

UNDERTAKING J14.2

Undertaking

To reconcile PWU Exhibit K13.4 for rate base for year.

Response

This undertaking had two parts. Part (a) was to provide reconciliation between the CWIP amounts for 2011-2012 shown in interrogatory L-14-004 (which underlines the analysis presented in Ex. K13.4) and CWIP cost for the test period of \$37.9 M given in Ex. D2-T2-S2, Table 1. Part (b) was to recalculate the table in L-14-004 without two of the simplifying assumptions used to originally generate it, namely the rounding to the nearest \$10M and the use of the opening capital balance amount as the rate base amount for the year in question.

Part (a):
 Chart 1, below, shows a comparison of the calculation of figures for the two exhibits.

Chart 1

Comparison of Figures used for Revenue Requirement Calculation in Ex D2 and Economic Analysis in Ex L-14-4				
in M\$	Ex D2 T2 S2 Table 1		Ex L-14-4	
	Revenue Requirement Calculation		Economic Analysis	
Rate Base	2011	2012	2011	2012
Opening	72.9	178.1	72.9	178.1
	Additions occur mid-yr		Additions occur yr-end	
Additions	105.2	255.8	105.2	255.8
Closing	178.1	433.9	178.1	433.9
	Average Amounts		Opening Balances	
Rate Base Amount Used	125.5	306.0	72.9	178.1
WACC	7.56%	7.59%	7.56%	7.59%
Carrying Charges	9.5	23.2	5.5	13.5
			Rounded to nearest \$10M	
Pre-Tax Rev Requirement	9.5	23.2	10.0	10.0
Income Tax	1.6	3.6	Income Taxes Excluded	
Rev Requirement Impact	11.1	26.8	10.0	10.0

The reconciliation between the two exhibits is shown in Chart 2, below. The “Effect of using average rate base vs. opening balances” figures in Chart 2 are the differences

1 between the Ex D2-T2-S2, Table 1 and L-14-004 figures on the "Carrying Charges" line
2 in Chart 1.

Chart 2
Reconciliation of Economic Analysis in L-14-004 with
Revenue Requirement Impact in Ex. D2-T2-S2, Table 1 (\$M)

	2011	2012	Test Period
Economic Analysis values per L-14-004	10.0	10.0	20.0
Remove effect of rounding to nearest \$10M	(4.5)	3.5	(1.0)
Effect of using avg rate base vs. opening balances	4.0	9.7	13.7
Include income tax effect	1.6	3.6	5.2
Revenue Requirement Impact per D2-T2-S2, Table 1	11.1	26.8	37.9

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Part (b):

A restatement of Table 1 of L-14-004 removing the two simplifying assumptions noted above is provided as Attachment 1.

As explained previously, the analysis presented in the original L-14-004 (which underlies Exhibit K13.4) was meant to show the NPV impact of CWIP versus the current regulatory treatment, over the life of the project. In this illustrative analysis, some simplifying assumptions were made (i.e., to exclude taxes, to exclude common costs, to use the opening capital balance amount for the rate base for the year in question and to round the annual figures to the nearest \$10M.)

The analysis used the same gross plant opening and closing balances and was based on the same expenditures: \$72.9M in 2010, \$105.2M in 2011 and \$255.M in 2012 as the more precise calculation given in Exhibit D2-T2-S2 Table1. OPG used as the discount rate the WACC for 2012 (7.59%) Tax was excluded in the analysis to keep things simple. The figures in the economic analysis were also rounded to avoid giving the appearance of precision and accuracy over a 40+ year study period.

As can be seen from the restated Table 1 attached, even after removing the two simplifying assumptions, the concern about potential for a significant rate shock in 2020 under the current regulatory methodology remains.

Restated L-14-004 Table 1
 Costs Recovered from Ratepayers
 under Proposed CWIP and Current Regulatory Treatment
 for 2 Illustrative Project Cost Examples
 (in \$ millions)

Line No.	Year	Col.1	Col.2	Col.3	Col.4
		OPG's CWIP Proposal	Current Regulatory Treatment	OPG's CWIP Proposal	Current Regulatory Treatment
		\$6B project cost example		\$10B project cost example	
1	2011	9	-	9	-
2	2012	23	-	23	-
3	2013	42	-	48	-
4	2014	61	-	81	-
5	2015	79	-	112	-
6	2016	97	-	143	-
7	2017	129	-	198	-
8	2018	187	-	297	-
9	2019	257	-	418	-
10	2020	415	357	679	561
11	2021	530	526	877	851
12	2022	592	513	984	831
13	2023	686	683	1,146	1,124
14	2024	742	853	1,242	1,416
15	2025	723	831	1,212	1,381
16	2026	705	810	1,181	1,346
17	2027	687	789	1,150	1,311
18	2028	668	768	1,119	1,276
19	2029	650	747	1,089	1,241
20	2030	632	726	1,058	1,206
21	2031	613	705	1,027	1,171
22	2032	595	683	997	1,135
23	2033	576	662	966	1,100
24	2034	558	641	935	1,065
25	2035	540	620	904	1,030
26	2036	521	599	874	995
27	2037	503	578	843	960
28	2038	485	556	812	925
29	2039	466	535	782	890
30	2040	448	514	751	855
31	2041	430	493	720	820
32	2042	411	472	689	785
33	2043	393	451	659	750
34	2044	374	430	628	714
35	2045	356	408	597	679
36	2046	338	387	566	644
37	2047	319	366	536	609
38	2048	301	345	505	574
39	2049	283	324	474	539
40	2050	180	197	308	337
41	2051	120	131	206	225
42	2052	112	123	192	210
43	2053	55	60	95	103
44	Total	16,892	17,882	28,135	29,660
45	PV* @ 7.6%	3,490	3,295	5,742	5,443

* PV results are in 2009 \$ millions