
ELECTRIC GENERAL RATE APPLICATION 2015**Manitoba Hydro Undertaking #40**

Manitoba Hydro to provide dates that the three (3) bids were submitted related to Bipole III.

Response:

The timeline for the HVDC Converter bids, where the technology decision was made, was as follows:

- The HVDC bids closed on March 20, 2014.
- Approximately one week after the HVDC bids closed, Manitoba Hydro's Vice President of Major Capital Projects was made aware that, based on preliminary review, all of the bids received from the vendors used LCC technology. However, he was further informed that detailed technical reviews and clarifications would be required over the next several months to confirm the complete technical solutions proposed by the vendors and confirm their pricing.
- Immediately after closing, all 3 (5000 page) vendor proposals were reviewed against Pass/Fail technical criteria to ensure the proposed solutions would meet certain key criteria for Manitoba Hydro's HVDC system. This took one month as the Pass/Fail criteria involved system studies and as such was a fairly rigorous test/review.
- Vendor proposals then went through more detailed technical and schedule reviews to confirm the proposals met Manitoba Hydro's requirements and to determine what vendors were offering for in-service date. This involved hundreds of formal clarifications between Manitoba Hydro and the vendors. These clarifications caused technical items to change or be revised, which had a noticeable impact to the prices and schedules proposed by the vendors.
- By June 20, 2014, Manitoba Hydro had finalized technical reviews and clarifications and was in a position where it could confirm a cost for the HVDC Converters. Before this date, bid values were continuing to change/shift based on reviews and clarifications with the vendors, as outlined further below.
- The HVDC Converters pricing was only part of preparing the Bipole III Control Budget. Once Manitoba Hydro had the cost estimate for the HVDC Converters confirmed on June 20, 2014, it still had to continue through the process of fully defining and estimating the rest of the work for Bipole III, including all other parts of the Converter Stations, Transmission Line and Collector Lines. Specifically,

Manitoba Hydro had to estimate the synchronous condenser costs. Therefore, there was significant estimating work to complete before Manitoba Hydro could prepare a draft of the Control Budget.

- Once the base estimate was ready, Manitoba Hydro also went through a rigorous risk and contingency exercise with an external third-party consultant to establish a contingency amount for the budget.
- Manitoba Hydro had a draft Bipole III Control Budget prepared at the start of August 2014. This draft was submitted to Manitoba Hydro's Executive Committee and then to the Manitoba Hydro-Electric Board ("MHEB") for approval. The revised \$4.65 billion Control Budget was approved by the MHEB at the end of August 2014.