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**UNDERTAKING J5.7**  
**(NON-CONFIDENTIAL)**

**Undertaking**

To provide documentation to support the \$184 million estimate provided to the OPA.

**Response**

The \$184 million estimate was provided to the OPA with the information in the tables below. It is the sum of the Pickering B OM&A line under “Difference Continued Operations – Base Case” for 2010-2013, plus the 2014 amount attributable to Continued Operations. The relevant amounts are 14+50+41+35=\$140 million, plus \$43.7 million in 2014 (see footnote 6). These amounts include that portion of the Fuel Channel Lifecycle Management Program attributable to Pickering B Continued Operations.

As noted in L-01-067, the \$184M figure represents the cost of the Continued Operations Initiative in 2010 dollars (i.e., unescalated), whereas the \$190.2 million in the business case represents the same number expressed in dollars of the year (i.e., escalated).

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**PICKERING A & B: BASE CASE AND CONTINUED OPERATIONS DATA**  
 (Life Management of P7 for Cont. Ops. Only)

|  |                      | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|--|----------------------|------|------|------|------|------|------|------|------|------|------|------|
| <b>Base Case: 210 KEFPH (No Life Management of P7)</b>         |                      |      |      |      |      |      |      |      |      |      |      |      |
| Pickering A  | Total OM&A (M2010\$) | 378  | 353  | 373  | 368  | 335  | 0    | 0    | 0    | 0    | 0    | 0    |
|  | Fuel (M2010\$)       | 23   | 29   | 32   | 32   | 30   | 0    | 0    | 0    | 0    | 0    | 0    |
|  | Energy (TWh)         | 6.7  | 7.4  | 7.7  | 7.7  | 7.3  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
|  | PO Days              | 145  | 82   | 75   | 78   | 30   | 0    | 0    | 0    | 0    | 0    | 0    |
|  | ACF (%)              | 73.7 | 82.6 | 85.3 | 84.8 | 91.5 | n/a  | n/a  | n/a  | n/a  | n/a  | n/a  |
|  | FLR (%)              | 8.0  | 7.0  | 5.0  | 5.0  | 4.0  | n/a  | n/a  | n/a  | n/a  | n/a  | n/a  |
| Pickering B  | Total OM&A (M2010\$) | 562  | 531  | 598  | 598  | 483  | 292  | 39   | 0    | 0    | 0    | 0    |
|  | Fuel (M2010\$)       | 55   | 69   | 75   | 78   | 50   | 21   | 3    | 0    | 0    | 0    | 0    |
|  | Energy (TWh)         | 14.1 | 15.8 | 16.0 | 16.3 | 10.5 | 4.3  | 0.6  | 0.0  | 0.0  | 0.0  | 0.0  |
|  | PO Days              | 263  | 120  | 118  | 85   | 85   | 0    | 0    | 0    | 0    | 0    | 0    |
|  | ACF (%)              | 77.9 | 87.7 | 88.4 | 90.4 | 89.4 | 96.0 | 96.0 | n/a  | n/a  | n/a  | n/a  |
|  | FLR (%)              | 5.8  | 5.0  | 4.5  | 4.0  | 4.0  | 4.0  | 4.0  | n/a  | n/a  | n/a  | n/a  |
| <b>Continued Operations: 240 KEFPH (Life Management of P7)</b> |                      |      |      |      |      |      |      |      |      |      |      |      |
| Pickering A  | Total OM&A (M2010\$) | 378  | 353  | 373  | 368  | 381  | 377  | 377  | 377  | 377  | 377  | 153  |
|  | Fuel (M2010\$)       | 23   | 29   | 32   | 32   | 32   | 32   | 32   | 32   | 32   | 32   | 14   |
|  | Energy (TWh)         | 6.7  | 7.4  | 7.7  | 7.7  | 7.8  | 7.8  | 7.8  | 7.7  | 7.8  | 8.0  | 3.3  |
|  | PO Days              | 145  | 82   | 75   | 78   | 70   | 70   | 70   | 70   | 60   | 30   | 0    |
|  | ACF (%)              | 73.7 | 82.6 | 85.3 | 84.8 | 86.8 | 86.8 | 86.4 | 85.9 | 86.3 | 88.7 | 90.5 |
|  | FLR (%)              | 8.0  | 7.0  | 5.0  | 5.0  | 4.0  | 4.0  | 4.5  | 5.0  | 6.0  | 7.5  | 9.5  |
| Pickering B  | Total OM&A (M2010\$) | 578  | 580  | 638  | 630  | 642  | 584  | 584  | 584  | 519  | 409  | 166  |
|  | Fuel (M2010\$)       | 53   | 64   | 72   | 72   | 69   | 65   | 71   | 67   | 54   | 40   | 16   |
|  | Energy (TWh)         | 13.8 | 14.6 | 15.4 | 15.3 | 14.5 | 13.8 | 15.0 | 14.2 | 11.3 | 8.4  | 3.4  |
|  | PO Days              | 291  | 222  | 172  | 177  | 238  | 296  | 192  | 247  | 165  | 0    | 0    |
|  | ACF (%)              | 76.1 | 81.0 | 84.7 | 84.4 | 80.4 | 76.3 | 82.8 | 78.6 | 80.1 | 93.3 | 91.8 |
|  | FLR (%)              | 5.8  | 5.0  | 4.5  | 4.0  | 4.0  | 4.3  | 4.6  | 5.4  | 6.5  | 6.8  | 8.5  |
| <b>Difference: Continued Operations - Base Case</b>            |                      |      |      |      |      |      |      |      |      |      |      |      |
| Pickering A  | Total OM&A (M2010\$) | 0    | 0    | 0    | 0    | 45   | 377  | 377  | 377  | 377  | 377  | 153  |
|  | Fuel (M2010\$)       | 0    | 0    | 0    | 0    | 2    | 32   | 32   | 32   | 32   | 23   | 14   |
|  | Energy (TWh)         | 0    | 0    | 0    | 0    | 1    | 8    | 8    | 8    | 8    | 8    | 3    |
|  | PO Days              | 0    | 0    | 0    | 0    | n/a  | n/a  | n/a  | n/a  | n/a  | n/a  | n/a  |
|  | ACF (%)              | 0.0  | 0.0  | 0.0  | 0.0  | n/a  | n/a  | n/a  | n/a  | n/a  | n/a  | n/a  |
|  | FLR (%)              | 0.0  | 0.0  | 0.0  | 0.0  | n/a  | n/a  | n/a  | n/a  | n/a  | n/a  | n/a  |
| Pickering B  | Total OM&A (M2010\$) | 14   | 50   | 41   | 35   | 158  | 292  | 545  | 564  | 519  | 409  | 166  |
|  | Fuel (M2010\$)       | -1   | -5   | -3   | -5   | 13   | 45   | 88   | 87   | 54   | 40   | 16   |
|  | Energy (TWh)         | 0    | -1   | -1   | -1   | 4    | 9    | 14   | 14   | 11   | 8    | 3    |
|  | PO Days              | 28   | 102  | 56   | 92   | n/a  | n/a  | n/a  | n/a  | n/a  | n/a  | n/a  |
|  | ACF (%)              | -1.8 | -6.7 | -3.7 | -6.0 | n/a  | n/a  | n/a  | n/a  | n/a  | n/a  | n/a  |
|  | FLR (%)              | 0.0  | 0.0  | 0.0  | 0.0  | n/a  | n/a  | n/a  | n/a  | n/a  | n/a  | n/a  |

Notes:  
 1. OM&A costs include OM&A project costs. For simplicity, sustaining capital projects are also included in this line. Total OM&A also includes each station's share of incremental allocated nuclear support and corporate support costs.  
 2. In the years when units transition to out-of-service, rules are applied to calculate the station annual OM&A.  
 3. This analysis does not show the impact of extending the unit lives on OPG's Decommissioning, Low & Intermediate Level Waste and Used Fuel management provisions.  
 4. FLR is an average of the unit FLR's for those units which are operating during a year.  
 5. Shaded cells indicate partial year operation of 1 or 2 units depending on the case.  
 6. \$43.7 million (2010\$) of incremental Pickering B costs in 2014 are attributed to work to enable Continued Operations. The remaining Costs, Fuel and Energy differences from 2014 to 2020 are not attributable to work to implement Continued Operations, but reflect the fact that the Pickering A and B units are assumed to operate beyond the period assumed in the Base Case.

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**BASE CASE: No Continued Operations (210 KEFPH, no Life Management of P7)**

**Sample Outage Plan 2010 - 2016**

**REDACTED**

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**Continued Operations: (240 kEFPH, Life Management of P7)  
Sample Outage Plan 2010 – 2020**

**REDACTED**