

Final Draft Report

Assessment Summary

Hydro One Networks Inc.



Beck #1 SS: Q5G and BSH106 Equipment Removals

CAA ID Number: 2008-EX379

1.0 General Description

Hydro One is proposing to remove various 25 Hz equipment at Beck SS #1 by the end of 2008. The removals include: (1) equipment on Q5G and (2) equipment on BSH106.

(1) Beck SS #1 Q5G Removals

The conversion of Beck 1 G7 from 25 Hz operation to 60 Hz operation is scheduled for an in-service date by December 31, 2008 (CAA ID 2006-252). **Figure 1** shows the system configuration as a result of the Beck 1 G7 conversion.

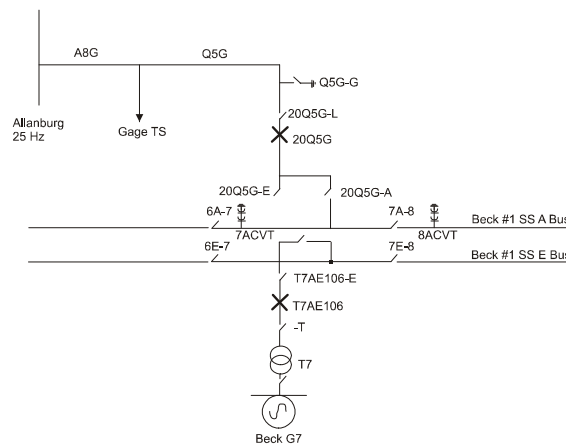


Figure 1: System Configuration Post Beck 1 G7 Conversion

Ontario Power Generation (OPG) has currently scheduled an outage window to the end of December 2008 to convert Beck 1 G7 to 60 Hz operation.

Hydro One sees an opportunity to remove various Q5G equipment on the Beck 1 A bus during this outage window. This will allow Hydro One a head start in its work for the eventual retirement of the Beck 25 Hz system (2009) and for the anticipated relocation of Beck TS #1 from OPG facilities (2011). Scheduling the work during the OPG outage period will help minimize the frequency of future G7 outages after the unit comes into service. Hydro One plans to schedule this work between September 14th to December 12th 2008.

Hydro One is proposing to remove a breaker, CVTs, switches and bus sections. No plans have yet been made to remove the Q5G underground cable.

The removal of the Q5G equipment will result in Gage TS without a second supply at Beck 1 in the event that A8G is lost. Hydro One has indicated that the customers at Gage TS, Horizon Utilities and U.S. Steel Canada, have agreed that a second supply at Beck 1 will not be needed.

(2) Beck SS #1 BSH106 Removals

Hydro One is proposing to remove switches BSH106-G and BSH106-7. These switches currently rest upon a powerhouse railing that OPG would like to make betterments on. Hydro One plans to schedule the work between September 14th and December 12th 2008.

2.0 Proposed Modification

The following equipment will be removed for each project:

(1) Beck SS #1 Q5G Removals

- Breaker: 20Q5G
- CVTs: 7ACVT and 8ACVT
- Switches: 6A-7, 7A-8, 20Q5G-A, 20Q5G-E, 20Q5G-L and Q5G-G
- Bus Sections: (1) *from 6A-7 switch to 8ACVT CVT*
(2) *from breaker 20Q5G to Q5G bay wall bushing*

Figure 2 shows the effect of the system with the Q5G equipment removed:

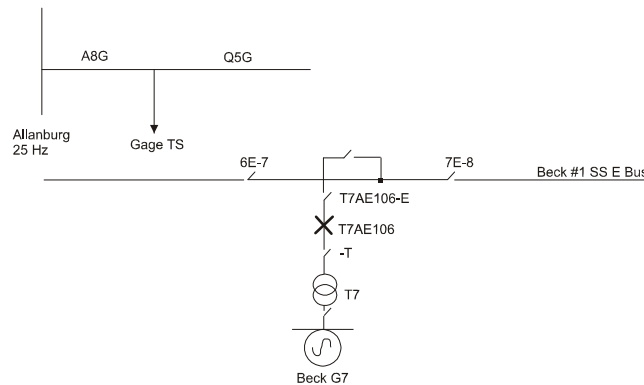


Figure 2: Effect of Q5G Equipment Removal

(2) Beck SS #1 BSH106 Removals

- Switches: BSH106-7 and BSH106-G

3.0 Assessment

(1) Beck SS #1 Q5G Removals

Given that the 25 Hz load is to be retired by 2009 and that the work will occur during the OPG outage window, the removal of the subject Q5G equipment will not have a material adverse effect on the IESO controlled grid. Hydro One has indicated that Horizon Utilities and U.S. Steel Canada have agreed that a second supply for Gage TS is not needed in the event A8G is lost.

The IESO is therefore pleased to grant approval for this work.

(2) Beck SS #1 BSH106 Removals

Circuit BSH106 currently is idle and disconnected from service. The removal of the subject BSH106 equipment will not have any material adverse effect on the IESO controlled grid. The IESO is therefore pleased to grant approval for this work

4.0 Requirements

The following requirements are applicable to both projects:

- De-registration of the Q5G equipment will need to be completed during the Facility Deregistration process.
- Hydro One must notify the IESO as soon as it becomes aware of any changes to the assumptions made in the connection assessment. The IESO will determine whether these changes require a reassessment.

5.0 Notification of Approval

This expedited System Impact Assessment concludes that the removal of the subject Beck SS #1 equipment is not expected to have a material adverse effect on the IESO-controlled grid. It is therefore recommended that a Notification of Conditional Approval of the Connection Proposal be issued, subject to the requirements detailed above.