

UNDERTAKING J5.9 Addendum

Undertaking

To provide total OM&A cost and total lost production for year-to-date for 2008 and planned values for the remainder of 2008.

Response

The following tables for 2007, 2006 and 2005 were filed in response to undertaking J5.9 on June 16, 2008 and are repeated here for ease of reference. They show actual planned outage days (ref: E2-T1-S2 Table 2a) including force extension of planned outages with the corresponding revenue impact along with the actual outage costs (ref: F2-T1-S1 Table 1) for 2005, 2006, 2007. Note: the outage costs for the year also include expenditures on preparatory work for outages that will occur in the future.

2007 Planned Outages				
	Duration (days)	Generation Impact (TWh)	Revenue Loss (M\$)	Outage OM&A (M\$)
Pickering A - U1	76.2	1.0	49.0	40.8
Pickering A - U4	49.2	0.64	31.7	2.0
Pickering B - U5	94.1	1.2	60.4	34.5
Pickering B - U6	78.0	1.0	50.0	26.5
Pickering B - U7	28.0	0.36	17.8	0.3
Darlington - U2	59.7	1.34	66.3	48.0
Darlington - U3	18.6	0.4	20.8	2.4
Darlington - U4	58.5	1.31	64.9	46.2
Preparatory work for future outages				14.9

2006 Planned Outages				
	Duration (days)	Generation Impact (TWh)	Revenue Loss (M\$)	Outage OM&A (M\$)
Pickering A - U1	14.9	0.2	9.4	40.6
Pickering A - U4	80.1	1.0	51.5	2.2
Pickering B - U6	35.4	0.46	22.7	0.8
Pickering B - U7	13.6	0.2	8.4	0.0
Pickering B - U7	108.3	1.4	69.8	41.5
Pickering B - U8	117.6	1.5	75.2	35.6
Darlington - U3	73.2	1.6	81.2	36.4
Darlington - U1	47.3	1.1	52.5	23.8
Preparatory work for future outages				6.8

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2005 Planned Outages				
	Duration (days)	Generation Impact (TWh)	Revenue Loss (M\$)	Outage OM&A (M\$)
Pickering B - U5	146.0	1.9	94.1	45.1
Pickering B - U6	122.4	1.6	78.7	44.5
Darlington - U2	69.4	1.6	77.2	30.8
Darlington - U4	13.3	0.30	14.9	1.2
Darlington - U4	33.9	0.8	37.6	15.8
Preparatory work for future outages				9.1
PA planned work accomplished during Unit 4 forced outage (feeder thinning issue)				16.5

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ADDENDUM

The following table shows a combination of 2008 actual (to the end of May 2008) and forecast planned outage days including forced extension of planned outages, with the corresponding revenue impact along with outage costs.

2008 Planned Outages (actuals to end of May)				
	Duration (days)	Generation Impact (TWh)	Revenue Loss (M\$)	Outage OM&A (M\$)
Pickering B - U5 Actuals	7.0	0.1	4.3	0.0
Pickering B - U7 <i>Business Plan</i>	52.0	0.6	31.9	27.6
Pickering B - U8 Actuals	73.2	0.9	44.9	36.4
Darlington - U1 Actuals	69.0	1.5	72.0	46.7

Some comments on the information provided in the above table

- The Pickering B Unit 5 outage is an actual unbudgeted planned outage in May 2008 (a definition of “unbudgeted planned outage” is provided at Ex. E2-T1-S1 page 23 line 23)
- The information provided on the Pickering B Unit 7 planned outage is in reference to a fall 2008 planned outage. As discussed in the Impact Statement (Ex. N-T1-S1) and at J5.10, OPG intends to eliminate this planned outage and complete the planned outage work while the unit is shut down during the forced outage that began in April 2008.
- The Darlington Unit 1 planned outage was completed on June 5, 2008, slightly earlier than schedule. The Outage OM&A costs of \$46.7 M are actuals as of May 30th. OPG currently estimates an additional \$2.3M will be incurred to complete the outage as of June 5th.
- The business plan included a 67 day Pickering A Unit 4 fall outage. As discussed in the Impact Statement (Ex. N-T1-S1) OPG has deferred this outage until the spring of 2009.

The outage OM&A costs set out in all of the above tables illustrate the difficulty of making meaningful cost comparisons across outages. Outage OM&A captures only the incremental costs over and above the base work program required to perform the outage (Ex F2 T4-S1 Page 1 line 19). The regular labour costs are captured in base OM&A.

1 Outage scope, in addition to duration, is a major driver to the incremental outage OM&A.
2 costs as noted at Ex. F2-T4-S2, page 1 line 20. Hence comparing outages of similar
3 duration but with dissimilar scope will not produce a meaningful comparison.
4 Furthermore, some of the outages set out in the tables include outage days due to
5 forced extension of planned outages. While the duration of a planned outage and
6 forced extension of a planned outage may be similar, as noted at Ex. E2-T4-S1, the
7 incremental unit cost of the outstanding work activities that lead to the extension of the
8 planned outage tends to be lower compared to the incremental unit cost of all of the
9 work activities that underpin the full planned outage. (Ex. E2-T4-S1)