

Appendix 3 – Manitoba Hydro Response to Directive 9, Order 116/08

Manitoba Hydro to provide a report indicating:

- a) whether the current depreciation rates for the Generation, Transmission, Distribution and other assets purchased from Winnipeg Hydro (including Slave Falls) and the Brandon Coal Plant remain appropriate; and*
- b) the related proposed capital replacement, expansion, and decommissioning costs.*

Pointe du Bois

The Pointe Du Bois Generating Station is situated on the Winnipeg River located approximately 123 kilometers northeast of Winnipeg. The plant contains 16 turbine generators operating under a normal head of 46 feet, having an output rating of 74,000 kW. The generators' original in service dates range from 1911 to 1926, with significant upgrades to two units being completed in 1955 and 1999 respectively.

The facility is comprised of the following assets: powerhouse, generating equipment, including turbines, generators, and related equipment, dams, spillways, retaining walls, switchyard, service and accommodation buildings, roads, and railroad. A modern replacement plant would be designed and constructed differently than the existing facility, e.g. fewer turbine generators with greater MW capacity.

The most recent depreciation study concurred that the plant was nearing the end of its economic life and adopted a remaining life estimate of approximately ten years which was consistent with Hydro's plans for refurbishment.

The Capital Expenditure Forecast (CEF08) includes \$818 million (currently under review) for the rebuild of the Pointe du Bois Plant with an in service date of October 2017. Included in this forecast is \$19 million to cover the cost of decommissioning the existing plant.

The depreciation rate for this facility appropriately considers current plans for replacing the facility and therefore no adjustment to the depreciation rate is warranted.

Slave Falls

The Slave Falls Generating Station is situated on the Winnipeg River approximately ten kilometers downstream from the Pointe Du Bois facility. The plant contains eight turbine generators operating under a normal head of 30 feet, having an output rating of 72,000 kW. The generators in service dates range from 1931 to 1948.

The facility is comprised of the following assets: powerhouse, generating equipment, including turbines, generators, and related equipment, dams, spillways, retaining walls, switchyard, service and accommodation buildings, roads, and railroad. A modern

replacement plant would have newer technology and design although constructed in a similar manner to the existing facility.

In its fair market value report which was prepared when the assets of Winnipeg Hydro were acquired, BearingPoint Inc, concluded that the plant was in good condition and assigned a prior depreciation factor of 50%. It also acknowledged that repairs would be required in the short term, including spillway, sluice gate, head gate, generator, turbine and other work.

The most recent depreciation study concluded similarly that this facility was in good condition and it was estimated that the remaining life of Slave Falls assets ranged from 40 - 55 years. The resulting depreciation rates for this facility were recommended to be from 1.89 % to 2.41%. These rates are generally higher than for comparable Manitoba Hydro facilities which have corresponding depreciation rates ranging from 1.25% to 2.55%. Embedded in the depreciation rate calculation is a negative salvage factor of 10% for all tangible hydraulic generation assets, which provides for the cost of removal of components that will need to be replaced over its remaining service life.

Currently, the following capital expenditures have been proposed for the Slave Falls facility:

Major Turbine/Generator Overhauls	- \$126 million
Spillway Rehabilitation	- \$46 million
Electrical Rehabilitation	- \$14 million
Tramway Conversion	- \$12 million

These capital expenditure amounts reflect required spending over the next ten years which includes not only immediately required repairs but also those required to ensure that the plant will be able to operate in a safe, efficient, and reliable manner over for the foreseeable future.

No adjustment to depreciation rates is warranted at this time. The Slave Falls facility is in good condition and, with the identified major capital expenditures, is expected to provide good service for the foreseeable future. The expected facility service life is similar to other comparable Manitoba Hydro plants but given that it is an older facility, it has a lower expected remaining life and a moderately higher depreciation rate.

Transmission and Distribution Assets acquired from Winnipeg Hydro

The transmission and distribution assets acquired from Winnipeg Hydro were estimated by BearingPoint to have a fair market value of approximately \$239 million which represented about 5% of the \$4.4 billion gross plant value of Manitoba Hydro transmission and distribution assets included in the Depreciation Study related to Electric Plant at March 31, 2005.

In accordance with Generally Accepted Accounting Principles, the fair market value of these assets were recorded as an addition to Manitoba Hydro assets at the time of purchase and subsequent additions and retirements to these assets have been recorded in Manitoba Hydro's records together with the additions and retirements for all other Manitoba Hydro assets.

The depreciation study could not separate these assets for unique treatment due to the lack of detailed historical records for these items. As well, due to the low materiality relative to the total value of such assets, the depreciation rate recommendations in the study for asset pools to which Winnipeg Hydro assets were added were deemed to be reasonable and appropriate without this historical detail.

To the extent that the retirement experience of Manitoba Hydro's pool of assets changes in the future as a result of the incorporation of the Winnipeg Hydro assets or due to any other factors, future depreciation studies (which are performed approximately every five years), will adjust for this circumstance.

Replacement experience for these assets was provided in the response to PUB/MH I-10(a) from the last General Rate Application. With the exception of the major transmission line between the Winnipeg River generating stations and Winnipeg, replacements are not specifically forecast for the Winnipeg Hydro district. Included in current capital forecasts is the redevelopment of the major transmission, communication, and switching facilities between Pointe du Bois and Winnipeg for an estimated cost of \$86 million and an in-service date of May, 2014.

No adjustment to depreciation rates is warranted at this time. Future depreciation studies will automatically detect and incorporate any required corrective measures.

Other Assets acquired from Winnipeg Hydro

Other depreciable assets acquired from Winnipeg Hydro included Communication Equipment, Hot Water Tanks, Tools and Shop Equipment, Furniture & Office equipment, and Transportation equipment. Total fair market value of these assets was estimated by BearingPoint to be approximately \$16 million which represented about 2% of the gross plant value of other Manitoba Hydro assets included in the depreciation study.

These types of assets are generally shorter lived assets that are similar in nature to corresponding Manitoba Hydro assets. Due to this similarity and due to the low materiality of these assets relative to the total pool of Manitoba Hydro assets, no special consideration was warranted for these assets.

No adjustment to depreciation rates is warranted. Future depreciation studies will automatically detect and incorporate any adjustments to depreciation rates that may be required.

Brandon Coal Plant

Recent legislation requires Manitoba Hydro to cease using Brandon Unit #5 coal generating station except for emergency purposes after December 31st, 2009. At the time of the last GRA, the implications of this changing legislation were uncertain. Subsequent to that time, it has been determined that Unit #5 will stay in service, albeit in a reduced capacity, until at

least 2019. Depreciation rates in place for this facility contemplate 2019 as a terminal date and therefore no adjustment to depreciation rates is warranted.

No replacement for this facility is currently being contemplated. Capital expenditures of \$19 million are included in the current capital expenditure forecast for re-licensing and for required environmental controls and replacements. As well, an asset retirement obligation has been recorded in Manitoba Hydro's liabilities that will provide \$27 million for the decommissioning of this facility. Depreciation and accretion expense is recorded annually to cover this cost.