landscape. For example, a small New England river hamlet against a steeply forested mountain range, or a sandy floodplain area next to a large rock outcrop are examples of contrasting combinations of texture which create patterns that are visually interesting. The nature of our perceptions depends upon the combination of natural and built pattern within the existing landform. The scenic quality of the river environment will depend on the quality of both the natural pattern and built pattern, and on the extent to which the two patterns are meshed or harmonized with one another.

The perceived scenic quality of a river and its corridor will also be a function of the frequency and diversity of the various natural and man-made components which combine to form a landscape (such as geomorphic and hydrologic features, vegetation, and cultural values), as well as the interrelationships among these components. Scenic resource values can be defined based on general relationships among components of a landscape. These relationships, which become the basic principles upon which assessment of river-related scenic resources is based, include the following:

- As the relief increases, the scenic quality of the river corridor increases
- As the landscape becomes more rugged, the scenic quality of the river corridor increases
- As the amount of enclosure by vegetation increases, the scenic quality of the river corridor increases
- As the diversity of land uses increases, the scenic quality of the river corridor increases
- As the naturalness of a landscape increases, the scenic quality of the river corridor increases.

- As the amount of tree cover increases, the scenic quality of the river corridor increases.
- As the density of land use edges increases, the scenic quality of the river corridor increases.
- As the diversity of land use edges increases, the scenic quality of the river corridor increases.
- As the compatibility of land use increases, the scenic quality of the river corridor increases.
- As the water surface and water edge increases, the scenic quality of the river corridor increases.
- As the size and length of the view increases, the scenic quality of the river corridor increases.

In general, spatial variety and three-dimensional contrast are positive values within a given river corridor's landscape composition. The greater the contrast and variety in spatial landforms and patterns, the higher the perceived scenic value. Spatial variety is judged on the shape of spaces, the degree of enclosure by landform or vegetation, and the diversity of shape, pattern, and enclosure which exist in a landscape.

Once relationships among compatible parts of a landscape have been defined, it is possible to proceed with the analysis by identifying the presence of specific landscape components or combinations of components which have scenic value. The following are river and landscape features and components which were identified in this analysis:

1) Landscape Physiography

This qualitative evaluation of physiographic relief will give an index of three dimensional contrast in a river-related landscape. The topography surrounding a river corridor is classified into one of the seven categories of form, representing a continuum of physiography from flatland to mountains. The underlying assumption is the greater the amount of relief in a river corridor, the greater the scenic quality.

2) Landscape Diversity

The amount of spatial variety is another measure of scenic value in a landscape. The scenic value of a river corridor will be enhanced when there is a diversity of hydrologic, geomorphic, and vegetative elements present. A general rule is the greater the diversity of landscape elements (land, water, vegetation) the higher the scenic quality.

a) Hydrologic features inventoried included channel shape, the presence of waterfalls, cascades, and whitewater rapids, tributary confluences, ponds and lakes, river islands, and complexity of water edges. The presence of hydrologic features (such as waterfalls and rapids) that have universal public appeal will enhance the scenic qualities of a river corridor. Scenic quality will also increase as the complexity of hydrologic elements increases. The greater the sinuosity of a river channel, the greater the visual carrying capacity of recreational users at the river's surface. In a similar manner, the more irregular or complex a river's shoreline or corridor (from the presence of river island complexes or tributary confluences for example), the higher its visual quality.

b) Vegetative features inventoried on the rivers included the percentage of tree cover, diversity of vegetative types, presence of forest edges, and forest wetland contacts. The underlying assumption was that scenic quality increases with the increased amount of tree cover, density of forest edges, and diversity of vegetation.

c) Outstanding geomorphic landforms and landscape features were identified for each of the three physiographic sections in Maine (Seaboard Lowland, New England Upland, and White Mountains) and then inventoried for each of the evaluated rivers. These representative and unique scenic features, by physiographic section, included:

- Seaboard Lowland

Landforms: undulating topography, worm clam flats, tidal marshes, beaches, and dunes

- New England Upland

Landforms: rolling topography, bold dome-like hills, soft round hilltops, steep side slopes and V-shaped gullies.

Drainage: curved dendritic, right-angle tributaries, glacial ponds and swamps, oxbow lakes

Landscape Features: eskers, kames, moraines, monadnocks, glacial erratics fields

- White Mountains

Landforms: V-shaped valleys, conical peaks in rows, eroded cliff and bench topography.

Drainage: radial, dendritic, deranged,

Landscape Features: ravines, escarpments, monadnocks, eskers, drumlins, kames, lake deltas, other glacial features.

In addition to inventorying these specific features which are thought to increase a river corridor's scenic quality, other geomorphic elements were identified which by their complexity of form or shape, add to river scenery. These elements of form are defined as relief enclosure.

- **Relative Relief:** the scenic quality of the river corridor will increase with greater relative relief. To calculate, elevation points were selected at quarter-mile intervals on a topographic map for a river area, and the lowest elevation point was subtracted from the average high elevation.

- **Enclosure:** as the amount of enclosure increases, scenic quality increases. Enclosures were measured by calculating the percentage of area enclosed by (lying below) the median of relative relief.

3) Land Use Diversity and Compatibility

Land use diversity relates to the number of different land use types, their areas, and the length of their edges. Compatibility of land use is a measure of the visual congruence (the visual fit) of adjacent land uses. Land use includes visually distinctive types of surface cover such as agricultural fields or forest, which may support more than one use.

b. Evaluation Methodology

The National Park Service of the Department of the Interior developed this process of scenic assessment outlined in the previous section for its work on the Nationwide Rivers Inventory. Evaluation of scenic river landscapes was conducted for the Inventory using the most recent USGS 7.5' of 15' quadrangle maps available, supplemented by field work, videotapes and slides from low-altitude helicopter flights over many of these rivers. Substantial use was made of this existing data base which was modified and expanded where appropriate for the Maine Rivers Study.

For this study's scenic river assessment, each river or river segment was measured on a topographic map and divided into one mile intervals beginning with the downstream segment boundary.

Using data sheets, all significant scenic landscape components were recorded for each mile interval. Greater value was assigned to segments with an outstanding diversity of components, or those riverscapes with a highly compatible combination of vegetative, hydrologic, geomorphic, and cultural values.

5. Information Sources and Experts

The following references were used as sources of information for this study;

Nationwide Rivers Inventory – Criteria for River Evaluations: US Department of the Interior, Heritage Conservation and Recreation Service, Northeast Regional Office, Philadelphia, Pa. 1979

Study of Visual and Cultural Environment for North Atlantic Region: Research Planning and Design Associates, Amherst, MA, published as Appendix N, North Atlantic Water Resources Study, November 1970

Guidelines for Identifying and Evaluating Scenic Resources; Hudson River Basin; Water and Related Land Resources Study, Technical Paper 4, October 1978

A Preliminary Listing of Noteworthy Natural Features in Maine: Center for Natural Areas, South Gardiner, Maine, June 1976

J. Glenn Eugster from the Mid-Atlantic Regional Office of the National Park Service provided information and review for this section of the study.

E. HISTORICAL RIVER RESOURCES

1. Definition

The rivers of Maine have long served a vital role in the colonization, development, and industrial growth of the state. This part of the Maine Rivers Study focused on the identification of river related historic places and sites which have achieved recognition as national Historic Landmarks or are listed on the National Register of Historic Places. It is realized that many of the rivers of Maine have historical and cultural value other than these recognized on the national level, such as the historic use for logging runs, the presence of archaeological sites, building with state or local importance, or settlements which represent unique cultural values. However, a lack of expertise and state agency assistance did not permit a more comprehensive survey by the study team. Thus, this discussion will focus on National Historic Landmark and National Register sites associated with rivers in the state.

2. Significance

River-related national historic landmarks and places in Maine are visible reminders of the events, places, and objects which have affected broad patterns of American history and reflect the evolution of industry and culture in this state and the US. They contain prehistoric and historic villages of the American Indian and early colonists, fortifications for the protection of access to waterways, sites of industry and resource extraction activities, and bridges with unique architectural styles. All historic areas designated as National Historic Landmarks are of national significance; other properties which are nominated by the State of Maine and placed on the National Register of Historic Landmarks after approval by the Secretary of the Interior are of national, state, or local significance. In recent years, building districts which possess a composite quality and evoke a special feeling and association have been added to the National Register. Such districts may contain individual buildings which of themselves may not be outstandingly significant but which, as an assemblage representing a special character of an urban or rural waterfront or port, possess national, state, or local significance.

3. Standards for Inclusion

There are many National Historic Sites which are found along rivers in Maine. However, only those sites which have a direct connection to the river, in terms of industrial, economic, or cultural importance (such as former significant winter ports or fortifications at the mouths of rivers for the defense of upstream settlements) were noted as significant by this study.

4. Evaluation Methods and Criteria

To attain the designation of National Historic Landmark, a property must be studied by National Park Service historians, architects, or archaeologists, usually as a part of a major theme in American history such as Social and Humanitarian Movements or Agriculture. The property should meet three general criteria:

- 1) significance in a given field
- 2) association with individuals and events
- 3) integrity, the latter meaning that original and intangible elements which contribute to national significance must remain intact

Potential landmarks are brought semi-annually before two advisory boards of scholars and national leaders – the Consulting Committee for the National Survey of Historic Sites and Buildings, and the Advisory Board on National Parks, Historic Sites, Buildings, and Monuments. These boards review the presentations of National Park Service professionals. Those properties which meet the approval of the Secretary's Advisory Board are recommended for landmark status. The actual designation is effected when the Secretary of the Interior, acting upon the counsel of his Advisory Board, approves landmark designation. The National Historic Landmarks Program is the only honorary historic preservation program of its kind in the Nation.

Because of their recognized national significance, National Historic Landmarks associated with particular rivers in Maine have been noted on the matrix accompanying the Final List of Rivers with an asterisk, to highlight their outstanding historic value.

A variety of criteria have been defined to guide the State, Federal agencies, and the Secretary of the Interior in evaluating potential entries in Maine for addition to the National Register of Historic Places, and include the following:

The quality of significance in American history, architecture, archeology, and culture is present in districts, sites, buildings, structures and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

- a. That are associated with events that have made a significant contribution to the broad patterns of the state's history; or
- b. That are associated with the lives of persons significant in the state's past; or
- c. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- d. That have yielded, or may be likely to yield, information important in prehistory or history.

Before submission to the National Register, all nominations must be approved by a State review board whose membership includes professionals in the fields of architecture (or architectural history), history, and archeology. If the property meets the National Register criteria, the board recommends it for nomination. The nomination form is then signed by the State Historic Preservation Officer and forwarded to the National Register, which reviews the potential entry and decides whether to accept or reject it.

5. Information Sources and Expert Review

The following references were used by the study team to identify and document resource values:

National Register of Historic Places, US Department of the Interior, Heritage Conservation and Recreation Service, Washington, DC, 1976

Annual Listing of Historic Properties, National Register of Historic Places; US Department of the Interior, Heritage Conservation and Recreation Service, Federal Register; Tuesday, February 6, 1979

_____ ; Federal Register, Tuesday, March 18, 1980

_____ ; Federal Register, Tuesday, February 3, 1981

The State Historic Preservation Office was requested to participate in the identification, documentation, and review of significant historic and cultural rivers but declined.

Unique Recreational Rivers – Overview

Both the economically important tourist industry and the life style of Maine residents rely heavily on the recreation use of the state's natural resources. Rivers are important components of this recreational use, providing diverse recreational experiences to a variety of interests. Recreational activities associated with rivers include camping, picnicking, fishing, boating, hiking, sightseeing, swimming, hunting, skating, and sailing.

While each of these activities is important to varying degrees, the Maine River Study has restricted its recreational analysis to activities which are:

- 1) directly dependent on free-flowing river resources
- 2) highly popular throughout the state, and
- 3) engaged in by large and readily identifiable user groups.

The recreational categories chosen for analysis include recreational boating (canoe touring, white water boating, and extended back country boating), inland fishing, and anadromous fishing.

For each recreational category, rivers were evaluated according to resource significance, economic importance, and user priority. This evaluation process recognized that user preference ultimately plays a dominate role in the determination of a river's value as a recreational resource. Input from concerned user groups was therefore sought throughout the process, with a strong attempt made to arrive at a consensus of opinion among users regarding the recreational significance of specific rivers.

This user input, coupled with objective analysis by resource experts, resulted in the category findings detailed in this report. The specific method used for each recreational category follows.

A. ANADROMOUS FISHERIES

a. Definition

Fresh water and tidal rivers which empty into the ocean or salt water estuaries provide vital habitat for anadromous fish. An anadromous fish species is characterized by its migratory nature, spending much of the life cycle in salt water but returning to fresh water to spawn. Catadromous fish species (e.g. the American eel) reverse this pattern by migrating to the ocean to spawn. For the purpose of this study, catadromous fish are considered to be included in the anadromous category.

The Maine River Study has identified important anadromous fishery rivers and isolated those that are of highest value to the state and its residents.

b. Significance

Historically, anadromous fish were of high importance to Maine's commercial fishing industry and were a dependable food source for coastal river inhabitants. While extensive commercial fishing depleted this resource, it was the increase in industrial pollution and the construction of impassable dams which most seriously depleted anadromous fish populations. The creation of the Atlantic Sea Run Salmon Commission in 1947, as well as the state Department of Marine Resources' strong commitment to anadromous fish restoration beginning in the mid-1960's, provide evidence that Maine recognizes the tremendous ecological and recreational significance as well as the commercial value of the state's anadromous fish.

a. Ecological Importance – Many of Maine's coastal rivers are characterized by their exceptional potential to support anadromous fish, both in numbers and species diversity. Of special note are the rivers which provide habitat for the more sensitive species. The shortnosed sturgeon found in a limited number of rivers is listed as an endangered species by the federal government. The American shad and Atlantic sea run salmon have also had their numbers severely reduced and depend on Maine rivers for their survival.

Maine's six rivers with fishable self-sustaining Atlantic salmon runs are unique, as no other state can claim even one. At least three additional rivers in the state are recognized as having high potential for restoration of historic Atlantic salmon fisheries.

b. Recreational Importance – The Atlantic sea run salmon fishery is recognized as a statewide high priority resource of value to Maine's recreational fishing interests as well as to the state's tourist industry. The Penobscot River is the most heavily fished Atlantic salmon river in the country; the value of this one river to the tourist industry is estimated to be a half million dollars per year. The American shad and rainbow smelt also are potentially of high recreational importance. Smelt are currently popular as a winter fishing resource. Overall, more user-days are expended fishing smelt than any other of the state's anadromous fish species.

c. Commercial Importance – Salmon, smelt, shad, and alewife were historically of high value to the commercial fishing industry. While the depletion of salmon, shad, and smelt have lessened their commercial importance, the alewife, which is an essential lobster and trawling bait, continues to be an important commercial fishery. According to the Maine Department of Marine Resources, landing of alewife doubled between 1970 and 1977, with total catch tripling during this time. With successful restoration, shad and smelt could also contribute significantly to Maine's commercial fishery industry.

Restoration efforts by the State Department of Marine Resources and the Salmon commission, assisted by federal funding, are beginning to produce results. Restoration, coupled with improvements in water quality and proper planning for future impoundments, will ensure that the ecologic, recreation, and commercial potential of Maine's rivers as anadromous fish resources will be realized.

3. Standards for Inclusion

Rivers were included in the Preliminary Draft List of Rivers Under Evaluation if they met the following standards:

- a. The river must be a viable anadromous fishery resource. It therefore must either currently support a substantial anadromous fish population or have realistic potential for restoration as evidenced by:
 - a) current restoration efforts, or
 - b) management plans which call for timely restoration.

b. The river must drain a minimum of 25 square miles before discharging into tidal waters. (Thirty of Maine's sixty coastal rivers meet both of these standards).

4. Evaluation Method and Criteria

The criteria used to evaluate anadromous fishery river significance include:

- a. Habitat quality and quantity
- b. Presence of threatened, endangered, or sensitive species
- c. Species diversity
- d. Recreational importance
- e. Commercial importance
- f. Evidenced restoration efforts
- g. Unique characteristics (i.e. self-sustaining Atlantic sea run salmon runs)

Note: The migratory nature of the resource makes specific anadromous fish segment identification difficult. Both the major thoroughfares and the spawning areas are essential to species survival. Therefore, when labeling segments for rivers in the anadromous category, the entire length of the river migration cycle was identified.

Rivers meeting the minimum standards were evaluated with the assistance of the Maine Department of Marine Resources' anadromous fish experts. The Preliminary Draft List was reviewed by private fishing interests and Atlantic Sea Run Salmon Commission staff. Because of the unique value of the Atlantic salmon, all rivers which support self-sustaining salmon runs were given high priority. All of these salmon rivers are, however, of importance to other species and to the state's overall anadromous fish program.

The rivers in Maine which were judged to be of highest significance include the following. Each river is identified by an asterisk in the Final List of Rivers section of this report.

Damariscotta River: high commercial alewife importance

Dennys River: self-sustaining Atlantic salmon run

East Machias River: self-sustaining Atlantic salmon run

Kennebec River: high habitat quality and quantity, species diversity and abundance, presence of endangered species, high recreational importance.

Machias River: (Washington County): the state's largest self-sustaining Atlantic salmon run, recreational importance

Narraguagus River: self-sustaining Atlantic salmon run

Penobscot River: high recreational importance, high restoration expenditure, habitat quality and quantity

Pleasant River (Washington County): self-sustaining Atlantic salmon run

Sheepscot River: self-sustaining Atlantic salmon run, endangered species

St George River: high commercial alewife importance

5. Information Sources and Expert Review

Information and expert opinion was provided to the study team by the following agencies and organizations.

Maine Department of Marine Resources

(fisheries biologists' input and review, species management plans)

Maine Department of Inland Fisheries and Wildlife

(Atlantic Sea Run Salmon Commission staff biologist review, miscellaneous publications)

Trout Unlimited

Maine Sportsman Magazine

B. RIVER-RELATED INLAND FISHERIES

1. Definition

Inland fish include all fish species which inhabit a fresh waters environment throughout their life cycle, in contrast to the migratory anadromous fish which require both fresh and salt water habitats. Included in the general category of inland fisheries are both cold water and warm water species. This analysis is restricted to river fisheries and does not consider lake fisheries. However, rivers which derive their major importance from their support of lake fisheries are given recognition.

While factors such as ecological importance (i.e., critical habitat) are given strong consideration, the focus of the study is the identification of inland fishery rivers and streams which are judged to be of high recreational importance.

2. Significance

The State of Maine has approximately 32,000 miles of flowing water, all of which support sport fisheries. Major cold water species include the native brook trout (the most abundant and certainly one of the most important cold water species), and native landlocked salmon (a highly prized fish found in a limited number of rivers), and the introduced brown trout (an adaptable species capable of providing a sport fishing resource where other cold water species will not thrive). Rivers which provide principal habitat for cold water species total 23,000 linear miles with an average of 153 legal sized fish per mile. Landlocked salmon are found in 64 rivers covering 635 miles. Nearly 200 miles of Maine's rivers provide exceptionally high quality habitat for this species.

Major stream-related warm water species include the native white perch and the introduced smallmouth and largemouth bass. All have self-sustaining populations. Warm water species predominate in 6400 miles of Maine's rivers and streams.

Sport fishing for inland species has witnessed a large increase in popularity over the past few years among Maine's residents, and approximately 190,000 resident fishing licenses are sold annually. When non-resident licenses and youth (who are not required to obtain a license) are taken into account, the Department of Inland Fisheries and Wildlife projects that 385,000 people fish Maine waters. Studies using creel census expansion techniques estimate 460,000 angler-days are spent annually on Maine's rivers and streams, accounting for one-third of the total inland fishing use. Cold water fish harvest in rivers and streams totals 532,000 fish annually, and the Department of Inland Fisheries and Wildlife estimates that there is potential for doubling both the use and take figures. The Department currently stocks 316,000 cold water fish annually in 105 streams totaling 826 linear miles.

Inland fisheries have economic as well as recreational value. Seventy to eighty thousand out-of-staters annually purchase fishing licenses and a number of in-state fishing guides and outfitter businesses depend on Maine inland fisheries. The overall dollar value of inland river and stream fishing has not been established, but it is definitely an important component of Maine's natural resource-related tourist industry.

3. Standards for Inclusion

Preliminary inland fish resource data was obtained with the assistance of the Maine Department of Inland Fisheries and Wildlife. Using a questionnaire accompanied by guidelines for evaluation, fisheries biologists in each of Maine's seven wildlife management regions were asked to identify approximately ten river and/or stream segments which they determined to be of high importance to that region's recreational fisheries program. A total of 81 river segments totaling 1487 miles was identified through this process. These results were reviewed by state level fisheries biologists from the Department of Inland Fisheries and Wildlife, and four additional segments were added due to their statewide significance. These 85 rivers and river segments comprise the Preliminary Draft List of Rivers Under Evaluation.

The list of rivers developed should not be construed to represent all rivers of significance for inland fisheries in each region. A limitation was placed on the number to be listed per region, and the emphasis was on importance for recreational fisheries. It should be clearly stated that all other rivers, brooks, and streams not on the list have at least some significance to the overall inland fisheries resources of Maine. Also, recreational demands upon these resources can be expected to change over time, with consequent shifts in significance for recreational fisheries uses and relative importance.

4. Evaluation Method and Criteria

The Department of Inland Fisheries and Wildlife's regional biologists evaluated the rivers which they selected according to the following criteria:

- a. **Species Composition** – The existence of fish species of major importance by virtue of being:
 - 1) rare in the region
 - 2) highly preferred by anglers
 - 3) of major ecological importance
- b. **Water Quality** – The extent to which overall water quality is capable of sustaining preferred fish resources.
- c. **Aquatic Habitat Quality** – The existence of natural features favorable to fish production and sustenance of preferred fish species (adequate flow, cover, etc)
- d. **Fishing Quality** – An evaluation of recreational fishing results (success rate, size of take, desirability of species taken, etc.)
- e. **Quality of Recreational Use** – The ability of a river segment to provide a satisfying recreational fishing experience (scenery, solitude, challenge, variety, etc)
- f. **Existing Recreation Use** – The popularity of a river segment as a recreational fishery resource.
- g. **Economic Importance** – The importance of recreational fishing on the river segment to the regional economy (use of local guides, retail sales, etc)

Using comparative analysis, rivers which were preliminary judged to be of highest statewide significance were identified. The regional lists were then distributed to Maine fishing interests for review and comment. Each of Maine's local Trout Unlimited chapters evaluated rivers on the Preliminary Draft List according to the criteria of fishing quality, recreational quality, and current use. Again using comparative analysis, rivers were ranked by region and the highest priority rivers were noted. Trout Unlimited's Maine Council combined local chapter findings and produced a comprehensive list of that organization's statewide fishery priorities.

The study's final determination of the state's outstanding inland fishing rivers incorporated the Department of Inland Fisheries and Wildlife's preliminary findings, Trout Unlimited's review and evaluation, and comments from other recognized resource experts and interested individuals who reviewed the study's Preliminary Draft List.

Rivers which were identified as being the States' most significant recreational inland fishery rivers follow. Each is identified with an asterisk in the Final List of Rivers section of this report.

Crooked River
Fish River Lake Thoroughfares
Grand Lake Stream
Kennebago River
Penobscot River, Upper West Branch
Penobscot River, West Branch (Ripogenus Gorge Section)
Penobscot River, East Branch

Other highly significant recreational fisheries include the:

Moose River
Narraguagus River
Rapid River
Roach River
Saco River
St John River
Sheepscot River
Nahmakanta Stream
Presque Isle Stream
Wassataquoik Stream

Trout Unlimited efforts and expenditures on the Little Ossipee River and the Pleasant River (Cumberland County), and the Maine Department of Inland Fisheries and Wildlife's stocking and management efforts on a number of additional rivers throughout the state attest to these rivers' significance. Those rivers identified by this study as being of high importance are, however, the result of a consensus of expert and public opinion and are representative of high quality resources of a type not found in this abundance in other states in the eastern United States.

5. Information Sources and Expert Review

Information and expert opinion were provided to the study team by the following agencies and organizations:

Maine Department of Inland Fisheries and Wildlife (state fisheries biologists, regional fisheries biologists, species management plans)

Trout Unlimited (local chapters and Maine Council)

Maine Sportsmen Magazine

Sportsman's Alliance of Maine

Regional and state biologists from the Maine Department of Inland Fisheries and Wildlife performed the preliminary identification and assessment of inland fisheries, and provided comment and review throughout the study. Species management plans were the source of information on habitat and significance of particular species. The Maine Council and local chapters of Trout Unlimited, as well as Maine Sportsmen Magazine and Sportsman's Alliance of Maine provided review and comment on the study.

C. RIVER-RELATED RECREATIONAL BOATING

1. Definition

The present study focuses on river-related recreational boating which is dependant on flowing waters and the use of a "waterway trail". Consequently, river resources were identified which were of importance mainly to recreational activities using open and closed canoes, kayaks, and inflatable rafts. In order to represent a broad range of recreational boating interests, the general recreational boating category has been subdivided into three more specific categories, which identify distinct recreational boating activities and river users. These three categories are as follows:

- a. **Canoe Touring** – Rivers and river segments which are navigable in an open canoe by novice to intermediate paddlers and which contain predominantly flat water, quickwater, and Class I rapids.
- b. **Whitewater Boating** – Rivers and river segments which are navigable in canoes, kayaks, or rafts by intermediate to expert boaters and which contain a significant number of Class II to Class V rapids.
- c. **Backcountry Excursion Rivers** – Rivers located in natural environments which are of adequate length to provide an extended river camping experience. These rivers may contain any combination of white water and/or canoe tour boating.

2. Significance

Maine's natural amenities have long been the source of recreational opportunities for the people of the state as well as the principal generator of tourist industry revenue. While historically the coast has been the focus of tourist recreation attention, the 1970's saw a strong diversification in recreation use patterns, with river use in particular increasing at an unparalleled rate. Though comprehensive user statistics do not exist for most state rivers, those that do exist verify this marked increase in river recreation popularity. The Allagash Wilderness Waterway witnessed a 60% increase in use between 1966 and 1980, while use on the St John has more than doubled since 1975. Use on the Saco River increased 300% between 1971 and 1976, and recent analysis suggests that recreational boater use on the Saco has since increased by 25% annually. The most significant change in boating use has occurred in commercial rafting. In 1976 approximately 600 commercial passengers rafted the Kennebec Gorge and the West Branch's Ripogenus Gorge. In 1981 this figure approached 14,000, a 200-fold increase.

Even without future growth, commercial rafting will annually add approximately \$2,000,000 to Maine's tourist industry revenues. River recreation popularity has also made canoe outfitting a viable component of the tourist industry with significant use on the Allagash, St John, Penobscot, and coastal rivers in eastern Maine.

Maine's recreational river resources are extensive. For example, the Appalachian Mountain Club's canoe guide identifies 4,474 miles of boatable rivers and streams within the state. The Maine Rivers Study has determined that 1,750 of these miles represent significant boating areas of high resource quality and high use priority. 650 of these miles are predominantly associated with white water boating, 500 with flat water canoe touring, and 600 with back country excursion boating.

Included in these 1,750 miles of river are a number of river segments which possess unique features. Maine can boast New England's only two stretches of Class V white water as well as the region's longest stretch of continuous canoeable white water. It can also boast the Northeast's premier back country canoe trips and one of three federally designated wild and scenic rivers.

These river resources, combined with a number of lesser known rivers with significant recreation potential, provide the State of Maine with a recreational resource of extremely high value. Though 98% of the state's river corridors are privately owned, the prevalent multiple use concept at work in the state ensures that these resources will remain accessible to boating enthusiasts.

3. Standards for Inclusion

To be included in the Preliminary Draft List of Rivers Under Evaluation, a river had to:

- a. Be listed as a prominent river trip in one or more of the recognized river guide books
- b. Be recommended by one of the state's recognized statewide recreational boating interests or organizations, or
- c. Show evidence of use by commercial outfitters

4. Evaluation Method and Criteria

A list of rivers meeting the minimum standards for inclusion in the recreational boating category was distributed to representatives of recreational boating interest groups, commercial outfitters, and other knowledgeable sources. Experts were asked to review the list and to evaluate each river segment's statewide significance in relation to others on the list. They were then asked to group rivers in priority categories from high to low. The following criteria were offered as guidelines in making these determinations.

General criteria with relevance to all the boating categories included:

1. Existing use
2. Access
3. Navigability
4. Length of season and flow regularity
5. Scenery and aesthetic experience
6. Economic importance

Specific criteria for each of the recreational boating categories included:

- Canoe Touring – safety, use by organizations
- Whitewater Boating – presence of significant rapids
- Backcountry Excursion – length of trip, lack of corridor development, availability of camp sites

Concurrent with this expert review process, study team members assembled available river use statistics, identified commercially significant rivers, and researched each river segment in an attempt to identify unique recreational features. Individual expert evaluations were then combined, and a list which represented a consensus of opinion was developed. This list was cross checked with the study team's independent evaluation, and the final list of outstanding recreational rivers was produced.

The following rivers were identified as outstanding (the state's most significant) in each category, and identified with an asterisk on the Final List of Rivers.

Backcountry Excursion:

Allagash River
Machias River (Washington County)
East Branch Penobscot River
Upper West Branch Penobscot River
St Croix River
St John River

Whitewater Boating

Carrabassett River
Dead River
East Branch Penobscot River
Upper Kennebec River
Machias River (Washington County)
West Branch Penobscot River
Rapid River
Seboeis River
Wassataquoik River

Canoe Touring

Moose River
Saco River

Many other canoe touring rivers have importance to regional recreational boaters, including the following rivers:

Royal River
St George River
Kennebec River
Aroostook River
Upper Androscoggin River

5. Information Sources and Expert Review

Information and expert opinion was provided to the study team by the following agencies and organizations.

Appalachian Mountain Club, Maine Chapter
High Adventure BSA
Maine Audubon Society
Maine Professional Guide's Association
Maine State Planning Office
Natural Resource Council of Maine River Committee
Penobscot Paddle and Chowder Society
White Water Outfitters Association of Maine

The following references were used by the study team to identify and document resource values.

AMC River Guide, Appalachian Mountain Club, Volumes 1 and 2, Boston: AMC, 1980

New England White Water River Guide, Gabler, Ray, New Canaan, Conn: Tobey Publishing Co., Inc., 1975

Canoe Trails Directory, Makens, James C., New York: Doubleday and Company, Inc., 1979

Maine Rivers, Thorndike, Maine: The Thorndike Press.

Maine's Whitewater Rapids, McMahon, Janet, Augusta, Maine: Maine State Planning Office, 1981

Pole, Paddle, and Portage, Riviere, William A., Boston: Little, Brown, and Company, 1969

Canoeing Maine (#1 and #2), Thomas, Eben, Thorndike, Maine: The Thorndike Press, 1979

Canoeing Racing: Hot Blood and Wet Paddles, Thomas, Eben, Hallowell, Maine: Hallowell Printing Company, 1974.

The Maine Atlas and Gazetteer, Yarmouth, Maine: Delorme Publishing Company, 1981.

V. Final List of Rivers

The following is the list of all rivers and streams in the state of Maine which have been determined through the study process to have significant and/or unique natural and recreational resource values. This list represents the product of the river evaluation, documentation, and expert and public review process and are judged to possess resource values of regional, statewide, and greater than statewide significance.

The list defines for each river the segment of the river with one or more resource values. The matrix accompanying the list identifies the total number of resource values associated with each river segment. Resource values which are the state's most outstanding in a particular resource category or greater than statewide significance are highlighted on the matrix with an asterisk.

The following guidelines were used to define the limits to the segment of river containing a significant resource value. The river segment for each specific resource value for a particular river is defined in the appendices following this report. River segments were defined by the following criteria:

1. Segments were described using readily identifiable physical locations.
2. Distinct river segments were identified for each natural and recreation value by determining the length of river required to preserve a given natural value or to support a given recreational activity.
3. Segments were identified such that each exhibits a relatively consistent level of resource quality throughout the segment.
4. A river segment could extend through a natural or man-made lake if the upstream and downstream portions of the river segment were of consistent resource quality and type, and if the lake did not significantly disrupt the river's natural values or recreational use. Rivers which flow through urban or other developed areas were handled in a similar manner.
5. In recognition of the importance of upstream tributaries to the resource value of a river segment, the designation "to headwaters" was used to describe segment boundaries whenever the segment location and resource values justify such a description.
6. Segment boundaries were determined by associated resource values alone and did not take into account jurisdictional boundaries or the location of potential development.

Chapter 10 Key Insights

Insights from the Maine licensed and Traveling sportsmen surveys

- The state of Maine is well positioned as one of the “Best” destinations among Maine licensed hunters and anglers across a majority of attributes that are important to them - ranging from climate, safety, pricing, and amenities. Maine’s particular strengths among Traveling sportsmen are its attractive natural setting and its sense of safety.
 - The state’s natural amenities, beauty and sense of security or safety are also identified to be among the most important characteristics of a site that hunters and anglers say are important when making the decision to hunt or fish.
- The abundance of game species and the ability to target native populations are critical factors that influence destination choices. Maine Department of Inland Fisheries & Wildlife supports management and conservation efforts aimed at maintaining healthy populations of native species.
- Interestingly, one of the key destination factors for hunters and anglers is the remoteness of the location. However, travel distance also factors into their decision. The geographical size and travel distance to the more remote areas can be a challenge to bring sportsmen to the state. Among traveling sportsmen, it may be important to highlight other services in the area for non-sportsmen to influence the travel decision.
- Maine’s primary market from which to recruit visiting hunters and anglers is the Northeast, North Atlantic, and mid-Atlantic regions. Findings indicate that, given the size of the traveling sportsmen market in those areas, there remains growth potential to increase the state’s level of penetration within that market.
- Word-of-mouth is an important marketing tool among Maine’s sportsmen. Both hunters and anglers rely on recommendations from friends or family about hunting and fishing destinations. Maine sportsmen report a high degree of satisfaction with their hunting and fishing trips in Maine and are likely to recommend the experience to friends and family
- Traditional media outlets such as television, magazine, and online are also effective means to reach sportsmen. Top media titles consumed by sportsmen in Maine’s market area include The Bassmasters (TV), Field & Stream (magazine), and North American Hunting Club (online), among others.
- When not hunting or fishing, sportsmen and their travel companions are typically enjoying the opportunity to relax and unwind and to see the local sights.

Insights gained from other research about hunter and angler recruitment and retention

- Nationally, only 15% of anglers typically purchase a license five out of five years.¹¹ Among hunters, 35% of resident hunters and 7% of nonresident hunters typically purchase a licensed five out of five years.¹² And, the number of hunters and anglers had been on the decline since the early 1990's.¹³
- Sportsmen cite a variety of reasons for not hunting or fishing. The most commonly cited reasons are: not enough time, takes time away from family, and other obligations such as work or family.¹⁴ The argument of “not enough time” can actually be reflective of shifting preferences and other activities providing the same or more benefits than hunting or fishing had in the past.
- When hunters and anglers take a hiatus from the sport, the largest percent of sportsmen (41% for hunters and 38% for anglers) return within 3 years.¹⁵ A recent effort, spearheaded by the Recreational Boating and Fishing Foundation, focused on lowering the rate of lapsing anglers or shortening the time away from the sport through used communication and outreach to encourage anglers to renew their license. Findings show that that these efforts have not been effective at reducing the rate of lapsing by a significant degree.
- What competes for free time among sportsmen? Among anglers, the most commonly cited preferred indoor recreational activity is relaxing or watching TV. The most commonly preferred outdoor activities included hiking, camping, hunting, and gardening.¹⁶ A similar study has not been completed for hunters but it is possible the same preferences exist, particularly given the number of sportsmen who both hunt and fish.

¹¹ Southwick Associates and Responsive Management. 2011. Understanding Activities that Compete with Recreational Fishing. Prepared for the American Sport Fishing Association under a U.S. Fish and Wildlife Service Grant VA M-24-R.

¹² Southwick Associates. 2010. *A Portrait of Hunters and Hunting License Trends: National Report*. Prepared for the National Shooting Sports Foundation.

¹³ U.S. Department of the Interior, U.S. Fish and Wildlife Service, and U.S. Department of Commerce, U.S. Census Bureau. 2011 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation.

¹⁴ American Sportfishing Association, Responsive Management, Oregon Department of Fish and Wildlife, and Southwick Associates. 2013. Exploring Recent Increases in Hunting and Fishing Participation. U.S. Fish & Wildlife Service Multi-state Conservation Grant F12AP00142.

¹⁵ Ibid.

¹⁶ Southwick Associates and Responsive Management. 2011. Understanding Activities that Compete with Recreational Fishing. Prepared for the American Sport Fishing Association under a U.S. Fish and Wildlife Service Grant VA M-24-R.

