

1 **UNDERTAKING J14.2**

2
3 **Undertaking**

4
5 To fill out the table at page 2 of the Environmental Defence document book.

6
7 (Provide the additional table that was provided in the ED supplementary compendium at
8 pages 1-4.)
9

10
11
12 **Response**

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15
16 OPG has provided the results of pro-rating OPG's high confidence estimate by 50%,
17 100%, 150%, 200%, and 250% and have noted the amounts, in each scenario, that are
18 passed along to OPG from the contractor. The response has been provided in \$2013 as
19 this is the basis of OPG's detailed information as provided in D2-2-1 and D2-2-2 and for
20 purposes of expediency in this response.
21

22 OPG has responded to this as requested, however, we do not believe that the
23 information provides a reasonable basis to assess the potential future costs that may be
24 expended by OPG in executing the Darlington Refurbishment Project.
25

26 OPG, and the construction industry as a whole, have learned significantly in the
27 experiences of past large complex projects and have embraced a robust front end
28 planning process. The front end planning process, based on industry best practices
29 from the Construction Industry Institute (CII) and the Association for the Advancement of
30 Cost Engineering (AACEi) provides OPG with a proven standard for developing
31 confidence in its estimate, and at the time of Release Quality Estimate (RQE) in
32 October 2015, OPG will have progressively developed a high degree of certainty for
33 each of the contractors' estimates that form the basis for the target price.
34

35 Specifically, each contractors' target price will be based on the completion of detailed
36 engineering and comprehensive work packages which fully describe the methods in how
37 the work will be performed. The Re-tube and Feeder Replacement project represents
38 over 60% of the Darlington Refurbishment Projects critical path of the project. All of the
39 tools will be time-tested in the full-scale mock-up prior to setting the target price. This
40 front end planning will be used to finalize the target price.
41

42 This is not to suggest that there will be no risks associated with the execution of the
43 project. In OPG's approach, the risks get allocated to the entity best able to manage
44 those risks.
45

46 The target price contracts are structured in a way to incent the vendors to achieve the
47 target price and schedule, and, have disincentives for failure to meet this including
48 reductions ██████████ of the contractors profit and overhead costs.
49

1 If the contractor exceeds the target price, OPG will continue to pay the direct costs, i.e.
2 actual costs for trades and project management labour, however, without markups
3 including profit or overhead. OPG's contracts have open book provision which allows
4 OPG to audit the direct costs to ensure that no profit centres are embedded in the rates;
5 payments are based on negotiated union agreements and actual costs paid for project
6 management.

7
8 OPG is the General Contractor and will play an active role in monitoring the work. OPG
9 would intervene and take appropriate actions to mitigate the circumstances as
10 contemplated in this undertaking. The contractors are responsible and have a significant
11 incentive to mitigate and recover delays and overruns. There are off ramps in the
12 contracts that allow OPG to terminate contracts without penalty in situations where
13 performance was not meeting OPG requirements.

14
15 In order to respond to this undertaking, we have included a number of conditions that we
16 do not believe are reasonable.

- 17
- 18 • OPG was asked to artificially pro-rate contingency which is not appropriate.
19 Contingency would be used to offset risks and cost growth in executing the work
20 program and should be reduced to zero. OPG has provided a scenario which
21 removes all contingency.
22
 - 23 • OPG has artificially pro-rated all of its owner's costs, including project
24 management. This is also not reasonable as the owner's costs would not grow in
25 relation to any perceived growth in contractor costs.
26

27 OPG has provided the information as requested, however, it is for the reasons noted
28 above that we do not deem this to be a reasonable representation of any likely outcome
29 of the Darlington Refurbishment Project.