CONTRACTS

1.0 OVERVIEW

This exhibit describes OPG's approach to contract management where the goal is to help maximize the Darlington Refurbishment Program's ("DRP" or "Program") performance under the terms of the governing contracts. Also discussed are the material amendments to the DRP contracts that have been executed since OPG's filings in EB-2016-0152.

2.0 CONTRACT MANAGEMENT

As explained in EB-2016-0152, OPG utilizes a "multi-prime contractor" model for the DRP. Under the multi-prime contractor model, there is more than one prime contractor working on the DRP. OPG, as the owner, has a separate contract with each prime contractor. Each prime contractor is responsible for completing work within the scope of its particular contract. As the owner, OPG is the integrator among the prime contractors and is responsible for the entire Program.

As explained in Ex. D2-2-3, Section 2.1, the scope of work for the DRP was grouped into five Major Work Bundles for purposes of assigning project management accountability, as well as for purposes of contracting DRP work to OPG's prime contractors.[1] The Major Work Bundles for the Program are as follows: Retube and Feeder Replacement ("RFR"), Turbine Generator ("TG"), Fuel Handling and Defueling, Steam Generator and Balance of Plant. The scopes of work within each Major Work Bundle have not changed materially since EB-2016-0152, with only minor movement of scope between bundles. See Attachment 1 for an updated summary description of the Major Work Bundles.

Contract management involves optimizing the efficiency, effectiveness and economy of the services to be delivered under contract. This is promoted via project monitoring, identification of potential issues and prudent management of issues when they arise in order to balance

[1] A high-level description of the Major Work Bundles was also provided in EB-2016-0152, Ex. D2-2-3.

costs against risks and maintain strong working relationships. As detailed below, collaboration and maintenance of good working relationships between OPG and its contractors promotes strong execution performance and successful contract management. See Attachment 2 for a copy of the Darlington Refurbishment Contract Program Management Plan.

2.1 Collaborative Contract Management

Integral to the Program's success is for OPG to maintain positive and productive long-term working relationships with all of its contractors. Therefore, OPG takes a collaborative approach to contract management. OPG and its DRP contractors, including the joint venture of SNC-Lavalin Nuclear Inc. and Aecon Industrial, a division of Aecon Construction Group Inc. (together, "CanAtom"),[2] have contracted with intent to work together for approximately 15 years.

Collaborative contract management is an industry-recognized approach for mega-program owners. Through this approach, OPG works to uphold the terms of its contracts while:

- establishing mutual goals and guiding principles;
- creating structures for alignment of expectations and interests over the long-term life of the Program;
- fostering trust and collaboration; and
- producing healthy and sustainable partnerships.

The Darlington Refurbishment Charter, which establishes the overall management framework of the Program, reflects the need to manage long-term commercial relationships.[3] In addition, the contracts governing the three largest Major Work Bundles (RFR, TG and Balance of Plant) include terms that require the parties to "collaborate" and "cooperate".[4]

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[2] On February 7, 2018, the joint venture was rebranded and launched as the CanAtom Power Group to reflect the collaborative efforts of each company in providing EPC services to OPG.

[3] Darlington Refurbishment Charter, D-PCH-09701-10000-R006, 2020-10-31, Section 9.

[4] Section 2.1 of the RFR Engineering Procurement and Construction (EPC) agreement between OPG and CanAtom; Section 2.1 of the TG EPC agreement; and, Section 3.3 of the Extended Services Master Services Agreements.

In adherence to its contract terms, OPG worked collaboratively with its contractors to jointly develop the key metrics to measure successful completion of the work. For example:

1. OPG worked with various contractors to develop schedules with inputs from appropriate project stakeholders;
2. OPG worked collaboratively with CanAtom to conduct a vigorous vetting process to establish the estimate for the RFR work; and,
3. The RFR Engineering Procurement and Construction ("EPC") contract and the TG EPC contract include a Definition Phase which allowed a prolonged term for OPG and CanAtom to plan the RFR and TG work, including development of cost estimates, schedule, and a risk register.

To date, OPG has performed contract management effectively as demonstrated by OPG having maintained healthy relationships with its contractors while successfully executing the refurbishment of Unit 2 under the terms of the relevant contracts. OPG is always seeking to refine its collaborative contract management approach in an effort to realize continuous performance improvement over the life of the DRP. Successes and lessons learned from execution of the Unit 2 refurbishment with respect to contract management are embedded into OPG's ongoing project execution approach, and as discussed below in Section 3, have resulted in certain contract amendments where necessary.

2.1.1 <u>The One Team Approach</u>

Strategic Improvements are new approaches and/or innovative methods for planning and executing the refurbishments of Units 3, 1, and 4 ("Remaining Units") (Ex. D2-2-3, Section 5.1). The One Team Approach is a component of the Organizational Evolution Strategic Improvement (Ex. D2-2-3, Section 5.1.1) founded upon collaboration and common project goals in the areas of cost, schedule and safety. The One Team Approach recognizes that each party has a variety of talent and assigning the best personnel available, whether from OPG or CanAtom, to the positions where they can yield the highest value can benefit the Program. As discussed in the Darlington Refurbishment Contract Program Management Plan (Attachment

2), the One Team Approach is expected to enhance collaboration and increase transparency, resulting in improved performance under the terms of the existing contracts.

OPG applied the One Team Approach successfully during the Unit 2 refurbishment. For example, OPG and CanAtom created an integrated team for the vault restoration scope consisting of both OPG and CanAtom leaders, project managers, and series leads. Together, the team developed an integrated schedule, streamlined engineering and other review activities and efficiently and effectively executed the work pursuant to the terms of the contract.

The One Team Approach will be applied to the project teams executing the RFR and TG Major Work Bundles for the Remaining Units. Using the RFR Major Work Bundle as an example, the joint OPG/CanAtom planning team selected three OPG project managers to lead the feeders segment of the RFR Major Work Bundle. There will be an overall Feeders Lead from OPG and reporting to them will be two OPG seconded Area Managers, one for Feeder Removal and one for installation of instrumentation tubing.[5]

These OPG staff were specifically selected because they had successfully assisted in recovery and completion of the Unit 2 feeder program and, therefore, have directly applicable experience and technical expertise that will contribute to project success on the Remaining Units. The Feeder Lead and Area Managers report to CanAtom senior personnel and will be responsible for the work throughout the lifecycle of the feeders series, i.e., from planning to execution to close out. See Ex. D2-2-8 for further discussion of how the One Team Approach is expected to drive performance under the program structure in place to execute the Remaining Units.

[5] A Collaboration Agreement between OPG and CanAtom allows staff to be seconded between the companies without impacting the rights and obligations of each party under the RFR EPC agreement.

3.0 MAJOR CONTRACTS

As noted above in Section 2.0, the Major Work Bundles structure described in EB-2016-0152 remains largely the same, with only minor adjustments to the scope within certain bundles.[6] Section 3.1 provides an overview of the contracts used for each of the Major Work Bundles. The remaining subsections discuss material amendments to these contracts since EB-2016-0152.

3.1 Contracting Overview

Contracting for the Major Work Bundles is as follows:

Chart 1: Overview of Major Work Bundle Contracts for the Remaining Units' Refurbishments

Work Bundle	Contractor	Contract Model
RFR	• CanAtom	• EPC
TG	• General Electric Steam Power Inc. ("General Electric")	• Engineering Services, Equipment Supply and Field Services Agreement[7]
	• CanAtom	• EPC
Fuel Handling and Defueling	• GE-Hitachi • E.S. Fox Limited ("ES Fox")	• Engineering Services Equipment Supply Agreement (Refurbishment of the fuel handling equipment) • Extended Services Master Services Agreement ("ESMSA") – Procure and Construct (Defueling of the reactor cores)
Steam Generator	• BWXT and Candu Energy Inc.	• EPC
Balance of Plant	• Many	• ESMSA

The following subsections briefly describe the contract model governing each Major Work Bundle and detail any material contract amendments since EB-2016-0152.

[6] EB-2016-0152, Ex. D2-2-3, Major Work Bundle Structure and Contracts, which describes each of the Major Work Bundles and associated contracts.

[7] As discussed further below in Section 3.3.1, this is the new title for the previously titled TG Engineering Services and Equipment Supply Agreement between OPG and Alstom dated March 27, 2013. The title was changed as part of Amendment 5 to reflect the addition of a scope of work that will be performed on site at Darlington i.e., in the field.

3.2 Retube and Feeder Replacement

The contract governing the RFR Major Work Bundle is an EPC agreement between OPG and CanAtom. The RFR EPC agreement divides the RFR work into three distinct phases: the definition (planning) phase, the execution (doing) phase, and the commissioning phase. Following completion of the definition phase work, OPG exercised an option to proceed with CanAtom pursuant to Amendment 4, dated January 11, 2016, for completion of the execution phase and the commissioning phase. The scope of work under the execution and commissioning phases of the RFR EPC contract includes:

1. full engineering, procurement and construction services for the replacement of fuel channels, feeders and supporting hardware and associated parts;
2. internal inspection of calandria vessels;
3. development of tooling and systems to perform replacement and inspection tasks; and
4. commissioning.

In EB-2016-0152, OPG filed the full RFR EPC contract as well as Amendments 1-6.[8] Since EB-2016-0152, the RFR EPC contract has undergone six additional amendments.[9]

3.2.1 Amendments 7 to 10 to the RFR EPC

Amendment 7 dated July 1, 2017 incorporated project change directives into the RFR EPC and did not materially change the terms of the contract.

Amendment 8 dated June 27, 2017 reflects the disincentives earned by CanAtom during the definition phase work and sets the amount payable by CanAtom with respect to the Retube Waste Processing Building disincentive at $10M, and with respect to the Definition Phase schedule disincentive at $10M (together, the "Deferred Definition Phase Disincentive") (see Section 3.2.2.3 for the relevant payment terms).

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[8] EB-2016-0152, Ex. D2-2-3, Attachment 6 RFR EPC Contract, including Amendments 1-5, and JT.1.13 Amendment 6.

[9] Date of Agreement: March 1, 2012; Amendment 1: October 1, 2012; Amendment 2: February 28, 2014; Amendment 3: November 2, 2015; Amendment 4: January 11, 2016; Amendment 5: February 1, 2016; Amendment 6: June 7, 2016; Amendment 7: July 1, 2017; Amendment 8: June 27, 2017; Amendment 9: February 27, 2018; Amendment 10: October 16, 2019; Amendment 11: November 3, 2020; Amendment 12: December 11, 2020.

Amendment 9 dated February 27, 2018 introduced an additional financial incentive for strong performance by CanAtom through to the return to service ("RTS") of Unit 2. Specifically, if OPG's total Program costs through to the RTS of Unit 2 were less than $5,623M, CanAtom would have been entitled to 100% of the first $6M of such savings, and 50% of any of such savings above $6M ("Unit 2 Cost Incentive"). The objective of this amendment was to drive CanAtom's performance to complete its scope within the capital and OM&A amounts approved for the DRP through Unit 2. As total Program costs through Unit 2 were ultimately greater than $5,623M, CanAtom did not earn the Unit 2 Cost Incentive.

The Unit 2 Cost Incentive provided by Amendment 9 coincided with an additional action taken to enhance DRP performance. Specifically, CanAtom established an additional management team to provide dedicated support for CanAtom's work and the overall success of the DRP. As described in Amendment 9, $6M of the fees for these services paid by OPG were at risk for CanAtom, such that if CanAtom did not earn the Unit 2 Cost Incentive, these fees would become repayable to OPG. As stated above, CanAtom did not earn the Unit 2 Cost Incentive; therefore, CanAtom must repay the $6M to OPG ("Infrastructure Team Repayment Amount") (see Section 3.2.2.3 for the relevant repayment terms).

Amendment 10 dated October 16, 2019 incorporated project change directives into the RFR EPC and did not materially change the terms of the contract.

3.2.2 Amendments 11 and 12 to the RFR EPC contract dated November 3, 2020 and December 11, 2020 respectively (each effective as of October 17, 2019)

OPG successfully concluded settlement discussions with CanAtom to resolve outstanding commercial issues from the refurbishment of Unit 2. This resulted in Amendments 11 and 12 to the RFR EPC contract, and Amendment 5 to the TG EPC contract (Section 3.3.2.1).

Amendments 11 and 12 introduce terms to motivate strong performance for the duration of the Remaining Units' refurbishments, taking into account the experience gained from Unit 2. As described in Ex. D2-2-2, the DRP encountered challenges on the Unit 2 feeder installation

series, which is the obligation of CanAtom to complete under the RFR EPC contract. This resulted in increased costs compared to estimates and increased schedule duration for that work series.

Chart 2 summarizes the key terms of Amendments 11 and 12 as well as the purpose of each term. The sections following Chart 2 provide further details on the mechanisms of these terms.

Chart 2: Terms of Amendments 11 and 12 to the RFR EPC Contract

Term	Purpose
Revised Execution Phase Target Cost from $1,626M to $1,724M	• Reflect operating experience from Unit 2. Based on Unit 2 experience, the targets may not have been reasonable without amendment, therefore failing to incentivize the contractor. • Increase certainty of achieving the target costs and the corresponding need for lower contingency amounts. See section 3.2.2.1 for further details.
CanAtom to provide a credit note for any variance against OPG's Unit 2 costs above $3,417M ("Unit 2 Credit").	• Motivate strong performance by CanAtom through to the return to service of Unit 2 in order to minimize the value of the Unit 2 Credit. • Motivate strong performance by CanAtom through the Remaining Units' work; the Unit 2 Credit: includes an earn-back mechanism tied to achieving execution milestones across each Remaining Unit; is at risk in the event of termination as OPG may apply any remaining amount of the Unit 2 Credit against amounts owing to CanAtom; and the full value of Unit 2 Credit operates to reduce the amount of any execution phase cost incentive earned. • Avoid potential protracted Unit 2 commercial issues resolution process under both the RFR EPC and TG EPC agreements that would draw upon project resources. • Cap OPG's Unit 2 execution phase work costs at $3,417M. See Section 3.2.2.2 for further details.
Revised Execution Phase Cost Incentive /Disincentive Mechanism	• Revise incentive/disincentive threshold amounts to reflect Unit 2 experience and increase certainty in achieving the estimated cost and schedule targets for the Remaining Units, and of achieving the Program estimate of $12.8B.

	• Have in place an incentive/disincentive mechanism that motivates strong performance by CanAtom for the duration of the Program. • Have in place a disincentive threshold that mimics fixed-price conditions for total RFR EPC execution phase reimbursable costs for the Remaining Units. The revised disincentive structure removes the neutral band previously in place and therefore CanAtom is responsible for every dollar over a defined disincentive threshold. See Sections 3.2.2.3 for further details.
Working Schedule Incentive	• Motivate CanAtom to complete its work effectively and efficiently and to maximize its collaborative contributions to the DRP in order see the Remaining Units' refurbishments completed according to the Working Schedule. If achieved, this would result in overall Program cost savings. See Section 3.2.2.4 for further details.
Revised Project Change Directive Terms and Caps on Owner Specified Materials and Goods costs	• Eliminate CanAtom's opportunities for certain cost increases and improve OPG cost management for duration of the DRP. See Sections 3.2.2.5 and 3.2.2.6 for further details.
Partnership Principles	• Strengthen the collaborative principles in the RFR EPC agreement and enhance contractual support for the One Team Approach in order to drive efficiencies during the Remaining Units' refurbishments. See Section 3.2.2.7 for further details. The partnership principles also apply under the TG EPC contract (Section 3.3.2.1).

3.2.2.1 Revised Execution Phase Target Cost

As stated above, and as discussed in Ex. D2-2-2, the RFR Major Work Bundle, and specifically the feeder installation series, was the main driver of increased schedule duration and increased costs compared to estimates for the Unit 2 refurbishment. As discussed in Ex. D2-2-3, Section 4, OPG and CanAtom collected many Lessons Learned that are being applied to the feeder series for the Remaining Units and that are expected to improve performance. In order to reflect the experience gained from Unit 2, fairly allocate cost risk, and continue to motivate strong performance, the execution phase target cost was increased from $1,626M to $1,724M.

This increase to the execution phase target cost did not result in a corresponding increase to the execution phase fixed fee payable to CanAtom, as would normally be the case under the terms of the RFR EPC contract. Instead, this fee opportunity was provided via the revised execution phase cost incentive/disincentive mechanism (Section 3.2.2.3).

3.2.2.2 The Unit 2 Credit

Further to the challenges experienced on the Until 2 feeder series, and the fact that the RFR Major Work Bundle is the largest contributor to DRP costs, CanAtom is required to provide OPG with a credit equal to the amount that OPG's total actual cost to complete all Unit 2 execution phase work exceeds $3,417M.

The Unit 2 Credit motivated CanAtom to limit its cost to complete Unit 2 work in order to minimize the value of the Unit 2 Credit. Further, the Unit 2 Credit motivates strong performance by CanAtom for the duration of the Remaining Units' refurbishments, as detailed below. The Unit 2 Credit also provides OPG with cost certainty on the refurbishment of Unit 2 by capping OPG's total execution phase expenditures at $3,417M. The value of the Unit 2 Credit is estimated at $95M and will be finalized after February 2021.

The Unit 2 Credit equates to an early benefit to OPG of the execution phase cost disincentive earned by CanAtom during the refurbishment of Unit 2. Per the terms of the RFR EPC contract in effect during the Unit 2 refurbishment, any execution phase cost incentive or disincentive earned by CanAtom would not be calculated and paid until the completion of the Program. The Unit 2 Credit allows OPG to receive early consideration for CanAtom's execution phase cost disincentive position at the completion of Unit 2 in the form of a cap on all Unit 2 execution phase costs.

The Unit 2 Credit incents CanAtom's performance on the Remaining Units' refurbishments in three ways. Firstly, the Unit 2 Credit is a CanAtom liability that can only be reduced through an earn-back mechanism tied to performance on subsequent units. The earn-back mechanism functions by setting milestones at which fixed percentages of the Unit 2 Credit are reduced.

Specifically, the Unit 2 Credit will be reduced by 50% at the Unit Mechanical Completion ("UMC") of Unit 3, 25% at the UMC of Unit 1, and 25% at the UMC of Unit 4. The Unit 2 Credit requires continuous strong performance for the duration of the Remaining Units' refurbishments in order for CanAtom to earn it back.

Secondly, the Unit 2 Credit further motivates CanAtom performance as it is at risk in an event of termination. If OPG terminates the RFR EPC contract, it has an opportunity to apply the then unreduced value of the Unit 2 Credit against outstanding costs due to CanAtom.

Thirdly, the Unit 2 Credit impacts the revised execution phase cost incentive calculation (Section 3.2.2.3). Any cost incentive payment earned by CanAtom is reduced by the full value of the Unit 2 Credit. This is intended to further motivate CanAtom to incur lower execution phase reimbursable costs[10] for the Remaining Units in order to realize an incentive.

3.2.2.3 Revised Execution Phase Cost Incentive/Disincentive

A revised execution phase cost incentive/disincentive structure is in place for the Remaining Units. Chart 3 at the conclusion of this section provides a summary of the thresholds applicable to the revised structure.

Cost Incentive Structure

CanAtom is only eligible for a cost incentive payment if its total execution phase reimbursable costs for the Remaining Units are less than $1,550M. If CanAtom meets this threshold, OPG must pay a cost incentive amount equal to 50% of the difference between $1,700M[11] and the

[10] Reimbursable costs consist of both labour and non-labour costs incurred and actually paid by the contractor, but do not consist of any overhead and profit amount. Reimbursable costs are calculated in accordance with the applicable reimbursable cost table set out in a schedule to the RFR EPC agreement. Reimbursable costs do not include any Fixed or Firm Price work, Goods or Owner Specified Materials, Execution Phase SS&E Fixed Fee, the Execution Phase Fixed Fee, or Reimbursable Costs-No Markup.

[11] The $1,700M incentive calculation metric reflects a fair allocation of risk for the Remaining Units' work taking into account the execution phase target cost and OPG's available contingency for the Remaining Units' refurbishments.

actual total execution phase reimbursable costs incurred for the Remaining Units, subject to the following adjustments:

1. The cost incentive is increased by 32% of every dollar of execution phase reimbursable costs for the Remaining Units above $1,187M[12] up to a maximum increase of $38M. This adjustment reflects CanAtom's fee opportunity resulting from the increase to the execution phase target cost (Section 3.2.2.1). If CanAtom's reimbursable costs for the Remaining Units were less than or equal to $1,187M, this adjustment to the cost incentive would not be made and CanAtom would not realize this fee opportunity.
2. The cost incentive is reduced by the original amount of the Unit 2 Credit. Depending on the cost incentive accrued, the Unit 2 Credit can reduce the cost incentive down to a maximum of $0.

Calculation and payment of any cost incentive earned by CanAtom is deferred until the date that is six months after the completion of the final unit's refurbishment, Unit 4. In the event of early termination of the RFR EPC contract, the cost incentive is calculated on a prorated basis.

CanAtom, as the prime contractor executing the largest and most costly body of DRP work, has the largest opportunity to deliver cost efficiencies for the remainder of the Program. This revised cost incentive structure provides CanAtom with a greater incentive than before to deliver the project below the execution phase target cost.

Cost Disincentive Structure

There are two threshold amounts applicable to the disincentive structure. If CanAtom's total execution phase reimbursable costs for the Remaining Units exceed $1,600M, CanAtom must pay a disincentive equal to 50% of every dollar above $1,600M up to $1,650M. If CanAtom's total execution phase reimbursable costs for the Remaining Units exceed $1,650M, CanAtom must pay a disincentive equal to 100% of every dollar above $1,650M up to a total maximum disincentive equal to 48% of the execution phase fixed fee.

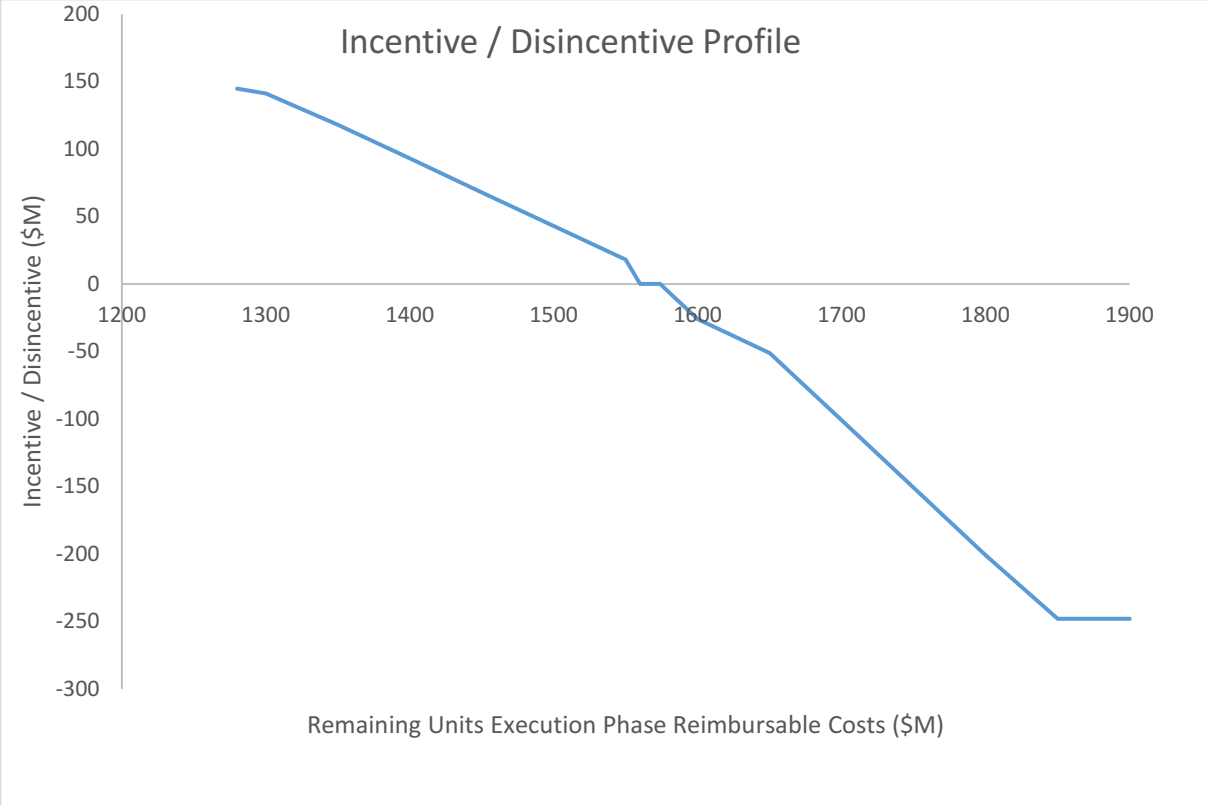
[12] As a result of the increase to the execution phase target cost from $1,626M to $1,724M (Section 3.2.2.1), there was a corresponding increase to the portion of the execution phase target cost for the Remaining Units. Specifically, the portion of the execution target cost for the Remaining Units increased from $1,187M to $1,287M.

Unlike the original structure in place for Unit 2, any disincentive is calculated and owed immediately upon exceeding the above threshold amounts rather than upon completion of the DRP. This cost disincentive structure is significant because it places CanAtom's reimbursable costs, overhead and profit at risk. If CanAtom were to exceed the $1,650M threshold, they would not be paid their reimbursable costs incurred, nor would they receive any profit or overhead. In effect, CanAtom would be operating at a loss.

Additionally, the Infrastructure Team Repayment Amount established by Amendment 9 becomes payable by CanAtom when the total execution phase reimbursable costs exceed $1,574M, and the Deferred Definition Phase Disincentive established by Amendment 8 becomes payable by CanAtom when the total execution phase reimbursable costs exceed $1,580M. Both the Infrastructure Team Repayment Amount and the Deferred Definition Phase Disincentive are subject to an economic cost adjustment of +2.5% per year.

Based on the above described cost incentive/disincentive structure, Figure 1 shows the estimated cost incentive/disincentive payments at various total execution phase reimbursable cost amounts for the Remaining Units RFR work.

Figure 1: Cost Incentives and Disincentives Profile (for RFR Major Work Bundle for Remaining Units)*+



*Unit 2 Credit amount is assumed to be $95M.
+Includes the impact of payment of the Deferred Definition Phase Disincentive and the Infrastructure Team Repayment Amount.

Chart 3 summarizes the thresholds for the incentive/disincentive structures that have been discussed in this section.

Chart 3: Summary of Execution Phase Cost Incentive/Disincentive Thresholds

Threshold ($) Amounts represent execution phase reimbursable costs for the Remaining Units.	**Description** Discussion of "costs" refer to execution phase reimbursable costs for the Remaining Units
1,724M*	Execution phase target cost*
1,700M	*Incentive calculation metric*: If the incentive eligibility threshold is met, cost incentive will be calculated as $1,700M minus actual costs incurred divided by two, i.e. [(1,700 – actual costs)/2]. The resulting sum is subject to the adjustments discussed below in the body of this Exhibit before any incentive amount is paid.

1,650M	*Second disincentive threshold*: CanAtom pays every dollar of costs above this threshold up to a set maximum
1,600M	*First disincentive threshold:* CanAtom pays 50% of every dollar of costs above this threshold
1,580M	*Second payment threshold*: Deferred Definition Phase Disincentive becomes payable to OPG above this threshold
1,574M	*First payment threshold*: Infrastructure Team Repayment Amount becomes payable to OPG above this threshold
1,550M	*Incentive eligibility threshold*: CanAtom costs must be below this threshold to be eligible for an incentive payment
1,187M	*Fee opportunity threshold*: CanAtom cost incentive is adjusted upwards by 32% of every dollar above this threshold up to a maximum of $38M

*The Execution Phase Target Cost of $1,724M is for all units i.e. Units 2, 3, 1 and 4.

3.2.2.4 Execution Phase Working Schedule Incentive

A schedule incentive has been introduced for the Remaining Units that uses the Working Schedule as a target. The purpose of this incentive is to motivate CanAtom to execute its scope of work for the Remaining Units' refurbishments according to the Working Schedule (see Ex. D2-2-5 for a discussion of the Working Schedule and the High Confidence Schedule, which includes schedule contingency). In addition, the schedule incentive ties CanAtom to the overall DRP schedule and therefore further motivates CanAtom to collaborate with OPG and other DRP vendors in order to identify execution efficiencies.

CanAtom will earn this schedule incentive of $25M if the refurbishments of the Remaining Units are completed in a duration that is equal to or less than the Working Schedule. For each day that OPG exceeds the Working Schedule, the schedule incentive is reduced by $0.25M until it is reduced to $0. Should OPG execute according to the Working Schedule, which is substantially shorter than the High Confidence Schedule, there would be a corresponding cost savings on the project as schedule contingency would not need to be drawn to fund any additional execution durations.

The pre-existing execution phase schedule incentive/disincentive structure under the RFR EPC contract, which is based on target durations that are different from the Working Schedule, remains in place.

3.2.2.5 Revised Execution Phase Project Change Directive Terms

Project Change Directives ("PCDs") are the mechanism by which changes to contract scope are executed. The RFR EPC contract already limits the ability of CanAtom to initiate PCDs and the situations in which PCDs are applicable. The revised PCD terms further improve OPG's ability to manage costs in the event of a PCD.

First, a new exhibit to the RFR EPC contract [Ex. 4.1(b)(2)] identifies, for each contractually allowed PCD, which execution phase cost and schedule elements can and cannot be impacted.

Second, a $1M PCD threshold is set. For PCDs with changes that are expected to increase the reimbursable costs by less than $1M, OPG would pay only CanAtom's reimbursable costs and not any corresponding profit or overhead. For PCDs with changes that are expected to increase the reimbursable costs by more than $1M, OPG would pay CanAtom its reimbursable costs and the corresponding contractual overhead amount, but would not pay any corresponding profit amount.

Third, a $10M aggregate PCD threshold is set on a per unit basis in order to maintain the sharing of cost risk established through the revised cost incentive/disincentive structure (Section 3.2.2.3). Where in aggregate the PCD's for any single unit are expected to increase (or decrease) reimbursable costs by more than $10M, each cost incentive/disincentive threshold would be increased (or decreased) by the amount of costs above $10M.

Finally, no PCD, regardless of the change and expected increase to CanAtom's reimbursable costs, can result in an increase in CanAtom's fixed fee payable by OPG. Together, these

revised terms provide OPG with increased cost controls for the Remaining Units' refurbishments.

3.2.2.6 Revised Pricing Terms for Owner Specified Materials and Goods

The revised pricing terms for Owner Specified Materials[13] ("OSM") and Goods place limits on the total costs for each of these categories over and above which CanAtom is not paid any markup/fee and may only recover actual costs incurred. The limits for these cost categories align with the OSM and Goods execution phase pricing estimates and are $394M and $72.3M respectively. Costs incurred by CanAtom for OSM and Goods below these limits remain subject to the costs plus markup (10% for OSM and 5% for Goods) pricing in the RFR EPC contract. These revised terms provide OPG with increased cost controls for the Remaining Units' refurbishments.

3.2.2.7 Enhanced Collaboration Terms

Enhanced principles of partnership and collaboration have been introduced which are expected to support project execution under the One Team Approach. The partnership principles include:

1. with the understanding that CanAtom has the contractual responsibility and accountability to execute the work, both parties continuing to implement the One Team Approach going forward;
2. while implementing the One Team Approach, both parties:
    - seeking to populate each position with the best qualified candidate; and,
    - optimizing the size and structure of the execution team;
3. both parties collaborating on leadership and lean process support opportunities;
4. both parties implementing joint/standardized reporting utilizing one system and one set of facts for transparency;
5. both parties working collaboratively to minimize the cost of the Remaining Units and project changes, including with respect to scope creep, and strictly following the change

[13] Owner Specified Materials include, among other things, the calandria and pressure tubes, all "nuclear material" as defined in the Nuclear Liability Act (Canada) in respect of which the duties under section 3 of the Nuclear Liability Act (Canada) are imposed on OPG, and all nuclear waste containers, racks and flasks.

management provisions in the RFR EPC (and TG EPC) agreements, including timely escalation of issues as they occur.

In addition to supporting collaboration and application of the One Team Approach, the above principles regarding transparency, joint/standardized reporting and scope control are expected to facilitate contract management and help manage costs for the Remaining Units.

A summary of the RFR EPC contract is provided in Attachment 3 and RFR EPC Amendments 7-12 are provided in Attachments 4-9.

3.3 Turbine Generator

As in EB-2016-0152, the TG Major Work Bundle is divided into two contracts. While both contracts continue to be in place for the Remaining Units work, OPG has revised the allocation of work between the two contractors to create efficiencies, as discussed below.

3.3.1 TG Engineering Services and Equipment Supply and Field Services Agreement

The first contract for the TG Major Work Bundle is an Engineering Services and Equipment Supply and Field Services Agreement ("ESESFSA") between OPG and General Electric.[14] General Electric is the Original Equipment Manufacturer ("OEM") of the turbine generators, which are highly specialized machines designed and manufactured specifically for Darlington. The ESESFSA covers:

1. the design and supply of equipment for the refurbishment of the turbine generators;
2. the provision of technical field advisors to provide engineering support for the duration of the refurbishment of the turbine generators;
3. the provision of the in-situ stator rewind scope for Unit 3 and Unit 4;
4. the refurbishment of the generator for Units 3, 1, and 4; and,
5. the refurbishment of the high pressure turbine, low pressure turbines and main turbine steam valves for Units 3, 1, and 4.

[14] OPG had originally entered into this contract with Alstom Power & Transport Canada Inc. ("Alstom"), which was acquired by General Electric.

The design engineering work includes all conceptual, preliminary and detailed design engineering, as well as issuance of design packages and required drawings to OPG. General Electric also provides limited services to OPG in support of CanAtom's installation work (see Section 3.3.2 below for a description of this work) as well as static commissioning work and dynamic commissioning work. A Memorandum of Agreement between OPG, General Electric and CanAtom documents cooperation principles, processes and tools to ensure that the three parties work co-operatively to effectively and efficiently manage and complete their respective scopes of work.

As part of EB-2016-0152, OPG filed the full TG ESESFSA contract as well as Amendments 1-2.[15] Since EB-2016-0152, the ESESFSA contract has undergone three amendments.[16]

Amendment 3 dated March 15, 2017 and Amendment 4 dated June 24, 2019, did not materially change the terms of the contract.

Amendment 5 dated November 30, 2020 introduces new terms coinciding with OPG's award of stator rewind scope and centerline inspection and maintenance scope to General Electric. OPG made this decision in order to reduce schedule and execution risks for this work by having it performed by the OEM, instead of CanAtom. This opportunity was created as a result of General Electric's acquisition of Alstom, through which General Electric gained the personnel and knowledge to offer field services as the OEM.

General Electric will perform the rewind of the stator in-situ, which will result in a reduction of the duration of the work as well as elimination of the need to fully disassemble the generator and perform lifting and rigging of the stator. Similarly, General Electric will leverage its experience as the OEM to perform the centerline scope within a reduced duration and under a fixed price. An additional benefit is that General Electric plans to perform the centerline scope

[15] EB-2016-0152, Ex. D2-2-3, Attachment 7, TG ESESA contract, including Amendment 1, and JT1.13 for Amendment 2.

[16] Date of Agreement: March 27, 2013; Amendment 1: December 10, 2014; Amendment 2: July 27, 2016; Amendment 3: March 15, 2017; Amendment 4: June 24, 2019, and Amendment 5: November 30, 2020.

within the same work window used to execute the stator rewind scope, thereby removing additional schedule risk. Finally, this amendment introduces warranty provisions covering the new scope of work to be performed by General Electric.

A summary of the TG ESESFSA contract is provided in Attachment 10 and TG ESESFSA Amendments 3-5 are provided in Attachments 11-13.

3.3.2 TG Engineering Procurement and Construction Agreement

The second contract for the TG Major Work Bundle is an EPC contract between OPG and CanAtom. The TG EPC contract covers a scope of work for the fieldwork required for installations of the General Electric equipment and some related work necessary for the refurbishment of the turbine generators. The contract also includes the engineering of plans and processes needed to carry out the work and the procurement of any goods not supplied by General Electric under the ESESFSA.

In EB-2016-0152, OPG filed the full TG EPC contract as well as Amendments 1-2.[17] Since EB-2016-0152, the TG EPC contract has undergone three amendments.[18]

Amendment 3 dated October 6, 2017, and Amendment 4 dated October 16, 2020, incorporate project change directives into the TG EPC contract and do not materially change the terms of the agreement.

3.3.2.1 Amendment 5 dated November 3, 2020 (with effect as of October 17, 2019)

As discussed above in Section 3.2.2, OPG successfully concluded settlement discussions with CanAtom to resolve outstanding commercial issues from the refurbishment of Unit 2, which resulted in Amendments 11 and 12 to the RFR EPC contract and Amendment 5 to the TG EPC contract.

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[17] EB-2016-0152, Ex. D2-2-3, Attachment 8, TG EPC contract, including Amendment 1, and JT1.13 for Amendment 2.

[18] Date of Agreement: January 22, 2014; Amendment 1: March 1, 2016; Amendment 2: April 12, 2016; Amendment 3: October 6, 2017; Amendment 4: October 16, 2020; and, Amendment 5: November 3, 2020.

Amendment 5 introduces the material changes, described below, to the terms of the TG EPC contract. Of note, and as described above in context of the RFR EPC contract (Section 3.2.2.2), the Unit 2 Credit also equates to an early benefit to OPG from the cost disincentive earned by CanAtom under the TG EPC contract during the refurbishment of Unit 2.[19] The cap imposed by the Unit 2 Credit applies to all of OPG's execution phase costs for Unit 2, which include all costs incurred under the TG Major Work Bundle.

Revised Unit 3 Execution Phase Cost Incentive/Disincentive

A revised execution phase cost incentive/disincentive structure is introduced for Unit 3 scope only. The revised structure reflects experience gained during the refurbishment of Unit 2 and an increase to the Unit 3 target cost. CanAtom did not receive an increase to its Unit 3 fixed fee in response to this target cost increase, as normally would be the case under the terms of the TG EPC contract. Instead, the Unit 3 cost incentive was revised to motivate CanAtom to perform better than target in order to earn any additional fees. The cost incentive/disincentive structure applicable to Unit 1 and Unit 4 work was not amended.

The revised Unit 3 cost incentive structure establishes Unit 3 execution phase cost bands with corresponding incentive values up to a set maximum. The revised Unit 3 cost incentive amounts are absolute and not subject to change as a result of any PCD.

The corresponding disincentive structure places a neutral band above the Unit 3 execution phase cost bands. If CanAtom exceeds this neutral band, it must pay a disincentive equal to every dollar of the exceedance up to a set maximum.

De-scoping of Stator and Centerline Work

As discussed above, OPG awarded the TG stator rewind and centerline scope to General Electric under the ESESFSA. Amendment 5 executed the corresponding de-scoping of this work for Unit 3 from CanAtom.

[19] The TG EPC contract is the same as the RFR EPC contract whereas any execution phase cost incentive/disincentive earned by CanAtom is not calculated and paid until the end of the Program.

Enhanced Collaboration Terms

The enhanced principles of partnership and collaboration that were introduced to the RFR EPC agreement (Section 3.2.2.7), are also introduced to the TG EPC contract.

A summary of the TG EPC contract is provided in Attachment 14 and TG EPC Amendments 3-5 are provided in Attachments 15-17.

3.4 Fuel Handling and Defueling

The Fuel Handling and Defueling Major Work Bundle has two distinct areas of work: 1) defueling of the reactor cores, and 2) refurbishment of the fuel handling equipment. The contract governing the defueling of the reactor cores is an Engineering Services and Equipment Supply Agreement ("Defueling ESESA") between OPG and GE-Hitachi Nuclear Energy Canada Inc. Defueling work involves engineering, manufacturing and technical support. Since EB-2016-0152, the Defueling ESESA has not undergone any amendments. Given the relatively small value of this agreement, neither a contract summary nor a copy of the agreement is provided.

The contract governing the refurbishment of the fuel handling systems is an ESMSA - Procurement and Construction – between OPG and ES Fox. Refurbishment of the fuel handling system involves improvements to fuel handling reliability through inspections and replacement of critical components. No engineering is required for this work. The ESMSA contract model is discussed below in Section 3.6 regarding the Balance of Plant Major Work Bundle.

3.5 Steam Generator

The contract governing the Steam Generator Major Work Bundle is an EPC agreement between OPG and Babcock & Wilcox Canada Ltd. and Candu Energy Inc. (acting jointly and severally and doing business as a contractual joint venture). The Steam Generator EPC contract governs the inspections and maintenance activities required to extend the life of the steam generators for an additional 30 years. More specifically, the scope of work includes the

mechanical cleaning of the inside of the steam generator tubes, water lancing, leakage measurements, installing inspection ports to support future inspections, and the cleaning of the tube bundles. The majority of the scope of work is subject to fixed/firm pricing where tasks are highly definable and consistent with those performed at other nuclear facilities. A cost reimbursable target price model applies to the remainder of this scope of work.

As part of EB-2016-0152, OPG filed the full Steam Generator EPC contract including Amendments 1 and 2.[20] Since EB-2016-0152, the Steam Generator EPC contract has undergone one amendment.[21] This amendment did not result in any material changes to the contract.

A summary of the Steam Generator EPC contract is provided in Attachment 18 and Steam Generator Amendment 3 is provided in Attachment 19.

3.6 Balance of Plant

The ESMSA is the form of contract governing the majority of the Balance of Plant Major Work Bundle.[22] OPG is party to an ESMSA contract with each of ES Fox, Black & McDonald, and CanAtom.

Balance of Plant work includes scope on both nuclear and conventional systems that could not be effectively grouped with the other Major Work Bundles, including:

1. Refurbishment Support Facilities work to support the refurbishment scope and staff in and around the station;
2. Shutdown, Layup and Services work to establish specific conditions for shutdown of the Units and layup of systems to maintain a protected environment until the systems are returned to service following refurbishment activities; and,

[20] EB-2016-0152, Ex. D2-2-3, Attachment 9, Steam Generator EPC contract
[21] Date of Agreement: December 30, 2013; Amendment 1: May 13, 2015; Amendment 2: July 1, 2015; Amendment 3: May 1, 2018
[22] Note that the ESMSA contract model also governs the scope of work for the refurbishment of the fuel handling equipment under the Fuel Handling and Defueling Major Work Bundle discussed above, and the F&IP and SIO projects.

3. Specialized Projects work to replace shutdown system computer network and like-for-like replacement of vault cooler coils and fan motors to improve and regulate vault temperatures; and,
4. Waste Disposal which includes the safe transporting and storing of nuclear waste managed centrally by OPG's Nuclear Waste Management organization.

Certain important terms of the ESMSAs are common across all three of the above noted contracts and have not undergone amendment since EB-2016-0152:

- *Core Team*: Each contractor is required to maintain a core team capable of managing, controlling and administering the provision of all work pursuant to the ESMSA. This approach promotes committed and focused contractor leadership for OPG work.
- *Contracting Flexibility*: The ESMSA models afford flexibility to OPG to contract for any combination of engineering, procurement and construction services for a specific project while maintaining the core terms of the master services level agreement.
- *Pricing and Profit at Risk Model*: Fixed labour rates for trades and non-trades as well as set fees for material management provide a level of cost certainty under the ESMSA. At the same time, for each project awarded pursuant to the ESMSA, OPG may adopt the appropriate pricing model. Under each ESMSA, a percentage of the contractor's profits and overhead are at risk. OPG withholds a contractually set percentage of payments due and contributes these amounts to a performance fee pool. Performance fees are paid out of the pool annually based on the results of a scorecard. The scorecard is comprised of approved performance indicators including in the areas of cost, schedule, safety and human performance.[23]

The contracting flexibility provided by the ESMSA allows OPG to effectively and efficiently reorganize the distribution of Balance of Plant scope to reflect Lessons Learned and optimize performance for the Remaining Units' refurbishments. For example, OPG elected to remove engineering scope from ES Fox under the ESMSA governing Balance of Plant work and

[23] The percentage withheld does not apply to applications for payment related to fixed price work, payments of performance fee, or the fixed fees associated with a core team of personnel identified in each ESMSA.

execute the scope in-house for the Remaining Units. With the Unit 2 design basis established, and only engineering replication work required across the Remaining Units, OPG acted on the opportunity to improve schedule certainty and consolidate resources.

As part of EB-2016-0152, OPG filed the full ESMSA (with CanAtom), including Amendments 1 and 2, which is substantially similar to the ESMSAs that are in place with each of ES Fox and Black & McDonald.[24] Since EB-2016-0152, the ESMSA contracts with ES Fox and Black & McDonald have been amended twice.[25] None of these amendments materially changed the terms of the contracts. In addition, each ESMSA was amended and restated in late 2019. OPG's election to amend and restate the contracts was motivated by multiple factors and did not result in any material changes between the three ESMSA contracts. First, certain ESMSA terms required updating, including terms related to cyber-security, anti-bribery and corruption, and counterfeit and fraud. Second, official consolidated versions of the ESMSAs incorporating all amendments did not exist. Therefore, the amendment and restatement served to improve the administration of the contract. Third, going forward, in order for OPG to most efficiently enter the market with requests for proposals to execute work on its non-DRP nuclear projects under the ESMSA, OPG elected to restate the ESMSA document incorporating all of the clarifications and adjustments made up to the end of 2019.

A summary of the ESMSA form of agreement is provided in Attachment 20 and a copy of the Amended and Restated ESMSA with CanAtom is provided in Attachment 21.

[24] EB-2016-0152, Ex. D2-2-3, Attachment 10, ESMSA with CanAtom including Amendments 1 and 2.

[25] ES Fox ESMSA - Date of Agreement: February 12, 2012; Amendment 1: June 28, 2013; Amendment 2: July 1, 2015; Date of Amendment 3: August 1, 2016, and; Date of Amendment and Restatement: September 27, 2019; Black & MacDonald ESMSA - Date of Agreement: February 12, 2012; Amendment 1: June 28, 2013; Amendment 2: December 16, 2015; Amendment 3: August 1, 2016, and; Amendment and Restatement: September 27, 2019 CanAtom ESMSA - Date of Agreement: December 19, 2014; Amendment 1: July 7, 2015; Amendment 2: January 1, 2017, and; Amendment and Restatement: December 23, 2019.

ATTACHMENTS

Attachment 1:	Summary of the Major Work Bundles
Attachment 2:	Darlington Refurbishment Contract Program Management Plan
Attachment 3:	Summary of the RFR EPC contract with CanAtom
Attachment 4:	RFR EPC Agreement Amendment #7
Attachment 5:	RFR EPC Agreement Amendment #8
Attachment 6:	RFR EPC Agreement Amendment #9
Attachment 7:	RFR EPC Agreement Amendment #10
Attachment 8:	RFR EPC Agreement Amendment #11
Attachment 9:	RFR EPC Agreement Amendment #12
Attachment 10:	Summary of TG ESESFSA contract with General Electric
Attachment 11:	ESESFSA Amendment #3
Attachment 12:	ESESFSA Amendment #4
Attachment 13:	ESESFSA Amendment #5
Attachment 14:	Summary of the TG EPC contract with CanAtom
Attachment 15:	TG EPC Amendment #3
Attachment 16:	TG EPC Amendment #4
Attachment 17:	TG EPC Amendment #5
Attachment 18:	Summary of the Steam Generator EPC contract with the BWXT/Candu JV
Attachment 19:	Steam Generator EPC Amendment #3
Attachment 20:	Summary of the ESMSA contract

Attachment 21: Amended and Restated ESMSA contract with CanAtom

Note: The Amended and Restated ESMSA contract with CanAtom included in Attachment 21 does not include (1) detailed appendices of terms and conditions for the combinations of engineering, procurement and construction agreements available under the master services level agreement, and (2) information that is confidential to CanAtom including Workplace Safety and Insurance Board identification numbers, banking account numbers or tax numbers. OPG does not believe this information is necessary for a complete understanding of the contract relative to OPG's application.

SUMMARY OF EPC CONTRACT FOR RFR WITH SNC/AECON JV

Contract Name:

Engineering, Procurement and Construction Agreement for the Darlington Refurbishment Retube and Feeder Replacement Project

Dates:

Date of Agreement: March 1, 2012
Date of Amendment 1: October 1, 2012
Date of Amendment 2: February 28, 2014
Date of Amendment 3: November 2, 2015
Date of Amendment 4: January 11, 2016
Date of Amendment 5: February 1, 2016
Date of Amendment 6: June 7, 2016
Date of Amendment 7: July 1, 2017
Date of Amendment 8: June 27, 2017
Date of Amendment 9: December 20, 2018
Date of Amendment 10: October 16, 2019
Date of Amendment 11: November 3, 2020
Date of Amendment 12: December 11, 2020
Date of Summary: January 21, 2021

Summary of Key Terms:

The following is a brief summary of the key terms and conditions of the Engineering, Procurement and Construction Agreement for the Darlington Refurbishment Retube and Feeder Replacement Project that was entered into between SNC-Lavalin Nuclear Inc. and Aecon Construction Group Inc. (the "SNC/AECON JV") as the successful proponent/contractor and OPG as of March 1, 2012, and updated to reflect the following amendments thereto: (i) amendment agreement number 1 dated as of October 1, 2012 ("Amendment 1"); (ii) amendment agreement number 2 dated as of February 28, 2014 ("Amendment 2"); (iii) amendment agreement number 3 dated as of November 2, 2015 ("Amendment 3"); (iv) amendment agreement number 4 dated as of January 11, 2016 ("Amendment 4"); (v)

amendment agreement number 5 dated as of February 1, 2016 ("Amendment 5"); (vi) amendment agreement number 6 dated as of June 7, 2016 ("Amendment 6"); (vii) amendment agreement number 7 dated as of July 1, 2017 ("Amendment 7"); (viii) amendment agreement number 8 dated as of June 27, 2017 ("Amendment 8"); (ix) amendment agreement number 9 dated as of December 20, 2018 ("Amendment 9"); (x) amendment agreement number 10 dated as of October 16, 2019 ("Amendment 10"); (xi) amendment agreement number 11 dated as of November 3, 2020, with effect as of October 17, 2019 ("Amendment 11"); and (xii) amendment agreement number 12 dated as of December 11, 2020, with effect as of October 17, 2019 ("Amendment 12").

The form of agreement is an engineering, procurement and construction contract, and the form of agreement and amendments reflect extensive feedback from the entire OPG project team, external legal counsel (Blake, Cassels & Graydon LLP) and the contractor.

Phased Approach to Refurbishment Work

The agreement divides the retube and feeder replacement work on the Darlington refurbishment project into three distinct phases – the definition (planning) phase, the execution (doing) phase, and the commissioning phase. The agreement focuses on definition phase, which includes the retube waste processing building (RWPB) unless explicitly stated otherwise, and execution phase activities. The commissioning phase work is anticipated to be a relatively minor component of the project.

The multi-year definition phase was intended to provide the contractor and OPG with sufficient opportunity to plan all of the retube and feeder replacement work for the four reactor units at Darlington. The design, fabrication and testing of all tooling required to perform this work occurred during the definition phase. The mock-ups of the reactor face, which will be used to test the tooling and for worker training purposes, were also completed during the definition phase.

As part of the definition phase work, the contractor and OPG developed an "execution phase plan". This included a cost estimate, schedules (milestone, target, submittal) and a risk register for the execution phase. The cost and schedule estimates developed by the contractor were

subjected to a P50 analysis, which means that the cost and schedule estimates included contingency amounts required to be added or deducted from the estimates to provide the contractor with a confidence level of 50% of achieving completion of the work at the estimated cost and within the estimated timeline. The P50 analysis was the basis for establishing the target cost and target schedule under the agreement. The contractor's fixed fee for the execution phase work was calculated based on the target cost.

Consequent to the definition phase work, OPG made a decision, pursuant to Amendment 4, to proceed with the execution phase work with the contractor. This was one of the key inflection points in the agreement. If the contractor and OPG had not agreed on the elements of the execution phase plan, OPG could have decided not to proceed with the execution phase work. The dispute resolution mechanism provided for in the agreement would not have applied to the terms of the execution phase plan, and the contractor would not have been entitled to any extraordinary payment if OPG had decided not to proceed with the execution phase work and elected to terminate the agreement for convenience.

Target Cost Model for Key Components of the Contract Price

The agreement adopts a target cost model for the definition phase work and the execution phase work. Under this model, OPG will pay all of the contractor's actual costs (other than overhead costs) incurred in performing the work. The contractor will be entitled to a fixed fee as compensation for all of its overhead costs, profit and risk. The agreement includes "allowed cost" and "disallowed cost" concepts for reimbursable work, as well as a detailed cost allocation table, to distinguish actual costs that are reimbursable by OPG from actual costs that are to be included in the contractor's fixed fee. To address the risk of cost overruns by the contractor on reimbursable work, the agreement also includes a financial incentives/disincentives mechanism that is tied to the target cost for the definition phase work, RWPB work and execution phase work. As a result, while the contactor will be reimbursed for all of its actual (allowed) costs, up to 48% of its fixed fee will be at risk if there are cost overruns (up to 80% of the definition phase fixed fee, 48% of the RWPB fixed fee or 80% of the execution phase fixed fee, as applicable, in aggregate for cost and schedule overruns). This financial incentive/disincentive mechanism also applies to schedule risk and is described in more detail below.

The definition phase target cost, the definition phase fixed fee and the execution phase fixed fee percentages were bid by SNC/AECON JV as the successful proponent as part of its final proposal. The amounts proposed by the contractor were incorporated into the agreement and amended to reflect changes in scope.

Other Components of the Contract Price

The design, fabrication and testing of the tooling were done on a fixed price basis. This fixed price was bid by SNC/AECON JV as the successful proponent as part of its final proposal. The fixed price amount proposed by the contractor was incorporated into the agreement and amended to reflect changes in scope.

The construction of the reactor mock-ups was also done on a fixed price basis. This fixed price was bid by SNC/AECON JV as the successful proponent as part of its final proposal. The fixed price amount proposed by the contractor was incorporated into the separate mock-ups agreement, as amended to reflect changes in scope.

For all commissioning phase work, the contractor will be entitled to reimbursement of its actual costs, plus a fixed percentage fee. This percentage was bid by SNC/AECON JV as the successful proponent as part of its final proposal. The percentage proposed by the contractor was incorporated into the agreement.

Tooling Performance Guarantee and Tooling Fixed Price Reduction

The agreement requires that the tooling meet the minimum productivity threshold ("tooling performance guarantee") that the contractor provided as part of its final proposal. The agreement contemplated a reduction of up to 10% in the tooling fixed price if the tooling failed to meet this productivity threshold during testing on the mock-ups. However, the tooling met or exceeded the productivity threshold and, therefore, the tooling fixed price did not need to be reduced. If the tooling failed to meet this productivity threshold, the agreement gave OPG discretion to allow the contractor more time to improve the performance of the tooling or, alternatively, to proceed with the execution phase work using the sub-standard tooling.

Schedules

Work on the definition phase and the execution phase is governed by a milestone schedule, a detailed target schedule and a submittal schedule.

The milestone schedule, the target schedule and the submittal schedule for the definition phase were submitted by each proponent as part of its final proposal. The schedules proposed by the contractor and agreed to by OPG were incorporated into the agreement and amended to reflect changes in scope.

The milestone schedule, the target schedule and the submittal schedule for the execution phase were developed as part of the execution phase plan, and were incorporated into the agreement by Amendment 4 and amended to reflect changes in scope. Certain key dates in the execution phase milestone schedule were established prior to the effective date of the agreement and could not be varied during the development of the execution phase plan, other than by an amendment.

Productivity Gain Expectations and Experience-Based Schedule Adjustments

OPG expects that the contractor's productivity will improve on a unit-by-unit basis. The target schedule for the first unit was determined by OPG and the contractor as part of the definition phase work. A fixed percentage reduction – [redacted], [redacted] and [redacted] – was then applied to the target schedule for the first unit to determine the target schedule durations for the second, third and fourth units.

The predetermined target schedule durations for the second, third and fourth units will be adjusted in some instances in response to the actual outage durations experienced during field execution. Such adjustments will affect the amount of schedule incentives or disincentives that will be payable on completion of the execution phase work. If the contractor completes the work on a unit in less than [redacted] of the predetermined target schedule duration for the first unit, then the predetermined target schedule duration for the next-following unit will be reduced. Conversely, in completing the work on a unit, if the contractor exceeds the predetermined target schedule duration for the first unit by more than [redacted], then the predetermined target schedule for the next-following unit will be increased. No adjustments will be made if the actual

outage duration falls within a [redacted] neutral band established on either side of the predetermined target schedule duration for the first unit.

The agreement does not provide for any experience-based adjustment of the execution phase target cost.

Financial Incentives and Disincentives – Cost and Schedule

The agreement includes financial incentives and disincentives that apply to both cost and schedule performance during the definition phase and the execution phase. (These incentives and disincentives do not apply to work performed during the commissioning phase).

For each of the definition phase and the execution phase, the contractor's obligation to pay financial disincentives is capped at 80% of its fixed fee. Conversely, OPG's obligation to pay financial incentives is capped at 40% of the fixed fee for the definition phase. With respect to the RWPB work, the contractor's obligation to pay financial disincentives is capped at 48% of the RWPB fixed fee and OPG's obligation to pay financial incentives is capped at 24% of the RWPB fixed fee. The agreement also includes sub-caps on the total amount of cost disincentives that can be incurred by the contractor during the definition phase and the execution phase (so as to preserve meaningful schedule disincentives).

Definition Phase Support Services and Equipment Target Cost – Cost Incentives and Disincentives

The agreement establishes a neutral band 10% above and below the definition phase support services and equipment target cost. If the actual amount of reimbursable costs incurred in connection with the definition phase support services and equipment work falls outside of the neutral band, either OPG will pay to the contractor (for cost savings), or the contractor will pay to OPG (for cost overruns), 50% of the total cost savings or cost overruns.

Definition Phase Target Cost – Cost Incentives and Disincentives

The agreement establishes a neutral band of $2,500,000 above and below the definition phase target cost. If the actual amount of reimbursable costs incurred in connection with the definition phase work falls outside of the neutral band, either OPG will pay to the contractor (for cost

savings), or the contractor will pay to OPG (for cost overruns), a specified percentage (not exceeding 50%) of the total cost savings or cost overruns.

RWPB Target Cost – Cost Incentives and Disincentives

The agreement establishes a neutral band of $2,500,000 above and below the RWPB target cost. If the actual amount of reimbursable costs incurred in connection with the RWPB work falls outside of the neutral band, either OPG will pay to the contractor (for cost savings), or the contractor will pay to OPG (for cost overruns), a specified percentage (not exceeding 50%) of the total cost savings or cost overruns. The maximum cost disincentive payable by the contractor with respect to RWPB work is fixed at $10,000,000.

Definition Phase – Schedule Disincentives

The agreement requires the contractor to make disincentive payments to OPG if the contractor does not complete all definition phase work by the respective dates in each of the milestones. The contractor will pay to OPG (a) an aggregate lump sum of $1,000,000 for failing to meet the definition phase work complete milestone; (b) $100,000 for each calendar day that completion of the definition phase work is delayed past the date specified in any of the deferred definition phase work milestones; and (c) $100,000 for each calendar day between August 15, 2016 to August 30, 2016, inclusive, plus $100,000 for each calendar day that completion of the definition phase work associated with the containment isolation valves mods material on site (goods) milestone is delayed past August 30, 2016. With respect to (b) and (c), in no event will the contractor be liable for more than $100,000 per calendar day. The schedule disincentive payable by the contractor for failure to meet the deferred definition phase work milestones is fixed at $10,000,000 and OPG waives any further schedule disincentives for failure to meet such milestones.

Deferred Disincentive Payments

The cost disincentive payable by the contractor with respect to the RWPB work and the schedule disincentive payable by the contractor for failure to meet the deferred definition phase work milestones are collectively subject to economic cost adjustment. These disincentives will be payable by the contractor dollar-for dollar for each dollar by which the aggregate reimbursable costs for Units 3, 1, and 4 (the “Subsequent Units”) exceeds $1,580,000,000. If

the aggregate reimbursable cost for the Subsequent Units is less than $1,580,000,000, the deferred disincentive amount will be deemed to have been paid.

Execution Phase Support Services and Equipment Target Cost – Cost Incentives and Disincentives

The agreement establishes a neutral band 10% above and below the execution phase support services and equipment target cost. If the actual amount of reimbursable costs incurred in connection with the execution phase support services and equipment work falls outside of the neutral band, either OPG will pay to the contractor (for cost savings), or the contractor will pay to OPG (for cost overruns), 50% of the total cost savings or cost overruns.

Unit 2 Credit Amount

OPG will prepare an estimate of total costs incurred to complete all execution phase work for Unit 2 on or about breaker closed for Unit 2. The contractor will apply a one-time credit adjustment against future amounts owing by OPG to the contractor for the Subsequent Units equal to the difference between the estimate and $3,417,000,000 (the "Unit 2 Credit Amount"). Within 8 months of breaker closed for Unit 2, OPG will calculate the final total actual costs incurred to complete all execution phase work for Unit 2. The Unit 2 Credit Amount will be adjusted in an amount equal to the difference between the estimate and final total actual costs, plus additional adjustments, including the addition of the $6,000,000 advanced by OPG to the contractor against the Unit 2 cost incentive described below. The settlement of the Unit 2 Credit Amount is intended to be a cashless transaction. As the contractor completes each Subsequent Unit, the Unit 2 Credit Amount will be reduced as follows: (i) Unit 3: 50%; (ii) Unit 1 (25%); and (iii) Unit 4 (25%). In the event of early termination, the unreduced amount of the Unit 2 Credit Amount at the time of termination will be determined by reference to the applicable milestones completed at such time and the percentages associated with such milestones. At such time, the unreduced amount of the Unit 2 Credit Amount may be applied by OPG against specified amounts owing.

Execution Phase – Cost Incentives and Disincentives

Cost incentives and disincentives for Unit 2 were deemed calculated and paid. If the aggregate amount of all reimbursable costs incurred in connection with the execution phase work for the

Subsequent Units is less than $1,550,000,000, OPG will pay to the contractor an incentive amount equal to 50% of the difference between the reimbursable cost and $1,700,000,000, subject to a downward adjustment for an amount equal to the Unit 2 Credit Amount (or by a specified percentage of the Unit 2 Credit Amount if the RFR Agreement is terminated prior to Unit 4 being completed). The cost incentive for the refurbishment of the Subsequent Units will never be less than zero and no incentive is payable if the aggregate reimbursable cost is equal to or greater than $1,550,000,000.

In addition if the aggregate reimbursable cost is less than $1,550,000,000, the incentive amount will be increased by an amount equal to 32 cents for every dollar that the aggregate reimbursable costs for the Subsequent Units is above $1.187 billion, up to a maximum of $38,000,000.

If the actual amount of reimbursable costs incurred during the execution phase for the Subsequent Units is greater than $1,600,000,000, the contractor will continue to invoice OPG for the excess reimbursable costs, however, the contractor will pay OPG, or OPG will set off against the reimbursable costs (a) 50% of every dollar of reimbursable costs between $1,600,000,000 and $1,650,000,000, and (b) 100% of every incremental dollar of reimbursable costs in excess of $1,650,000,000. The contractor's obligation to pay financial disincentives is capped at 48% of the execution phase fixed fee.

Execution Phase – Schedule Incentives and Disincentives

Schedule incentives and disincentives for Unit 2 were deemed calculated and paid. The agreement requires OPG to pay to the contractor an incentive amount equal to $125,000 multiplied by the number of full calendar days by which the actual duration of the work on each Subsequent Unit is less than the target scheduled duration for such work. The agreement requires the contractor to pay to OPG a disincentive amount equal to $250,000 multiplied by the number of full calendar days by which the actual duration of the work on each Subsequent Unit exceeds the guaranteed duration for such work, which is 10% above the target scheduled duration. The calculation and payment of such schedule incentives and disincentives will be done on an aggregate basis for all completed units.

In addition, if the sum of the number of full calendar days by which the actual duration of the work on the Subsequent Units is less than a more aggressive targeted schedule duration for such work, OPG will pay to the contractor an incentive amount equal to $25,000,000. If the sum of the actual duration of the work for the Subsequent Units is greater than such targeted schedule duration for such work, OPG will pay to the contractor an incentive amount equal to $25,000,000 reduced by an amount equal to $250,000, multiplied by the number of full calendar days by which the actual duration of the work on each unit exceeds the targeted schedule duration for such work.

Unit 2 Cost Incentives

The agreement establishes a cost incentive sharing mechanism for the first unit to be refurbished ("Unit 2") in addition to the other incentives and disincentives in the agreement, provided the refurbishment program has achieved the P90 schedule milestones for Unit 2. OPG will prepare an estimate of the total actual costs incurred to complete all refurbishment program work for Unit 2 within 3 months of completion of high power testing and turbine testing. If the estimate is less than $5,623,000,000, the contractor will be entitled to share in the difference. The contractor will be entitled to 100% of the first $6,000,000 of the difference and 50% of any amounts above $6,000,000. Within 12 months of completion of high power testing and turbine testing, OPG will calculate the final total actual costs. If final costs are greater than $5,623,000,000, the contractor will repay in full to OPG or OPG will set-off any contractor share amount previously paid by OPG. If final costs are less than $5,623,000,000, the contractor share will be reconciled and the difference will be paid by the contractor or OPG as required.

The $6,000,000 advanced by OPG to the contractor against the Unit 2 cost incentive described above will be subject to economic cost adjustment and will be payable by the contractor dollar-for dollar for each dollar by which the aggregate reimbursable costs for the Subsequent Units exceeds $1,574,000,000. If the aggregate reimbursable cost for the Subsequent Units is less than $1,574,000,000, the $6,000,000 advance will be deemed to have been repaid.

<u>Rework</u>

The contractor is required to perform all work safely and diligently, in an organized and timely manner, and in accordance with the agreement, applicable laws and prudent practices. It is

acknowledged in the agreement that, notwithstanding the exercise of prudent practices by the contractor, a certain amount of typical rework is to be expected on a project of this nature. Therefore, the agreement contemplates the inclusion of an allowance equal to 3% of the labour portion of each of the definition phase target cost and the execution phase target cost for rework. Any actual costs incurred by the contractor for rework in excess of such allowances will be reimbursable by OPG, but such target costs will not be adjusted.

Project Change Directives, Excusable Delays and Force Majeure

The agreement tightly restricts the ability of the contractor to initiate "project change directives" (change orders) and to make claims for "excusable delay" events and "force majeure" events.

An "excusable delay" is a delay that is caused by an OPG breach or a stop work order, emergency or hazardous condition for which OPG is responsible, and which extends the critical path of the Definition Phase Milestone Schedule or the Execution Phase Milestone Schedule, as applicable, by more than 3 days. Delays due to certain radiation protection activities are also considered "excusable delays" under the agreement.

Neither party will be held responsible for material delays resulting from certain "force majeure" events, which are restricted to fire, flood, tidal wave, lightening, earthquake, cyclone, tornado, hurricane, explosion, severe ice storm, epidemic or pandemic disease, legal strike or lock-out (other than those caused by the contractor, a subcontractor, or their employees, or work to rule activities), war, riot, sabotage or other acts of public enemies, including terrorists, or site-related blockades (other than labour-related events).

An "excusable delay" or a "force majeure" event entitles the applicable party to schedule and/or cost relief depending on the type of work (i.e. fixed, firm price or reimbursable work) impacted by the delay or the event.

The rationale for this restrictive approach is twofold. First, the "functional" scope of work for the Darlington refurbishment project is to be determined (or confirmed) in part by the contractor itself during the definition phase. As a result, the contractor should not be discovering additional scope or encountering delay-inducing "unforeseen risks" as the execution phase work

progresses. Second, the contractor should have had sufficient time during the definition phase to fully investigate the site conditions, and should have captured all of the required work when developing the execution phase target cost and the execution phase schedules. The restriction on project change directives and claims for “excusable delay” events and “force majeure” events was intended to give the contractor an incentive to do the best possible planning work during the definition phase. The contractor also enjoys the benefit of a significant neutral band around the target cost that affords protection against erosion of fee for any changes that fall within the neutral band.

The agreement also takes a standard approach to scope changes resulting from “concealed conditions” inside the vault and calandria of each unit. The contactor is not able to examine all of these areas prior to commencement of the execution phase work.

For any Subsequent Unit project change directive for changes that are expected to increase the reimbursable costs incurred by the contractor by less than $1,000,000, OPG will pay the contractor its reimbursable costs but there will be no adjustment to any target costs, thresholds, fees, etc.

For any Subsequent Unit project change directive for changes that are expected to increase the reimbursable costs incurred by the contractor by $1,000,000 or more, OPG will pay the contractor the contractor’s reimbursable costs plus the applicable overhead, which itself will be treated as a reimbursable cost.

In addition, with respect to each Subsequent Unit (on a unit-by-unit basis), for any project change directives for changes that are expected to increase the reimbursable costs incurred by the contractor by $1,000,000 or more in the aggregate but by an amount equal to or less in the aggregate than $10,000,000, the Subsequent Unit cost disincentive thresholds will be adjusted dollar-for-dollar for the aggregate amount of the increase from the first dollar.

Further, with respect to each Subsequent Unit (on a unit-by-unit basis), for any project change directives for changes that are expected to increase the reimbursable costs incurred by the contractor by more in the aggregate than $10,000,000, all Subsequent Unit cost incentive and

disincentive thresholds will be increased dollar-for-dollar for the aggregate amount of the increase above $10,000,000.

For any Subsequent Unit project change directive for changes that are expected to reduce the reimbursable costs incurred by the contractor by less than $1,000,000, but there will be no adjustment to any target costs, thresholds, fees, etc.

For any project change directive for changes that are expected to reduce the reimbursable costs paid to the contractor by $1,000,000 or more, for each Subsequent Unit (on a unit-by-unit basis), the execution phase fixed fee will be reduced, but none of the costs, thresholds, fees, etc. will change.

In addition, with respect to each Subsequent Unit (on a unit-by-unit basis) for project change directives for reductions that are expected to reduce reimbursable costs incurred by the contractor by more than $10,000,000, the execution phase target cost and all Subsequent Unit cost incentive and disincentive thresholds will be reduced dollar-for dollar for the aggregate amount of the decrease in excess of $10,000,000.

Contractor Personnel

The agreement requires the contractor to identify and employ certain key personnel for the duration of the Darlington refurbishment project. This obligation is reinforced with financial penalties if such key personnel are replaced without OPG's prior written consent. The agreement gives OPG certain veto rights over the contractor's field supervisory staff.

"Open Book" Approach and OPG Audit Rights

The agreement requires the contractor to provide OPG with full and open access to all financial and other records relating to the project. The agreement also provides OPG with extensive audit rights for all financial and other records that relate to work that is performed on a reimbursable costs basis, with few restrictions on the lookback periods for audits and readjustment of contractor cost claims. OPG's audit rights with respect to payroll burdens (an agreed payroll burden percentage is used as a proxy for actual payroll burden costs) and work that is performed on a fixed price basis or firm price basis are narrower.

Procurement of Owner-Specified Materials

The agreement requires the contractor to procure all “Owner-Specified Materials” for OPG on a cost plus a fixed percentage fee basis. This percentage was bid by the SNC/AECON JV as the successful proponent as part of its final proposal. OPG will not pay any incremental fee for Owner-Specified Materials for the Subsequent Units once the cost of Owner-Specified Materials exceeds $393,910,834. Owner-Specified Materials include, among other things, the calandria and pressure tubes, all “nuclear material” as defined in the *Nuclear Liability Act* (Canada) in respect of which the duties under section 3 of the *Nuclear Liability Act* (Canada) are imposed on OPG, and all nuclear waste containers, racks and flasks.

Procurement of Goods

The agreement requires the contractor to procure all Goods” for OPG on a cost plus a fixed percentage fee basis. This percentage was bid by the SNC/AECON JV as the successful proponent as part of its final proposal. OPG will not pay any incremental fee for Goods for the Subsequent Units once the cost of Goods exceeds $72,376,715.

Subcontractors

The agreement permits the use of subcontractors, but obliges the contractor to “push down” all applicable terms and conditions of the agreement to each subcontractor.

Cash Neutrality for Contractor

The agreement contemplates that OPG will keep the contractor in a “cash neutral” position while the work is being performed.

Scientific Research and Experimental Development (“SRED”) Tax Credit

The agreement provides that OPG is entitled to claim all SRED tax credits generated by work on the Darlington project, including those generated in connection with the development of the tooling.

Performance Security

The agreement obliges the contractor to post a letter of credit in the amount of 10% of the tooling fixed price to support the contractor's obligations under the tooling performance guarantee and for completion of the tooling by the date specified in the definition phase milestone schedule.

The agreement also obliges the contractor to post a letter of credit to support its obligations under the agreement and the separate mock-ups agreement, initially in the amount of $50,000,000 and, on commencement of the execution phase work, increasing to $100,000,000. This letter of credit amount steps down over time as work on the project is completed and warranty periods expire. If the Unit 2 credit note is greater than $100,000,000, the letter of credit must be increased by an amount equal to the difference between $100,000,000 and the Unit 2 credit amount.

The contractor provided guarantees in OPG's standard form from the ultimate parent companies of the contractor in support of all of the contractor's obligations under the agreement. These guarantees contain ratings-based and/or covenant based tests of the ongoing creditworthiness of the parent guarantors.

Ownership of the Tooling

The agreement requires that ownership of the physical tooling be transferred to OPG as such tooling is completed.

Intellectual Property

The agreement requires the contractor to transfer to OPG, or to license to OPG, all intellectual property required for performance of the work, including all intellectual property associated with the tooling. The agreement also provides for the continuing use of such intellectual property by OPG if the agreement is terminated, either following a contractor default or for convenience.

Completion Incentives

The agreement provides for substantial holdbacks of the contractor's fixed fee and other financial incentives at successive points in the completion of the work on each unit – at "Unit Mechanical Completion", at "Final Mechanical Completion" and at "Final Completion". These holdbacks are primarily intended to ensure that OPG receives all "available for service" documentation that is required for the restart of each refurbished unit.

Warranty

The agreement provides for a warranty of the contractor's work, and obliges the contractor to correct any defective work at its own cost. The contractor's sole liability and OPG's exclusive remedy with respect to the repair or replacement of any defective work will be limited to the warranty remedies set out in the agreement. The warranty period for each unit ends on the earlier of (i) the date that is three months after the actual end date of the first planned outage for such unit, and (ii) the date that is five years from unit mechanical completion for such unit. For work relating to common services for all units, the warranty period will end concurrent with the warranty period for the last unit. If warranty work is performed by the contractor, an extended warranty period also applies. This extended warranty period ends on the earlier of (i) the date that is three months from the actual end date of the next planned outage for such unit, and (ii) the date that is four years from the date on which the corrected work re-enters commercial operation. The warranty period for a unit will not in any event extend beyond nine years from the unit mechanical completion date for such unit. The warranty period for RWPB work ends two years after the RWPB is substantially completed.

Termination for Default

The agreement includes standard events of default. If the contactor defaults, OPG will be entitled to terminate the agreement and to exercise a number of self-help remedies. Termination for default would permit OPG to make a claim against the contractor for full contractual damages (subject to a percentage cap formula that is linked to the total contract price and certain other amounts).

Termination for Convenience

The agreement permits OPG to terminate the agreement for convenience at any time. Certain types of direct damages (but not full contractual damages) will be payable by OPG to the contractor in such circumstances.

Suspension of the Work

The agreement permits OPG to suspend the work at any time. Certain types of direct damages (but not full contractual damages) will be payable by OPG to the contractor in such circumstances. If additional activities are added by OPG that are not already being performed by the contractor, and that extend the critical path of the work being performed, OPG and the contractor will follow a specified suspension protocol. With respect to the suspension of work for Unit 3 and the suspension initiated by OPG in response to the COVID-19 pandemic, OPG will only pay the overhead, not the profit component, of direct damages. For the COVID-19 suspension, OPG will also pay the contractor's bridging costs for project management personnel, sub forepersons, superintendents, and other experienced personnel retained during the suspension (which costs would otherwise be disallowed costs). For the Unit 3 suspension, any suspension costs in excess of $16,000,000 will be deemed reimbursable costs for cost incentive and disincentive purposes.

Dispute Resolution

The agreement provides for both informal and formal resolution of disputes. The informal procedure contemplates a staged escalation of disputes within OPG's and the contractor's management structure with a view to achieving a consensual resolution of the dispute. The formal mechanism is binding arbitration under commercial arbitration rules. The agreement limits the recourse of the contractor and OPG to the ordinary courts.

Other Projects

The agreement restricts the contractor from transferring, or permitting any affiliate from transferring, supervisory trade personnel at the superintendent level or higher that have received project-specific training and have been assigned to the project for four months or more to any other nuclear generating station refurbishment project during the term of the agreement without the prior consent of OPG.

Other Use of the Tooling

Under the agreement the contractor agrees that (i) the tooling, or any component thereof, will not be diverted for use in any other project undertaken by the contractor or any other person, and (ii) the contractor will not use the tooling except at the Darlington nuclear generating station until such time as unit mechanical completion is achieved for the last unit.