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BY COURIER

August 31, 2015

Ms. Kirsten Walli
Secretary
Ontario Energy Board
Suite 2700, 2300 Yonge Street
P.O. Box 2319
Toronto, ON.
M4P 1E4

Dear Ms. Walli:

EB-2009-0078 – Hydro One Networks' Section 92 Lower Mattagami Transmission Reinforcement Project – Hydro One's Construction Activities Monitoring Report

As directed by the Board's Decision and Order dated August 5, 2009, I am attaching Hydro One Networks' Monitoring Report for the above noted Application.

An electronic copy of the complete report has been filed using the Board's Regulatory Electronic Submission System (RESS).

Yours truly,

ORIGINAL SIGNED BY JOANNE RICHARDSON

Joanne Richardson

Attach.



HYDRO ONE NETWORKS INC

LOWER MATTAGAMI RIVER PROJECT

Monitoring Report

August 31, 2015

Hydro One Networks Inc.
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Lower Mattagami River Project - Monitoring Report

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1. Introduction

This monitoring report covers Hydro One construction activities related to:

- adding new 230 kV line tap connections at four locations: Kipling 2 GS, Harmon 2 GS, Smoky Falls 2 GS and Little Long 2 GS,
- adding a second 230 kV transmission circuit from Harmon Junction to Kipling GS, and
- station work at Little Long SS

The report includes construction activities associated with Hydro One's Lower Mattagami Transmission Reinforcement Project which received OEB leave to construct approval on August 5, 2009¹.

The Section 92 Approval is applicable to the following work: modifying the support towers and adding a second 230 kilovolt ("kV") three phase transmission circuit to the existing 4.56 km section of line H22D from Harmon Junction to Kipling Generating Station (the "Project").

Construction was substantially complete for the Kipling X Harmon line in May of 2012 and the Project was put in-service in December of 2012. Construction activities were considered complete as of November of 2014 once the back feed and unit synchronization was completed as the customer was not ready to connect to the transmission system until September 2014.

The monitoring report addresses the following conditions set out in the Section 92 Approval:

3.1 Both during and for a period of twelve (12) months after the completion of construction of the Project, Hydro One shall monitor the impacts of construction, and shall file five (5) copies of a monitoring report with the Board within fifteen (15) months of the completion of construction of the Project. Hydro One shall attach to the monitoring report a log of all comments and complaints related to construction of the Project that have been received. The log shall record the person making the comment or complaint, the time the comment or complaint was received, the substance of each comment or complaint, the actions taken in response to each if any, and the reasons underlying such actions.

3.2 The monitoring report shall confirm Hydro One's adherence to Condition 1.1 and shall include a description of the impacts noted during construction of the Project and the actions taken or to be taken to prevent or mitigate the long-term effects of the impacts of construction of the Project. This report shall describe any outstanding concerns identified during construction of the Project and the condition of the rehabilitated Project land and the effectiveness of the mitigation measures undertaken. The results of the monitoring programs and analysis shall be included and recommendations made as appropriate. Any deficiency in compliance with any of the Conditions of Approval shall be explained.

This report describes the impacts noted during the construction of Hydro One's portion of the Lower Mattagami River Project (LMRP) along with the actions taken to prevent or mitigate the

¹ EB-2009-0078

long-term effects of the impacts of construction of the project. This report describes any outstanding concerns identified during construction of this project and the condition of the rehabilitated project land and the effectiveness of the mitigation measures undertaken.

2. Environmental Job Planning

In brief, the scope of this work included the refurbishing of existing towers, construction of new towers, restringing of electrical conductor and the building of access roads and work areas to allow for this work to be completed.

Hydro One construction supervisors reviewed all the work locations on site during the planning stages of this Project. This review allowed for the preparation of the Environmental Specification for this project which was issued to all Hydro One personnel and contractors working on this Project to follow to completion of this Project.

A monitoring log was created and maintained related to Section 92 Approval requirements. The results are detailed in Section 10 of this report.

Hydro One's environmental approvals applicable to the Section 92 approval are contained within OPG's submission of the amendment to the Mattagami River Hydroelectric project Environmental Assessment. The Mattagami Extension Coordination Committee reviewed and agreed to the variances by letter to the Ministry of Environment on July 20, 2011.

3. Vegetation Clearing

There was vegetation clearing required to be done on this Project to accommodate the new tower locations for the angle tower (i.e. anchor) structures being built at Structures 12 and 14². The additional area of this new right of way is 0.9 ha, and cutting was less than 0.5 ha. The site was inspected and it was determined that there were no merchantable trees to be cleared.

4. Herbicide Inquiry

OPG owns and operate approximately 2km of new transmission line from Smoky Falls 2 GS that parallels Hydro One's existing transmission corridor for circuits S3S and S4S. The Moose Cree First Nation ("Moose Cree FN") have an understanding with OPG that OPG will prohibit the use of herbicides for vegetation control on OPG's transmission corridor. On June 14, 2012 Hydro One received an inquiry from Moose Cree FN regarding Hydro One's vegetation maintenance practice related to herbicide use on Hydro One's transmission corridors. A conference call was held on July 13, 2012 between Hydro One and the Moose Cree FN where it was explained that Hydro One will continue the selective use of herbicides on Hydro One's corridors. Hydro One followed up on this inquiry with a site visit and met on October 3, 2012 with the Moose Cree FN to further explain Hydro One's vegetation management practices. This inquiry was not related to the construction activities of this project.

² These two structures are within the Section 92 Approval area.

5. Unusual Find At Tower 14, Circuit L20D³

On August 23, 2012 something unusual was found by a crew who was auguring a hole for a new tower leg foundation. They saw something at the bottom of the augured hole on the bedrock that they could not identify or explain. Their immediate concern was that they had possibly dug up some burial remains so the crew followed the Environmental Specification requirements when something unknown is uncovered by stopping work, protecting the site and making the required contacts. In case it was human remains, Hydro One notified the Ontario Provincial Police and the Project's archaeologist, Dr. John Pollock. The Moose Cree FN was notified by the Project Manager. Photographs of what was uncovered were sent to all these parties. From these photos, Dr. Pollock was able to conclude that they were not human remains and were likely fossils. Hydro One then contacted Brian Atkins who is the Regional Resident Geologist with Ontario's Ministry of Northern Development and Mines. Mr. Atkins came to the site on September 5, 2012 to investigate the site, after which he concluded that it was simply marine fossils found on the bedrock surface. Photographs and samples were taken of this fossiliferous bedrock by the Ministry of Northern Development and Mines, Timmins Ontario.

The site was cleared for construction to begin again on September 11, 2012.

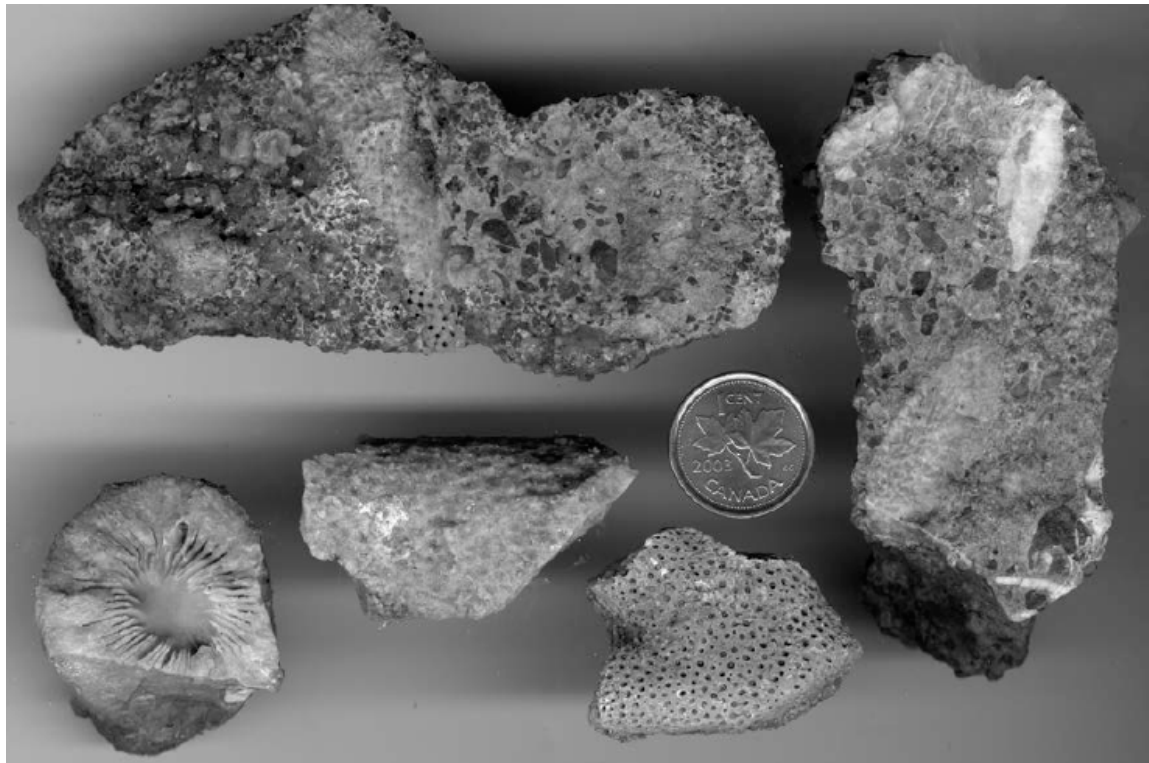


Figure 1 – Some of the fossils found when auguring for new Tower 14 on Circuit L20D

³ This is within the Section 92 Approval area.

6. Road Building

New rock roads and tower pads were constructed off of the existing service road between Harmon and Kipling GS to accommodate the heavy equipment needed for the existing tower upgrade and new tower construction work. Specifically the work involved:

- Eleven single circuit structures were converted to double circuit structures and two anchor structures were replaced, constructed in a 4km section of circuit L20D/H22D to connect the new Kipling 2 GS generation⁴.
- Seven lattice structures were installed to connect the new Harmon 2 GS generation to circuit L20D.
- One double circuit H22D/L20D structure was replaced and four lattice structures installed to connect the new double circuit OPG line for generation from Smoky Falls 2 GS.
- Four lattice structures were installed to connect the new Little Long 2 GS generation to circuit H22D.



Figure 2 - Building Rock Construction Pads on circuit L20D Tower 12 (in foreground) and 13 and 14 (in background)⁵

⁴ These structures are within the Section 92 Approval area

⁵ This is within the Section 92 Approval area



Figure 3 - Avoiding wetlands with new rock road construction

While there was already existing access on the H22D/L20D transmission line, additional crushed aggregate was added to the roads and around the towers in order to allow for the safe travel and use of the heavy equipment needed to complete this work. All Hydro One travel and work was contained to the rock areas including tower pads, roads and yards. As shown in Figure 4, barriers were established wherever there was concern about inadvertent entry into natural areas.



Figure 4 - Barriers installed to prevent entry into natural areas



Figure 5 - Tower Pad Construction on Tower 4 on Circuit L20D

7. Station Work on the LMRP

There was station refurbishment work at Little Long Switching Station (SS) involving the installation of a new protection, control and telecom building, station service voltage transformers, new footings, a wave trap, fiber optic cabling, fuse boxes and associated cable trenches. As a result of this station work, there were fifteen dump truck loads of spoil and broken concrete that needed to be removed. This material was sampled prior to it leaving the site using Waste Disposal Bulk and Toxicity Characteristic Leaching Procedure (TCLP) testing parameters. As this material tested clean, it was disposed of on the nearby Hydro One transmission corridor under circuit L20D between Towers 7 and 8 as shown in Figure 6. This area was “high and dry” with no conflicting land uses. This excavated material was spread so that there was minimal change to the overhead electrical clearances as shown in Figure 7 below.



Figure 6 - Clean excavated fill piled on Hydro One transmission corridor for disposal on site



Figure 7 - Clean excavated fill spread out on Hydro One corridor for disposal on site

Hydro-vacuums are used when excavating in a live electrical station which was required in Little Long SS. This method creates a combined water and earth slurry that needs to be periodically disposed of. To dispose of this slurry at Little Long SS, a temporary drying pond lined with geotextile was created west of this station's fence on the other side of the road. This pond was created in mid-October of 2012 and was removed and disposed of by the end of 2012. Once the water is separated out from the slurry and the sediment dries on the geotextile, this material is collected and appropriately disposed of.

The existing Smoky Falls SS, an 115kV switchyard, will be decommissioned and equipment removed in the summer of 2016.

8. Culvert Installation in Harmon Ditch

In order to access Tower 2 of circuit H22D as part of the Harmon GS new connection, a large ditch had to be crossed approximately 50 metres from the structure. This 8 foot culvert was installed in July of 2012 and was removed in October of 2012. After removal the site was restored to its previous condition and was seeded. The photos in Figures 9 and 10 show the site just after the culvert had been removed and 2 years after removal, respectively. There is very little evidence of this culvert installation in the latter photo as the site is re-established with vegetation.



Figure 8 - Pre-Construction Site photo Showing Location of Temporary Culvert Installation



Figure 9 - Restored Site after the Removal of the Temporary Culvert



Figure 10 - Restored Site Two Years after the Removal of the Temporary Culvert

9. Restoration

Hydro One's transmission line work was substantially completed on December 11, 2012. Very little site restoration was needed upon completion of the construction work. All rock roads and work areas around the towers sites were left in a safe, stable condition. Having these rock roads and pads left in place guarantees good access for future tower line maintenance and also ensures all these future activities will be contained to the rock areas. This minimizes the impact on the remainder of the corridor.

Any disturbance to mineral soil was seeded with Hydro One standard right of way mix (consisting of 40% Creeping Red Fescue, 25% Tall Fescue, 20% Perennial Rye grass, 15% Champ Timothy).

On the August 6, 2014 monitoring visit, the only outstanding environmental issue related to the Section 92 approvals area is two locations where scrap steel from previously removed lattice towers were still piled on site waiting for contractor pickup. This will be scheduled for removal in the Fall of 2015.



Figure 11 - Scrap steel from old tower removal still on site waiting for pickup

10. Monitoring Log Summary

In accordance with the OEB's Condition of Approval 3.1 for this project, Hydro One's Public Affairs department established a log prior to the start of construction activities in May 2012 for the purpose of recording any comments, inquiries or complaints about project construction or construction effects. No comments, complaints or inquiries were received during the construction period, nor have any been received since Hydro One placed the Board-approved facilities in service.

11. Summary

To complete this Project, there was only a small amount of new corridor required. As shown in Fig 12 much of this new area was covered in rock as required for the construction of the new Tower 12⁶.



Figure 12 - Photo showing the only new corridor needed for this project (west of Structure 12 on Circuit L20D with much of it covered with rock)

This project has had minimal environmental impact beyond adding a significant layer of crushed aggregate to the existing access and work areas which was required in order to accommodate the heavy equipment needed. The only outstanding environmental issue is the scrap steel which is scheduled to be picked up in the Fall of 2015. Overall the construction activities were in compliance with the Conditions of Approval set out for this Project. It is unlikely that there will be any long term environmental impacts resulting from this Hydro One project. The site has been left in a stable condition that should pose no safety or environmental risk to anyone or anything in the area. There are no outstanding concerns and for the foreseeable future this site will form part of Hydro One's normal routine high voltage transmission line maintenance program.

⁶ This is within the Section 92 Approval area