BEFORE THE
STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

In the Matter of

NEW YORK REGIONAL INTERCONNECT, INC.

Case 06-T-0650

JANUARY 9, 2009

AMENDED TESTIMONY

Prepared Testimony of:
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The New York State Department of
Environmental Conservation
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Q. Please state your name and business address.

A. My name is Jerome Fraine and my business address is New York State Department of Environment Conservation, 65561 State Highway 10, Stamford, New York 12167-9503.

Q. By whom and in what capacity are you employed?

A. I have been employed by the Department of Environmental Conservation ("Department") for over 26 years in the Division of Fish, Wildlife, and Marine Resources. I work in the Department's Region 4 sub-office in Stamford. Region 4 encompasses a nine county area including Albany, Delaware, Montgomery, Schenectady and Otsego counties. Since 1992, my job responsibilities have included the inspection of protected streams to ensure that no activities are conducted therein without the requisite permits applications within the geographic area of Region 4.

Q. Please describe your educational background.

A. In 1976 I graduated from the State University of New York with a B.S. degree in Biology.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to twofold: (1) to describe the New York and federal regulatory schemes for protecting the water quality and use of streams: and (2) to identify and describe the protected streams that are located within two of the proposed NYRI alternative transmission line routes that cross through Delaware and Otsego counties.

Q. What are protected streams as defined under New York State Environmental Conservation Law ("ECL") Article 15?

A. Department regulations at 6 NYCRR 608.1(p) define a "protected stream" as: "*any stream or particular portion of a stream for which there has been adopted by the department or any of its predecessors any of the following classifications or standards: AA, AA(t), A, A(t), B, B(t) or C(t). Streams designated (t)(trout) also include those more specifically designated (ts)(trout spawning).*"

Q. How are protected streams regulated in New York?

A. The excavation and placement of fill in protected streams is prohibited unless a permit is issued under 6 NYCRR 608.2 (a): "*No person ...may change, modify or disturb any protected stream, its bed or banks, nor remove from its bed and banks sand, gravel or other material, without a permit issued pursuant to this Part.*"

Q. Are there Department water quality regulations that safeguard protected streams?

A. The Department narrative water quality standards in 6 NYCRR 703.1 are as follows:

Parameter	Classes	Standard
Taste-, color-, and odor-producing, toxic and other deleterious substances	AA, A, B, C, D, SA, SB, SC, I, SD, A-Special, GA, GSA, GSB	None in amounts that will adversely affect the taste, color or odor thereof, or impair the waters for their best usages.
Turbidity	AA, A, B, C, D, SA, SB, SC, I, SD, A-Special	No increase that will cause a substantial visible contrast to natural conditions.
Suspended, colloidal and settleable solids	AA, A, B, C, D, SA, SB, SC, I, SD, A-Special	None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages.
Oil and floating substances	AA, A, B, C, D, SA, SB, SC, I, SD, A-Special	No residue attributable to sewage, industrial wastes or other wastes, nor visible oil film nor globules of grease.
Garbage, cinders, ashes, oils, sludge and other refuse	SA, SB, SC, I, SD	None in any amounts.
Flow	AA, A, B, C, D, A-Special	No alteration that will impair the waters for their best usages.

Q. Why is it critical to protect a stream's water quality?

A. The stream's water quality is essential to maintain aquatic habitat and for use of the stream for recreational uses including fishing.

Q. Are there any other state and federal environmental protection programs that can affect water quality in protected streams?

A. Based on my personal experiences in monitoring stream quality during the Millennium.

Pipeline construction, the proper development and implementation of a Stormwater Pollution Protection Plan ("SWPPP") is essential for preventing erosion and sedimentation that causes or contributes to turbid discharges to protected streams that

result in violations of 6 NYCRR 703.1 water quality standards (i.e., turbidity) (See, 6 NYCRR 750-1.4(b) and 40 CFR 122.26, requirements for state and federal stormwater permit requirements).

Q. What NYRI documents have you reviewed in the development of your testimony?

A. I reviewed the "NYRI Supplemental Filing February 2008" prepared for the ESS Group, Inc by EDR, Environmental Design and Research, Exhibits 3 and 4.

Q. What transmission line routes have you reviewed regarding potential impacts to protected streams?

A. I reviewed the NYRI Proposed Route, and the NYRI Marcy South Alternate Route.

Q. Where does the Proposed Route cross DEC Region 4?

A. The NYRI proposed main transmission line would cross only Delaware County in Region 4. It would enter the region in the Town of Deposit, Delaware County from the Town of Sanford in Broome County. The line would leave Delaware County, Town of Hancock and enter Region 3 in the Town of Fremont, Sullivan County. As the line crosses through Delaware County it would be necessary to clear vegetation, install poles and transmission lines across the following streams and rivers:

Stream Name	Waters Index Number	Class and Standard
Butler Brook	D-71-11	C
W. Branch Delaware River	D-71	B(T)
Roods Creek	D-71-4	C(TS)
Laurel Creek	D-71-4-1	C(TS)
Unnamed stream	D-71-3	C(TS)
Travis Brook	D-71-2	C(TS)
T3 of Sands Creek	D-71-1-3	C(T)
Sands Creek	D-71-1	C(TS)
Bear Brook	D-71-1-1	C(TS)
East Branch Delaware Rvr	D-70	C(T)
Cobas Hollow	D-70-4	C(TS)
Eel Weir Hollow	D-70-5	C(TS)
Gee Brook	D-70-6	C(T)
T3 of Abe Lord Creek	D-65-3	C
Abe Lord Creek	D-65	C(TS)
T2 of Abe Lord Creek	D-65-2	C
Bouchoux Brook	D-64	C(TS)
Pea Brook	D-61	C(TS)
Hungry Hollow	D-61-1	C(T)
T1 of Hoolihan Brook	D-60-1	C
Hoolihan Brook	D-60	C(TS)

Q. Do any of these protected streams you have identified above contain trout resources?

A. All of the above streams except for Butler Brook, Tributaries 2 and 3 of Abe Lord Creek, and Tributary 1 of Hoolihan Brook, are trout resources.

Q. Are there any other water bodies that would be affected by the proposed main route?

A. In addition to the above named streams, there would be other smaller tributaries and sub-tributaries to these streams that would need to be crossed.

Q. Do you have any concerns regarding the disturbance of land as part of the construction of a transmission line?

A. Construction of the transmission lines above ground will require the installation of lattice towers and/or monopoles, access roads, equipment and material storage areas, etc. Clearing a large amount of land (whether upland or wetland) is a major factor as far as water quality is concerned. Having a DEC-approved SWPPP plan as part of a State Pollutant Discharge Elimination System Stormwater Permit will be critical to protect the numerous streams and stream banks that will be crossed during the construction phase. Based on my experience with the Millennium and the Iroquois Pipeline Projects, I am concerned that the construction and stream crossings would not be accomplished with minimal or no impact to the streams, and turbidity and sedimentation would pollute the water courses.

Q. What other concerns do you have regarding locating transmission lines over these streams?

A. Increased temperature would be very detrimental to the trout resource, and the aquatic environment in general. As the vegetative canopy is removed the streams would likely be subject to warming from solar radiation.

Q. Why is the temperature of a trout stream critical to its functioning habitat?

A. Trout require cool water to survive and thrive; their physiological mechanisms are temperature dependent. Among other things, temperature affects their metabolism and spawning success.

Q. Does the proposed main route cross state freshwater wetlands?

A. According to the NYRI documents the proposed main route would impact 0.5 acre of state freshwater wetlands.

Q. Where does the NYRI Marcy South Alternate Route cross DEC Region 4?

A. The NYRI Marcy South Alternate Route would be located within the existing Marcy South transmission line right-of -way for most of its distance. It would enter Region 4 at the Herkimer/Otsego County line in the Town of Richfield, Otsego County, and leave Region 4 from the Town of Colchester, Delaware County and then enter Region 3 in the Town of Fremont, Sullivan County. For the above ground installation in Region 4 it will require a 150 foot R-O-W; 75 ft on each side of the existing Marcy South line.

Q. Would the Marcy South route result in the need to cross any protected streams?

A. Again, as the line crosses through Otsego and Delaware Counties it would be necessary to construct access roads, storage areas and towers as in the NYRI Proposed Route. The following streams and rivers would need to be crossed:

Stream Name	Waters Index Number	Class and Standard
Dundee Brook	SR-146-36-26	C(T)
Butternut Creek	SR-146-9	C(TS)
Susquehanna River	SR	B
Ouleout Creek	SR-155	C(TS)
Treadwell Brook	SR-155-7	C(TS)
West Platner Brook	D-71-57-3	C(TS)
East Platner Brook	D-71-57-4	C(TS)
W. Branch Delaware Rvr	D-71	C(T)
Gregory Hollow Brook	D-70-39	C(TS)
Trout Brook	D-70-26	C(TS)
E. Branch Delaware River	D-70	C(T)
Beaver Kill	D-70-20	C(T)

Q. Do any of these protected streams you have identified above contain trout resources?

A. All of the above streams contain trout resources with the exception of the Susquehanna River.

Q. Are there any other water bodies that would be affected by the Marcy South route?

A. In addition to the above named streams, there would be other smaller tributaries and sub-tributaries to these streams that would need to be crossed.

Q. Do you have any concerns regarding the disturbance of land as part of the construction of a transmission line?

A. I have the same concerns for this route as the proposed main route regarding the crossing of these streams and tributaries; that it would not be accomplished with minimal or no impact to the streams, based on my experience with the turbid discharges to streams generated from the construction of the Millennium and the Iroquois Pipeline Projects. Both the NYRI Proposed Route and the NYRI Marcy South Alternate Route pass through some very steep terrain, which makes it very difficult to control runoff from rain events and snow melt.

Q. Does the NYRI Marcy South Alternate Route cross any State Fresh Water Wetlands?

A. The NYRI Marcy South Alternate Route crosses three state freshwater wetlands amounting to 5.46 acres of disturbance within this right-of-way. The NYRI proposed route would cross only 0.5 acres of state freshwater wetland in Region 4.

Q. What are the factors used in evaluating whether to issue a permit under 6 NYCRR 608.2?

A. In reviewing an application for a stream disturbance, the Department has set forth the standards for review in 6 NYCRR 608.8 to determine whether the proposal is in the public interest: *"(a) the proposal is reasonable and necessary; (b)the proposal will not endanger the health, safety or welfare of the people of the State of New York; and (c) the proposal will not cause unreasonable, uncontrolled or unnecessary damage to the natural resources of the state, including soil, forests, water, fish, shellfish, crustaceans and aquatic and land-related environment*."

Q. What type of information is required to make an ECL Article 15 application complete for purposes of DEC review?

A. The DEC would require the following information for each crossing for an ECL Article 15 permit application: site plan; location of the trenching or drilling; the amount of disturbance; the soil and sedimentation control measures; cross sections; photographs of existing conditions; a restoration plan; the type of equipment to be used, and time frames for work.

Q. Would this information be the same for each stream crossing application?

A. No. Each stream crossing would require its own evaluation which would determine the degree of information that I identified in my preceding answer.

Q. You also mentioned earlier in your testimony that turbid discharges to streams from the Millennium and Iroquois Pipeline projects caused contravention of water quality standards (i.e., turbidity) in streams. How is that concern best addressed for the NYRI project?

A. The testimony of Angus Eaton on the need for an individual SPDES stormwater permit underscores my concerns that the NYRI application lacks stream crossing

specific information to adequately protect the streams from turbid discharges during construction and until final stabilization of disturbed areas are achieved.

Q. Is there a time of year when trout spawning is most prevalent in the cold water trout spawning streams classified as C(TS)?

A. The DEC's Region 4 permits generally prohibit any work in cold water trout streams between October 1 and June 14 depending, again, on site specific conditions. This is the period of time when spawning is most vulnerable to turbidity or other bank and bed disturbances, because brook and brown trout spawn in the Fall and the eggs over-winter in the stream bed, then hatch out in the Spring.

Q. As a habitat biologist, do you have any other concerns regarding the proposed construction methods and maintenance of the alternative routes that you have not already mentioned?

A. Appendix P, Section 3.2.1 of the NYRI Supplemental Filing (February 2008) discusses clearing and maintaining the proposed routes with herbicides. NYRI must identify the proposed herbicides, and address any potentially significant impacts to the aquatic and terrestrial resource from these herbicides. Clearing native vegetation is also an invitation for exotic invasive species to become established, and alternately clearing invasive species without a plan in place to control the accidental spread is also an issue. They need to describe how they will deal with invasive species on a species specific level.

Q. If NYRI had submitted an application under 6 NYCRR 608.2 for a DEC permit to construct transmission lines in the two alternative routes discussed in your testimony, would you recommend that the permits be issued?

A. I would recommend the denial of any application made under ECL Article 15 for the NYRI proposed route and the NYRI Marcy South routes based on the insufficient information in the NYRI application on how the sites would be stabilized during construction, so that the construction would not cause unreasonable, uncontrolled or unnecessary damage to the cold water protected streams containing trout resources.

Q. In your expert opinion, can the Public Service Commission make a finding, based on the existing NYRI information.

A. In my expert opinion, the Public Service Commission cannot make either a positive finding under its procedures or issue a Clean Water Act Certificate because of the lack of information in the record on the potential impacts of the route construction on cold water trout streams.

Q. Does this conclude your direct testimony?

A. Yes.