

1 **SUBJECT:**

2
3 **REFERENCE: OL-12-1 comparing Bi-Pole III to natural gas development (page25-26):**
4 **<http://www.pub.gov.mb.ca/exhibits/mh-154.pdf>**

5
6 **PREAMBLE:**

7
8 **QUESTION:**

9 Was this document (OL-12-1) included in La Capra's review of the resource plans?

10
11 **RESPONSE:**

12
13 This response assumes the request is referring to MH's 20 Year Financial Outlook: Updated to
14 reflect the revised capital estimate for Bipole III, 2010/11- 2029/30 dated June 2011.

15 LCA reviewed more recent MH financial plans. We did not review this particular document.

1 **SUBJECT:**

2
3 **REFERENCE: OL-12-1 comparing Bi-Pole III to natural gas development (page25-26):**
4 **<http://www.pub.gov.mb.ca/exhibits/mh-154.pdf>**
5

6 **PREAMBLE:** OL-12-1 sets out a natural gas generation scenario which at the time
7 was used as an alternative to Bipole 3. The document indicated that if natural gas
8 generation was to be installed at that time, 2000 MW would be required, with a
9 capital cost of \$2.988 billion in current dollars. Further this document indicates
10 that if gas were to be installed, "a firm gas supply is required at an average cost of
11 \$181 million per year".
12

13 **QUESTION:**

14 Can La Capra indicate if the natural gas assumptions noted in the preamble are consistent with
15 the costs for capital and firm gas contracting used by Manitoba Hydro in the NFAT? Does the
16 NFAT include costs for firm gas supply contracting outside of unit costs for generation? Or is the
17 difference simply that (a) large gas units being run periodically for reliability (Bipole alternative)
18 versus (b) smaller gas units being added energy supply (drought) rationale? Is Hydro's
19 presentation in OL-12-1 a fair summary of the extent to which natural gas may have been
20 required if it were to play a dual role of meeting supply requirements (Plan 1 (All Gas)) as well
21 as transmission backup for the Bipole system?
22

23 **RESPONSE:**

24 LCA has not been able to fully resolve our understanding of the modeling of gas prices by MH.
25 The table below provides copies of LCA IRs to MH that have not been answered that should
26 provide the necessary information.

27 Technically, MH did respond to LCA-476, but the response refers back to LCA-475.

Round 1	LCA-095		Please provide all monthly fuel cost assumptions for the thermal generation modeled in SPLASH.
Round 2	475		Does the natural gas price entered into SPLASH for use in estimating the production costs of MH's existing natural-gas fired units reflect only Henry Hub prices? If there are any adjustments made to the Henry Hub forecast, please provide the adjustments used for the natural gas price forecasts relied upon for the NFAT submission with any supporting work papers in electronic spreadsheet format. Please provide the information separately for the 2012/13 forecast and 2013/14 forecast.
Round 2	476		Does the natural gas price entered into SPLASH for use in estimating the production costs of new CCGT or CT units reflect only Henry Hub prices? If there are any adjustments made to the Henry Hub forecast, such as a basis differential, please provide the adjustments used for the natural gas price forecasts relied upon for the NFAT submission with any supporting work papers in electronic spreadsheet format. Please provide the information separately for the 2012/13 forecast and 2013/14 forecast.
Round 2	481	This question references documents MH has labeled as commercially sensitive information. Please refer to the Natural Gas price forecasts on page 4 of the pdf.	Please provide the assumed transportation charges for the natural gas price forecasts listed in the pdf.