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January 18, 2017

Client File No. 5433.00  
Licence No. 3055

Ms. Tracey Braun  
Director  
Environmental Approvals  
Manitoba Sustainable Development  
Suite 160, 123 Main Street  
Winnipeg, MB R3C 1A5

Dear Ms. Braun:

**RE: Bipole III Transmission Project (Licence 3055) – Fibre Optic Alteration Request**

Pursuant to the Bipole III Transmission Project *Environment Act* licence 3055, Manitoba Hydro is requesting a minor alteration to the Bipole III Transmission Project EIS. Manitoba Hydro originally planned to bury a fibre optic cable along the Conawapa Access Road from Keewatinohk Converter Station (CS) to the Limestone Generating Station (GS) as part of its communication network (Chapter 3 – PG 3-67). Due to engineering and geotechnical issues with crossing numerous deep ravines associated with rivers and streams along the Conawapa Access Road, Manitoba Hydro is proposing to bury the cable within the AC Collector transmission line right of way.

Manitoba Hydro is also proposing to bury a second new fibre optic cable within the AC Collector ROW. This second cable would tap the existing KN36 (Construction Power Line) overhead optical ground wire and connect to the Keewatinohk CS, providing back-up communications with the Limestone GS. The attached map illustrates the proposed changes.

The fibre optic cables will be installed near the existing tower foundations on the western side of the AC Collector ROW using horizontal directionally drilling (HDD) techniques under frozen ground conditions. The use of HDD vs direct bury mitigates potential effects on soil, water quality and vegetation by causing minimal ground disturbance.

Manitoba Hydro has had discussions with the Northeast Region about these proposed changes; concern was expressed with HDD under the Limestone River. Manitoba Hydro has changed the design to eliminate the need for HDD under the Limestone River through routing the fibre optic cable overhead across the river, by one of two methods 1) replacing one of the existing overhead ground wires on the Keewatinohk to Henday Transmission Line (K64H) with an optical ground wire or 2) stringing the fibre optic cable on new poles approximately 11m in height along the western edge of the ROW.

The proposed changes do not alter any conclusions in the Bipole III Transmission Project EIS.

As the proposed routes are within recently developed ROW's this provides for increased mitigation of potential effects on rivers and streams compared to the original proposal of burying the cable along the Conawapa Access Road. Manitoba Hydro will follow the Bipole III AC Collector Construction Environmental Protection Plan for the installation of the buried and overhead fibre optic cables.

Should you have any questions or require further clarification of our request, please do not hesitate to contact me at 204-360-4394.

Regards,





***Original signed by Shannon Johnson***

Shannon Johnson  
Manager  
Licensing and Environmental Assessment Department  
Manitoba Hydro  
820 Taylor Ave (3)  
Winnipeg, Manitoba  
R3M 3T1





Attachment: 1

## Bipole III Transmission Project



### Project Infrastructure

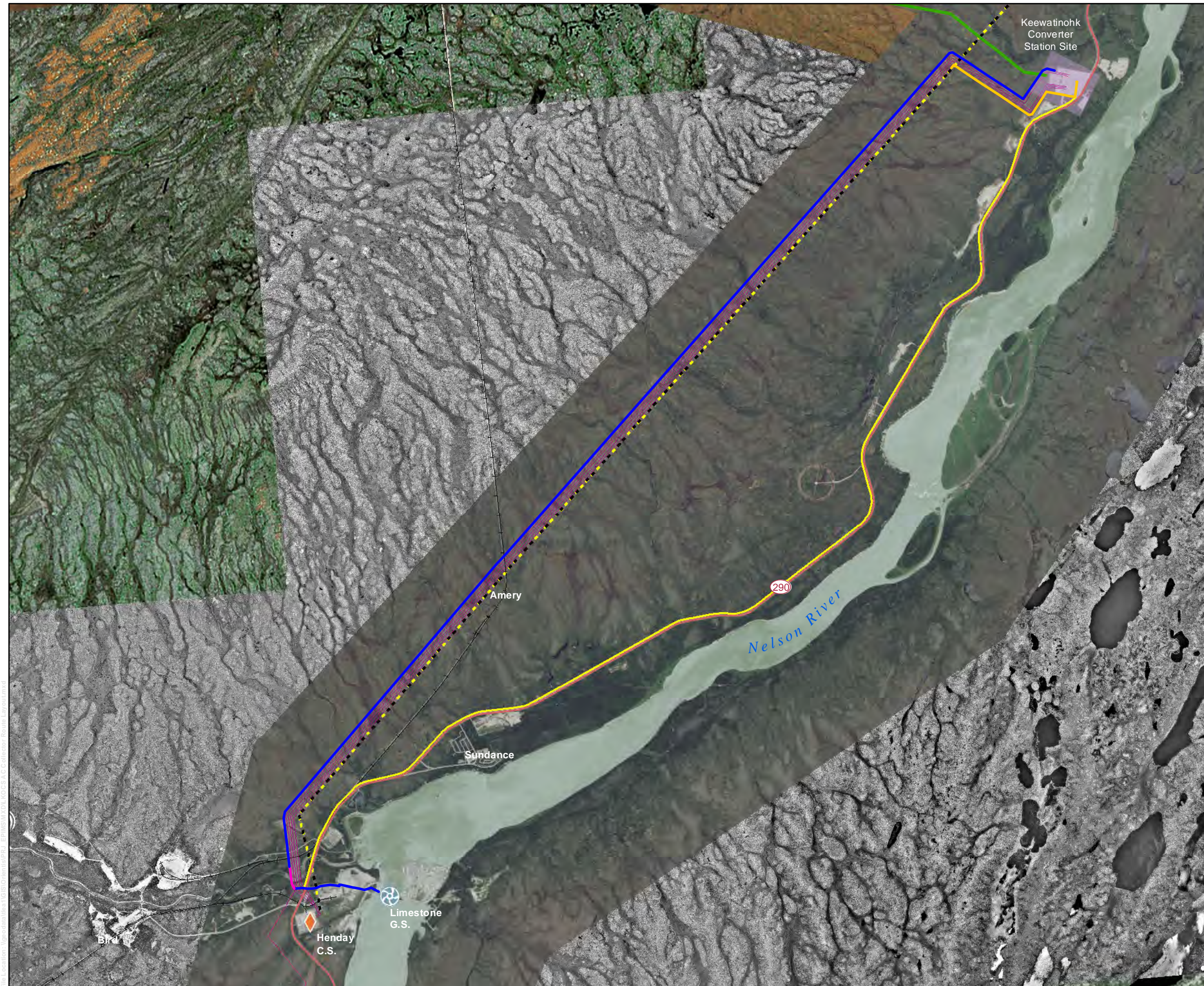
-  Final Preferred Route
-  Converter Station Site
-  AC Collector Line
-  Construction Power (KN36)

### Fibre Optics Cable

-  New Underground Cable
-  New Overhead Cable
-  New Underground Tap from Existing Overhead Cable
-  Previously Planned Cable Location

### Infrastructure

-  Converter Station
-  Generating Station



Coordinate System: UTM Zone 14N NAD83  
 Data Source: MBHydro, ProvMB, NRCAN  
 Date Created: January 5, 2017



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## Limestone to Keewatinohk Optical Cable System AC Collector Line Fibre Optic Route Layout

*Draft: For Discussion Purposes Only*