Exhibit # MH-137
Transcript Pages #5714-5715

Manitoba Hydro Undertaking #130

Manitoba Hydro to advise of the criticism that MH has of Mr. Chernick's testimony in regards to allocation of substation costs.

In this Undertaking response, Manitoba Hydro also provides a more considered response to Mr. Gange's question at Tr. 5710 regarding Subtransmission facilities and to his question at Tr. 5715 regarding Distribution Poles and Wires.

Allocation of Subtransmission Facilities (Tr. 5710, line 21 through 5711, line 6)

MR. WILLIAM GANGE: Good. Thank you. On page 11 of Mr. Chernick's testimony, he talked about the non-coincident peak demands and -- and his comment -- it was page 11, and he goes through from about lines 4 to 13, Mr. Wiens, and he -- he says that, in -- in -- from his perspective, that the no -- that the class non coincident peak is appropriate only for allocating specific sub-transmission lines that serve customers from a single rate class. Again, on a conceptual basis only, is that something that you disagree with in Mr. Chernick's testimony?

Mr. Wiens' oral testimony was that he did not take strong exception to Mr. Chernick's evidence; that his assertion was at least worth investigating. However, to clarify for the record, Manitoba Hydro will not agree with his evidence without further investigation.

Subtransmission is defined as non-grid radial lines which transport power from the integrated grid to major load centres. In Manitoba the line voltages for subtransmission may be as low as 33 kV or as high as 138 kV. Subtransmission also includes the low voltage portion of the upstream substations, and a share of communication equipment, administration buildings, and general equipment and substation transformers in stock. In the PCOSS11, Subtransmission costs account for approximately $75 million, or 6%.

Manitoba Hydro classifies Subtransmission costs as demand-related and allocates them on the basis of class Non-Coincident Demand. Mr. Chernick's evidence questions the use of NCP as an allocator and proposes the use of the same Demand-related allocator which Manitoba Hydro uses to allocate the Transmission function, (that is an allocator based on the 50 highest winter load hours and the 50 highest summer load hours) adjusted to exclude customers that are served at the Transmission level (Chernick p. 11: 2-17).

Allocation of Subtransmission costs is being addressed as part of the current external review of cost of service methodology. At this point, Manitoba Hydro is not prepared to accept that a coincident peak defined over a range of hours is the appropriate allocator for Subtransmission facilities. Even if it is found to be appropriate to use a coincident peak allocator based on a broader range of peak hours, the allocator proposed by Mr. Chernick is likely not the appropriate one. Unlike Manitoba Hydro's Transmission system, the

Subtransmission system serves only domestic loads, which tend to peak more in the winter than in the summer. If a coincident peak allocator based on multiple hours were to be used, it would be appropriate to weight the hours more heavily toward the winter peak, i.e. 75% Winter Peak and 25% Summer Peak as noted on p. 12: 18-21 of Mr. Chernick's evidence. Manitoba Hydro does not believe that the end-results based on such an approach would vary significantly from the published results in PCOSS11.

Allocation of Distribution Substations (Tr. 5713-5714)

MR. WILLIAM GANGE: Thank you. The second -- the second point that Mr. Chernick raised was to allocate substation costs according to the contribution of each class to the most constrained loading of all substations or on a representative sample of substations. Again, sir, on a conceptual basis, is that something that you take issue with Mr. Chernick?

MR. ROBIN WIENS and, I guess, depending on the number of hours that this recommendation applies to, I -- I might be inclined to take exception to it in principle.

MR. WILLIAM GANGE: His testimony comes up the first week in June, Mr. Wiens. If -- if there's going to be exception taken to -- to that point would you undertake to advise us of -- of the criticism that Manitoba Hydro has of Mr. Chernick's testimony on this point?

MR. ROBIN WIENS: Yes, we can do that.

In Manitoba Hydro's Cost of Service Study, the distribution substations are part of the Distribution Plant function, i.e. the low voltage portion of the distribution substations. Distribution substations make up about $85 million of the cost allocated to domestic customer classes, about 29% of the total Distribution Plant cost, or 7% of total cost allocated to domestic customer classes.

Manitoba Hydro classifies Distribution Substation costs as 100% Demand-related and allocates them on the basis of class non-Coincident Demand. Mr. Chernick's evidence questions the use of NCP as an allocator and proposes that "Hydro should estimate the contribution of each class to the constrained loading (i.e., the hours when load on the substation is the highest percentage of its seasonal rating) on each substation, or a representative sample of substations" (Chernick, page 13: 16-18).

Allocation of Distribution Substation costs is being addressed as part of the current external review of cost of service methodology. At this point, Manitoba Hydro will note that, were a more coincident type peak found to be appropriate for allocating the cost of these facilities, a composite seasonal peak, weighted 75% to winter high load hours and 25% to summer high load hours might be appropriate.

Classification and Allocation of Lines and Poles (Tr. 5715)

The classification and allocation of Distribution lines and poles is discussed beginning at Transcript page 5715.

MR. WILLIAM GANGE: The third point that he raised in -- in that list was to eliminate the allocation of conductors and poles on customer number. And then he has a further discussion in a footnote, number 5, that's at the bottom of that page. But again sir, if I can ask that same question. Do you take exception, on a conceptual basis, to Mr. Chernick's analysis here?

MR. ROBIN WIENS: Yes.

In Manitoba Hydro's Cost of Service Study, Lines and Poles are the largest part of the Distribution Plant function. In PCOSS11, Lines and Poles account for 56% of all Distribution Plant costs - $167 million - and 14% of all costs allocated to domestic customer classes. Manitoba Hydro classifies Lines and Poles as 60% Demand related and 40% Customer related. The Demand related portion is allocated on the basis of class non-coincident peaks and the Customer related portion is allocated on the basis of unweighted customer count for all classes other than Area and Roadway Lighting. Mr. Chernick's evidence is that Manitoba Hydro's approach to classification is flawed and overstates the portion of distribution that is customer related. (Chernick Evidence, page 15: 6-7).

Mr. Chernick provides a review of methods which have been historically used to determine the customer portion of distribution facilities which have been deemed to be related to both demand and customer components (Chernick Evidence pages 15-19). Manitoba Hydro intends to have the arguments raised in Mr. Chernick's Evidence reviewed as part of its current external review of its cost of service methodology. At this point Manitoba Hydro does not accept Mr. Chernick's recommendations with respect to classification and allocation of the Distribution Pole and Wire sub-function that appear on page 22 of his Evidence at lines 7 through 10:

"- Eliminate the allocation of conductors and poles on customer numbers.
- *Recognize the effect of high energy use in the allocation of demand related distribution plant, especially for the summer-peaking portions of the system."*

Mr. Wiens' oral testimony at pages 5715 through 5717 discusses why Manitoba Hydro will not accept Mr. Chernick's recommendations. The key point made in Mr. Wiens' oral testimony is that customer density is a significant driver of the cost of poles and wires in the Distribution system, and that a customer component is required to recognize this.

Manitoba Hydro would also point out that Customer and Demand classification of Distribution Poles and Wires continues to be a common practice throughout North America. In its Directions on Cost Allocation Methodology for Electricity Distributors (EB 2005 0317), the Ontario Energy Board states on page 47:

"Three principal options for categorizing joint distribution assets and operating expenses were initially identified. Each approach has been approved by various regulators across North America. The minimum system approach is ultimately favoured for use in the filings as the common categorization method."
http://www.oeb.gov.on.ca/documents/cases/EB-2005-0317/report_directions_290906.pdf

The Ontario Energy Board direction is to determine a customer component for not only Poles and Wires, but also for Distribution transformers. Generic results, shown on page 141 of EB 2005 0317 indicate that the customer component is between 30% and 60%, depending on the density of the distribution system being reviewed.

Similarly, BC Hydro's Fiscal 2009 compliance filing with the British Columbia Utilities Commission treats Distribution costs generally as being 35% related to Customer and 65% to Demand.
http://www.bchydro.com/etc/medialib/internet/documents/planning_regulatory/rda/bcuc_compliance_filing_dec15_2009.Par.0001.File.bcuc_compliance_filing_dec15_2009.pdf

With respect to the allocation of the Demand related Pole and Wire cost, the Ontario Energy Board supports their allocation on either a single hour class NCP basis or, if the class NCPs in several months are close enough to a single month NCP, on the basis of 4NCP. (See EB 2005 0317, page 58-61.) Where distribution assets are at voltages above 50 kV, the OEB document indicates a preference for a version of CP. In any case, the OEB is not prescribing the use of Energy as an allocator for Distribution facilities of any kind.

Elimination of the customer component in the allocation of poles and wires could have a moderate impact on the results of the PCOSS, affecting mainly Residential and General Service Small classes.