SUMMARY OF EPC CONTRACT FOR STEAM GENERATORS
WITH BWXT/CANDU JV

Contract Name:
Engineering, Procurement and Construction Agreement for the Darlington Refurbishment Steam Generator Project

Dates:
Date of Agreement: December 30, 2013
Date of Amendment 1: May 13, 2015
Date of Amendment 2: July 1, 2015
Date of Summary: May 6, 2016

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 Steam Generator Project for the Darlington nuclear generating station (the “SG EPC Agreement”) that was entered into between Babcock & Wilcox Canada Ltd. (“BWXT”, currently known as BWXT Canada Ltd.) and Candu Energy Inc. (“Candu”) acting jointly and severally and doing business as a contractual joint venture (“BWXT/Candu” or the “Contractor”) as the successful proponent and OPG as of December 30, 2013, and updated to reflect the following amendments thereto: (i) amendment agreement number 1 dated as of May 13, 2015 (“Amendment 1”); and (ii) amendment agreement number 2 dated as of July 1, 2015 (“Amendment 2”).

The form of the SG EPC Agreement is an engineering, procurement and construction contract and reflects extensive feedback from the entire OPG project team, external legal counsel (Blake, Cassels & Graydon LLP) and BWXT/Candu as the successful proponent.
Scope and General Requirements of the SG EPC Agreement

The SG EPC Agreement covers inspections and maintenance work to extend the life of the steam generators ("SGs") for an additional 30 years. This work includes mechanical cleaning of the inside of the SG tubes, water lancing, leakage measurements, installing inspection ports to support future inspections, and the cleaning of the tube bundles.

The Contractor is required to perform all work safely and diligently, in an organized and timely manner, and in accordance with the SG EPC Agreement, applicable laws and prudent practices.

Key Components of Contract Price

The SG EPC Agreement adopts a hybrid fixed/firm price and target cost pricing model. A fixed/firm price model is used to provide increased cost certainty for a majority of the scope of work (~ of the contract value), where tasks are highly definable and can be performed at the Contractor's facility (training, mock ups, engineering) and on site (secondary side cleaning, nozzle installation). For work within the fixed/firm price scope, OPG pays a fixed price (without escalation for inflation) for the applicable work on the first unit and firm price (with escalation for inflation) for the applicable work on each subsequent unit.

A target cost model is used for the remainder of the scope of work (~ of the contract value) consisting of limited field-execution work where some unknowns exist (e.g., primary side cleaning of the inside of the tubes). For target cost work, OPG reimburses the Contractor for all of its actual costs (other than overhead costs) incurred in performing the work. The Contractor will be entitled to a fixed fee on reimbursable work as compensation for all of its overhead costs, profit and risk. The SG EPC 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 SG EPC Agreement also includes a financial incentives/disincentives mechanism that is tied to the
target cost for the work. As a result, while the Contractor will be reimbursed for all of its actual (allowed) costs, up to [---] of its fixed fee will be at risk if there are cost overruns. This financial incentive/disincentive mechanism also applies to schedule risk and is described in more detail below.

The fixed/firm price, the target cost and the fixed fee percentages were bid by BWXT/Candu as the successful proponent as part of its proposal. The amounts proposed by the Contractor and agreed to by OPG were incorporated into the SG EPC Agreement and amended to reflect changes in scope.

The work performed on a fixed/firm price basis and the reimbursable work fixed fee are invoiced upon milestone completion. Reimbursable work is invoiced monthly. OPG may review, audit and dispute invoiced costs and has additional audit rights with respect to reimbursable work.

Schedules

The SG refurbishment work is governed by the contract schedule, progress schedule, and submittal schedule. The Contractor is required to adhere to the progress and submittal schedules and provide OPG with progress reports, including any deviations or anticipated deviations from these schedules. If a progress schedule has not been met or is anticipated not to be met, the Contractor must provide OPG with satisfactory cost and recovery plans, showing that the schedule will be restored. Any changes to the contract schedule require an amendment to the SG EPC Agreement. All payments for the Contractor’s fixed fee are made in accordance with the milestone payment schedule. These schedules, as proposed by the Contractor and agreed to by OPG, were incorporated into the SG EPC Agreement and amended to reflect changes in scope.

The SG EPC Agreement allows OPG to make certain discretionary decisions to advance or delay the start date for work under the schedule. Provided adequate notice is given to the Contractor, such schedule adjustments will not result in additional costs to OPG.
Financial Incentives and Disincentives – Cost and Schedule

The SG EPC Agreement includes financial incentives and disincentives that apply to both cost and schedule performance. The cost incentives and disincentives do not apply within an established neutral band and are triggered only when the neutral band is surpassed. The Contractor’s obligation to pay financial disincentives for reimbursable work is capped at of its reimbursable work fixed fee. Conversely, OPG’s obligation to pay cost and schedule incentives for reimbursable work is capped at of the reimbursable work fixed fee. The SG EPC Agreement also includes sub-caps on the total amount of cost disincentives that can be incurred by the Contractor during the project (so as to preserve meaningful schedule disincentives) and on schedule disincentives for achieving specific milestones identified in the agreement. These sub-caps are set at of the fixed fee for cost disincentives and of the aggregate cost of all fixed/firm price work for schedule disincentives for achieving specific milestones. Similarly, there is a sub-cap on cost incentives to be paid by OPG if the Contractor comes under its target cost, which sub-cap is set at of the fixed fee.

The incentives and disincentives are to be calculated and paid after the last unit to be refurbished is commissioned. They will not be payable with respect to a unit where there is early termination of the agreement with respect to a unit prior to such unit achieving the available for service milestone.

Cost Incentives and Disincentives

The SG EPC Agreement establishes a neutral band of of the reimbursable work target cost above and below the reimbursable work target cost. If the actual amount of reimbursable costs incurred 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 of the total cost savings or cost overruns. The percentage of total cost savings or cost overruns to be paid by OPG or the Contractor gradually increases with the increase of the cost savings or overruns, but cannot exceed . The calculation and payment of such cost incentives and disincentives will be done on an aggregate basis for all completed units.
Schedule Incentives and Disincentives

The SG EPC Agreement bases schedule incentives and disincentives around guaranteed completion dates for specific milestones identified in the agreement. The agreement requires OPG to pay to the Contractor, on a unit-by-unit basis, an incentive amount equal to... multiplied by the number of full calendar days by which the actual timeline for unit primary side completion for each unit is less than the guaranteed timeline, up to a maximum of...

The SG EPC Agreement requires the Contractor to pay to OPG a disincentive amount that varies based on specific milestones to be achieved. Disincentives of... per day are payable for delays in achieving the following milestones: unit secondary side tooling detailed design completion, unit site requirement modifications detailed design completion and unit primary side tooling detailed design completion. Disincentives of... per day are payable for delays in achieving the following milestones: unit secondary side materials delivery completion and unit primary side material delivery completion. Disincentives of... per day are payable for delays in achieving unit primary side completion date and... per day for delays in achieving unit documentation completion. The calculation and payment of schedule incentives and disincentives will be done on an aggregate basis for all completed units.

Project Change Directives, Excusable Delays and Force Majeure

The SG EPC Agreement 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. Project change directives are only allowed in specific situations listed in the agreement.

An “excusable delay” is a delay that is caused by certain OPG breaches, other OPG contractors, OPG’s requests to give priority use of certain OPG equipment, or a stop work order, emergency or hazardous condition for which OPG is responsible, and which extends the baseline progress schedule by more than a threshold amount.
Neither party is held responsible for material delays resulting from certain “force majeure” events, which are restricted to fire, flood, tidal wave, lightning, earthquake, cyclone, tornado, hurricane, explosion, severe ice storm, epidemic or pandemic disease, embargo, sanction, boycott, legal strike (excluding work to rule activities) or lock-out (other than a lock-out initiated solely by the Contractor or a subcontractor of its employees, or work to rule activities), war, riot or act of public enemies, including terrorists, or site-related blockades (other than labour-related events).

Both “excusable delay” and “force majeure” events require the party seeking relief to provide a notice and take steps to minimize the impact of the delay. In the event of an “excusable delay”, the Contractor is entitled to both cost and schedule relief. In the event of “force majeure”, the Contractor is entitled to schedule relief, but no cost relief with respect to fixed/firm price work and reimbursable work, provided that with respect to reimbursable work the Contractor will be entitled to recover its actual costs of the delay.

The rationale for the restrictive approach to the ability of the Contractor to initiate change orders is that BWXT, one of the partners of the contractual joint venture, is the original equipment manufacturer of the SGs at Darlington, and as such, the Contractor should not be discovering additional scope or encountering delay-inducing “unforeseen risks” with respect to the equipment that BWXT designed and has maintained and serviced, from time to time, throughout the life of the station. In addition, both BWXT and Candu are industry experts in the SG secondary and primary side cleaning respectively and have performed similar work scopes for various nuclear operators a number of times. The restriction on project change directives and claims for “excusable delay” events and “force majeure” events is intended to give the Contractor an incentive to be efficient. The Contractor also enjoys the benefit of a neutral band around the target cost that affords protection against erosion of fee for any changes that fall within the neutral band.
Key Personnel

The SG EPC Agreement requires the Contractor to identify and employ certain key personnel for the duration of the SG refurbishment project. This obligation is reinforced with financial penalties if such key personnel are replaced without OPG’s prior written consent.

“Open Book” Approach and OPG Audit Rights

The SG EPC Agreement requires the Contractor to provide OPG with full and open access to all financial and other records relating to the SG refurbishment 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.

Subcontractors

The SG EPC Agreement permits the use of listed, OPG-approved subcontractors, but obliges the Contractor to “push down” all applicable terms and conditions of the agreement to each subcontractor.

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

The SG EPC Agreement provides that OPG is entitled to claim all SRED tax credits generated by work on the SG refurbishment project.

Performance Security

The SG EPC Agreement requires the Contractor to post a letter of credit to support its obligations under the agreement, initially in the amount of 6% of the contract price and, on the unit breaker open date for the first unit to be refurbished, increasing to 10%. This letter of credit amount steps down to 2% of the contract price upon completion of all SG refurbishment work, and will stay in place until the expiry of the warranty period on the last unit to be refurbished.

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 SG
EPC Agreement. These guarantees contain ratings-based and/or covenant based tests of the ongoing creditworthiness of the parent guarantors.

Intellectual Property
The SG EPC Agreement requires the Contractor to transfer to OPG, or to license to OPG, all intellectual property required for performance of the work. The SG EPC 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. OPG grants to the Contractor the right to use intellectual property respecting station modifications created by the Contractor under the agreement and owned by OPG.

Completion Incentives
The SG EPC Agreement provides for a final payment holdback in the amount of $2,500,000. OPG is entitled to withhold this amount until it has determined that the Contractor completed all work under the agreement.

Warranty
The SG EPC Agreement provides for a warranty of the Contractor’s work, and obliges the Contractor to correct any defective work at its own cost. 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 where inspections take place for such unit, (ii) the date that is four years after the unit in-service date for such unit, or (iii) the date that is five years after the date when the Contractor completes all work related to such unit. If warranty work is performed by the Contractor, an extended warranty period also applies. The warranty period for a unit will not in any event extend beyond the earlier of (i) the date that is three months after the actual end date of the second planned outage where inspections take place for such unit; or (ii) nine years from date that the Contractor completes all work on such unit.

Termination for Default
The SG EPC Agreement includes standard events of default. If the Contractor 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 SG EPC 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 Work
The SG EPC 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.

Dispute Resolution
The SG EPC 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 SG EPC Agreement limits the recourse of the Contractor and OPG to the ordinary courts.