

Paquette, Gil

From: Dube, Norm [Norm.Dube@maine.gov]
Sent: Wednesday, October 13, 2004 1:43 PM
To: Paquette, Gil; 'Wende_Mahaney@fws.gov'
Cc: Dube, Norm; Sean.McDermott@noaa.gov; jay.l.clement@usace.army.mil
Subject: RE: Endangered salmon streams of concern along the CCR

Wende's remarks are accurate as to what I have in my files regarding the question whether small tributaries to ESA listed rivers possess salmon habitat. See my comments below.

Norm

Wende's comments:

As I suspected yesterday, there are a few other streams that cross the M&NE pipeline ROW that USFWS, NMFS, and the MEASC flagged as appropriate salmon habitat that could be used by endangered salmon, particularly as juvenile rearing habitat. Norm, please feel free to chime in, as you participated in our coordination with M&NE on their Phase IV project in 2002/2003.

Narraguagus River watershed: nothing except the crossing of the mainstem itself, as identified and discussed during our field trip

Machias River watershed:

Machias River: nothing except the crossing of the mainstem itself, as identified and discussed during the field trip.

Tributary to Fifth Machias Lake (M&NE milepost 274.17) - NMFS/USFWS/MEASC all agree this stream offers suitable salmon habitat that could be accessible under some conditions, primarily for juveniles. Agree

Tributary to Fifth Machias Lake (M&NE milepost 274.22) - NMFS/USFWS/MEASC all agree this stream offers suitable salmon habitat that could be accessible under some conditions, primarily for juveniles. Agree I only see one tributary on the quad sheet in the vicinity of milepost 274, but apparently there are two that cross the ROW and I'm not sure which is which on the quad sheet.

Tributary to Fletcher Brook (M&NE milepost 276.87) - NMFS/USFWS/MEASC all agree this stream offers suitable salmon habitat that could be accessible under some conditions, primarily for juveniles. Fletcher Brook has been stocked with salmon fry in the past. Agree

Dead Stream or tributary of Dead Stream?? (M&NE milepost 279.98) - This stream still seems like it was on our final list of salmon streams for M&NE Phase IV after our meetings and site visits, but I can't find a piece of paper yet that confirms that this stream contains suitable salmon habitat. If this stream does contain suitable salmon habitat, I assume that we would place it in the same category as the other Machias watershed streams, i.e., potential juvenile habitat under suitable stream flows. I have the trib listed as Dead Stream. In the final M&NE salmon habitat list and should be treated as a trib with salmon habitat.

Lanpher Brook (M&NE milepost 280.79) - I think that Norm and I mentioned this one yesterday. As with

Dead Stream above, I can't find any paper from our M&NE Phase IV work that states this brook contains suitable salmon habitat, But it is on what appears to be the final list of salmon streams from our pipeline coordination. On the final M&NE salmon habitat list and should be treated as a trib with salmon habitat.

Last Machias River watershed:

Huntley Brook (M&NE milepost 291.93) - NMFS/USFWS/MEASC all agree this stream offers suitable salmon habitat that could be accessible under some conditions, primarily for juveniles. Agree

Joe Brook (M&NE milepost 294.39) - similar to some of the Machias watershed streams, I cannot find a piece of paper that states that Joe Brook contains suitable salmon habitat. Again, however, it appears to have made our final salmon stream list for pipeline coordination. Agree

Please keep in mind that the tribs are located in watersheds with ESA listed salmon populations. Therefore, by definition, extreme care needs to be taken when the streams are crossed by the transmission line even if the trib has not been specifically identified as having salmon habitat in the vicinity of the crossing. The area could be used seasonally as a migration pathway, especially by juvenile salmon.

Any questions/comments, please call.

Norm

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Norman R. Dube
Fisheries Scientist
Environmental Permit Coordinator
Maine Atlantic Salmon Commission
650 State Street
Bangor, ME 04401
Tel: (207) 941-4453
Mobile: (207) 557-9194
Fax: (207) 941-4443
Website: www.maine.gov/asa

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***** CHECK YOUR ADDRESS BOOK ***** The address norm.dube@state.me.us will disappear soon, replaced by norm.dube@maine.gov. The state.me.us address still works but will not in the near future.

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United States Department of the Interior

FISH AND WILDLIFE SERVICE
New England Field Office
70 Commercial Street, Suite 300
Concord, New Hampshire 03301-5087



REF: Docket No. PP-89-1
ER 04/0867

December 1, 2004

Dr. Jerry Pell
Office of Fossil Energy (FE-27)
U.S. Department of Energy
1000 Independence Avenue, SW
Washington, DC 20585

Dear Dr. Pell:

This letter is in response to the Department of Energy's (DOE) November 2, 2004 notice in the Federal Register (69 FR 63514) requesting scoping comments on the preparation of an Environmental Impact Statement (EIS) that will discuss the impacts of a proposal by Bangor Hydro-Electric Company (BHE) to construct a single-circuit 345,000-volt (345-kV) electric transmission line from Orrington to Baileyville, Maine. This letter provides the U.S. Fish and Wildlife Service's (Service) response pursuant to Section 7 of the Endangered Species Act (ESA), as amended (16 U.S.C. 1531-1543) and the Fish and Wildlife Coordination Act, as amended (16 U.S.C. 661-667d).

General Project Description

BHE has applied to DOE to amend Presidential Permit PP-89 (issued on January 22, 1996), which authorizes BHE to construct a 345-kV electric transmission line that would extend eastward approximately 85 miles from BHE's existing Orrington, Maine substation to the United States-Canada border near Baileyville, Maine. At the border, the proposed transmission line was to connect to similar facilities to be built by New Brunswick Power, a Crown corporation of Canada's Province of New Brunswick. The project was never constructed.

BHE is now proposing a different transmission line route from that originally authorized by DOE. Since the issuance of PP-89, a natural gas transmission line has been constructed by Maritimes & Northeast Pipeline, L.L.C., in the same general vicinity as the BHE project. BHE is now proposing a transmission line route that is more closely aligned with the existing gas pipeline corridor. Project activities would include clearing rights-of-way and access roads; digging tower footings; setting transmission towers; seeding, mulching, and other erosion control work; and hanging transmission wires. The purpose of this new transmission line is to provide a

- 2 -

second line to link Maine and Canada that will improve the reliability, stability, and efficiency of the electric system, as well as to expand competition and electric energy exchanges between New England and Canada.

Endangered Species Act Comments

Based on the information currently available to us, two federally-listed species under the jurisdiction of the Service are known to occur in the project area, the threatened bald eagle (*Haliaeetus leucocephalus*) and the endangered Atlantic salmon (*Salmo salar*). The Atlantic salmon is jointly listed by the Fish and Wildlife Service and the National Marine Fisheries Service (the Services). The Fish and Wildlife Service, however, will have the lead for ESA Section 7 consultation requirements related to salmon for this project. In general, the Services have agreed that the Fish and Wildlife Service will have the lead on Section 7 consultations for those projects that occur within the freshwater habitat of Atlantic salmon. Likewise, the National Marine Fisheries Service will generally have the lead for those projects occurring in the estuarine or marine habitats used by salmon.

Currently there are no bald eagle nests located within BHE's preferred corridor. As BHE has already noted, however, there are several eagle nests located within the general vicinity of their preferred corridor; the EIS should evaluate the impact of the project on the eagles using these nests. DOE and BHE should continue to coordinate with the Service to determine if any new nest sites are located within the project area or if there is a need to conduct pre-construction surveys in any location(s). Maine's bald eagle population continues to expand and each spring new nest locations are usually found. The crossing of the St. Croix River also needs to be evaluated for impacts to bald eagles that feed in the river or roost along the shoreline and could be vulnerable to collisions with the transmission line. In the past, large numbers of alewives in the St. Croix River attracted many bald eagles to feed in the river. Currently, however, only a small number of alewives are allowed to pass upstream of the dam in Woodland, making the river in the vicinity of the proposed transmission line crossing less valuable as an eagle foraging area. This situation, though, could change in the future.

BHE's preferred route crosses three watersheds that fall within the Gulf of Maine Distinct Population Segment of Atlantic salmon, as follows (from west to east): 1) the Narraguagus River watershed, 2) the Machias River watershed, and 3) the East Machias watershed. Based on site visits conducted by the Services and the Maine Atlantic Salmon Commission, the following streams were determined to provide appropriate habitat that is or could be used by Atlantic salmon: Narraguagus River, two unnamed tributaries to Fifth Machias Lake, unnamed tributary to Fletcher Brook, Dead Stream, Lanpher Brook, Huntley Brook, and Joe Brook.

Based on information provided to us by BHE and their consultants from Devine Tarbell & Associates, Inc., we understand that discussions between BHE and Maritimes & Northeast Pipeline, L.L.C., have culminated in a decision that the existing gas pipeline would not need to be retrofitted with cathodic protection (i.e., installation of zinc ribbons on both sides of the pipe) in locations where the pipeline (and proposed 345-kV line) cross streams (or at least streams that provide habitat for Atlantic salmon). This issue was of great concern to the Service and other fishery agencies initially, as we understood that these streams would need to be re-excavated to

- 3 -

install the zinc ribbons. This work would cause another instream disturbance for salmonids and their habitat and set back the riparian vegetation that is now recovering well following installation of the pipeline. However, should there be a need to install cathodic protection at any of the above identified salmon streams, the EIS would need to carefully evaluate the effects of this action on endangered Atlantic salmon and their habitat.

The EIS should evaluate the impacts of the transmission line crossing at each of the above identified salmon streams. The most notable impact is likely to be from vegetation removal along or near these streams and the effects this action could have on salmonids and their habitat (e.g., effects on water temperature from loss of streamside shading). Every effort should be made to first avoid and then minimize impacts to the existing vegetation communities adjacent to Atlantic salmon streams. Based on the relatively narrow widths of these salmon streams and our discussions with BHE and their consultants, it appears that transmission towers would not need to be installed within or in close proximity to any of these streams. If this can be accomplished, this should help to minimize the impacts of the project on salmon and other fisheries resources. The EIS should also evaluate any temporary, construction-related impacts that could occur at the salmon stream crossings, such as the effects of access roads and any anticipated erosion or sedimentation.

Fish and Wildlife Coordination Act Comments

Based on our participation in BHE's "stakeholder" review process in the fall of 2003 to consider alternative routes for the proposed transmission line, we are generally supportive of BHE's choice of a preferred route. The majority of this route would be located adjacent to existing utility corridors (either electric or natural gas) and/or the Stud Mill Road (a private forestry road). Although selection of this alternative, which primarily crosses commercial forest land, will help to reduce the effects of wildlife habitat fragmentation, the 85-mile route still crosses a number of important natural resources, including wetlands, streams, waterfowl and wading bird habitats, deer wintering yards, and habitats used by rare species.

The EIS should carefully consider the impacts of the proposed project on the wide variety of fishery and wildlife habitats present along the project corridor. This evaluation should include both permanent impacts (e.g., the conversion of forested habitat to scrub-shrub habitat) and temporary, construction-related impacts (e.g., noise and other disturbances to breeding birds using wetlands identified by the Maine Department of Inland Fisheries and Wildlife as important for waterfowl and wading birds). The evaluation should consider the effects of habitat fragmentation—whether the transmission line would be on a new alignment or adjacent to an existing utility corridor or road—on fish and wildlife species. For example, impacts to area-sensitive, forest-interior birds species such as the scarlet tanager, veery, and blackburnian warbler should be evaluated. Likewise, the effects of widening existing non-forested corridors at stream crossings should be analyzed for impacts to fisheries resources.

Conclusion

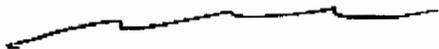
At this time, the Service has determined that there are at least two federally-listed species within the project area that could be affected by the proposed construction of a 345-kV electric

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transmission line. Consequently, we remind DOE of its continuing obligation to consult with the Service under Section 7 of the ESA.

Thank you for the opportunity to provide these comments. General questions and those specific to the endangered Atlantic salmon should be directed to Wende Mahaney in our Maine Field Office at 207-827-5938, extension 20. Questions specific to the threatened bald eagle should be directed to Mark McCollough in our Maine Field Office at 207-827-5938, extension 12.

Sincerely yours,



Michael J. Bartlett
Supervisor
New England Field Office

- 5 -

cc: Jay Clement, ACOE - Manchester, ME
Sean McDermott, NMFS - Gloucester, MA
Jeff Murphy, NMFS - Orono, ME
Steve Timpano, MDIFW - Augusta, ME
Stacie Beyer, MEDEP - Bangor, ME
Norm Dube, MEASC - Bangor, ME
BFA-ERT
V. Rai, OEPC
Reading file
ES: WMahaney:12-1-04:207-827-5938



December 20, 2004

005.0003.0100/2.0

Mr. Gordon Russell
Maine Field Office
U.S. Fish and Wildlife Service
1168 Main Street
Old Town, ME 04468

VIA FEDEX PRIORITY
207-829-5938

**Subject: Information Request for Bangor Hydro-Electric Company's Proposed
Northeast Reliability Interconnect Project**

Dear Mr. Russell:

TRC Environmental Corporation (TRC) and Devine Tarbell & Associates, Inc. (DTA) are currently assisting Bangor Hydro-Electric Company (BHE) in preparing state permit applications for BHE's proposed Northeast Reliability Interconnect Project (NRI). The NRI is a proposed 345,000 volt (345 kilovolt [kV]) electric transmission line that will run from an existing substation in Orrington, Maine (Orrington Substation) to the U.S./Canadian border at Baileyville, Maine. The proposed transmission line and modifications to the Orrington Substation will provide a second interconnect between the two existing bulk electric transmission systems in New England and New Brunswick.

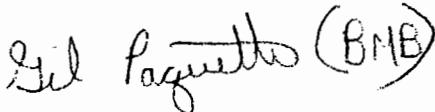
The NRI will require modifications to the existing Orrington Substation and construction of approximately 85 miles of new transmission line in Maine. Specifically, this new transmission line would originate from the existing Orrington Substation and would parallel and be immediately adjacent to the existing Maine Electric Power Company (MEPCO) transmission line and/or the Maritimes & Northeast Pipeline, L.L.C. natural gas pipeline (M&N pipeline) from the Orrington Substation, north to a point near Blackman Stream in Bradley for approximately 12 miles (new right-of-way [ROW] width ranges from 100' to 125'). At this point, the route would turn easterly/northeasterly passing through land owned and managed for commercial forest products for a distance of approximately 13.6 miles to a point where the route would join the Stud Mill Road (a privately owned timber haul road) east of Sunkhaze Stream in Myra (T32 MD) (new ROW width of 170'). From this point, the route runs northeasterly and is generally co-located with the Stud Mill Road and/or the M&N pipeline (new ROW width of 135' to 155') for the remaining approximately 59 miles where the route would cross the international border in Baileyville, Maine and would connect with a yet to be constructed, but permitted New Brunswick Power Corporation (NB Power) line to Point Lepreau, New Brunswick. The entire proposed route is shown on the attached USGS quadrangle excerpts.

On behalf of BHE, TRC and DTA are requesting information regarding the location of federally-listed threatened and endangered species, essential or significant wildlife habitats, and other wildlife and natural resource concerns associated with the proposed project. Your information will be incorporated into state and federal permit applications associated with the project and will also help form the basis for any mitigative measures that may be necessary during or after construction.

We would appreciate receiving your comments within 30 days. Should you have any questions or need additional information, please do not hesitate to contact me at (207) 879-1930.

Sincerely,

TRC ENVIRONMENTAL CORPORATION



Gil A. Paquette
Project Manager

GAP/kh
Enclosure

cc: R. McAdam, Emera (w/o attachment)
S. Sloan, BHE (w/o attachment)
J. Browne, Verrill Dana, LLP (w/o attachment)
L. Ballesteros, BHE (w/o attachment)
S. Beyer, MDEP
J. Clement, USACE
J. Pell, DOE
B. Vinokour, Argonne National Laboratory
S. Timpano, IF&W (w/o attachment)
Region C Wildlife Biologist (w/o attachment)
Region F Wildlife Biologist (w/o attachment)
File

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Customer-Focused Solutions

December 20, 2004

005.0003.0100/2.0

Mr. Sean McDermott
Fisheries Biologist
National Marine Fisheries Service
Northeast Regional Office
One Blackburn Drive
Gloucester, MA 01930

VIA FEDEX PRIORITY
207-281-9300

Subject: Information Request for Bangor Hydro-Electric Company's Proposed Northeast Reliability Interconnect Project

Dear Mr. McDermott:

TRC Environmental Corporation (TRC) and Devine Tarbell & Associates, Inc. (DTA) are currently assisting Bangor Hydro-Electric Company (BHE) in preparing state permit applications for BHE's proposed Northeast Reliability Interconnect project (NRI). The NRI is a proposed 345,000 volt (345 kilovolt [kV]) electric transmission line that will run from an existing substation in Orrington, Maine (Orrington Substation) to the U.S./Canadian border at Baileyville, Maine. The proposed transmission line and modifications to the Orrington Substation will provide a second interconnect between the two existing bulk electric transmission systems in New England and New Brunswick.

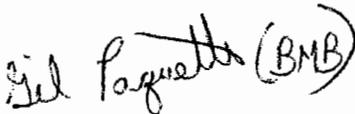
The NRI will require modifications to the existing Orrington Substation and construction of approximately 85 miles of new transmission line in Maine. Specifically, this new transmission line would originate from the existing Orrington Substation and would parallel and be immediately adjacent to the existing Maine Electric Power Company (MEPCO) transmission line and/or the Maritimes & Northeast Pipeline, L.L.C. natural gas pipeline (M&N pipeline) from the Orrington Substation, north to a point near Blackman Stream in Bradley for approximately 12 miles (new right-of-way [ROW] width ranges from 100' to 125'). At this point, the route would turn easterly/northeasterly passing through land owned and managed for commercial forest products for a distance of approximately 13.6 miles to a point where the route would join the Stud Mill Road (a privately owned timber haul road) east of Sunkhaze Stream in Myra (T32 MD) (new ROW width of 170'). From this point, the route runs northeasterly and is generally co-located with the Stud Mill Road and/or the M&N pipeline (new ROW width of 135' to 155') for the remaining approximately 59 miles where the route would cross the international border in Baileyville, Maine and would connect with a yet to be constructed, but permitted New Brunswick Power Corporation (NB Power) line to Point Lepreau, New Brunswick. The entire proposed route is shown on the attached USGS quadrangle excerpts.

On behalf of BHE, TRC and DTA are requesting information regarding the federally-listed Atlantic salmon (*Salmo salar*) and shortnose sturgeon (*Acipenser brevirostrum*), essential or significant Atlantic salmon and shortnose sturgeon habitats, and other fisheries and natural resource concerns associated with the proposed project. Your information will be incorporated into state and federal permit applications associated with the project, and will also help form the basis for any mitigative measures that may be necessary during or after construction.

We would appreciate receiving your comments within 30 days. Should you have any questions or need additional information, please do not hesitate to contact me at (207) 879-1930.

Sincerely,

TRC ENVIRONMENTAL CORPORATION



Gil A. Paquette
Project Manager

GAP/kh
Enclosure

cc: R. McAdam, Emera (w/o attachment)
S. Sloan, BHE (w/o attachment)
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L. Ballesteros, BHE (w/o attachment)
S. Beyer, MDEP (w/o attachment)
J. Clement, USACE (w/o attachment)
J. Pell, DOE (w/o attachment)
B. Vinokour, Argonne National Laboratory (w/o attachment)
S. Timpano, IF&W (w/o attachment)
G. Russell, USFWS (w/o attachment)
N. Dube, MASC (w/o attachment)
File

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December 20, 2004

005.0003.0100/2.0

Mr. Norm Dube
Fisheries Scientist
Maine Atlantic Salmon Commission
650 State Street
Bangor, ME 04401

VIA FEDEX PRIORITY
207-941-4449

**Subject: Information Request for Bangor Hydro-Electric Company's Proposed
Northeast Reliability Interconnect Project**

Dear Mr. Dube:

TRC Environmental Corporation (TRC) and Devine Tarbell & Associates, Inc. (DTA) are currently assisting Bangor Hydro-Electric Company (BHE) in preparing state permit applications for BHE's proposed Northeast Reliability Interconnect project (NRI). The NRI is a proposed 345,000 volt (345 kilovolt [kV]) electric transmission line that will run from an existing substation in Orrington, Maine (Orrington Substation) to the U.S./Canadian border at Baileyville, Maine. The proposed transmission line and modifications to the Orrington Substation will provide a second interconnect between the two existing bulk electric transmission systems in New England and New Brunswick.

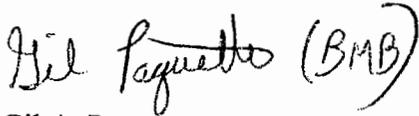
The NRI will require modifications to the existing Orrington Substation and construction of approximately 85 miles of new transmission line in Maine. Specifically, this new transmission line would originate from the existing Orrington Substation and would parallel and be immediately adjacent to the existing Maine Electric Power Company (MEPCO) transmission line and/or the Maritimes & Northeast Pipeline, L.L.C. natural gas pipeline (M&N pipeline) from the Orrington Substation, north to a point near Blackman Stream in Bradley for approximately 12 miles (new right-of-way [ROW] width ranges from 100' to 125'). At this point, the route would turn easterly/northeasterly passing through land owned and managed for commercial forest products for a distance of approximately 13.6 miles to a point where the route would join the Stud Mill Road (a privately owned timber haul road) east of Sunkhaze Stream in Myra (T32 MD) (new ROW width of 170'). From this point, the route runs northeasterly and is generally co-located with the Stud Mill Road and/or the M&N pipeline (new ROW width of 135' to 155') for the remaining approximately 59 miles where the route would cross the international border in Baileyville, Maine and would connect with a yet to be constructed, but permitted New Brunswick Power Corporation (NB Power) line to Point Lepreau, New Brunswick. The entire proposed route is shown on the attached USGS quadrangle excerpts.

On behalf of BHE, TRC and DTA are requesting information regarding the federally-listed Atlantic salmon (*Salmo salar*), essential or significant Atlantic salmon habitats, and other concerns associated with the proposed project. Your information will be incorporated into state and federal permit applications associated with the project and will also help form the basis for any mitigative measures that may be necessary during or after construction.

We would appreciate receiving your comments within 30 days. Should you have any questions or need additional information, please do not hesitate to contact me at (207) 879-1930.

Sincerely,

TRC ENVIRONMENTAL CORPORATION



Gil A. Paquette
Project Manager

GAP/kh
Enclosure

cc: R. McAdam, Emera (w/o attachment)
S. Sloan, BHE (w/o attachment)
J. Browne, Verrill Dana, LLP (w/o attachment)
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S. Beyer, MDEP (w/o attachment)
J. Clement, USACE (w/o attachment)
J. Pell, DOE (w/o attachment)
B. Vinokour, Argonne National Laboratory (w/o attachment)
S. Timpano, IF&W (w/o attachment)
G. Russell, USFWS (w/o attachment)
S. McDermott, NMFS (w/o attachment)
File

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December 20, 2004

005.0003.0100/2.0

Mr. Mark Caron
Regional Wildlife Biologist
Maine Department of Inland Fisheries & Wildlife
Region F
73 Cobb Road
Enfield, ME 04493

VIA PRIORITY FEDEX
207-732-4132

**Subject: Information Request for Bangor Hydro-Electric Company's Proposed
Northeast Reliability Interconnect Project**

Dear Mr. Caron:

TRC Environmental Corporation (TRC) and Devine Tarbell & Associates, Inc. (DTA) are currently assisting Bangor Hydro-Electric Company (BHE) in preparing state permit applications for BHE's proposed Northeast Reliability Interconnect project (NRI). The NRI is a proposed 345,000 volt (345 kilovolt [kV]) electric transmission line that will run from an existing substation in Orrington, Maine (Orrington Substation) to the U.S./Canadian border at Baileyville, Maine. The proposed transmission line and modifications to the Orrington Substation will provide a second interconnect between the two existing bulk electric transmission systems in New England and New Brunswick.

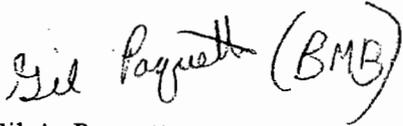
The NRI will require modifications to the existing Orrington Substation and construction of approximately 85 miles of new transmission line in Maine. Specifically, this new transmission line would originate from the existing Orrington Substation and would parallel and be immediately adjacent to the existing Maine Electric Power Company (MEPCO) transmission line and/or the Maritimes & Northeast Pipeline, L.L.C. natural gas pipeline (M&N pipeline) from the Orrington Substation, north to a point near Blackman Stream in Bradley for approximately 12 miles (new right-of-way [ROW] width ranges from 100' to 125'). At this point, the route would turn easterly/northeasterly passing through land owned and managed for commercial forest products for a distance of approximately 13.6 miles to a point where the route would join the Stud Mill Road (a privately owned timber haul road) east of Sunkhaze Stream in Myra (T32 MD) (new ROW width of 170'). From this point, the route runs northeasterly and is generally co-located with the Stud Mill Road and/or the M&N pipeline (new ROW width of 135' to 155') for the remaining approximately 59 miles where the route would cross the international border in Baileyville, Maine and would connect with a yet to be constructed, but permitted New Brunswick Power Corporation (NB Power) line to Point Lepreau, New Brunswick. The entire proposed route is shown on the attached USGS quadrangle excerpts.

Because most of the proposed project is within or adjacent to the survey corridor investigated by BHE during previous permitting efforts associated with this project, a great deal of information regarding natural resources in the proposed construction areas has already been provided by you and other regulatory agencies. To facilitate your review effort for this new project, the enclosed project location maps summarize the natural resource information obtained from you and other regulatory agencies and from field surveys. We would appreciate it if you would review these maps and provide any new updated information (i.e., waterfowl, and wading bird habitat, deer wintering areas, eagle nests, etc.), comments on the information we already have, or confirmation of the accuracy and completeness of our existing data. Your information will be incorporated into state and federal permit applications associated with the project and will also help form the basis for any mitigative measures that may be necessary during or after construction. TRC and DTA have contacted Mike Smith, Regional Fisheries Biologist for Region F, regarding data on fisheries in the area. Furthermore, TRC and DTA will be contacting the field office in Region C regarding the facilities proposed in that Region.

We would appreciate receiving your comments within 30 days. Should you have any questions or need additional information, please do not hesitate to contact me at (207) 879-1930.

Sincerely,

TRC ENVIRONMENTAL CORPORATION



Gil A. Paquette
Project Manager

GAP/kh
Enclosure

cc: R. McAdam, Emera (w/o attachment)
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B. Vinokour, Argonne National Laboratory
S. Timpano, IF&W (w/o attachment)
G. Russell, USFWS (w/o attachment)
File



December 20, 2004

005.0003.0100/2.0

Mr. Tom Schaeffer
Regional Wildlife Biologist
Maine Department of Inland Fisheries & Wildlife
Region C
Whitneyville Road
Jonesboro, ME 04648

VIA PRIORITY FEDEX
207-434-5927

**Subject: Information Request for Bangor Hydro-Electric Company's Proposed
Northeast Reliability Interconnect Project**

Dear Mr. Schaeffer:

TRC Environmental Corporation (TRC) and Devine Tarbell & Associates, Inc. (DTA) are currently assisting Bangor Hydro-Electric Company (BHE) in preparing state permit applications for BHE's proposed Northeast Reliability Interconnect project (NRI). The NRI is a proposed 345,000 volt (345 kilovolt [kV]) electric transmission line that will run from an existing substation in Orrington, Maine (Orrington Substation) to the U.S./Canadian border at Baileyville, Maine. The proposed transmission line and modifications to the Orrington Substation will provide a second interconnect between the two existing bulk electric transmission systems in New England and New Brunswick.

The NRI will require modifications to the existing Orrington Substation and construction of approximately 85 miles of new transmission line in Maine. Specifically, this new transmission line would originate from the existing Orrington Substation and would parallel and be immediately adjacent to the existing Maine Electric Power Company (MEPCO) transmission line and/or the Maritimes & Northeast Pipeline, L.L.C. natural gas pipeline (M&N pipeline) from the Orrington Substation, north to a point near Blackman Stream in Bradley for approximately 12 miles (new right-of-way [ROW] width ranges from 100' to 125'). At this point, the route would turn easterly/northeasterly passing through land owned and managed for commercial forest products for a distance of approximately 13.6 miles to a point where the route would join the Stud Mill Road (a privately owned timber haul road) east of Sunkhaze Stream in Myra (T32 MD) (new ROW width of 170'). From this point, the route runs northeasterly and is generally co-located with the Stud Mill Road and/or the M&N pipeline (new ROW width of 135' to 155') for the remaining approximately 59 miles where the route would cross the international border in Baileyville, Maine and would connect with a yet to be constructed, but permitted New Brunswick Power Corporation (NB Power) line to Point Lepreau, New Brunswick. The entire proposed route is shown on the attached USGS quadrangle excerpts.

Because most of the proposed project is within or adjacent to the survey corridor investigated by BHE during previous permitting efforts associated with this project, a great deal of information regarding natural resources in the proposed construction areas has already been provided by you and other regulatory agencies. To facilitate your review effort for this new project, the enclosed project location map summarizes the natural resource information obtained from you and other regulatory agencies and from field surveys. We would appreciate it if you would review these attached maps and provide any new updated information (i.e., deer wintering areas, eagle nests, waterfowl, and wading bird habitat, etc.), comments on the information we already have, or confirmation of the accuracy and completeness of our existing data. Your information will be incorporated into state and federal permit applications associated with the project and will also help form the basis for any mitigative measures that may be necessary during or after construction. TRC and DTA have contacted Ron Brokaw, Regional Fisheries Biologist for Region C, regarding data on fisheries in the area. Furthermore, TRC and DTA will be contacting the field office in Region F regarding the facilities proposed in that Region.

We would appreciate receiving your comments within 30 days. Should you have any questions or need additional information, please do not hesitate to contact me at (207) 879-1930.

Sincerely,

TRC ENVIRONMENTAL CORPORATION



Gil A. Paquette
Project Manager

GAP/kh
Enclosures

cc: R. McAdam, Emera (w/o attachment)
S. Sloan, BHE (w/o attachment)
J. Browne, Verrill Dana, LLP (w/o attachment)
L. Ballesteros, BHE (w/o attachment)
S. Beyer, MDEP
J. Clement, USACE
J. Pell, DOE
B. Vinokour, Argonne National Laboratory
S. Timpano, IF&W (w/o attachment)
G. Russell, USFWS (w/o attachment)
File



December 20, 2004

005.0003.0100/2.0

Mr. Mike Smith
Regional Fisheries Biologist
Maine Department of Inland Fisheries & Wildlife
Region F
73 Cobb Road
Enfield, ME 04493

VIA PRIORITY FEDEX
207-732-4132

**Subject: Information Request for Bangor Hydro-Electric Company's Proposed
Northeast Reliability Interconnect Project**

Dear Mr. Smith:

TRC Environmental Corporation (TRC) and Devine Tarbell & Associates, Inc. (DTA) are currently assisting Bangor Hydro-Electric Company (BHE) in preparing state permit applications for BHE's proposed Northeast Reliability Interconnect project (NRI). The NRI is a proposed 345,000 volt (345 kilovolt [kV]) electric transmission line that will run from an existing substation in Orrington, Maine (Orrington Substation) to the U.S./Canadian border at Baileyville, Maine. The proposed transmission line and modifications to the Orrington Substation will provide a second interconnect between the two existing bulk electric transmission systems in New England and New Brunswick.

The NRI will require modifications to the existing Orrington Substation and construction of approximately 85 miles of new transmission line in Maine. Specifically, this new transmission line would originate from the existing Orrington Substation and would parallel and be immediately adjacent to the existing Maine Electric Power Company (MEPCO) transmission line and/or the Maritimes & Northeast Pipeline, L.L.C. natural gas pipeline (M&N pipeline) from the Orrington Substation, north to a point near Blackman Stream in Bradley for approximately 12 miles (new right-of-way [ROW] width ranges from 100' to 125'). At this point, the route would turn easterly/northeasterly passing through land owned and managed for commercial forest products for a distance of approximately 13.6 miles to a point where the route would join the Stud Mill Road (a privately owned timber haul road) east of Sunkhaze Stream in Myra (T32 MD) (new ROW width of 170'). From this point, the route runs northeasterly and is generally co-located with the Stud Mill Road and/or the M&N pipeline (new ROW width of 135' to 155') for the remaining approximately 59 miles where the route would cross the international border in Baileyville, Maine and would connect with a yet to be constructed, but permitted New Brunswick Power Corporation (NB Power) line to Point Lepreau, New Brunswick. The entire proposed route is shown on the attached USGS quadrangle excerpts.

We would appreciate it if you would review these maps and provide information on fisheries and other natural resource concerns associated with the proposed project. Your information will be incorporated into state and federal permit applications associated with the project and will also help form the basis for any mitigative measures that may be necessary during or after construction. TRC and DTA have contacted Mark Caron, Regional Wildlife Biologist for Region F, regarding data on wildlife in the area. Furthermore, TRC and DTA will be contacting the field office in Region C regarding the facilities proposed in that Region.

We would appreciate receiving your comments within 30 days. Should you have any questions or need additional information, please do not hesitate to contact me at (207) 879-1930.

Sincerely,

TRC ENVIRONMENTAL CORPORATION



Gil A. Paquette
Project Manager

GAP/kh
Enclosure

cc: R. McAdam, Emera (w/o attachment)
S. Sloan, BHE (w/o attachment)
J. Browne, Verrill Dana, LLP (w/o attachment)
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J. Pell, DOE
B. Vinokour, Argonne National Laboratory
Steve Timpano, IF&W (w/o attachment)
G. Russell, USFWS (w/o attachment)
File

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December 20, 2004

005.0003.0100/2.0

Mr. Ron Brokaw
Regional Fisheries Biologist
Maine Department of Inland Fisheries & Wildlife
Region C
Whitneyville Road
Jonesboro, ME 04648

VIA PRIORITY FEDEX
207-434-5927

**Subject: Information Request for Bangor Hydro-Electric Company's Proposed
Northeast Reliability Interconnect Project**

Dear Mr. Brokaw:

TRC Environmental Corporation (TRC) and Devine Tarbell & Associates, Inc. (DTA) are currently assisting Bangor Hydro-Electric Company (BHE) in preparing state permit applications for BHE's proposed Northeast Reliability Interconnect project (NRI). The NRI is a proposed 345,000 volt (345 kilovolt [kV]) electric transmission line that will run from an existing substation in Orrington, Maine (Orrington Substation) to the U.S./Canadian border at Baileyville, Maine. The proposed transmission line and modifications to the Orrington Substation will provide a second interconnect between the two existing bulk electric transmission systems in New England and New Brunswick.

The NRI will require modifications to the existing Orrington Substation and construction of approximately 85 miles of new transmission line in Maine. Specifically, this new transmission line would originate from the existing Orrington Substation and would parallel and be immediately adjacent to the existing Maine Electric Power Company (MEPCO) transmission line and/or the Maritimes & Northeast Pipeline, L.L.C. natural gas pipeline (M&N pipeline) from the Orrington Substation, north to a point near Blackman Stream in Bradley for approximately 12 miles (new right-of-way [ROW] width ranges from 100' to 125'). At this point, the route would turn easterly/northeasterly passing through land owned and managed for commercial forest products for a distance of approximately 13.6 miles to a point where the route would join the Stud Mill Road (a privately owned timber haul road) east of Sunkhaze Stream in Myra (T32 MD) (new ROW width of 170'). From this point, the route runs northeasterly and is generally co-located with the Stud Mill Road and/or the M&N pipeline (new ROW width of 135' to 155') for the remaining approximately 59 miles where the route would cross the international border in Baileyville, Maine and would connect with a yet to be constructed, but permitted New Brunswick Power Corporation (NB Power) line to Point Lepreau, New Brunswick. The entire proposed route is shown on the attached USGS quadrangle excerpts.

We would appreciate it if you would review these maps and provide information on fisheries and other natural resource concerns associated with the proposed project. Your information will be incorporated into state and federal permit applications associated with the project and will also help form the basis for any mitigative measures that may be necessary during or after construction. TRC and DTA have contacted Tom Schaeffer, Regional Wildlife Biologist for Region C, regarding data on wildlife in the area. Furthermore, TRC and DTA will be contacting the field office in Region F regarding the facilities proposed in that Region.

We would appreciate receiving your comments within 30 days. Should you have any questions or need additional information, please do not hesitate to contact me at (207) 879-1930.

Sincerely,

TRC ENVIRONMENTAL CORPORATION



Gil A. Paquette
Project Manager

GAP/kh
Enclosure

cc: R. McAdam, Emera (w/o attachment)
S. Sloan, BHE (w/o attachment)
J. Browne, Verrill Dana, LLP (w/o attachment)
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J. Clement, USACE (w/o attachment)
J. Pell, DOE (w/o attachment)
B. Vinokour, Argonne National Laboratory (w/o attachment)
Steve Timpano, IF&W (w/o attachment)
G. Russell, USFWS (w/o attachment)
File

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United States Department of the Interior



FISH AND WILDLIFE SERVICE
Maine Field Office
1168 Main Street
Old Town, ME 04468-2023
(207) 827-5938

December 29, 2004

MEFO log # 05-107

Gil Paquette
TRC
125 John Roberts Road, Unit 14
South Portland, ME 04106

Dear Mr. Paquette:

Thank you for your letter requesting information or recommendations from the U.S. Fish and Wildlife Service. A list of federally-listed species in Maine is enclosed for your information. Our records show the following rare and endangered species are located within or near the proposed Bangor Hydro-Electric Company Northeast Reliability Interconnect Project:

Species	Location	State Status	Federal status
Bald eagle nest	Eddington (see attached map)	T	T
Sedge wren	Great Works Stream, Bradley	E	None
Atlantic salmon	West Branch, Narraguagas River T34 MD	None	E
Atlantic salmon	Narraguagas River, T35 MD	None	E
Atlantic salmon	Machias River, T37 MD BPP	None	E
Brook floater (mussel)	Machias River, T37 MD BPP	SC	FSC
Bald eagle nest	Pocomoonshine, Princeton	T	T

E = endangered

T = threatened

SC = special concern

FSC = federal species of concern

D = delisted

Comments on listed species:

The transmission line associated with the Northeast Reliability Interconnect Project will pass approximately 1/2 mile from active bald eagle nests in Eddington and Princeton. Maine Inland Fisheries and Wildlife (MDIFW) has designated a 1/4 mile radius Essential Habitats around both of

these nests. We recommend that an aerial survey be done ¼ mile of either side of the new transmission line corridor segments to ensure that there are no new or previously unknown eagle nests associated with the proposed transmission line corridor. Normally, activities greater than ¼ mile from eagle nests will not cause adverse effects to nesting eagles, however, we encourage you to consult with MDIFW and the Service to ensure project construction will not disturb nesting eagles or introduce a source of mortality into their home ranges. Bald eagles use riverine corridors for perching, feeding, and movement (e.g. Narraguagas, Machias, and St. Croix Rivers). We encourage you to construct over-water crossings in such a way to avoid raptor collisions or electrocution using raptor-friendly construction techniques.

The power line will cross several Atlantic salmon rivers (Narraguagas, Machias, and St. Croix). We advise that construction equipment avoid crossing these rivers and that appropriately vegetated riparian buffers be maintained to protect water quality.

We highly recommend that you contact the Maine Department of Inland Fisheries and Wildlife for additional information on state-threatened and endangered wildlife and other wildlife species of special concern. The Maine Endangered Species Act may protect some of the species in your project area.

Beth Swartz
Endangered Species Group
Maine Department of Inland Fisheries and Wildlife
650 State St.
Bangor, ME 04401
Phone: 207 941-4476

Atlantic salmon are known to occur in the project area. I would highly recommend that you contact the Maine Atlantic Salmon Commission for additional information:

Joan Trial
Atlantic Salmon Commission
650 State St.
Bangor, ME 04401

There are no known federal threatened or endangered plants in the project area, but there are likely many state-listed plants. You should contact the Maine Natural Areas Program for more information.

Emily Pinkham
Maine Natural Areas Program
Department of Conservation
93 State House Station
Augusta, ME 04333
Phone: 207 287-8044

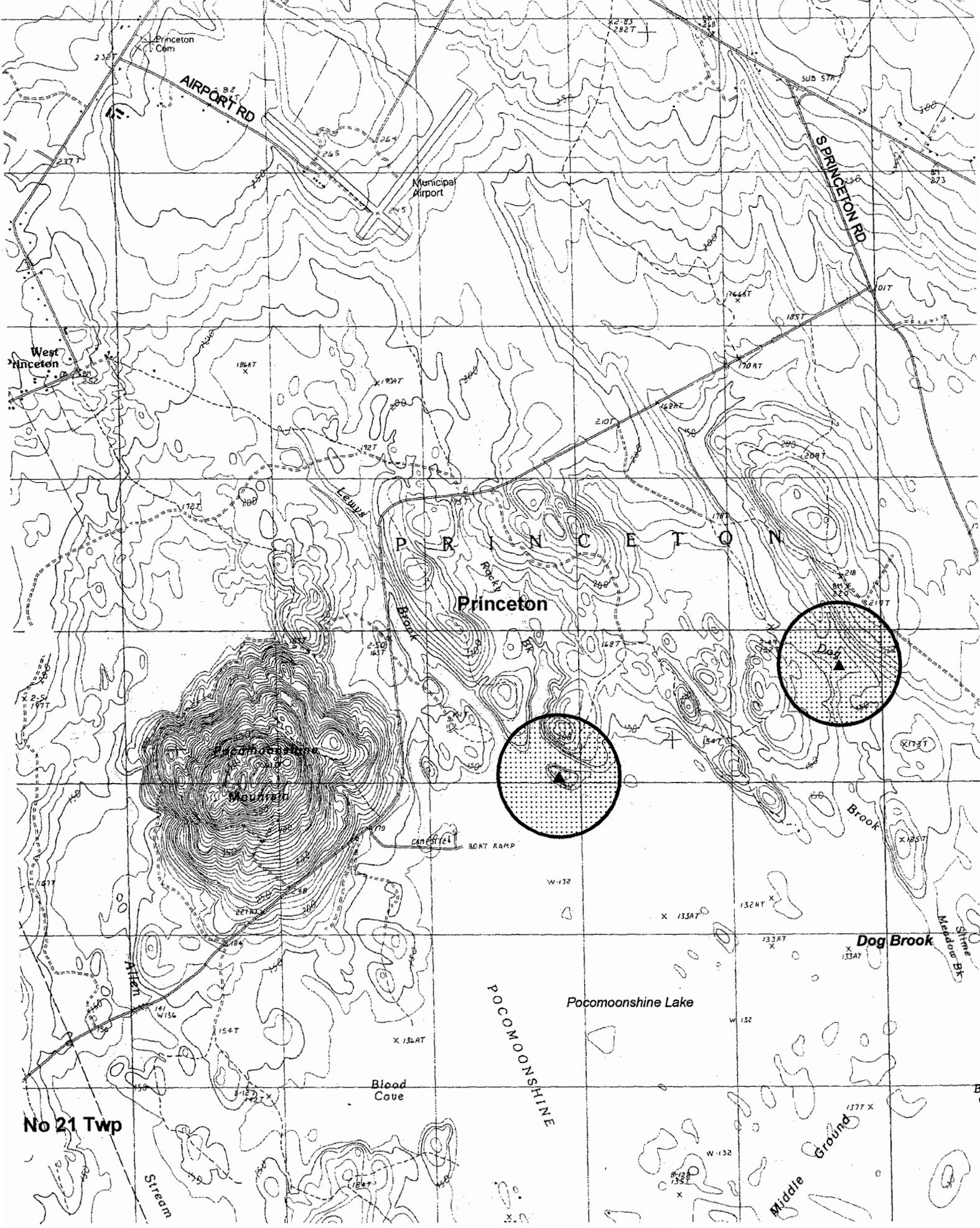
A list of federally-listed species in Maine is enclosed for your information. If you have any questions, please call me at (207) 827-5938.

Sincerely,

A handwritten signature in black ink, appearing to read "Mark A. McCollough". The signature is fluid and cursive, with a large initial "M" and a stylized "A".

Mark A. McCollough,
Endangered Species Biologist

Enclosure



Princeton Com

AIRPORT RD

Municipal Airport

SUB STR

S PRINCETON RD

West Princeton

Princeton

Princeton Mountain
Maunfald

BOAT RAMP

Pocomoonshine Lake

Dog Brook

No 21 Twp

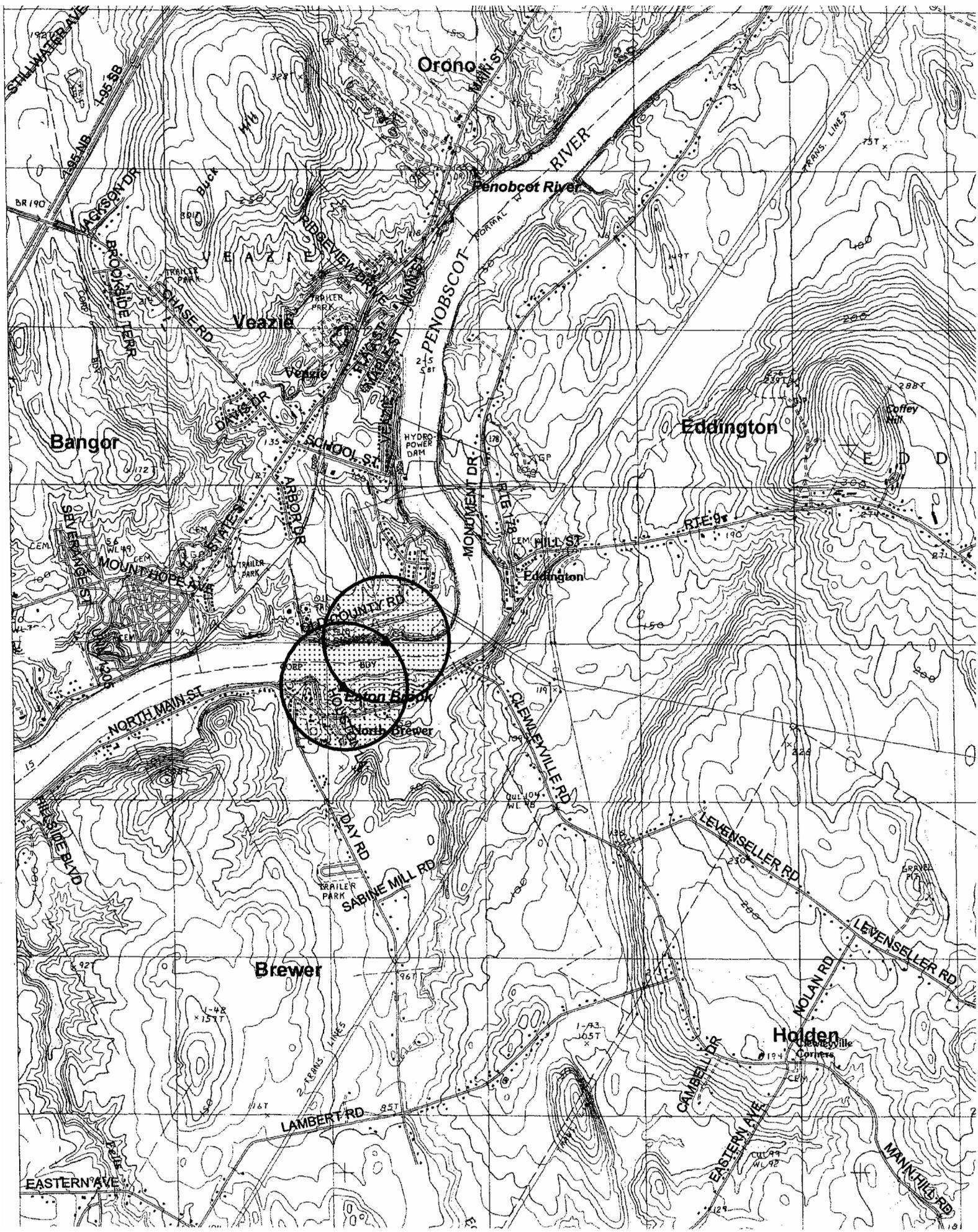
POCOMONSHINE

Middle Ground

Stream

Blood Cove

Stream Bk
Meadow Bk



Orono

Penobscot River

Veazie

Bangor

Eddington

Penobscot

Brewer

Holden

EASTERN AVE

LAMBERT RD

EASTERN AVE

LEVENSELLER RD



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
NORTHEAST REGION
One Blackburn Drive
Gloucester, MA 01930-2298

JAN 7 2005

Dr. Jerry Pell
NEPA Document Manager
Electric Power Regulation
Office of Fossil Energy, FE-27
U.S. Department of Energy
Washington, D.C. 20585

Re: Participation in the Preparation of the Environmental Impact Statement for the
"Northeast Reliability Interconnect"

Dear Mr. Pell:

This is in response to your letter dated November 30, 2004 requesting the National Marine Fisheries Service (NOAA Fisheries) participate as a cooperating agency in the preparation of an Environmental Impact Statement (EIS) for the Bangor Hydro-Electric Company's (BHE) application to amend Presidential Permit PP-89. Presidential Permit PP-89 authorizes BHE to construct a single-circuit 345 kV electric transmission line across the U.S. international border in the vicinity of Baileyville, Maine. NOAA Fisheries agrees to participate as a cooperating agency to help advance effective interagency coordination on the EIS for the BHE project.

Our role and degree of involvement as a cooperator is dependent on existing staff and fiscal resource capabilities. Our contributions generally will be limited to scoping, identification of issues and topics that need consideration and evaluation in the EIS, review of documents, and routine attendance at meetings. We are not in a position to undertake data collection, conduct EIS analyses, or prepare sections of the draft or final EIS, as staff and resources are fully tasked in other obligatory NOAA Fisheries programs.

If you have any questions pertaining to this letter, please contact Sean McDermott of my staff at (978)-281-9113. We look forward to exploring the issues associated with Bangor Hydro-Electric Company's proposed electric transmission line as it moves through the public and regulatory review process.

Sincerely,

Patricia A. Kurkul
Regional Administrator

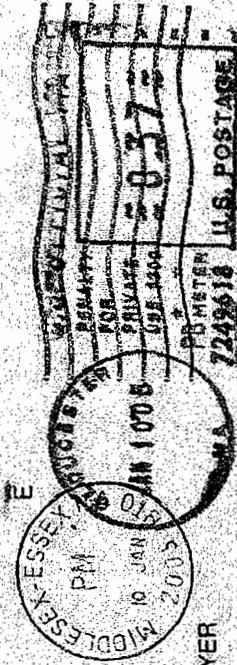


U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
One Blackburn Drive
Gloucester, MA 01930-2298

Official Business
Penalty for Private Use, \$300

received
25 JAN 05

AN EQUAL OPPORTUNITY EMPLOYER



Dr. Jerry Pell
NEPA Document Manager
Electric Power Regulation
Office of Fossil Energy, FE-27
U.S. Department of Energy
Washington, DC 20585





UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
NORTHEAST REGION
One Blackburn Drive
Gloucester, MA 01930-2298

JAN 19 2005

Gil A. Paquette
Project Manager
TRC Environmental Corporation
125 John Roberts Road
Unit 14
South Portland, Maine 04106

Re: Bangor Hydro-Electric Company's Information Request

Dear Mr. Paquette,

The National Marine Fisheries Service (NOAA Fisheries) has received the information request (December 20, 2004) regarding federally listed Atlantic salmon and shortnose sturgeon, essential or critical habitat for these species, and other fisheries and natural resources within the proposed Northeast Reliability Interconnect (NRI) project area. TRC Environmental Corporation and Devine Tarbell & Associated, Inc. requested the information on behalf of Bangor Hydro-Electric Company. In the cover letter, TRC requested the information be provided within 30 days. NOAA Fisheries has completed the review, however, we will not likely get the information to TRC before January 20. We anticipate that we will need an additional 10 days (to January 30) to furnish TRC with our findings. If you have any questions, please contact Sean McDermott of my staff at (978-281-9113).

Sincerely,

Peter Colosi
Assistant Regional Administrator
for Habitat Conservation



MEETING MINUTES

DATE: January 19, 9:30 AM

LOCATION: USFWS Old Town, Maine

ATTENDEES: Gil Paquette (TRC Solutions)
Steve Sloan (BHE)
Wende Mahaney (USFWS)
Norm Dube (ASC)

SUBJECT: Northeast Reliability Interconnect Salmon Stream Crossings

NOTES BY: Gil A. Paquette

CC: Stacie Beyer (DEP)
Sean McDermott (NMFS)
J. Pell (DOE)

- Gil explained that during the line design high priority was given to salmon streams identified during the fall field visit and in the subsequent e-mails from Norm and Wende (annotated below). Gil stated that structures were located as close as possible to these streams to allow vegetation to grow taller and as such the streams will be afforded more shade as the conductor will be higher in these locations. Gil explained that at its midpoint the conductor can sag to a minimum of 26 feet from the ground and by regulation vegetation on the ROW cannot grow into the conductor security zone (15 feet from the conductor). Gil further explained that BHE's standard utility practice is to cut or treat with herbicide vegetation on the ROW every 3-5 years. Specifically, all tree species that are 8-10 feet tall that can grow into the conductor security zone within the next 3-5 years are either cut or treated with herbicide. Shrubs like alder are not treated or cut and are allowed to remain intact.
- Discussed salmon streams and reviewed line design on project plan & profiles, as summarized below.
 - Narraguagus River – Open and no removal of shade vegetation as result of project. Project designed to locate structures away from river to mitigate impacts to canoeist.
 - Machias River - Open and no removal of shade vegetation as result of project. Project designed to locate structures away from river to mitigate impacts to canoeist and crosses river as discussed in the field during fall 2004 site visit.

- Tributary to Fifth Machias Lake (M&N milepost 274.17) and Tributary to Fifth Machias Lake (M&N milepost 274.22) - Located structure between the tributaries.
- Tributary to Fletcher Brook (M&N milepost 276.87) – Two crossings of tributaries to Fletcher Brook spanned by two structures (#393 and #394). Bend in road at these crossings and location of tributaries makes locating both structures close to the tributaries impossible. Located one structure as close as possible and used taller structures (10' taller) to increase the height of the conductor and as such allowable height of vegetation.
- Dead Stream or tributary of Dead Stream?? (M&N milepost 279.98) - Structure located close to brook but outside of wetland.
- Lanpher Brook (M&N milepost 280.79) – Structure located close to brook but maybe too close. Wende and Norm suggested that structure be 75' away from brook.
- Huntley Brook (M&N milepost 291.93) – Structure located close to brook but outside of wetland.
- Joe Brook (M&N milepost 294.39) - Structure located close to brook but maybe too close. Wende and Norm suggested that structure be 75' away from brook.
- Norm asked about other streams like EFH streams. Gil explained that because all streams crossed by the project are considered EFH salmon streams (given the broad definition) BHE prioritized the DPS salmon streams, particularly those in the list provided by Norm and Wende. Gil explained that it would not be practicable to locate structures near all streams and to allow vegetation to grow taller along the entire project.
- Gil explained that all streams are afforded extra protection during construction and line maintenance. Gil said he would provide Norm and Wende with a copy of the DRAFT Vegetation Maintenance Plan for their review and comment.
- Norm requested a list of Environmental Design Criteria and Gil said he would provide via e-mail.
- Gil stated that BHE had also developed a 'stand-alone' Erosion & Sedimentation Control Manual and that he would e-mail that to Norm and Wende after BHE incorporated Stacie Beyer's pending comments.
- The meeting adjourned at 11:00.

MEETING MINUTES

DATE: January 20, 10:00 AM

LOCATION: USFWS Old Town, Maine

ATTENDEES: Gil Paquette (TRC Solutions)
Steve Sloan (BHE)
Wende Mahaney (USFWS)
Rich Bard (IFW)
Mark McCollough (USFWS)

SUBJECT: Northeast Reliability Interconnect - Wildlife

NOTES BY: Gil A. Paquette

CC: Tom Schaeffer (MDIFW)
Mark Carron (MDIFW)
Charlie Todd (MDIFW)
J. Pell (DOE)
Stacie Beyer (DEP)

Eagle Surveys

- Based on earlier request by IFW and USFWS biologists, Gil explained that BHE will hire a pilot to search for new nests along the proposed route. Gil requested specific protocol of the flight and Mark provided.
 - Survey ½ mile on either side of the corridor
 - Survey should be conducted during the last week of April
 - Flight height should be between 500 to 700 feet leaning towards the higher side of that range; fixed-wing, high-wing aircraft are best
 - Consider Woodlot Alternatives as they are currently conducting eagle studies in the area.
 - Consult with MDIFW or Woodlot on optimal timing of survey
- If construction is in 2005/2006 then surveys should be conducted this year. If construction is delayed (2006/2007) then BHE can wait until next year. If unsure of construction timing then conduct surveys this spring and potentially next spring.

Markers

- Mark requested that structure design be as raptor-friendly as possible.
- Craig Koppe at the USFWS Chesapeake Bay Office is a good contact to inquire about the efficacy of then Firefly Bird Flapper as a marker.
- Gil explained that BHE and NBP have to put, at minimum, aviation ball markers at the St. Croix Crossing. Mark asked if both could be installed and Gil said he would research. Mark stated that the St. Croix is of most concern because of the number of eagles that use that corridor and potential increase in numbers if the alewife runs return.
- Mark requested that BHE consider flappers at the Machias and Narraguagas crossing. Gil explained the visual concern and BHE's attempt to minimize visual impacts at these two rivers as they are both Outstanding River Segments. Mark stated that the environmental groups that may be opposed to the putting markers at those crossings should consider minimizing wildlife impacts over visual impacts.
- The Great Works Stream crossing, a Wading Bird and Waterfowl Habitat, was identified as another location for flappers.
- Gil to order a flapper to evaluate sturdiness, installation ease, strength of materials, and to discuss with BHE maintenance staff. Gil to research use of flappers on other 345 kV lines and to research life. Gil to research use on the St. Croix given FFA and Canadian Cost Guard requirements.
- Gil mentioned the possibility of eliminating shield wires at bird sensitive crossings and will check with the engineers.
- Gil mentioned the possibility of moving an osprey nest and/or installing a platform during construction at Allen Brook.
- There was a question regarding nests built on utility structure and why birds can typically nest on structures safely. Gil explained using a typical h-frame structure as an example. Gil stated that the conductors typically hang from long insulators that are about 10 feet in length. This distance is long enough to prevent an arc to the surrounding grounded portions of the structure (wood poles, cross arms, etc.). The wire that can be seen at the top of the structures is called the shield or sky wire. Although this wire is made of material that can conduct electricity, electricity does not flow through this wire. This wire is designed to protect the line and structures from lightning strikes. It can be thought of as a horizontal lightning rod. Nests are typically built in the center of the structure on an arm that is connected to the two poles. Typically the nest material does not enter into the area where an arc can occur. Nests that get too big or that appear flimsy or abandoned are removed when it appears that there will be a danger of an arc. It can sometimes take several years for a nest to reach this stage.

Nesting Deterrents

- Eagles have nested rarely in osprey nests on top of structures, but it does happen. BHE would work with USFWS and IFW to remove nests at the agency request. Gil explained that osprey nests are allowed to remain on structures until they become reliability hazard.

WWH

- Aside from the potential of installing flappers at Great Works Stream MDIFW and USFWS are basically satisfied. Most construction will be done during frozen conditions. If warm weather work is necessary, BHE will coordinate season restrictions with MDIFW.

DWA

- The project crosses tangentially two Deer Wintering Areas and thus MDIFW is satisfied and no mitigation is required.

The meeting adjourned at 12:00.



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
NORTHEAST REGION
One Blackburn Drive
Gloucester, MA 01930-2298

JAN 21 2005

Gil A. Paquette
Project Manager
TRC Environmental Corporation
125 John Roberts Road
Unit 14
South Portland, Maine 04106

Re: Bangor Hydro-Electric Company's Proposed Northeast Reliability Interconnect Project

Dear Mr. Paquette:

The National Marine Fisheries Service (NOAA Fisheries) has reviewed the information provided regarding the proposed Northeast Reliability Interconnect project (NRI), a 345kV electric transmission line between Orrington and Bailyville, Maine. TRC Environmental Corporation and Devine Tarbell & Associated, Inc., on behalf of Bangor Hydro-Electric Company, requested information regarding federally listed Atlantic salmon and shortnose sturgeon, essential or critical habitat for these species, and other fisheries and natural resources within the project area. Based on the mapped proposed route, NOAA Fisheries offers the following information.

Essential Fish Habitat

The Magnuson-Stevens Fishery Conservation and Management Act (MSA) requires federal agencies such as the Department of Energy to consult with the Secretary of Commerce regarding any action or proposed action authorized, funded, or undertaken by the agency that may adversely affect Essential Fish Habitat (EFH) identified under the MSA. Broadly defined, EFH includes "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity." This includes currently utilized and historic habitat.

The proposed NRI route crosses multiple streams, including several designated EFH's for Atlantic salmon. Enclosed is a list of the streams, as identified from the provided USGS quadrangle excerpts, designated EFH for Atlantic salmon.

An EFH assessment, in consultation with the federal action agency, will be required for this project. The required contents of an EFH assessment include:

- 1) A description of the action.



- 2) An analysis of the potential adverse effects of the action on EFH and the managed species.
- 3) The federal agency's conclusions regarding the effects of the action on EFH.
- 4) Proposed mitigation, if applicable.

Other information that should be contained in the EFH assessment, if appropriate, includes the results of on-site inspections to evaluate the habitat and site-specific effects; the views of recognized experts on the habitat or the species that may be affected; a review of pertinent literature and related information; and an analysis of alternatives to the action that could avoid or minimize the adverse effects on EFH.

Project activities and associated impacts in and adjacent to those streams identified as EFH should be considered when compiling information that may be used by the federal action agency in preparing an EFH assessment.

Endangered Species Act

Shortnose sturgeon are not known to occur within the area affected by the proposed project. Therefore, no consultation pursuant to Section 7 of the Endangered Species Act (ESA) is necessary for shortnose sturgeon. However, listed Atlantic salmon are present within several streams and rivers that will be affected by the proposed transmission line including, but not limited to, the Narraguagus River, Machias River, Fletchers Brook, Lanpher Brook, Huntley Brook, and Joe Brook. The Gulf of Maine Distinct Population Segment (DPS) of Atlantic salmon (*Salmo salar*) was listed as endangered under the ESA on November 17, 2000. The Atlantic salmon DPS encompasses all naturally reproducing remnant populations of Atlantic salmon from the Kennebec River downstream of the former Edwards Dam site, northward to the mouth of the St. Croix River. The DPS includes the Dennys, East Machias, Machias, Pleasant, Narraguagus, Ducktrap, and Sheepscot Rivers, and Cove Brook. Cove Brook is a tributary of the Penobscot River. Thus, the project is located within the geographic range of the DPS and has the potential to affect the listed salmon. The U.S. Fish and Wildlife Service (USFWS) and NOAA Fisheries, collectively called the Services, jointly listed the Gulf of Maine DPS. For projects in the freshwater environment (above head of tide), the Services have agreed that all comments and correspondence regarding consultation under Section 7 of the ESA will be channeled through the USFWS. Therefore, consultation pursuant to Section 7 of the ESA for impacts on Atlantic salmon will be with the USFWS. No other federally listed or proposed threatened or endangered species and/or designated critical habitat for listed species under the jurisdiction of NOAA Fisheries are known to exist in the project impact area. Therefore, no further consultation with NOAA Fisheries is required. Should project plans change or new information become available that changes the basis of this determination, consultation should be initiated.

Fish and Wildlife Coordination Act

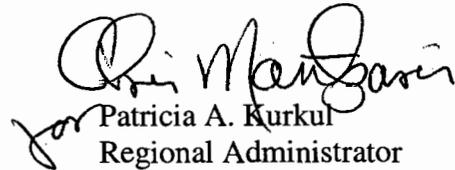
Portions of the proposed route may affect habitat suitable for American eel, alewife, and blueback herring, particularly in areas proximate to the Machias, Narraguagus, and Penobscot Rivers. Site specific information for these species will be required.

Conclusion

At this time, NOAA Fisheries has determined that shortnose sturgeon and designated critical habitat are not found within the NRI route. No further consultation with NOAA Fisheries under Section 7 of the ESA will be required. Habitat designated EFH for Atlantic salmon will be affected by the project, therefore, an EFH assessment will be required of the federal action agency. Other species may be affected, such as American eel and herring, however, site specific information is required to evaluate potential impacts.

NOAA Fisheries appreciates the opportunity to provide comments and technical assistance during the early phases of project development. If you have any questions, please contact Sean McDermott of my staff at 978-281-9113 for EFH concerns, or Sara McNulty at 978-281-9328, ext. 6520, for ESA matters.

Sincerely,


for Patricia A. Kurkul
Regional Administrator

Enclosure

cc: Jerry Pell, DOE
Wende Mahaney, USFWS
Norm Dube, ASC
Steve Timpano, ME IF&W
Stacie Beyer, ME DEP
Brian Swan, MEDMR



John Elias Baldacci
Governor

STATE OF MAINE
ATLANTIC SALMON COMMISSION

323 State Street
172 State House Station, Augusta, ME 04333-0172
Telephone: (207) 287-9972/Fax: (207) 287-9975
www.maine.gov/asa



Patrick C. Keliher
Executive Director

January 24, 2005

Mr. Gil A. Paquette
Project Manager
TRC Environmental Corporation
125 John Roberts Road, Unit 14
South Portland, ME 04106

**REF: Information Request for Bangor Hydro-Electric Company's Proposed
Northeast Reliability Interconnect Project**

Dear Gil:

By letter dated December 20, 2004, you requested information regarding the federally listed Atlantic salmon (*Salmo salar*), essential or significant Atlantic salmon habitats, and other concerns associated with the proposed construction of approximately 85 miles of new transmission line in Maine. The new transmission line will originate at Bangor Hydro-Electric Company's (BHE) Orrington Substation and will cross the Maine-New Brunswick border at Baileyville, Maine. Specifically, the line will parallel the existing Maine Electric Power Company (MEPCO) transmission line and/or the Maritimes and Northeast Pipeline, L.L.C. (M&NE) natural gas pipeline for approximately 12 miles from the Orrington Substation north to Blackman Stream in Bradley. At this point, the line will turn easterly/northeasterly for approximately 13.6 miles to the Stud Mill Road east of Sunkhaze Stream in T32 MD (Myra). From here, the line runs northeasterly and is generally co-located with the Stud Mill Road and/or the M&NE pipeline for the remaining 59 miles to the international border. Devine Tarbell & Associates, Inc. (DTA) identified sixty-five streams that the transmission line will cross along its length.

Along its proposed route, the new transmission line crosses drainages that historically contained runs of Atlantic salmon. The Penobscot, Union, Narraguagus, Machias, East Machias, and St. Croix drainages all contained runs of Atlantic salmon prior to the industrial revolution. To this day, these same watersheds still contain populations of Atlantic salmon, although in extremely reduced numbers. Whether some of the individual waterbodies crossed by the new transmission line formerly contained or now contain Atlantic salmon is more difficult to ascertain. Many of the streams are small and could be used for rearing juvenile Atlantic salmon. In addition, some of the colder streams are most likely utilized as refugia by juvenile Atlantic salmon during the warmer summer months and presence of salmon may be intermittent in a specific stream. Also, the particular location where the transmission line crosses a stream may or may not contain spawning and/or rearing habitat. Nonetheless, adult and/or juvenile Atlantic salmon could use the stream reach as a migratory pathway.

In addition to rivers and streams that historically contained or presently contain Atlantic salmon, the National Marine Fisheries Service (NMFS) and U.S. Fish and Wildlife Service (USFWS) listed as endangered, under the Endangered Species Act (ESA), the Atlantic salmon populations of eight rivers in the State of Maine. The new transmission line will cross three of these watersheds. The Narraguagus, Machias, and East Machias rivers and their tributaries could be impacted by transmission line construction or long-term line maintenance. Specifically, we are concerned with the timing of construction, proximity of new roads, location of structures, right-of-ways, erosion and/or sedimentation, buffer widths, and plans for vegetation control near streams.

You have consulted with us as well as with other resource and regulatory agencies as the project has evolved. Working together, we have identified two major stream crossings (main stems of the Narraguagus and Machias rivers), five tributaries to the Machias River (two tributaries to Fifth Machias Lake; a tributary to Fletcher Brook; Dead Stream; Lanpher Brook), and two tributaries to the East Machias River (Huntley Brook; Joe Brook) as waters with special environmental concern warranting judicious construction techniques and post-construction maintenance. There are over 20 other streams within these three watersheds that will be crossed by the transmission line. We recommend that similar construction and maintenance standards be applied to these streams as well.

I believe you are keenly aware of our concerns and that appropriate measures will be undertaken during and following construction to make this project as benign as possible on Atlantic salmon populations within all watersheds crossed by the transmission line. If you have any questions or need additional information, please do not hesitate to contact me by phone at (207) 941-4453 or electronically at norm.dube@maine.gov.

Sincerely,



Norman R. Dubé
Fisheries Scientist

cc: Wende Mahaney, USFWS
Jeff Murphy, NOAA
Sean McDermott, NOAA
Stacie Beyer, MDEP
Steve Timpano, MDIFW



John E. Baldacci
GOVERNOR

STATE OF MAINE
DEPARTMENT OF INLAND FISHERIES & WILDLIFE
WILDLIFE DIVISION - REGION C
PO BOX 220
JONESBORO, MAINE 04648

Phone (207) 434 - 5927 FAX (207) 434 - 5923



ROLAND D. MARTIN
COMMISSIONER

Gil Paquette
Senior Program Manager
TRC Environmental Corporation
400 Southborough Drive
South Portland, Maine 04106

January 28, 2005

Dear Mr. Paquette:

I have reviewed the resource information which you provided with your letter of December 20, 2004. According to our most recent information, there are no additional Essential or Significant Wildlife Habitats, or occurrences of Threatened or Endangered species in the corridor affected by the Northeast Reliability Interconnect project. As discussed at our meeting on January 20, 2005, there is an osprey nest on Allen Brook along the boundary between T34 MD and T35 MD which may be affected by installation of the line. If needed, we will be available to consult on any actions you find necessary regarding this nest.

As always, if I can be of any further assistance, please contact me.

Sincerely,

A handwritten signature in black ink, appearing to read 'Rich Bard'.

Rich Bard
Asst. Regional Wildlife Biologist

Paquette, Gil

From: Brokaw, Ronald [Ronald.Brokaw@maine.gov]
Sent: Friday, February 04, 2005 2:12 PM
To: Paquette, Gil
Subject: RE: Bangor Hydro Stream Buffers

Yes, I'm still OK with the 25 foot buffer as the SOP.

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

From: Paquette, Gil [mailto:GPaquette@TRCSOLUTIONS.com]
Sent: Friday, February 04, 2005 1:14 PM
To: Smith, Michael R; Brokaw, Ronald
Cc: Timpano, Steve
Subject: Bangor Hydro Stream Buffers

Have you had an opportunity to consider the proposed 25 foot buffers yet? I am trying to wrap up the vegetation maintenance plan of the project for DEP review and would like to incorporate your comments/concerns as soon as possible. I know in the past the 25 foot buffer is what you recommended but just want to make sure the train of thought hasn't changed

Thanks,

Gil Paquette

From: Paquette, Gil
Sent: Sunday, January 23, 2005 11:49 AM
To: 'Smith, Michael R'; 'Brokaw, Ronald'
Subject: Bangor Hydro Stream Buffers

Bangor Hydro 345 kV Transmission Line Project

Although a transmission line ROW remains vegetated and is allowed to grow into a scrub-shrub habitat after the initial clearing, additional precautions will be taken by BHE to protect waterbodies. Based on previous projects BHE will implement a 25 foot buffer on all waterbodies. During construction no machinery may enter the stream buffer except to cross the stream using a temporary bridge. No equipment will be allowed to enter the stream. For clearing in the buffer, mechanical harvesters must reach in so the ground is not disturbed and to minimize disturbance to existing vegetation that will be allowed to remain (saplings/shrubs/herbaceous vegetation). Harvesters will not be allowed to enter the 25' stream buffer. After construction, only trees that can grow into the conductor clearance zone will be cut. All cutting will be by hand and no herbicide will be used within the 25 foot buffer.

Although you will have an opportunity to review our vegetation maintenance plan and application after the application is filed with the DEP, I would like to get your comments on the 25 foot buffer and make sure that you are fine with this prior to filing our application. That will ensure we have taken into consideration MDIFW's (and other agencies who I have coordinated with) specific comments/suggestions prior to our filing.

Thanks in advance for your reply. I am more than happy to meet with you if you would like to sit down and discuss the project in more detail.

4/19/2005

Gil A. Paquette, CWB, PWS
Senior Program Manager
TRC Environmental Corporation
400 Southborough Drive
South Portland, Maine 04106
Main: 207-879-1930
Fax: 207-879-9293
Cell: 207-310-1996
Home: 207-282-3074
Web: www.trcsolutions.com

Paquette, Gil

From: Smith, Michael R [Michael.R.Smith@maine.gov]
Sent: Friday, February 04, 2005 2:26 PM
To: Paquette, Gil
Subject: RE: Bangor Hydro Stream Buffers

Yes, I am OK with this. Mike

*Michael R. Smith
Regional Fishery Biologist
Dept. Inland Fisheries & Wildlife
73 Cobb Road
Enfield, ME 04493
Phone: 207 732 4131
FAX: 207 732 4405
E-mail: michael.r.smith@Maine.gov*

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