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Susan Frank
Vice President and Chief Regulatory Officer
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BY COURIER

November 30, 2010

Mr. David Richmond
Manager, Electricity, Facilities, and Infrastructure Applications
Ontario Energy Board
Suite 2700, 2300 Yonge Street
P.O. Box 2319
Toronto, ON.
M4P 1E4

Dear Mr. Richmond:

EB-2008-0023 – Leave to Construct Underground Transmission Facilities in Norfolk County for the Vanessa-Norfolk Transmission Reinforcement Project – Post Construction Financial and Monitoring Report

The Ontario Energy Board's Decision and Order, Appendix A, Section 3.0 dated August 14, 2008 requires that Hydro One Networks Inc shall provide to you a Post Construction Financial Report and five (5) copies of the Monitoring Report. Both the Post Construction Financial Report and five copies of the Monitoring Report are attached.

If you have any questions or concerns please contact Joanne Richardson at 416-345-5393

Sincerely,

ORIGINAL SIGNED BY SUSAN FRANK

Susan Frank

Post Construction Financial and Monitoring Report

Vanessa - Norfolk Transmission Reinforcement Project

Prepared for:

Ontario Energy Board

File No. EB-2008-0023

Prepared by:

Hydro One Networks Inc.
Engineering and Construction
Project Management Office
483 Bay Street
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Toronto, Ontario M5G 2P5

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1.0 Introduction

Hydro One Networks Inc. was granted leave to construct facilities associated with the Vanessa to Norfolk Transmission Reinforcement Project for the purposes of (i) to increase the capacity of the existing Vanessa Junction to Norfolk TS 115 kilovolt ("kV') line in order to meet the forecast load on the line; and (ii) to improve reliability of supply by making available a second circuit in the event that one of the circuits is out of service. The construction work commenced in the fall of 2008 and was completed by May of 2009. This report is being filed in compliance with Conditions 3.1 and 3.2 of the Board Order which required Hydro One to file a Post-Construction Financial Report and a Monitoring Report.

2.0 Background

Hydro One Networks Inc. filed an application with the Ontario Energy Board (the "Board") dated March 13, 2008 under section 92 of the Ontario Energy Board Act, 1998, S.O. 1998, c.15, Schedule B. Hydro One applied for an order or orders of the Board granting leave to construct transmission facilities for the Vanessa - Norfolk Transmission Reinforcement Project. The work involves reinforcing the existing 12 km 115 kV single-circuit transmission line in Norfolk County between Vanessa Junction and Norfolk Transformer Station.

3.0 Scope of Work

The scope of work for the Vanessa - Norfolk Transmission Reinforcement Project was as follows:

Line Work:

- Replace 12 kilometres of existing conductors (C12) with higher capacity conductors;
- Install 3 new Structures and associated footings at Vanessa junction;
- Install a new set of conductors and support arms on the existing structures to establish a second 115 kV circuit (C9);
- Construct a short (20 metre) line tap to connect Bloomsburg Municipal Transformer Station to the 115 kV line;
- Install dampers for the phase conductors; and
- Connect new 115 kV circuit at existing Norfolk TS

Station Work:

- Install new relays, rack and switches at Norfolk and Caledonia TS
- Reinforce 115 kV structures at Norfolk TS.

The proposed in-service date for the Project was April 2009.

The Board assigned File No. EB-2008-0023 to this application.

4.0 Schedule Status

	Planned In-Service	Actual In-Service/Completion
C9 and C12 Upgrades	April 30 2009	May 15, 2009
Bloomsburg Line Tap	April 30, 2009	May 15, 2009
Road Removal	April 30, 2009	July 20, 2009

5.0 Schedule Variance

The line upgrade (C12) and the installation of the new circuit (C9) was completed by April 30, 2009. However, delays in the delivery of telecommunication equipment and outages, resulted in commissioning activities delays. Consequently, the in-service date was delayed by 2 weeks.

Due to very wet spring soil conditions, Hydro One elected to delay removal of the temporary roads to minimize any disturbance to the sub-soils and surrounding vegetation.

6.0 Cost Status Report

Table 1- Total Project Costs (Lines and Stations)
($000s)

	Estimated costs	Actual Costs	Change
Transmission Line Facilities (Table 2)	$2,792	$3,302	
Station and Telecommunications Facilities (Table 3)	447	642	
Line Tap to Bloomsburg-Lines MTS (Table 4)	250	193	
Line Tap to Bloomsburg-Stations MTS (Table 5)	91	35	
Total	**$3,580**	**$4,172**	**$592**
			16.5%

Table 2 – Lines Work
Line Upgrade
($000s)

	Estimated Costs*	Actual Costs**	Change
Project Management	$100	$39	
Engineering	166	159	
Material	938	871	
Construction [1] (includes removals)	1,330	1,773	
Commissioning	-	44	
Sub-Total (excl. O/H and AFUDC)	**$2,534**	**$2,886**	
Interest (AFUDC)	17	56	
Overhead	241	360	
Total Lines Work	**$2,792**	**$3,302**	**$510**
			18.3%

Table 3 – Stations Work
Line Upgrade
($000s)

	Estimated Costs*	Actual Costs**	Change
Project Management	$7	$7	
Engineering	137	245	
Material	109	102	
Construction [1]	110	66	
Commissioning	40	133	
Sub-Total (excl. O/H and AFUDC)	**$403**	**$553**	
Interest (AFUDC)	4	12	
Overhead	40	76	
Total Lines Work	**$447**	**$642**	**$195**
			43.6%

Table 4 – Lines Work
Line Tap Bloomsburg MTS
($000s)

	Estimated Costs*	Actual Costs**	Change
Project Management	$13	$0	
Engineering	81	108	
Materials	27	47	
Construction [1]	92	27	
Commissioning	10	-	
Sub-Total (excl. O/H and AFUDC)	**$223**	**$182**	
Interest	4	4	
Overhead	23	8	
Total Lines Work	**$250**	**$193**	**($57)**
			(22.8%)

Table 5 – Stations Work
Line Tap Bloomsburg MTS
($000s)

	Estimated Costs*	Actual Costs**	Change
Project Management	$8	$0	
Engineering	40	5	
Materials	9	4	
Construction [1]	17	4	
Commissioning	8	20	
Sub-Total (excl. O/H and AFUDC)	**$82**	**$33**	
Interest	1	1	
Overhead	9	1	
Total Lines Work	**$91**	**$35**	**($56)**
			(61.5%)

[1] includes contingency

Source

* Project estimate EB 2008-0023 dated March 13, 2008
** SAP Data Mart dated May 18, 2010

7.0 Cost Change Analysis

The initial Vanessa - Norfolk Transmission Reinforcement Project was granted leave to construct on August 14, 2008 based on a project submission cost of $3,580M.

Cost Change from $3,580K to $4,172K ($592K) is primarily attributable to:

- Poor weather conditions (wind and rain) at the start of the project delayed construction which was originally scheduled to begin in October to late fall, resulting in additional resources and overtime required to complete the project by spring 2009 before a moratorium on construction activities imposed by the Ministry of Natural Resources (MNR) Conservation Authority came into effect. MNR informed Hydro One that no line work was to be performed between May and August due to nesting migratory birds in the area along the transmission line. Thus, in order to meet the project schedule and the requirements of Norfolk Power, Hydro One needed to increase resources and overtime to complete the project or risk a one year in-service delay. This increased the line upgrade construction costs by $400K, which was partially offset by lower project management costs ($60K)
- Line upgrade commissioning costs (see Tables 2 and 3) were $130K over budget due to changes in the outage plan. Often the outages occurred on weekends that resulted in premium labour rates. Significant field labour hours, over that initially estimated, were also needed to meet Norfolk Power's telecommunication specifications at Bloomsburg. This also resulted in more field labour time at Caledonia TS and Norfolk TS.
- Delays in the delivery of telecommunication equipment (i.e., NSD 570s and racks) also resulted in additional work hours.
- AFUDC costs for the line upgrades (see Tables 2 and 3) were $47K over budget. This is a result of higher interest rates than forecast for both 2008 and 2009 as well as the increase in direct costs. AFUDC interest rates forecast in 2008 and 2009 were 5.1% and 5.5% in the original submission to the OEB. Actual AFUDC rates were 5.6% and 6.9 % respectively.
- Overhead costs for the line upgrade (see Tables 2 and 3) were $155K over budget. The initial application forecast capitalized overhead rates were 11.8% and 13.12% in 2008 and 2009. Actual rates were 12% and 14% respectively. The increase in rates together with the increase in direct costs resulted in higher costs applicable to the project.
- Lines and Stations work for the Bloomsberg MTS line tap were $113K under budget, including AFUDC and overhead, due to the deferral of work. The deferral arose as Norfolk Power experienced delays in installing its planned new second power

transformer. As a result, Hydro One's connection work at Bloomsberg MTS was deferred and carried out later under a separate agreement with Norfolk Power.

8.0 Environmental Monitoring and Complaints

Prior to the initiation of construction of the project, an Environmental Specification and Development Plan (ESDP) was written and reviewed with the Project Manager and the Construction Foremen. It outlined environmental permits and approvals for the project and site specific requirements such as archaeological monitoring when crews were working in specific locations. The ESDPs were followed during the reinforcement of the transmission line and there was no evidence of long or short term effects of construction. No complaints from adjacent neighbours were received during the construction and installation of the line. The Environmental Monitoring Report is provided in Appendix A.

	Signature	Name	Title	Date
Submitted by:		Derek McQuade	Project Manager	November 25, 2010
Approved by:		Victor Girard	Director-Business Service Projects	November 25, 2010

Monitoring Report

Vanessa Jct. - Norfolk TS Reinforcement Project

EB2008-0023

Hydro One Networks Inc.
April 2010

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Monitoring Report
Vanessa Jct. - Norfolk TS Reinforcement Project
EB2008-0023

Background

In 1997, the former Ontario Hydro determined that in order to maintain electrical liability and meet future demand for the City of Nanticoke and the Regional Municipality of Haldimand-Norfolk, the original 115kV wood pole transmission line constructed in 1940 required refurbishment. Fig. 1 shows the location of the project. A Class EA: *Vanessa Junction x Norfolk Transformer Station 115kV Line Refurbishment* was undertaken and filed with the Ministry of the Environment in March 1999. An archaeological assessment was also completed as part of the project. The Vanessa Jct. x Norfolk TS line was refurbished and upgraded in 1999 and there were plans to install a second circuit. In 2007 it was decided that there was a need for the second circuit and the in-service date was to be April, 2009.

It was recognized that Ontario Energy Board Section 92 Approval would be required for the project, and for due diligence an environmental screening would be completed and archaeological information updated. Land owners were notified of the project and potentially affected or interested First Nations were contacted in writing.

The Energy Board issued a decision Aug 14, 2008 and one of the conditions of approval was a monitoring report, which was to be filed within 15 months of the completion of construction. Construction began in October 2008 and was completed in May 2009.

Project Scope

Following is a description of the lines and stations work that was done on facilities owned and operated by Hydro One:

Line work:

- 12 km of 115kV single-circuit line conductor was removed and replaced with a new higher capacity conductor between Vanessa Jct. to Norfolk TS
- A second 115kV three phase transmission circuit and support arms were installed on the existing structures from Vanessa Junction to Norfolk TS
- A short 115 kV line tap (.02km) was built to connect Bloomsburg MTS and the 115 kV transmission line

Station work:

- New relays, rack and switches were installed at Norfolk TS
- a new 115kV structure was installed at Norfolk TS

Environmental Specification and Development Plan

Prior to the initiation of construction of the project, an Environmental Specification and Development Plan was written and reviewed with the Project Manager and the Construction Foremen. It outlined environmental permits and approvals for the project and site specific requirements such as archaeological monitoring when crews were working in specific locations.

Monitoring

Two types of monitoring were conducted during the construction: environmental and archaeological monitoring. Environmental monitoring was done to ensure the Environmental Specifications and Development Plans were followed and there were no long-term environmental effects of the project. Archaeological monitoring was a condition of approval by the Ministry of Culture and was conducted by licensed archaeologists during construction.

Environmental monitoring was conducted Dec. 3, 2008, Feb. 23, 2009 and May 20, 2009. Sites were field inspected such as locations where the crossing of creeks was prohibited in the plans, access routes and areas where there were constrains because of archaeology. These locations were visually checked to ensure that the Environmental Specification and Development Plans were followed and to assess any environmental effects. During the monitoring no long or short term environmental effects were found. The Environmental Specification and Development Plans were followed.

Archaeological monitoring was conducted by Jacques Whitford Stantec Ltd. according to conditions recommended by the Ministry of Culture. Project activities were monitored by archaeologists at Pole #2, 38, 39 and 84. In these areas access was to follow previously used access routes and was to be done when the ground was frozen or very dry. Eleven artefacts were found by the archaeologists while monitoring construction activities. A 10m buffer was marked with a snow fence in the vicinity of Pole #2 to prevent access to the sensitive area. The monitoring report was filed with the Minister of Culture in compliance with section 65(1) of the Ontario Heritage Act.

Complaints

Hydro One did not receive any complaints from adjacent neighbours during the construction of the transmission facilities.

Conclusion

The Environmental Specification and Development Plans were followed during the reinforcement of the transmission line and there was no evidence of long or short term effects of construction. Archaeologists from Jacques Whitford Stantec Ltd. were in the field monitoring project activities when construction crews were accessing locations specified by the Ministry of Culture. Eleven artefacts were found and documented by the archaeologists.

Hydro One did not receive any complaints during the construction of the transmission facilities.

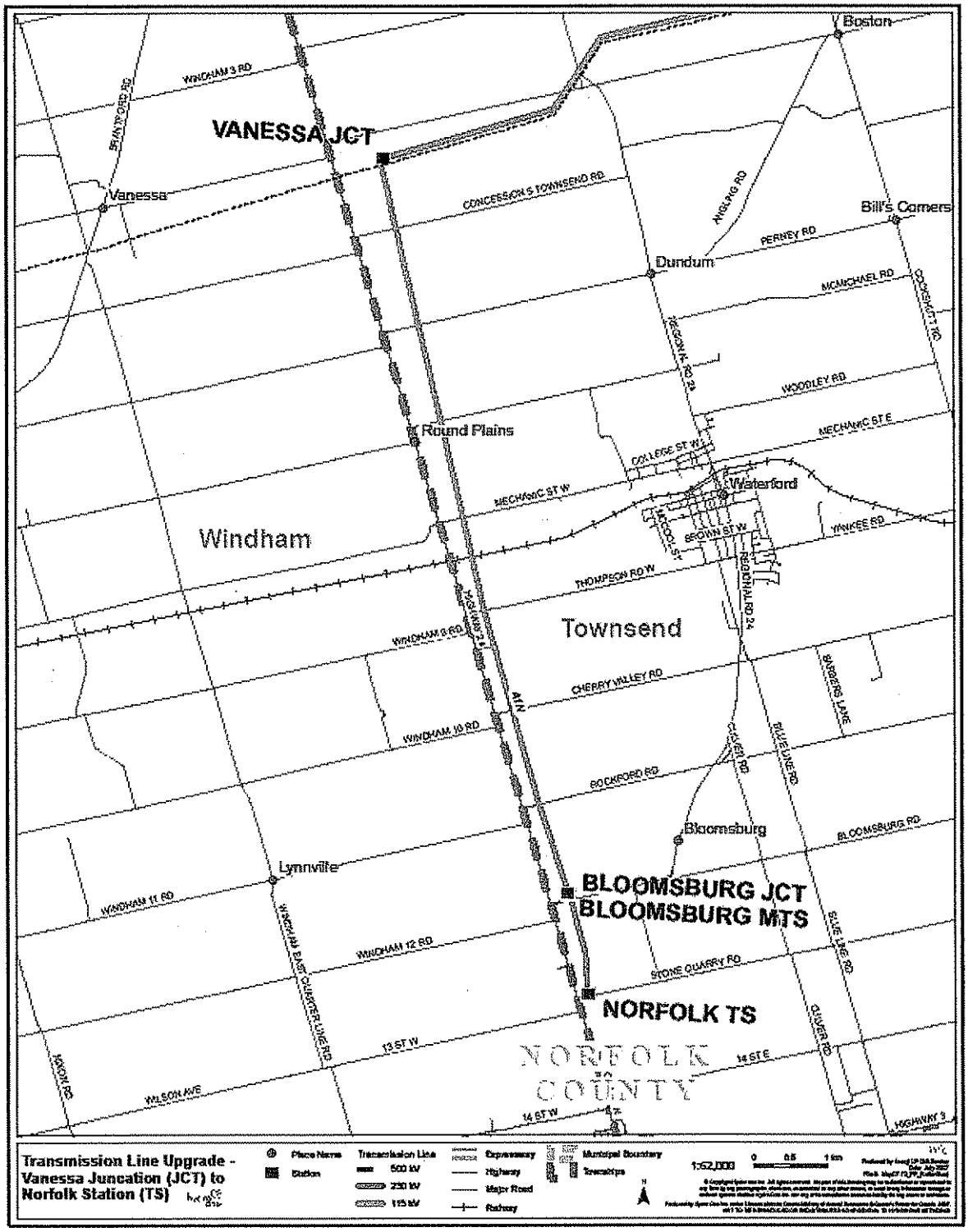

Fig. 1 Location Map of Vanessa Jct. x Norfolk TS