

1 **UNDERTAKING J7.1**
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4 **Undertaking**
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6 To provide a revised version of Exhibit K7.1 more tailored to the DRP.
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9 **Response**
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11 The following response was provided by Schiff Hardin:
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13 The following is a description of proposed structure and content for a periodic report
14 regarding the status of the Darlington Refurbishment Program (DRP) to be provided by
15 Ontario Power Generation (OPG) to the Ontario Energy Board (OEB) and other
16 governmental and/or regulatory stakeholders. The exact structure and content of the
17 report should be determined based on what is necessary for OPG to accurately and
18 transparently report the status of the DRP including any actual or threatened risks to
19 budget and schedule. The structure of the report can vary from the order listed below as
20 long as all of the categories of information are adequately and transparently addressed.
21 The overall benchmark of an effective OPG report to the Ontario Energy Board (OEB)
22 and other governmental and/or regulatory stakeholders is that which provides
23 sufficiently detailed and transparent information so that the recipients understand: (1)
24 what is going on at the Darlington site including known and potential risks to budget and
25 schedule; (2) the technical, commercial, schedule, safety, quality or other risk
26 management challenges facing the DRP; and (3) the actions OPG is taking to mitigate
27 risk, respond to issues as they arise, and make project management decisions.
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29 **PROPOSED STRUCTURE & CONTENT OF PERIODIC DARLINGTON**
30 **REFURBISHMENT PROJECT (DRP) PROGRESS REPORTS**
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Section 1 Introduction and Table of Contents. This section should provide an explanation of the business, legal, technical, and regulatory context and requirements governing the DRP including any legal, governmental, and/or regulatory requirements governing the purpose, structure, and content of the report.

Section 2 Executive Summary. This section should provide a high level overview of the current status of the DRP. This section should be previewing and summarizing the content provided in more detail in the remaining sections of the report.

Section 3 Overall Darlington Refurbishment Program (DRP) Status. The purpose of this section is to provide a substantive update regarding the status of every project and/or work bundle included in the Darlington Refurbishment Program.

The narrative should be detailed enough for the recipients to gain an accurate understanding of the current status of each of the components of the DRP including discussion and analysis of not only the events that occurred during the reporting period, but a forecast of anticipated challenges and OPG's mitigation efforts.

The exact content of this section and scope of the narrative should evolve and change over the life cycle of the DRP. The consistent metric that OPG should use to evaluate the appropriate reporting content throughout the DRP should be the content and narrative necessary to accurately and transparently report the status of the DRP including opportunities, challenges, risks, and the contemporaneous evaluation of what lies ahead. The reporting should be based on OPG memorializing not just the facts as they occur, but the steps of the process the management team and corporate leadership are using to make project management decisions for all significant technical, cost, schedule, safety, quality or other challenges to the DRP.

For example, as appropriate for the phase of the Program, the discussion of the overall status of the DRP should include the following:

- Overview. This section should put the current reporting period in context of the overall DRP and provide a roadmap of the substantive discussion in the remainder of the section.
- DRP Progress Update. This should include a report of all contractor/vendor performance during the reporting period and a discussion of the events occurring during the reporting period for each project or work bundle included in the DRP. Accordingly, the exact content will change over the life of the DRP. Additional subtopics may be appropriate based on the actual facts and events that occur over the life cycle of the DRP. The list below is not an exclusive list but serves as a recommended framework to communicate sufficient content to transparently and accurately report the status of the DRP.
 - Engineering Status. As applicable, the report should include a discussion of the status of any engineering work performed including the status of engineering deliverables and forecast for next period. The discussion should address all variances and include engineering earned value metrics including planned, earned and actual hours. Engineering staffing plan should be

discussed including comparison of planned to actual staffing. The report should address any engineering problems, challenges, concerns and OPG's mitigation efforts.

- Procurement Status. As applicable, the report should include a discussion of procurement activities performed by OPG and/or the contractors during the reporting period and forecasted for the next period. This would include a discussion of the status of major material and equipment purchases and a discussion of all variances to budget and/or schedule. This also includes reporting on major supplier inspections that are planned, scheduled, and/or completed. The report should address any procurement problems, challenges, concerns, and OPG's mitigation efforts.
- Construction Status. The report should include a discussion of construction activities performed by OPG and/or the contractors during the reporting period and forecasted for the next period. This includes a report of major accomplishments this period and planned major accomplishments for next reporting period and a discussion of all variances. The discussion should address earned value metrics including a discussion of any negative trends or low productivity and the details of the planned, earned, and actual manhours; an update of material delivery and installation including an identification of any shortages, deficiencies, and problems; discussion of the status of major subcontractors including, but not limited to, those active at site, new mobilization, demobilization, and any problems and concerns; major equipment mobilization, demobilization, usage and utilization; manpower by trade and Contractor/Subcontractor; and any labor relations issues, quality, environmental and permitting concerns, as applicable. All work packages should be identified and tracked from engineering to procurement to construction completion and start-up.
- Testing, Start-Up, and Commissioning. As applicable, the report should include a discussion of testing, start-up, and commissioning activities performed by OPG and/or the contractors during the reporting period and forecasted for the next period. This includes a report of major accomplishments this

period and planned major accomplishments for next reporting period and a discussion of all variances. The discussion should address earned value metrics including a discussion of any negative trends or low productivity and the details of the planned, earned, and actual manhours; identification of any shortages, deficiencies, and problems; and discussion of test results.

- Other. OPG should include any other major topics/activities necessary to explain the DRP status for the reporting period. This could include safety issues, environmental issues, quality assurance and quality control concerns, force majeure events, staffing problems, potential regulatory issues, or other events occurring during the reporting period.
- Key DRP Program Risks & Risk Management. The major categories of risk to the DRP should be identified and discussed including an analysis relevant events and/or mitigation measures taken during the reporting period. Discussion of any problems OPG or the contractors encountered during this period or anticipated problems in upcoming periods. As applicable, OPG should discuss the results of prior improvement/mitigation actions undertaken. Either this section or the previous section should include a discussion of significant contractor claims, disputed change orders, and/or other significant commercial issues.
- Safety & Quality Reporting. Industry standard safety and quality metrics should be provided in this section to give the reader an idea of how the DRP overall and the individual contractor's safety and quality record compares to industry standards and OPG expectations and goals. Regarding safety, the narrative should include an explanation of all safety related incidents, a discussion of any lost man hours due to accidents, an explanation of any safety programs or initiatives launched by OPG or the contractor(s), and any safety investigations, reports, fines/penalties undertaken during the reporting period. Regarding quality, the narrative should include a summary of contractor/vendor quality performance including analysis of the amount of rework, rejection rates, etc.
- Financial Reporting. This section should provide a narrative and

graphics addressing the planned, actual, and projected costs of the DRP including sufficient detail to see the component projects. OPG should discuss all variances between actual costs and the DRP budget and the current forecast and cost trends. Cost discussion may also include invoicing status for major contractors. The cost details should be provided in attachments to the report. The actual format and content of financial reporting required by government or regulatory bodies is typically determined by the utility company's cost control software and internal reporting created in accordance with existing corporate and/or project-specific policies and procedures. The reports generated internally for managing the project are typically required to be transparently provided as a part of any ongoing reporting requirement.

- Schedule Reporting. This section should provide a narrative addressing the overall schedule status of the DRP including at least three critical paths. The report should identify all major interim and/or completion milestones achieved. The report should address key activities for each major work bundle during the reporting period. This should include an earned value summary and conclusions for the entire DRP as well as earned value data broken down by the major work bundles and contractors. Accurate reporting of earned value should discuss not only the current reporting period, but the project to date. It is common for graphics to be used as a part of the report – typically attached as an Exhibit. The report should compare the current DRP schedule to baseline schedule and include a narrative of known or suspected problem areas which have affected or may affect the current project schedule and all recovery and mitigation plans. The actual format and content of schedule reporting required by government or regulatory bodies is typically determined by the utility company's schedule software and internal reporting created in accordance with existing corporate and/or project-specific policies and procedures. The reports generated internally for managing the project are typically required to be transparently provided as a part of any ongoing reporting requirement.
- OPG Staffing. This section should address OPG's actual staffing levels as compared to the plan and address any variances to the plan, changes to the staffing plan, efforts to fill open positions, and identify any leadership turnover.

Suggested Report Attachments:

Cost Report(s) Covering the Reporting Period

Earned Value Metrics by discipline and area

Level 1 Schedule Planned and Current comparison

Level 2 Schedule Planned and Current comparison

Supplemental exhibits, as appropriate.

Audit reports for all audits performed during the Reporting Period

Third-party oversight reports submitted to OPG during the Reporting Period