

June 3, 2010

Ms. Nancy McNeil
Clerk of the Board
Nova Scotia Utility and Review Board
1601 Lower Water Street, 3rd Floor
P.O. Box 1692, Unit "M"
Halifax, NS B3J-3S3

Re: NSPI's Relay Testing Report 2009

Dear Ms McNeil:

In the Board's letter dated May 06, 2006 the Board provided the following:

...The Board directs NSPI to begin testing relays associated with the 69kV and 138kV system components, initially based on a three year maintenance cycle and to access the results of these tests. After the assessment is completed, the three year testing cycle may be extended as required. NSPI is further directed to provide the Board with an annual report showing the number of relays tested, associated costs and numbers requiring some form of action (if any). Supporting cost details are also to be filed as part of the annual filing.

This is the 2009 Annual Report for the Electromechanical Relay Test Program. This report shows the number of relays tested, test results and associated costs in the 2009 relay test program. It also shows the total combined test results for 2007, 2008 and 2009.

The 2009 Electromagnetic Relay Test Program involved the testing of electromechanical relays on the 138kv and 69 kV transmission system. These tests were completed by the System Maintenance Department at NSPI.

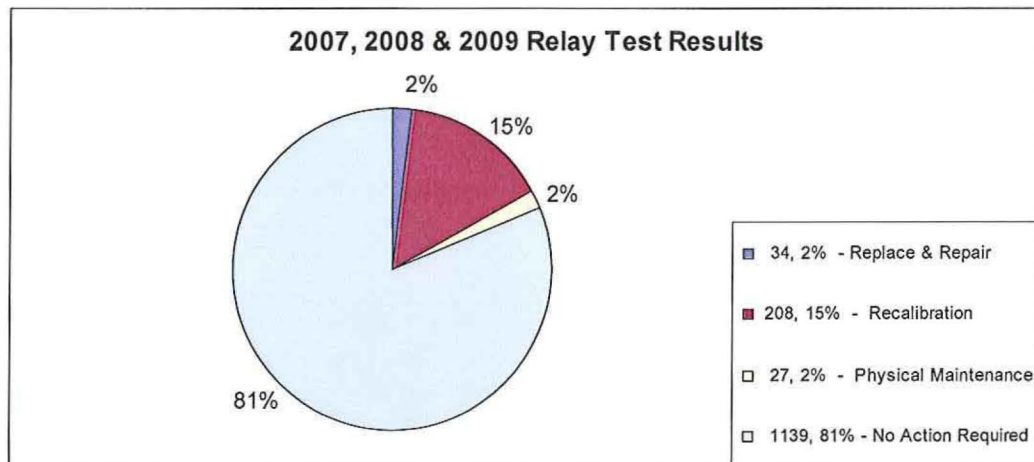
2009 Test Results Summary

In 2009 there were 325 relays tested in 22 substations across the province. The results are summarized into the following categories:

- Replacement or Repair due to serious functional failures – 10 (9%)
- Recalibration – 53 (15%)
- Physical Maintenance – 3 (1%)
- No Action Required – 259 (74%)

2007, 2008 & 2009 Test Result Summary

There were a total of 1408 relays tested in 2007, 2008 & 2009 in 63 substations across the province. The below chart shows the total combined results from the Relay Test Program for the period of 2007 to 2009.



Associated Cost of 2009 Relay Test Program

The total cost associated with the testing of relays in 2009 was approximately \$92,200. The cost is comprised of technician labour, administrative overheads and transportation costs.

69 and 138 kV Relay Test Program – 2009

Relays tested in 2009 (3 year Cycle):

325

Labour Costs for Relay Testing in 2009:

Metro	\$7,843
Northern	\$10,052
West-South Shore	\$18,014
Sydney	\$8,590
Overhead Costs	\$35,154
Transportation Costs - E-350 Van (22% of Field Labour)	\$9,790

Engineering Labour Costs:

Junior Engineer	\$2,767
Total	\$92,210

Future Requirements

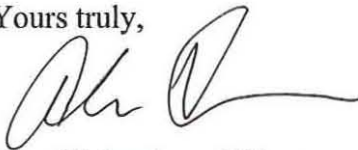
During the past three years a minimal number of relays tested required replacement or repair due to functional failure (34, 2%). Should any of these relays have failed, backup relays would have responded to prevent customer outages. The total cost of the multi-year program is approximately \$440k.

With the recent three year test cycle and related maintenance, the number of these relays requiring replacement or repair in the next test cycle is expected to be further decreased.

Based on NSPI's experience with the testing of these relays as discussed above, NSPI believes a ten year cycle for testing of these relays would be more appropriate and requests UARB approval to make this change.

This would not include relays classified as Bulk Power System Elements under NPCC Inc. Criteria Document A-10 which will require individual testing every four years.

Yours truly,



Alan Richardson, P.Eng.
VP Integrated Customer Service

c: Eric Ferguson
Brian Glinsky