Appendix B – Overview of Coalition Recommendations Relating to its August Written Submissions

Coalition Recommendations to Re-examine Hydro's COSS Methodology

1) Improve allocation of revenues from Late Payment charges and Customer Adjustments – The $5.78 million in revenues from Late Payment charges and Customer Adjustments is material. Late payment charges account for most of the revenues derived from Late Payment charges and Customer Adjustments.[1]

Given that between 2012-2015 more than 80 percent of Late Payment charges was from the Residential class, the allocation of only 51 percent of the revenue from Late Payment charges and Customer Adjustments to Residential materially understates the revenue that should be allocated to this class.[2]

Rather than allocating the revenue from Late Payment charges and Customer Adjustments on the basis of revenue class, it would be more appropriate to pro-rate the revenues based on the historical proportion of Late Payment charge revenues received from each class.

2) Examine whether directly assigning the depreciation and interest costs associated with 3rd party contributions to the Diesel class is consistent with the intent of the Diesel Settlement Agreement and whether the inclusion of the Diesel class in the Net Export Revenue allocation actually offsets these increased costs[3]

Manitoba Hydro directly assigns depreciation and interest cost to the Diesel class.

Included in the direct assignment is a $1 M increase in depreciation due to the exclusion of the amortization of 3rd party contributions and roughly $635,000[4] additional allocated Interest costs due to the exclusion of 3rd party contributions from the Diesel Rate Base. Both changes are attributed to the Diesel Settlement Agreement[5] but the actual wording of the Agreement is not available for review.

It is not clear whether the intent of the Agreement was to make the adjustments for 3rd party contributions simply for purposes of establishing the allocation base for Net Export Revenue or whether the adjustments were also meant to be reflected in the costs directly assigned to the Diesel class.

Hydro suggests the inclusion of the Diesel class in the Net Export Revenue allocation more than offsets the increased costs[6].

But the Net Export revenue allocated to Diesel is only $626,000.[7] It is not clear whether the assignment of direct costs is offset by the inclusion of the Diesel class in the Net Export Revenue

1 Coalition/MH I-4 a) – e). Over 70 percent of the revenues associated with Late Payment charges and Customer Adjustments flows from late payment fees.
2 Coalition/MH I-4 a) – e). Over 70 percent of the revenues associated with Late Payment charges and Customer Adjustments flows from late payment fees.
3 Harper June 10, 2016, s. 4.4.2, p. 42
4 Diesel is allocated $1.049 M in Interest costs on a Rate Base of $20.657 M. Thus the effect of the $12.5 M increase in Rate Base due to Diesel 3rd party contributions is roughly $635,000.
5 Coalition/MH I-8 a) & 12 a)
6 May Workshop, page 202
7 Appendix 3, Schedule B1-Amended

Allocation.

This issue should be re-assessed when the actual Settlement Agreement is filed.

3) Direct Manitoba Hydro to examine whether transmission and subtransmission are complimentary or incremental – As stated in the Areas of Particular Focus, the fundamental question of whether transmission and subtransmission are complimentary or incremental requires significant consideration. This issue is material and the evidence to date is not sufficient to develop a reliable conclusion.

4) In terms of distribution plant, the sub-functionalization of "common" costs such as Buildings, Communication, General Equipment and certain SCCs needs to be re-assessed[8] - Manitoba Hydro agrees that there should be a consistent treatment of Interest, Operating and Depreciation costs but currently does not have any views as to what it should be[9]. At some point in the future, Manitoba Hydro should re-assess the sub-functionalization of these costs.

5) In the Distribution-Plant function, the COSS methodology should separate out the costs of primary and secondary facilities into two distinct sub-functions[10] - This is discussed in the Areas of Particular Focus. See Appendix A for the materiality of this issue.

6) There continues to be merit in the PUB directing Manitoba Hydro to undertake a review as to the appropriate split for poles and wires (and also transformers) between demand and customer-related costs[11] - There is a significant issue with respect to Manitoba Hydro's classification of Distribution Plant relating to the demand/customer splits proposed for the Poles & Wires and Transformers sub-functions. Manitoba Hydro proposes to continue to use the existing split noting that the percentages used are in line with industry practice.[12]

However, the existing demand/customer splits are based on a study undertaken in 1990[13] which itself did not undertake an analysis of Manitoba Hydro's distribution costs but rather relied on general industry practice. In the case of Poles and Wires, the study noted[14] that industry practice ranged from demand classifications as low as 30% and as high as 100%.

More recent surveys have indicated similarly wide range for the industry practice as it relates to distribution lines and distribution transformers.[15]

As a result, industry practice provides little guidance (or broad license) regarding the appropriate demand/customer split. Manitoba Hydro has acknowledged the need to update the split for poles & wires and transformers as between demand and customer-related and should be encouraged to do so.

7) The customer counts used in the allocation of Services and Poles & Wires to customer classes should

8 Harper, June 10, 2016, p. 78
9 May Workshop, page 840-841
10 Harper, June 10, 2016, p. 77
11 Harper, August 5, 2016, Rebuttal, pages 9 - 11
12 Coalition/MH I-69 a)
13 A copy was provided in the 205 COSS Review, PUB/MH I-29
14 Page IV-5
15 A 2013 survey done by Elenchus Research Associates for SaskPower found the demand-related range for Lines to be 35%-100%.

be adjusted to remove the double counting that currently exists regarding Apartments - The allocation base for the customer portion of the Services and Poles & Wires sub-functions needs to be adjusted in order to account for the fact that 103,000 Residential customers are in Apartments that are "served" as GSS or GSM customers.[16]

8) The GSM portion of the allocation base used for Poles & Wires needs to be adjusted to account for the different demand/customer classification for primary as opposed to secondary facilities – similar to that done for A&RL[17]

9) The customer weighting factors for Distribution Customer Service – General should be derived by applying the customer weighting factors established for each Department to the Department's budget for the test year[18]. Manitoba Hydro should be directed to update the customer weighting factors.

10) The weights applied to the customer counts for the purposes of allocating meter investment, meter maintenance and services investment have not been reviewed in 25 years and should be updated[19].

11) The customer weightings used for meter reading should be revised so as to account for the relative effort involved in reading different types of meters as well as the frequency of meter reading[20].

12) Since there is no clear evidence as to whether CP or NCP is the more appropriate allocator, there would be merit in Manitoba Hydro further assessing (through analysis of the timing of Substation peaks and its load research data regarding customer class monthly load profiles) whether a CP based allocation factor or an NCP allocation based on more than a single value would be more reasonable - This is discussed in paragraphs 80 and 85 of the written submission. It represents an amendment to the recommendation of Mr. Harper.

13) Update the various customer related allocation factors (particularly for Billing and Collecting) to separate out Sentinel Lights and Street Lights and establish a proper weighting for each[21]

16 Harper, June 10, 2016, p. 80
17 Harper, June 10, 2016, p. 81
18 Harper, June 10, 2016, p. 84
19 Harper, June 10, p. 82
20 Harper, June 10, p. 85
21 Harper, June 10, 2016, p. 85

Selected Recommendations Regarding Updating Manitoba Hydro's Data

A more thorough summary of the evidence relating to the recommended/acknowledged areas for data improvement can be found in Appendix A. Where possible, the summary in Appendix A articulates the position of all parties.

With reference to Appendix A, the Coalition accepts the recommendations of Mr. Harper (ECS) in terms of recommended improvements. In priorizing these improvements, the Coalition would recommend that consideration of the dollar value of the specific areas be considered (ie the larger the value – the higher the priority).

The Coalition provides additional details about certain recommendations for data updates below:

1) The factors used to functionalize operating and depreciation system control costs should be reassessed - The basis for determining allocation factors was established almost 20 years ago (1997), there has been significant investment since that time as well as changes in assignment of assets to functions.[22]

2) The factors used to functionalize the rate base for communications should be reassessed given that the basis for determining allocation factors was established almost 20 years ago (1997), there has been significant investment since that time as well as changes in assignment of assets to functions.[23]

3) The weights applied to the customer counts for purposes of allocating meter investment, meter maintenance and services investment should be reassessed[24] – They have not been reviewed for 25 years. Manitoba Hydro does not expect that revised weights would have a material impact on the COSS results but recognizes that they should be updated[25] and should be encouraged to do so.

4) Manitoba Hydro has acknowledged that some of the customer weighting factors are based on analysis done 25 years ago (e.g. Billing and Collections factors are based on 1991 analysis) and need to be updated.[26] Manitoba Hydro should be encouraged to pursue such updates.

5) The current demand/customer classification of distribution lines and transformers was established roughly 25 years ago and should be updated.[27]

6) The customer weightings used for meter reading should be revised so as to account for the relative effort in reading different types of meters as well as the frequency of meter reading.[28]

22 Harper, June 10, 2016, p. 36
23 Harper, June 10, 2016, p. 39
24 Harper, June 10, 2016, p. 39, See also p. 82.
25 PUB/MH I-57 and 58
26 PUB/MH I-57 see also Harper, June 10, 2016, p 85
27 Harper, June 10, 2016, p.78
28 Harper, June 10, 2016, p 85

Recommendations Regarding Improving Manitoba Hydro's Model

1) Depreciation and Operating costs associated with Communications should be functionalized as part of the COSS model to enable the model to reflect any changes in the initial functionalization of assets/activities made by Hydro's financial systems.

As documented in Mr. Harper's evidence[29] and in the Hydro Workshop[30] the functionalization of the Depreciation and Operating costs for Communications and Control Systems did not change even though the functionalization of Dorsey's operating costs was changed. This was also confirmed during the May Workshop.[31] Mr. Harper's evidence on this point was not challenged.

2) The $14.6 million in Other Revenues should be functionalized as part of the COSS model to reflect Operating and labour cost functionalization as established by the model. As Mr. Harper explained in his evidence,[32] the functionalization of these revenues does not change when assets and their associated operating costs are re-functionalized as part of the COSS model. Mr. Harper's evidence on this point was not challenged.

3) For purposes of the COSS, costs that in Manitoba Hydro's financial systems are reported as Sub-Transmission are subsequently re-assigned to the Transmission and Distribution functions[33]. When asked what the basis was for this re-functionalization in PCOSS14-Amended Schedules C6 and C12, Manitoba Hydro explained:[34]

> *The schedules include a row which is titled "Common Subtransmission Costs", but which also includes SCC's for Common Subtransmission and Distribution costs related to system planning. These costs are prorated between Subtransmission and Distribution on the basis of relative operating cost of each function in Schedule C12, and depreciation in Schedule C6.*

However, the Schedules do not actually show any re-assignment of Common Subtransmission costs and the amounts re-assigned exceed the total reported Common Subtransmission costs. Such re-assignments would be more transparent and readily understood if formally incorporated in the COSS model.

4) The COSS model should be refined so as to allow for the sub-functionalization of: i) the costs associated with Settlement Cost Centres that are associate with common activities and ii) the shares of Regulated Assets, Buildings, Communication & Control and General Equipment costs that are assigned to each function. Such a refinement would also permit the COSS model to re-functionalize these costs when assets/activities are re-assigned between functions as part of the COSS.[35]

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29 Harper, June 10, 2016, p. 36
30 P. 188-189
31 P. 188-189
32 Harper, June 10, 2016, p. 37
33 See Appendix 3.1, Schedule C6 and C12
34 Undertaking #25
35 Harper, June 10, 2016, p. 69 and 74

Recommendations to Support Hydro's Methodological Approach

1) Support inclusion of wind purchases and all thermal plant costs in the Generation pool for allocation to both domestic load and dependable exports[36] - Please see Areas of Particular Focus in the main submission.

2) Support proposed treatment of Operating and Depreciation costs associated with Communications and Control Systems – Manitoba Hydro's proposed treatment is reasonable.[37]

3) Support direct assignment of both SEP Revenues and street lighting interest, depreciation and operating costs - Manitoba Hydro directly assigns interest, depreciation and operating costs associated with street lighting assets and totalling $15.3 M[38] to the Area and Roadway Lighting (A&RL) class. The energy-related revenue forecast to be received from EP customers under market-based SEP prices is directly assigned to the SEP customers as Generation and Transmission costs.

It is generally accepted that, where feasible, costs should be directly assigned to customer classes. Manitoba Hydro's direct assignment of costs for those assets and activities related only to Street Lighting is appropriate as is the direct assignment of the energy revenue from SEP customers.

4) Support introduction of a Non-Tariffable sub-function[39] - The introduction of a Non-Tariffable sub-function is an improvement. The approved cost of service methodology functionalized radial taps and other transmission voltage assets as Sub-Transmission[40] effectively overstating the cost of serving customers at voltages less than 100 kV.

In order to account for and track radial customer taps and other assets that are transmission but not eligible for inclusion in the OATT Manitoba, Manitoba Hydro has segmented the costs in its Transmission function between those that are Tariffable and Non-Tariffable. The Non-Tariffable Transmission sub-function includes the cost of two radial taps to >100 kV customers which results in a fairer allocation of these costs.

5) The classification of Sub-Transmission as demand-related and the use of a 1NCP allocation factor are also consistent with industry norms.[41]

6) With respect to the other distribution (other than polls and wires) sub-functions, industry practice is more standardized with Substations generally being classified as demand-related while Service and Meters are classified as customer-related – consistent with Manitoba Hydro's proposals.

7) The demand and customer allocation factors proposed by Manitoba Hydro (i.e. 1NCP in the case of demand-related costs and some form of customer/weighted customer count allocator in the case of customer-related costs) are also consistent with industry practice and generally appropriate.

36 Harper, June 10, S. 4.5, p. 52 -53, 55 -57.

37 Communications for system control are functionalized separately and the balance of the costs are functionalized based on operating costs as a proxy for labour.

38 COW I-1 b)

39 Harper, June 10, 2016, s. 4.6.2, p. 67-68.

40 PUB MFR 13

41 Appendix 5, page 16

8) Overall, Manitoba Hydro's definition and functionalization of Distribution Services is reasonable.