
NEEDS FOR AND ALTERNATIVES TO (NFAT)**Manitoba Hydro Undertaking #67**

Manitoba Hydro to file a detailed supporting schedule which shows the calculations used to arrive at return on equity as shown on pg. 4 of Manitoba Hydro Exhibit 129.

Response:

The return on equity values shown on page 4 of Exhibit 129 are determined by calculating the difference in net present value (NPV) for each development plan relative to the All Gas plan at the corporate real WACC (5.4%) and then at a discount rate of 4.65% (with Manitoba Hydro's embedded return on equity of 3% removed). The detailed supporting information for these values can be found in Manitoba Hydro Exhibit 104-4 DSM Analysis Economic Summary Tables for values at 5.40% discount rate and Manitoba Hydro Exhibit 104-4-1 DSM Economic Summary Tables at 4.65% discount rate.

Table 1 below provides an example of how the incremental NPVs are calculated for the Preferred Development using information from:

- Table 030 (Exhibit 104-4) and Table 30B (Exhibit 104-4-1) for the Preferred Development Plan with Level 2 DSM and
- Table 022 (Exhibit 104-4) and Table 022B (Exhibit 104-4-1) for the All Gas Plan with Level 2 DSM.

Table 1 shows that at a real WACC of 5.40% the Preferred Development Plan has an incremental NPV of \$45 million relative to the All Gas Plan. The incremental NPV of the Preferred Plan relative to the All Gas plan increases to \$1364 million at a discount rate of 4.65%. The Return on Equity (ROE) of \$1319 million embedded in the WACC is the difference between the NPV at 5.4% (\$45) and the NPV at 4.65% (\$1364).

Table 1: Return on Equity Calculation for Preferred Development Plan (14) Relative to the All Gas Plan (1)

Plan	Discount Rate	DSM Analysis Economic Summary Table Reference	Net Present Value (2014\$ millions)
14	5.40%	Table 030	-2765
1	5.40%	Table 022	-2810
Incremental NPV (Plan 14 minus Plan 1)			45
14	4.65%	Table 030B	-2374
1	4.65%	Table 022B	-3738
Incremental NPV(Plan 14 minus Plan 1)			1364
ROE Embedded in WACC			1319