Q. **2013 General Rate Application, Finance**

Page 3.5, lines 1-4 - It is stated that a market analysis was undertaken by one of Hydro's capital market advisors in the fall of 2010 relating to the debt guarantee fee. Provide a copy of this analysis.

A. Please see PUB-NLH-059 Attachment 1.

Scotia Capital

newfoundland labrador hydro
a nalcor energy company

Guarantee Fee Analysis

October 2010

Executive Summary

Request

- Newfoundland Hydro (Hydro) has requested an update on Scotia Capital's (Scotia) thoughts on the value of the guarantee provided by the Province. The last review was provided in November 2008.
- At that time Hydro thought that the most valid comparison would be with Newfoundland Power, however since Newfoundland Power's bonds do not trade with any regularity, Scotia believes a more valid comparison would be with Hydro One, Enbridge Gas and Enbridge Pipeline. Scotia continues to hold that opinion.
- We understand that the Province waived, for 2010/11, the annual fee of 100 bps on the principal amount of Hydro's debt outstanding.

Conclusion

- Scotia Capital believes that the guarantee is currently worth between 25 and 50 bps. Given the nature of Hydro's liabilities (across the maturity spectrum) Scotia suggests a fee of 25 bps for ten years and under, and a fee of 50 bps for over ten years.
- For comparison purposes, Scotia understands that other Provinces charge the following:
  - » Province of British Columbia: a fee on anything over 1 year. The basis of the charge is a recovery of administrative costs rather than a comparison of the borrowing costs of BC Hydro to a private sector alternative (the fee is nominal).
  - » Province of Quebec: 50 bps on maturities over one year.
  - » Province of Ontario: 50 bps on maturities over one year.
  - » Province of Saskatchewan: zero
  - » Province of Alberta: for ATB, a fee equal to federal deposit insurance (to create a level playing field with the Banks), for all others such as ACFA or AFC: zero
  - » Province of New Brunswick: Driven by a specific annual revenue requirement. Currently this equates to a fee of .6489 of 1% on New Brunswick Power's total debt outstanding.

Newfoundland Spreads vs Various Corporate Utility Spreads

Province of Newfoundland and Labrador Spreads vs Various Corporate Benchmark Spreads

Bond	For the Period ending Oct, 2010			For the Period Aug 09 to Oct 10		
	Average	Median	Std Deviation	Average	Median	Std Deviation
Hydro One (Aa3, A+, A(H)) 6.40% due Dec 2011	30.8 bps	22.3 bps	26.9 bps	38.6 bps	38.6 bps	6.4 bps
Hydro One (Aa3, A+, A(H)) 3.13% due Nov 2014		Not Applicable		27.6 bps	19.5 bps	12.1 bps
Hydro One (Aa3, A+, A(H)) 5.49% due July 2040		Not Applicable		41.5 bps	34.4 bps	19 bps
Enbridge Gas (A-, , A) 5.16% due Sept 2014	35.7 bps	24.5 bps	26.7 bps	25.3 bps	25.5 bps	7.25 bps
Enbridge Gas (A-, , A) 5.21% due Feb 2036	81 bps	57.4 bps	7 bps	55.8 bps	57.4 bps	7 bps
Enbridge Pipeline (, A- , A(H)) 5.70% dues July 2036		Not Applicable		56 bps	56.2 bps	2.2 bps
DEX Ten year "A" Rated Corporate Index	104 bps	39.6 bps	124 bps	110 bps	96.5 bps	25.4 bps

"Not Applicable" means that the respective bond had not been issued thus there is no spread history

Newfoundland Spreads vs Various Corporate Utility Spreads

- The chart on the previous page illustrates the spread differences between bonds issued by Hydro One, Enbridge Gas, Enbridge Pipeline and bonds with similar maturities issued by the Province of Newfoundland. The concept was to try and isolate the value of the Provincial guarantee in terms of potential cost savings by comparing bonds issued by the Province with a selection private sector bonds of similar maturity dates.
- Scotia chose Hydro One, Enbridge Gas and Enbridge Pipeline, as those companies are regulated utilities with ratings that would be somewhat similar to Newfoundland Hydro's rating without a provincial guarantee. However, this comparison assumes that Hydro continues to benefit from the existing timely cost recovery and a favourable return on equity ruling. It also assumes that Hydro would continue to be owned by the Province even if it was not guaranteed.
- Of the three Utilities, Scotia believes that Hydro One would represent the lower band (in terms of spread over Cda's) given that it has a split rating "AA3/A+" and is 100% owned by the Province of Ontario. The only negative to this comparison is that Hydro One has a lower debt to equity ratio (approx 60/40) and does not contain any generation, it's purely transmission. Bond investors typically require higher spreads for regulated generation. Enbridge Gas and Enbridge Pipeline would represent the upper band (in terms of spread) as they have ratings of "A", "A+" respectively, are regulated and are owned by private sector investors.
- In addition to Hydro One, Enbridge and Enbridge Pipeline, Scotia also compared the DEX Bond Universe's "A" Rated 10 year Index to the constant 10 year maturity for Newfoundland. Scotia dismissed this comparison as the Dex "A" Index also contains non-utility names which, given their industry sector, trade at wider spreads (for example: Suncor or GTAA).
- Where possible, Scotia compared both maturities under five years and maturities thirty years and over. As one would expect, the spread difference for maturities under five years was tighter than those spreads for maturities over 30 years. The former ranged between 25 and 40 bps. The latter ranged between 40 and 60 bps (a wider range is understandable give the volatility of the long end).

Newfoundland Spreads vs Various Corporate Utility Spreads

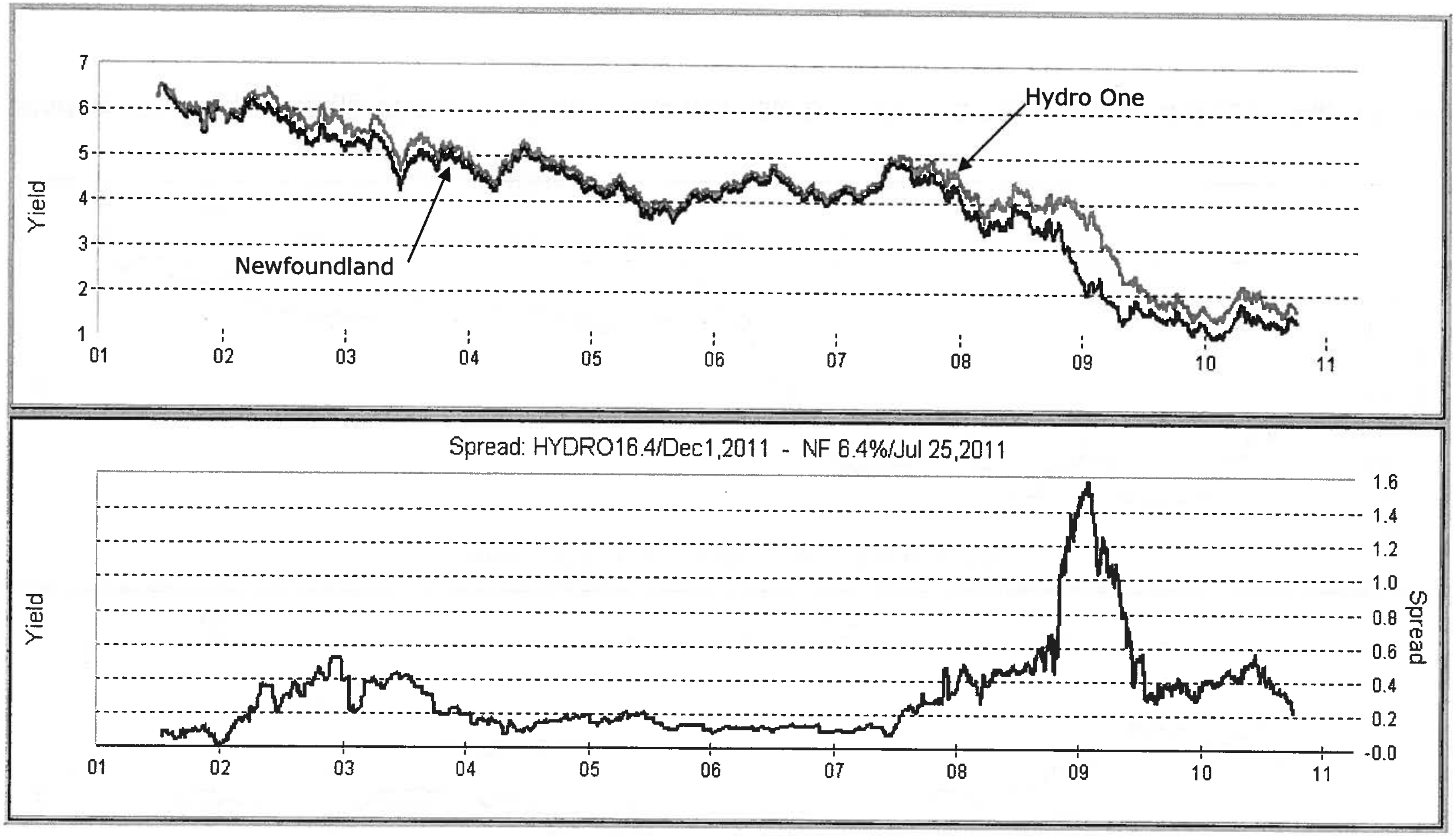
- The chart also illustrates the difference in spreads over two periods: from launch to October 2010 and from August 2009 to October 2010. The reason for the two periods is to illustrate the impact of the "Credit Crunch" on spreads, particularly in the long end. Scotia assumed that the "Credit Crunch" started in August 2008 and ended August 2009.
- As illustrated in the following charts the Credit Crunch has had a dramatic impact on credit spreads and thus the potential value of the Guarantee. During the Credit Crunch, credit spreads for corporate credit dramatically widened in all terms but most particularly in the long end. Government Bonds also widened but not nearly as dramatically, thus negatively impacting the average spread differential between the bond in question and the relevant Province of Newfoundland bond.
- If one were to believe that the Credit Crunch was a temporary aberration and that credit spreads will benefit from the process of "mean reversion" then one should put a greater emphasis on the spread comparison for the period August 2009 to October 2010.
- It is Scotia's view that neither period is a particularly valid comparison: the firm believes that spreads initially "overshot" during the credit crunch and then markets started shifting towards a "new norm" in the period after the crunch. However, the firm also believes that the period August 2009 to October 2010 may not be long enough to draw the conclusion that it represents the "new norm" (although it has begun to feel that way). If faced with a choice, Scotia would lean towards using the period August 2009 to October 2010.

Conclusion

- It is important to consider that the Province has not issued in the public debt markets since 2007. Thus, its spreads benefit from a certain degree of scarcity value. Recently, the Province's long bonds were quoted on a broker screen at a spread that was through the spread for a comparable Province of Ontario bond. Scotia would suggest that scarcity value is worth approximately 5 bps in a spread adjustment.
- There are two additional features of a Guarantee has that are very difficult to value, namely; that during periods of stress in the credit markets, a guarantee from a government entity provides for unrestricted market access and that a guarantee allows for more flexibility as to maturity.

Based on the credit spread analysis of the three utilities and taking into consideration what other Provinces charge their respective Hydro Crown corporations, Scotia Capital believes that the Provincial guarantee is worth between 25 and 50 bps depending on maturity.

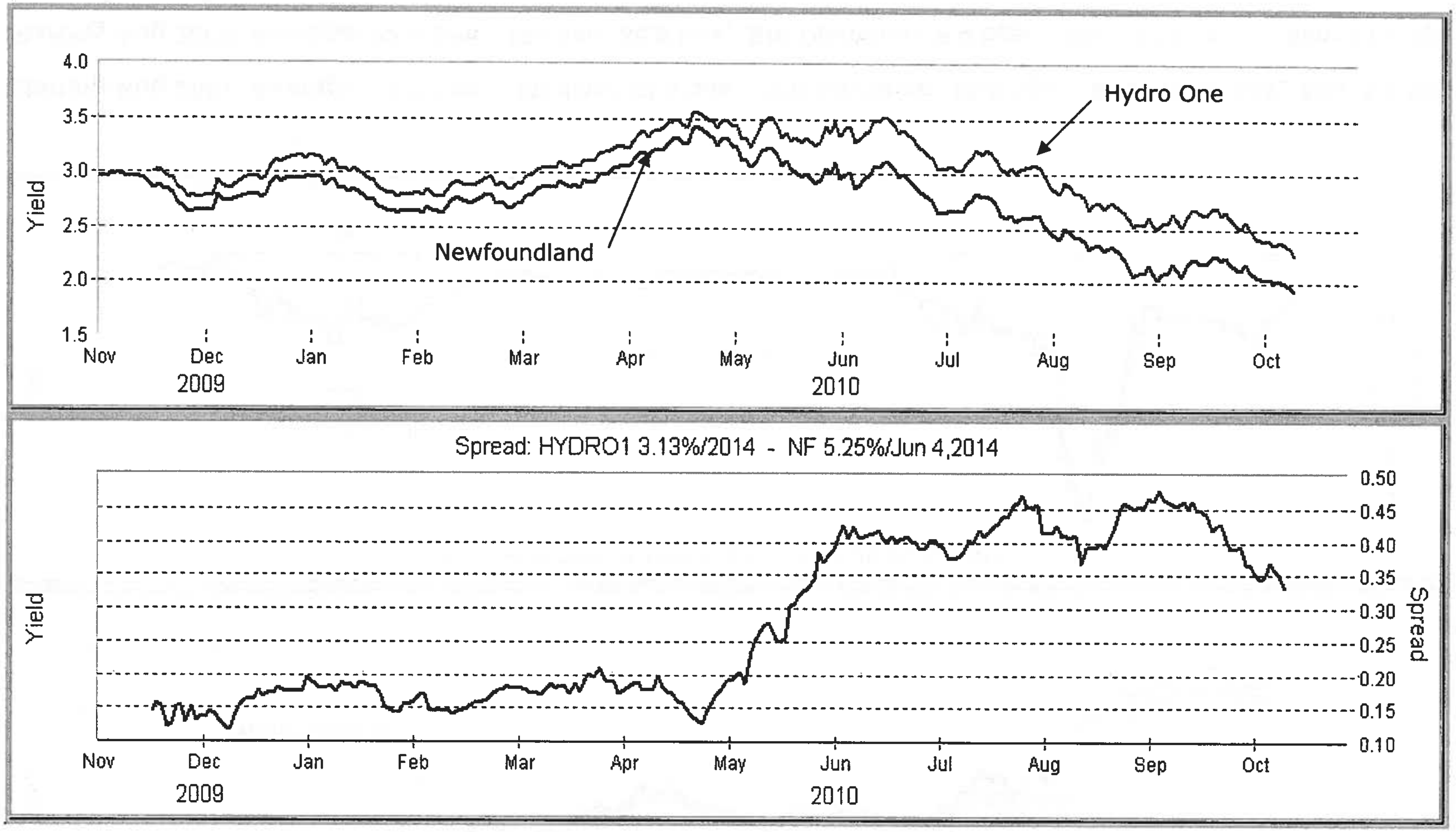
Newfoundland 6.40% due July 2011 vs Hydro One (A+) 6.40% due Dec 2011



Starting Aug 2001: Average: 30.8 bps, Median: 22.3 bps, Std Deviation: 26.9 bps, Max: 157.7 bps, Min: 1.2 bps

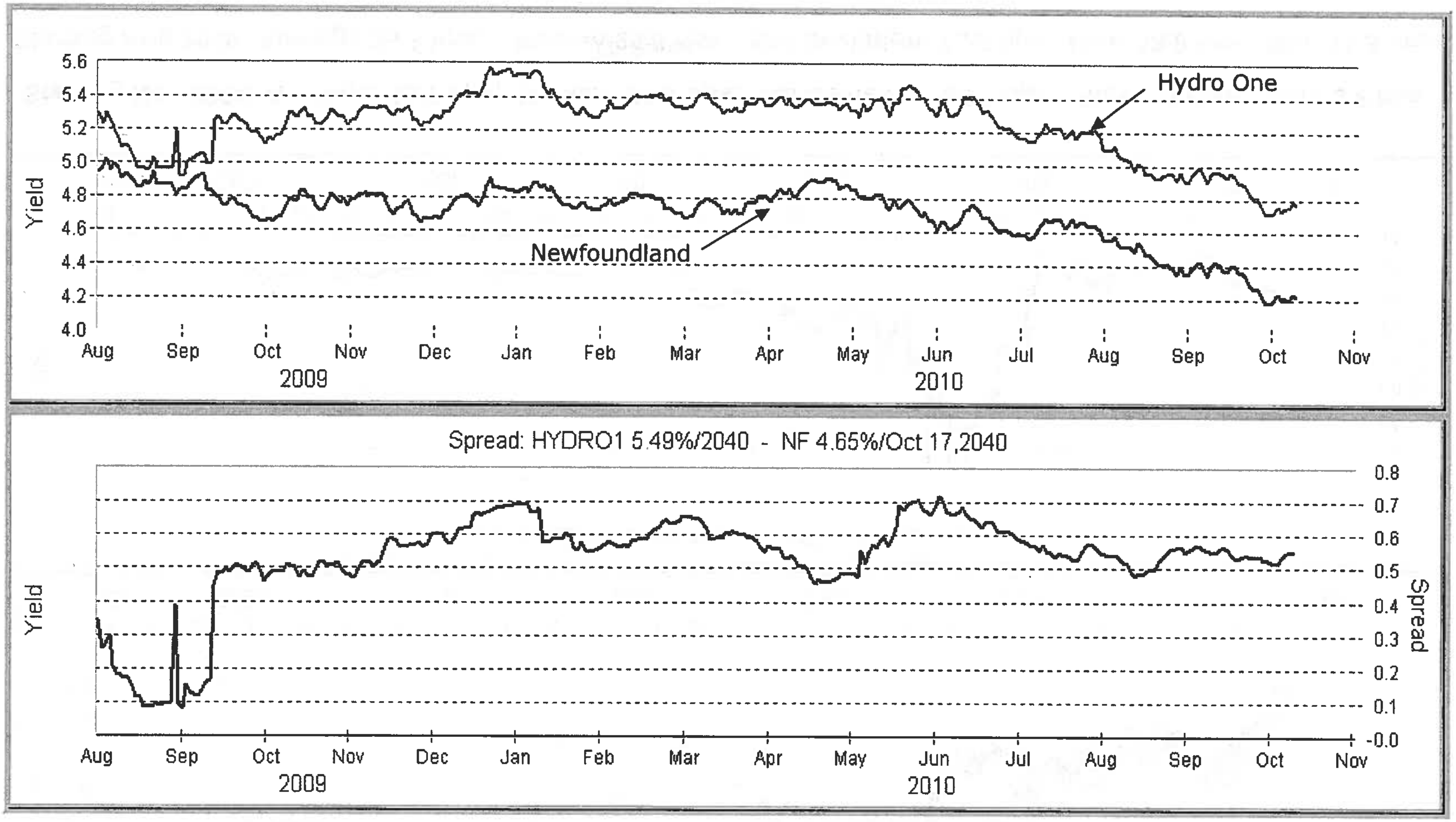
Starting Aug 2009: Average: 38.6 bps, Median: 38.6 bps, Std Deviation: 6.4 bps, Max: 57 bps, Min: 21.7 bps

Newfoundland 5.25% due June 2014 vs Hydro One (A+) 3.13% due Nov 2014



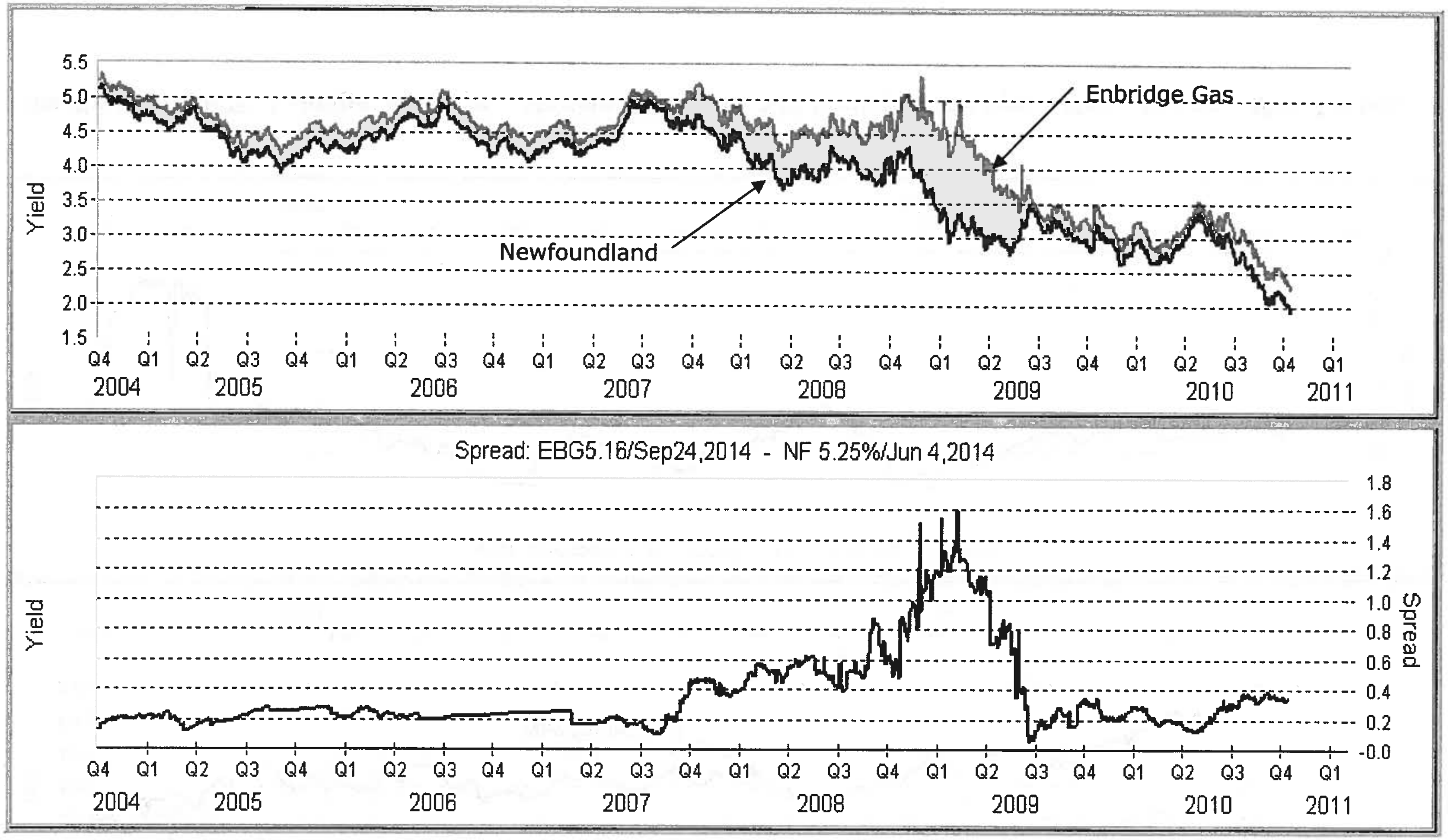
Starting Nov 2009: Average: 27.6 bps, Median: 19.5 bps, Std Deviation: 12.1 bps, Max: 47.9 bps, Min: 11.7 bps

Newfoundland 4.65% due Oct 2041 vs Hydro One (A+) 5.49% due July 2040



Starting Aug 2009: Average: 41.5 bps, Median: 34.4 bps, Std Deviation: 19 bps, Max: 71 bps, Min: 7.9 bps

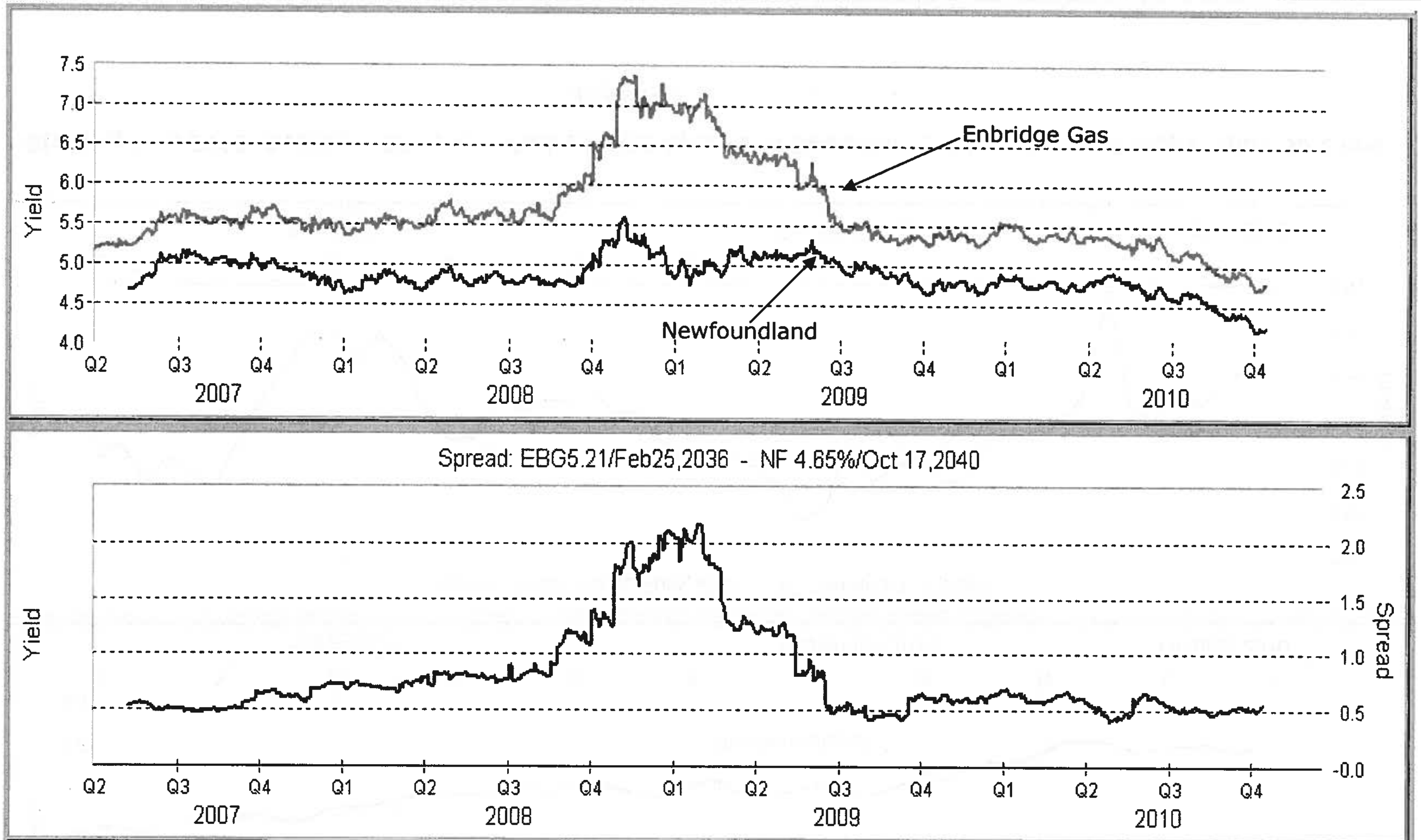
Newfoundland 5.25% due June 2014 vs Enbridge Gas (A) 5.16% due Sept 2014



Starting Nov 2004: Average: 35.7 bps, Median: 24.5 bps, Std Deviation: 26.7 bps, Max: 160 bps, Min: 5.8 bps

Starting Aug 2009: Average 25.3 bps, Median 25.5 bps, Std Deviation: 7.25 bps Max: 38.8 bps, Min: 11.3 bps

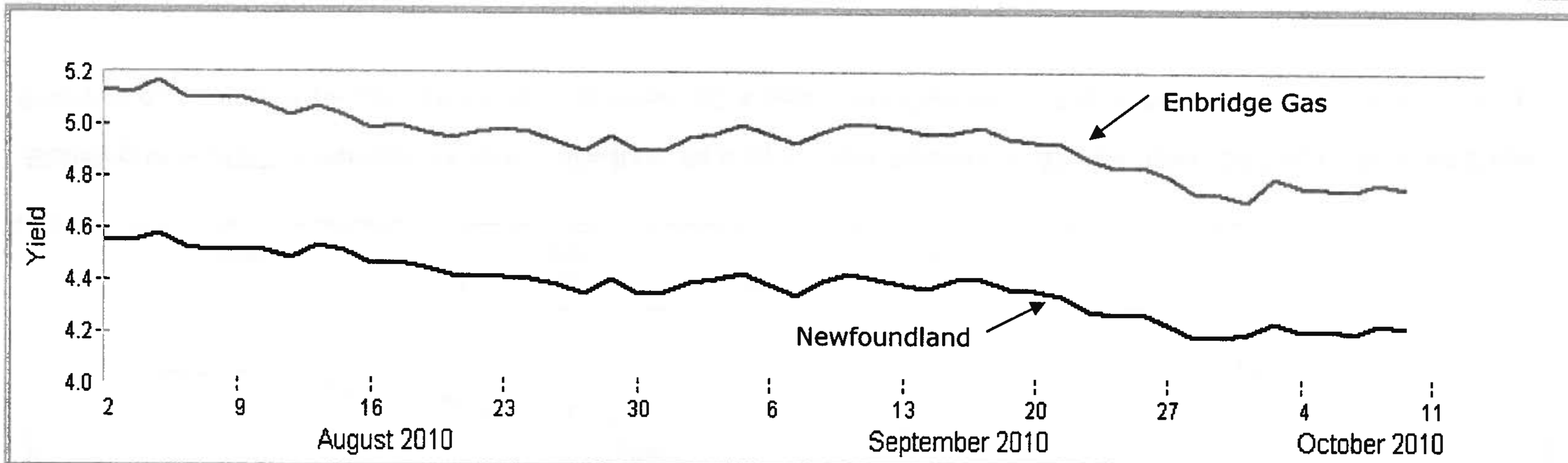
Newfoundland 4.65% due Oct 2040 vs Enbridge Gas (A) 5.21% due Feb 2036

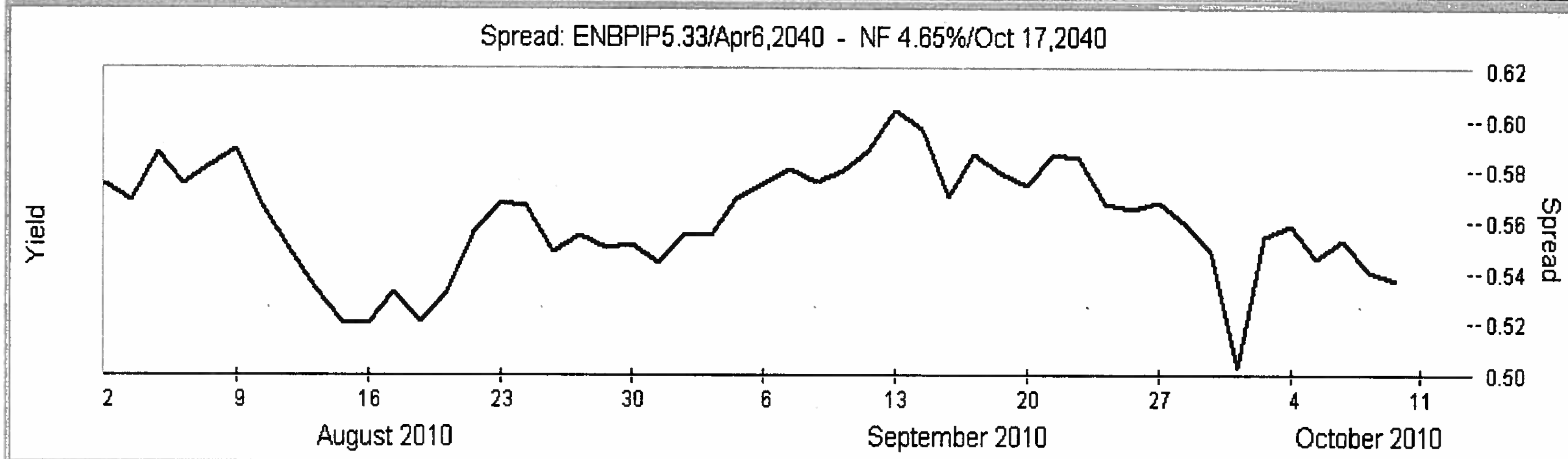


Starting May 2007: Average: 81 bps, Median: 64.6 bps, Std Deviation: 42 bps, Max: 217 bps, Min: 40.5 bps

Starting Aug 2009: Average: 55.8 bps, Median: 57.4 bps, Std Deviation: 7 bps, Max: 68.9 bps, Min: 40.5 bps

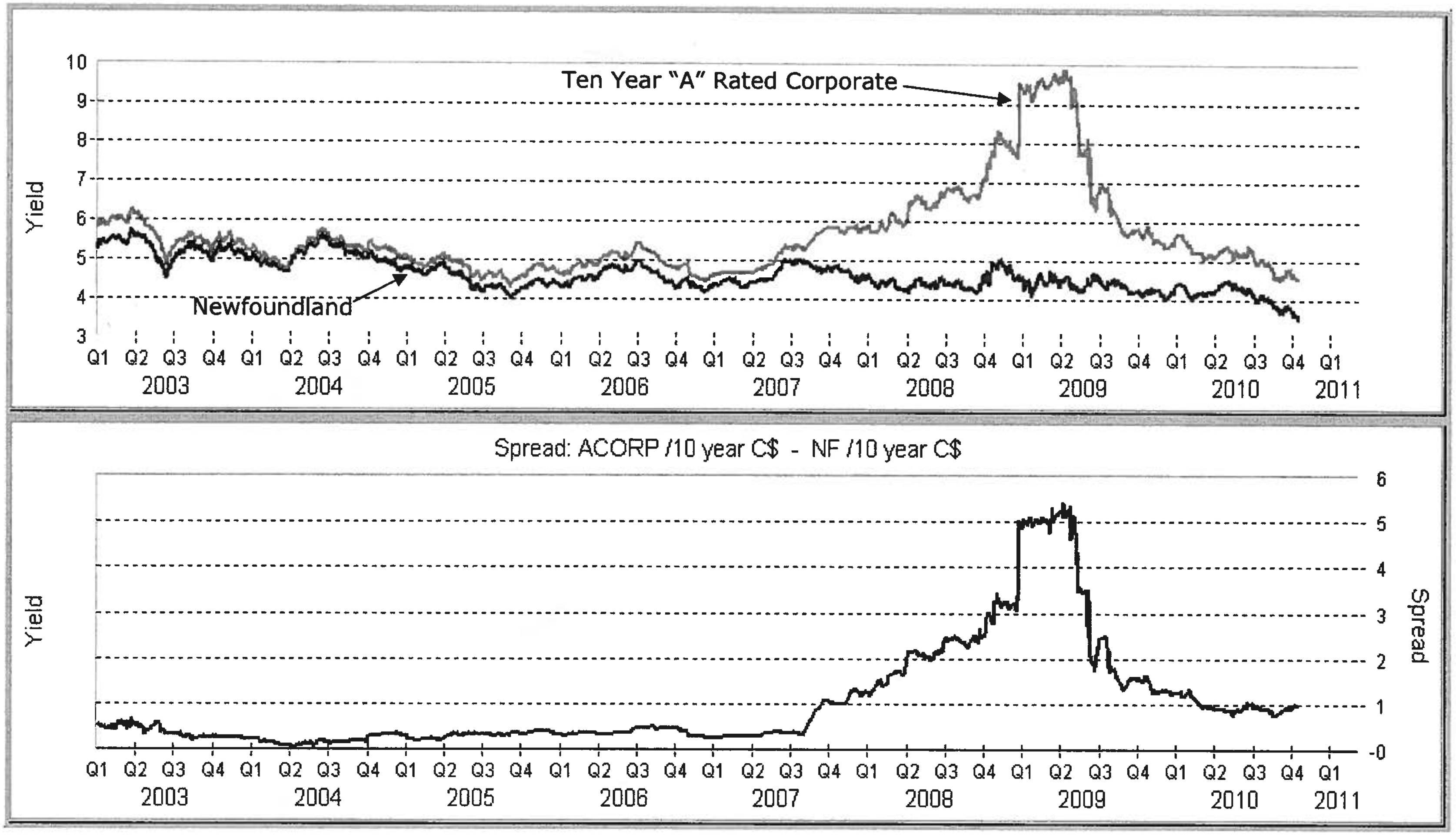
Newfoundland 4.65% due Oct 2040 vs Enbridge Pipeline (A+) 5.33% due April 2040





Starting Aug 2010: Average: 56 bps, Median: 56.2 bps, Std Deviation: 2.2 bps, Max: 60.4 bps, Min: 50.2 bps

Ten Year Province of Newfoundland vs Ten Year "A" Rated Corporate Bond



Starting Jan 2003: Average: 104 bps, Median: 39.6 bps, Std Deviation: 124 bps, Max : 543 bps, Min 2.7 bps

Starting Aug 2009: Average: 110 bps, Median: 96.5 bps, Std Deviation: 25.4 bps, Max : 162 bps, Min 72.8 bps