REFERENCE: Undertaking from R. Peters, per email May 28, 2014

QUESTION:

a) MIPUG recommended that the incremental financial benefits that would flow to the Province, be shared with Ratepayers for approximately 15 years post in-service of the new PDP assets.

Please provide a schedule that quantifies the amount of the 'financial benefit' MIPUG recommends be foregone by the Province for each the 15 years post in-service, together with the calculation of the rate impact of such 'sharing of the benefit'. Please provide the calculations at 100% 'sharing' as well as at '50% sharing' levels by the Province.

ANSWER:

(a)

For clarity, MIPUG's final written argument recommended that:

> "During the period when customers face upward pressure on rates and added risks due to this plan, the provincial government sees significant and ongoing added recoveries compared to the need-based plans (with benefits already occurring today, such as from the capital taxes on the $1 billion plus spent on Keeyask and Conawapa) regardless of the economic conditions that arise in the future, including drought conditions. Under the current approach, any financial risks as a result of this plan are to be paid for by ratepayers. The provincial recoveries include both benefits for debt guarantee fees, capital taxes and water rentals, as well as benefits from economic activity associated with the construction, such as income and other taxes from construction employment and related business activity. Even a time-limited revised sharing arrangement (such as an exemption of government charges for new projects to the end of 15 years post-ISD of each project) would be a substantial assistance to ratepayers to balance the rate pressures and risks of advancing Keeyask with the 750 MW

line, and the government would continue to receive charges for Hydro's existing system."[1]

In MIPUG's view the requirement for a revised sharing approach is justified regardless as to the specific approach adopted. The specific form of a benefit sharing approach requires careful consideration by Manitoba Hydro and the Province. One example, that MIPUG notes may work, is to provide an exemption on government charges (water rentals, debt guarantee fees, capital taxes) for major new projects (Keeyask, 750 MW line, and to the extent pursued, Conawapa) for the entire pre-construction period (on a go-forward basis) as well as the period after in-service for 15 years after the ISD.

Based on the available information, MIPUG has approximated the effect of this approach as follows, with the specific noted limitations:

ESTIMATION OF CASH IMPACT ON GOVERNMENT/RATEPAYERS

1) With regard to the effect on the provincial government, MIPUG can compare the government charge levels for Plan 5 (K19/750 MW) or Plan 14 (PDP) to the level of charges for Plan 1 (All Gas) and assume the difference is foregone. This analysis will provide an estimate of the annual cash foregone by the provincial government. This is not a perfect comparison, for a number of reasons, but the effects are likely offsetting:

    a. This estimation of foregone government revenue is somewhat understated, as Plan 1 All Gas also includes some government charges for gas assets. For this reason a simple comparison of the two plans fails to capture the full impact of pursuing Plan 5/6 or Plan 14 with revised charge levels. This is assumed to be a relatively small factor during the relevant time periods, particularly for NPV purposes, as the gas investment to 2034 or 2040 remains relatively small and later in this time frame.

    b. The conceptual approach is intended to be based on the premise that government forgoes all charges for Plans 5/6 or Plan 14 that relate to the specific plants noted. The estimation approach, however likely

[1] MIPUG-28, MIPUG Final Argument Written Submission, page xii – xiii. (May 21, 2014)

understates the amounts foregone. As Plan 1 All Gas includes debt guarantee fees and capital taxes on balances related to unamortized planning costs through the first 18 years, the scale of forgone government charges is somewhat understated in the attached analysis. Given that this only applies to approximately $1.4 billion in planning costs, decreasing with time (compared to almost $20 billion of assets) the understatement is assumed to be relatively small, and the analysis approach in the attached materials is assumed to portray a representative approximation of the effect of this approach.

c. At the same time, the net effect on government (lost potential revenue from Hydro) from foregoing the noted charges is likely overstated, since the analysis includes no offset for the added economic effects on government from lower electricity prices, whether that be for government facilities, from added taxes from larger amounts of disposable income for Manitobans, or from added business growth.

2) With regard to the effect on Hydro's finances, the assumption is that any government charges foregone in a year flow directly 1:1 to ratepayer savings in the same year. This approach also has some modest limitations, as follows (as these are small, they are not expected to materially undermine the analysis):

a. The analysis does not recalculate a rate increase scenario; it simply takes the rate increase scenario already generated by Hydro and makes adjustments to the annual rates paid. In practice, some "smoothing" would be expected, but the effect on the analysis is expected to be small.

b. The effect on Hydro's cash flow is expected to be neutral each year (less cash paid to government equals less cash received from customers) however in this analysis there would be a modest mismatch on the income statement accounting for debt guarantee fees during times when the project is in the planning stages. Specifically, Hydro presently capitalizes all amounts paid for debt guarantee fees to the project to which the fees apply (this only affects debt guarantee fees, as capital taxes are not capitalized, and there are not water rentals during construction). If these charges were foregone, then the implicit savings would be to the capital cost of the project. MIPUG is unable to precisely model this, so for simplicity it is assumed that the effect is to lower rates in the year the charges are paid, rather than to lower project capital costs. As this only applies to project planning stages, and at times when the cumulative project spending is lower than during operating phases, this effect is expected to be relatively small in the attached analysis. Note however that a side benefit of this approach is that it would reduce the capital costs of projects modestly.

3) Finally, MIPUG notes that the updated scenarios provided in the various parts of Exhibit MH-104 (including most specifically the financials in Exhibit MH-104-12) do not update the total debt balance or debt guarantee fee payment breakdown, as was originally provided in PUB/MH I-73a for the 2012 scenarios. For this reason, the analysis of changes to government charges uses the original financials from Appendix 11.4 and 2012 assumptions. As the analysis is focused only on the incremental effects of a change in Manitoba Government charges, the effect of using the older data (as compared to the latest scenarios) is expected to be relatively modest.

ESTIMATION OF IMPACT ON RATES PAID

1) To estimate the impact on rates, the above estimation of the cash impact of a revised government charges regime was compared to the rate levels in effect for each year. As the best estimation of projected rate levels is contained in Exhibit MH-104-12, this rate level was used as the baseline for Plans 1 (All Gas), 6 (K19/750 MW) and 14 (PDP). The scenarios with DSM #2 were utilized, without pipeline load, as this was the only scenario that was consistently provided for Plans 1, 6 and 14. Note that Plan 6 and Plan 5 are expected to be similar in almost all respects, so for consistency with the approach adopted above, Plan 6 rates were used rather than Plan 5. Note that use of this approach also introduces some time mismatches, as the Conawapa ISD varies between Appendix 11.4 and the DSM #2 scenarios depending on load demand. The effects of this mismatch on the NPV of rates are expected to be small.

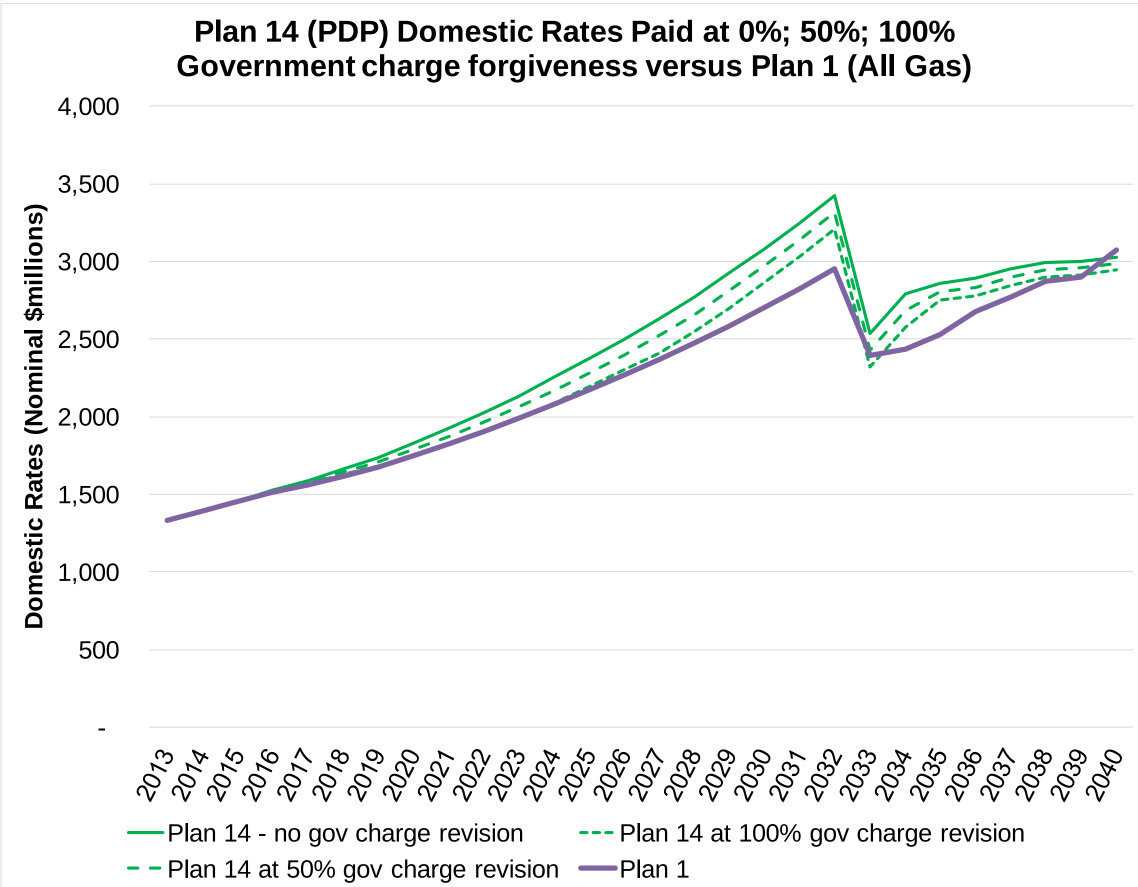
2) MIPUG cannot accurately model the iterative impact of rate changes. As a result, the estimates focus on how the revisions change the total amount paid by

ratepayers over the relevant period (Net Present Value from 2013 to 2040) rather than the percentage rate increases.

For all of the above reasons, the analysis below should be considered a reasonable approximation of the effect of the revised government charge levels on ratepayer NPVs.

Note that the attached analysis only reflects the REF-REF-REF condition and does not fully represent the degree of risk and variability that ratepayers continue to be exposed to under the scenarios.

The conclusion of the attached analysis is that government foregoing 100% of the charges on major new development is a time-limited means of bringing the rate effects of the large development plans closer to the All Gas Plan baseline. It is not sufficient to bring the plans 100% to the All Gas level, much less to any equivalent of a hypothetical All Gas scenario reflecting where ratepayers would be if $1.4 billion had not been sunk in the new projects. The analysis also suggests that while this approach may help bridge the gap with All Gas, it does not provide net benefits (at least in any way sufficient to deal with the risks ratepayers are bearing).

1 
Plan 14 (PDP) Domestic Rates Paid at 0%; 50%; 100% Government charge forgiveness versus Plan 1 (All Gas)
Domestic Rates (Nominal $millions)
4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
-
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
2026
2027
2028
2029
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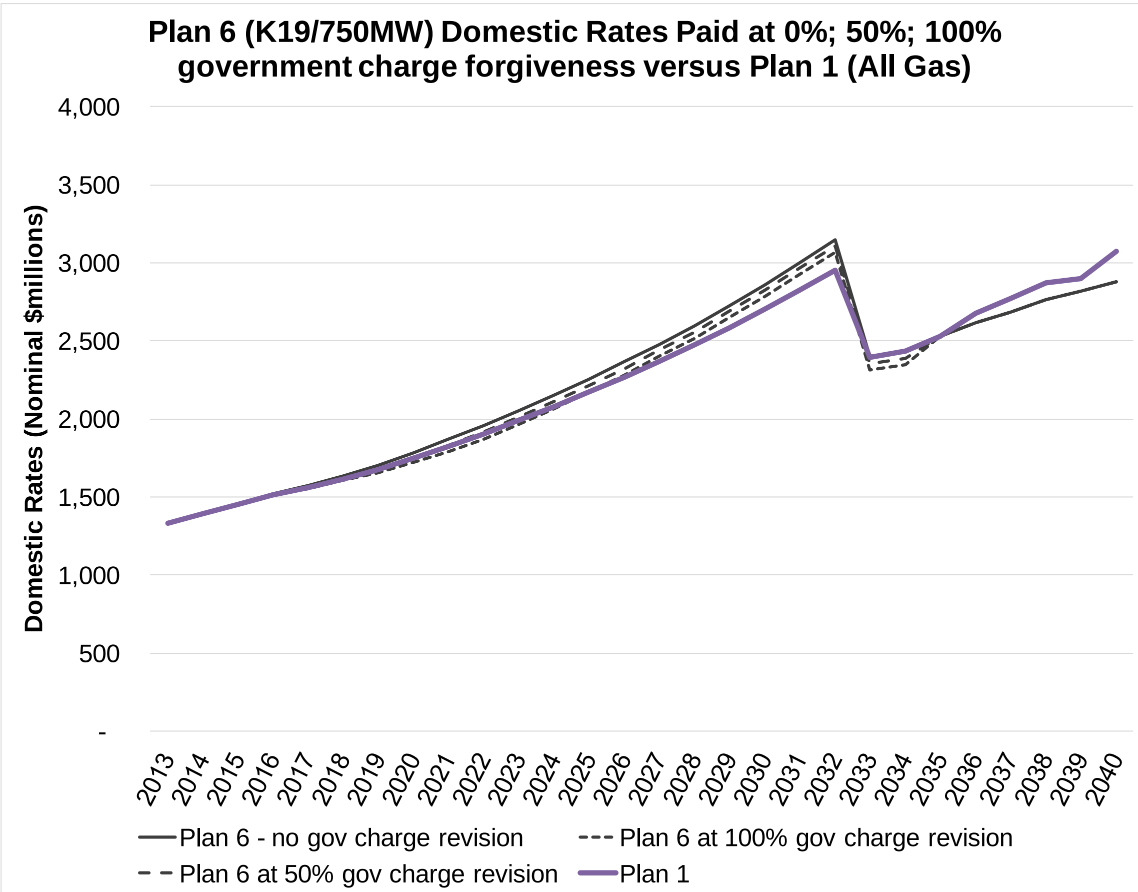
2038
2039
2040
Plan 14 - no gov charge revision
Plan 14 at 100% gov charge revision
Plan 14 at 50% gov charge revision
Plan 1

1 
Plan 6 (K19/750MW) Domestic Rates Paid at 0%; 50%; 100% government charge forgiveness versus Plan 1 (All Gas)
Domestic Rates (Nominal $millions)
4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
-
2013
2014
2015
2016
2017
2018
2019
2020
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2040
Plan 6 - no gov charge revision
Plan 6 at 100% gov charge revision
Plan 6 at 50% gov charge revision
Plan 1

2

Table 1: Part I - Effect on Government/Ratepayer Cash Flow ($ Millions)

REF-REF-REF	NPV to 2040 (2014$)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Applied to Plan 14																													
Foregone Government Benefit per year - 100%	1,397	-	-	2	7	19	34	54	75	101	122	145	164	181	201	221	225	224	219	215	215	215	213	109	110	104	99	88	85
Foregone Government Benefit per year - 50%	699	-	-	1	4	10	17	27	38	51	61	73	82	91	101	111	113	112	110	108	108	108	107	55	55	52	50	44	43
Based on:		Plan 14 minus Plan 1 (forego gov benefits from K19, 750 MW, C26)																						Plan 14 minus Plan 6 (forego gov benefits from C26)					
Applied to Plan 6																													
Foregone Government Benefit per year - 100%	621	-	-	1	5	15	27	44	60	78	85	86	84	83	83	79	81	79	73	75	81	84	82	-	-	-	-	-	-
Foregone Government Benefit per year - 50%	310	-	-	1	3	8	14	22	30	39	43	43	42	42	42	40	41	40	37	38	41	42	41	-	-	-	-	-	-
Based on:		Plan 6 minus Plan 1 (forego gov benefits from K19, 750 MW)																						No foregone gov benefits					

Table 2: Part II – Effect on Total Amounts Paid in Rates to 2040 ($ Millions)

REF-REF-REF	NPV to 2040 (2014$)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Impact on Plan 14 at 100%																													
Exhibit 104-12-4 Ratepayer Revenues	30,696	1,331	1,396	1,456	1,526	1,587	1,660	1,737	1,827	1,924	2,027	2,135	2,250	2,371	2,498	2,631	2,771	2,922	3,082	3,249	3,424	2,538	2,791	2,862	2,890	2,951	2,995	3,000	3,029
Revenue Reduction @ 100%	1,397	-	-	2	7	19	34	54	75	101	122	145	164	181	201	221	225	224	219	215	215	215	213	109	110	104	99	88	85
Reduced Ratepayer Revenues	29,299	**1,331**	**1,396**	**1,454**	**1,519**	**1,568**	**1,626**	**1,683**	**1,752**	**1,823**	**1,905**	**1,990**	**2,086**	**2,190**	**2,297**	**2,410**	**2,546**	**2,698**	**2,863**	**3,034**	**3,209**	**2,323**	**2,578**	**2,753**	**2,780**	**2,847**	**2,896**	**2,912**	**2,944**
Plan 1 All Gas Ratepayer Revenues	28,845	**1,331**	**1,396**	**1,456**	**1,512**	**1,559**	**1,617**	**1,677**	**1,749**	**1,825**	**1,907**	**1,990**	**2,079**	**2,172**	**2,268**	**2,368**	**2,472**	**2,584**	**2,701**	**2,823**	**2,950**	**2,393**	**2,437**	**2,528**	**2,677**	**2,771**	**2,874**	**2,899**	**3,075**
change from All Gas	454	**-**	**-**	**(2)**	**6**	**9**	**9**	**6**	**3**	**(2)**	**(1)**	**(0)**	**7**	**18**	**29**	**42**	**74**	**114**	**161**	**211**	**260**	**(70)**	**140**	**224**	**102**	**77**	**22**	**13**	**(131)**
Impact on Plan 14 at 50%																													
Exhibit 104-12-4 Ratepayer Revenues	30,696	1,331	1,396	1,456	1,526	1,587	1,660	1,737	1,827	1,924	2,027	2,135	2,250	2,371	2,498	2,631	2,771	2,922	3,082	3,249	3,424	2,538	2,791	2,862	2,890	2,951	2,995	3,000	3,029
Revenue Reduction @ 50%	699	-	-	1	4	10	17	27	38	51	61	73	82	91	101	111	113	112	110	108	108	108	107	55	55	52	50	44	43
Reduced Ratepayer Revenues	29,998	**1,331**	**1,396**	**1,455**	**1,522**	**1,577**	**1,643**	**1,710**	**1,790**	**1,873**	**1,966**	**2,062**	**2,168**	**2,280**	**2,398**	**2,520**	**2,658**	**2,810**	**2,972**	**3,141**	**3,317**	**2,430**	**2,684**	**2,807**	**2,835**	**2,899**	**2,945**	**2,956**	**2,986**
Plan 1 All Gas Ratepayer Revenues	28,845	**1,331**	**1,396**	**1,456**	**1,512**	**1,559**	**1,617**	**1,677**	**1,749**	**1,825**	**1,907**	**1,990**	**2,079**	**2,172**	**2,268**	**2,368**	**2,472**	**2,584**	**2,701**	**2,823**	**2,950**	**2,393**	**2,437**	**2,528**	**2,677**	**2,771**	**2,874**	**2,899**	**3,075**
change from All Gas	1,152	**-**	**-**	**(1)**	**10**	**18**	**26**	**33**	**41**	**48**	**60**	**72**	**89**	**109**	**129**	**153**	**186**	**226**	**271**	**318**	**367**	**37**	**247**	**279**	**157**	**129**	**72**	**57**	**(88)**
Impact on Plan 6 at 100%																													
Exhibit 104-12-4 Ratepayer Revenues	29,368	1,331	1,396	1,456	1,519	1,571	1,636	1,702	1,782	1,867	1,958	2,052	2,152	2,256	2,365	2,478	2,598	2,727	2,860	3,001	3,147	2,398	2,428	2,530	2,615	2,683	2,763	2,816	2,880
Revenue Reduction @ 100%	621	-	-	1	5	15	27	44	60	78	85	86	84	83	83	79	81	79	73	75	81	84	82	-	-	-	-	-	-
Reduced Ratepayer Revenues	28,747	**1,331**	**1,396**	**1,455**	**1,514**	**1,556**	**1,609**	**1,658**	**1,722**	**1,789**	**1,873**	**1,966**	**2,068**	**2,173**	**2,282**	**2,399**	**2,517**	**2,648**	**2,787**	**2,926**	**3,066**	**2,314**	**2,346**	**2,530**	**2,615**	**2,683**	**2,763**	**2,816**	**2,880**
Plan 1 All Gas Ratepayer Revenues	28,845	**1,331**	**1,396**	**1,456**	**1,512**	**1,559**	**1,617**	**1,677**	**1,749**	**1,825**	**1,907**	**1,990**	**2,079**	**2,172**	**2,268**	**2,368**	**2,472**	**2,584**	**2,701**	**2,823**	**2,950**	**2,393**	**2,437**	**2,528**	**2,677**	**2,771**	**2,874**	**2,899**	**3,075**
change from All Gas	(98)	**0**	**(0)**	**(1)**	**2**	**(3)**	**(8)**	**(19)**	**(27)**	**(36)**	**(34)**	**(24)**	**(11)**	**1**	**14**	**31**	**45**	**64**	**86**	**103**	**116**	**(79)**	**(91)**	**2**	**(62)**	**(88)**	**(111)**	**(83)**	**(195)**
Impact on Plan 6 at 50%																													
Exhibit 104-12-4 Ratepayer Revenues	29,368	1,331	1,396	1,456	1,519	1,571	1,636	1,702	1,782	1,867	1,958	2,052	2,152	2,256	2,365	2,478	2,598	2,727	2,860	3,001	3,147	2,398	2,428	2,530	2,615	2,683	2,763	2,816	2,880
Revenue Reduction @ 50%	310	-	-	1	3	8	14	22	30	39	43	43	42	42	42	40	41	40	37	38	41	42	41	-	-	-	-	-	-
Reduced Ratepayer Revenues	29,058	**1,331**	**1,396**	**1,456**	**1,517**	**1,564**	**1,623**	**1,680**	**1,752**	**1,828**	**1,916**	**2,009**	**2,110**	**2,215**	**2,324**	**2,439**	**2,558**	**2,688**	**2,824**	**2,964**	**3,107**	**2,356**	**2,387**	**2,530**	**2,615**	**2,683**	**2,763**	**2,816**	**2,880**
Plan 1 All Gas Ratepayer Revenues	28,845	**1,331**	**1,396**	**1,456**	**1,512**	**1,559**	**1,617**	**1,677**	**1,749**	**1,825**	**1,907**	**1,990**	**2,079**	**2,172**	**2,268**	**2,368**	**2,472**	**2,584**	**2,701**	**2,823**	**2,950**	**2,393**	**2,437**	**2,528**	**2,677**	**2,771**	**2,874**	**2,899**	**3,075**
change from All Gas	212	**0**	**(0)**	**(0)**	**4**	**4**	**5**	**3**	**3**	**3**	**9**	**19**	**31**	**43**	**55**	**71**	**85**	**103**	**122**	**140**	**157**	**(37)**	**(50)**	**2**	**(62)**	**(88)**	**(111)**	**(83)**	**(195)**