EB-2020-0290

Ontario Power Generation Inc.
Payment Amounts Application for prescribed generating facilities commencing January 1, 2022.

COMPENDIUM OF AMPCO
Motions Day

May 21, 2021

SEC Interrogatory #96

Interrogatory

Reference: D2-2-10, p.69

With respect to the termination and settlement with Black & McDonald (B&M):

a. Please provide copies of the termination letter(s) that were sent to B&M which sets out OPG's reasons for termination.
b. Please provide copies of any responses that OPG received related to any termination letter(s) sent to B&M, which would outlines any views they had with respect to any positions taken by OPG.
c. Please provide a copy of the Settlement Agreement between OPG and B&M.

Response

a) Please see Attachment 1 for a copy of OPG's termination letter (the Attachment is marked confidential but OPG has determined it is non-confidential in its entirety).

b) Please see Attachment 2 for a copy of B&M's response to OPG's termination letter.

c) Please see Attachment 3 (confidential) for a copy of the Settlement Agreement between OPG and B&M.

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Black & McDonald

October 21, 2014

Mr. Riyaz Habib, Project Director
Projects and Modifications
Ontario Power Generation
1908 Colonel Sam Drive, 011-226,
Oshawa, ON
L1H 8P7

Dear Riyaz,

Re: Extended Services Master Agreement (the "ES MSA")
Re: Termination of D20 Project Purchase Order No. 217807 (the "D2O Purchase Order")

As promised in our Letter dated October 17, 2014 in response to your letters dated October 16, 2014, in which you purport to terminate the D2O Purchase Order, pursuant to section 9.1 of the ES MSA, effective immediately, the following is a more thorough response to the allegations contained in your letter of October 16, 2014.

B&M Is Not in Breach of the ES MSA

B&M has been diligently working in good faith since the issuance of the D20 Purchase Order. In spite of the adversity B&M has faced as a result of OPG's breaches of its obligations under the ES MSA and D2O Purchase Order, including acknowledged organizational challenges within OPG, and also unexpected site conditions and other factors. B&M has met and exceeded its standard of care under Section 3.1(c) of the ES MSA, and denies the vague and unsubstantiated allegations referenced in your letter.

In addition, your letter seeks to attribute exclusive responsibility to B&M for project conditions which developed over a period of time. These project conditions have been acknowledged by the third party consultants retained by OPG, Burns & McDonnell/ Modus Strategic Solutions in their report to the Nuclear Oversight Committee of the OPG Board of Directions dated June 26, 2014 (the "Modus Report"),which was also given in evidence before the Ontario Energy Board.

By way of example, in your letter, you seek to attribute full responsibility for the increase in the project's budget to B&M. However, your own third-party consultants found in their Report (at page 16) that "[it] is important to note that we believe that the majority of the cost increases with D2O Storage and AHS are due to maturation of these projects' scope definition, scope management, unforeseen subsurface conditions or flawed estimates. In other words, the increased budgets are simply reflective of the true project costs had they been estimated properly at the outset." [emphasis added]

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Direct Factors Influencing Cost Increases and Schedule Extensions

The increases in cost of the D2O Purchase Order and related schedule extensions are largely attributable to the following list of factors impacting scope or B&M's ability to move forward with the project, which have been provided by way of example, but are by no means an exhaustive list:

(a) Significant scope growth and project disruption arising from contaminated soil and water necessitating mitigation and monitoring measures. B&M was instructed by the OPG Project & Modifications Group ("P&M") not to provide for the presence of tritium on-site in its original bid.

(b) Scope growth from the original proposed annex to the existing building (3 walls and a roof) becoming a standalone building with the new requirement of a piping / services bridge.

(c) Schedule delays arising from Engineering approvals and decision making such as the methodology of the LPSW relocation and delays in the comment and disposition review cycle for items acknowledged by OPG senior management as items of preference.

(d) Scope increase arising from unknown soil and water conditions adding complexity to the shoring requirements over the proposed bid and common industry practice which had significant impacts on cost, schedule and risk.

(e) Scope increase introduced by Tritium Recovery Facility stakeholders during the acceptance review of the design which multiplied the piping and valve complexity and increased scope of office facilities.

(f) Delays and inefficiency arising from site space allocation for laydown areas, trailers and construction area boundaries not finalized with OPG Operations and OPG Security until late in the project.

(g) Slow response time for issuing PCA's, CTP's, PO revisions and ONCORE setups by OPG PMO, OPG Supply Chain and OPG Finance which impacted Contractor's response time to subcontractors and their subcontractors and created significant additional PMT effort and cost.

(h) Delays and costs arising from the months required to obtain OPG approval for a Graded Approach to procurement and construction activities. This first impacted the scope and schedule for the concrete reinforcing bar in the pad for the helium tank relocation.

(i) Additional PMT cost and distraction as well as schedule delays arising from B&M project team resources being consumed in responding to an ongoing series of OPG requests for new schedule scenarios, new design strategies and schedule compression requests, which effort detracts from advancing the Work itself.

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The above listed generally arise from a failure of OPG to manage its internal stakeholders to take actions promptly as per 4.1(a),(b) & (c) of the ES MSA in providing approvals, information and decisions required by B&M to advance the project. Instead, B&M was generally left to deal with the site stakeholders without any authority or control over them.

Indirect Factors Influencing Cost Increases and Schedule Extensions

(a) The project award was delayed by OPG's Supply Chain process but there was pressure to maintain schedule milestones, resulting in compressed mobilization, engineering and planning for the TRF outage and the project in general.

(b) OPG has failed to fulfill its implied reciprocal obligation to facilitate the project as a buyer of engineering, procurement and construction services for this "first of a kind" project of its magnitude and complexity inside the nuclear protected area in over 20 years. Instead, OPG's approach was to make the Contractor responsible for everything without fulfilling OPG's necessary role.

(c) OPG project management on the project had never managed a construction project of this magnitude and it became apparent that they had little to no influence with the other OPG stakeholders to remove obstacles, secure access or obtain approvals to facilitate the B&M project team to proceed on time and within budget;

(d) OPG required that this construction project be performed under the modern Engineering Change Control process, which was designed to manage sustaining capital changes in a maintenance environment in an operating nuclear facility, and not what is essentially a brownfield construction site. This was also acknowledged in the Modus Report;

(e) Addition of subsequent projects impacted Sally Port congestion and transit time further impacting cost, schedule and productivity. B&M included qualifications and concerns in its bid regarding the capacity of the Sally Port if project activity was to increase in the protected area.

(f) B&M endured an uncooperative labour relations environment, including but not limited to:

  (i) OPG's engineers, who are members of a collective bargaining unit (*i.e.* the Society of Energy Professionals) and who previously would have been responsible for the design, have held up the acceptance of B&M's engineering deliverables with excessive, trivial and preferential comments that had no impact on the functionality or quality of the design.

  (ii) Stakeholder disengagement by many members of other bargaining units, such as the Power Workers Union, who are gatekeepers to many of the barriers to B&M performing its work.

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(g) The Modus Report confirms at page 17 that OPG's own P&M Group failed to appropriately budget the D2O project internally, based upon a realistic scope of work and the proper classification of the estimate, and if it had done so, the perceived "budget overrun" would not have occurred:

> Based on these practices, the budgets initially approved by the Board for D2O Storage ($108M) and AHS ($45.7M) were not sufficient for the planned scope of work. Moreover, had P&M appropriately classified these two project's cost estimates at a Class 5 (-50% to +100%) maturity level, it is very likely that these projects could have entirely avoided an overrun. [emphasis added]

Despite the uncertainty posed by the increases in scope as well as the indirect obstacles and factors, B&M has worked diligently to develop the budget and schedules through all of the changes in Project scope and functionality. As a result of the factors outlined above, the estimate of $287 million outlined in B&M's October 7, 2014 letter remains a valid target price, assuming that there are no further scope changes.

Deemed Termination for Convenience

For the foregoing reasons, B&M expressly denies that it has breached its obligations under either the ES MSA or the D2O Purchase Order, including, but not limited to its obligation to exercise a standard of care normally exercised by professional contractors having specialized knowledge and expertise in performing work or a similar nature, scope and complexity to the Work and to implement all Prudent Practices.

Furthermore, even if a breach had occurred under the D2O Purchase Order, which B&M explicitly denies, ES MSA Section 9.1(l) and the post-amble of Section 9.1 provide that it is a precondition to an Event of Default arising that OPG has served a Notice of Default specifying the breach, and that the 7-day cure period provided therein has expired. Neither of those preconditions has been met, since OPG has not previously served a Notice of Default under the D2O Purchase Order, nor provided B&M with the requisite cure period.

As such, B&M cannot be terminated for default. Section 9.5 of the ES MSA provides that "if, at any time after OPG ... exercises its rights under Sections 9.3 or 9.4, it is determined for any reason that an Event of Default had not occurred or that the Event of Default was otherwise excusable, the rights and obligations of the Parties will be the same as if the termination of this Agreement by OPG had occurred under Section 10.2".

In light of the foregoing, and in light of OPG's stated intention to immediately terminate the D2O Purchase Order, B&M interprets this termination as being pursuant to the Termination for Convenience provisions of Section 10.2 of the ES MSA.

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Path Forward

Notwithstanding that B&M vehemently denies that an Event of Default has arisen and that B&M intends to vigorously defend any such accusation, B&M remains available to work with OPG in transitioning the D2O Project.

To that end B&M firmly believes that OPG and B&M should meet in the next day or two to engage in good faith discussions regarding a D2O transition plan and all other outstanding items related to D2O. It is our hope that this meeting will clearly appoint decision making representatives from each of B&M and OPG, set a list of action items requiring resolution, and set fixed dates for achieving such resolution.

B&M of course remains committed to carrying out its obligations on all other purchase orders under the ES MSA and will do so without compromising performance, including with respect to safety and HU.

Sincerely,

J. Bruce McDonald
President and Chief Executive Officer

cc: Dietmar Reiner, OPG, SVP, Nuclear Projects
Scott Martin, OPG, SVP, Business and Administrative Services
Chris Ginther, OPG, SVP and General Counsel and Chief Ethics Officer
Art Rob, OPG, VP, Project and Modifications
Stephun Cliver, OPG, Chief Supply Officer
Phil Reinert, OPG, VP, Supply Services, OPG Projects
Keith Backus, Black & McDonald

MODUS
Strategic Solutions CANADA

Burns & McDonnell
CANADA

Supplemental Report to

Nuclear Oversight Committee

2nd Quarter 2014

Darlington Nuclear Refurbishment Project

ONTARIO POWER GENERATION

Burns & McDonnell
Modus Strategic Solutions

June 26, 2014

CONFIDENTIAL

Project 2 Matrix

Campus Plan

Observations/Findings

REF.	OBSERVATIONS	PROJECTS				
		Water & Sewer	D20 Storage	Aux Htg Sys	RFR Annex	* RFR Waste Storage
1	Lack of scope definition.	√	√	√	√	
2	Insufficient effort and time in creating engineering requirements.	√	√	√	√	
3	Initial Project was deferred and then reactivated over a period of years (> 5yrs).	√	√	√		
4	3rd Party Estimates - Mixed results w/F+G being significantly over or under vendor quote.	√	√	√		
5	Change in contracting strategy with Vendor from a E-PC to EPC.	√	√	√		
6	Basis of Estimates do not conform to AACE Recommended Practices.	√	√	√	√	√
7	Project Team has failed to characterize the changes/progression to the estimates from gate to gate.	√	√	√	√	
8	Mischaracterized Estimate Classification - OPG is accepting vendor quote as a "Class 2" or "Class 3 estimate when such quote does not meet the threshold for a Class 2 or 3.	√	√	√	√	√
9	Contingency calculated at ~21% - not clear how contingency and risk assessment are linked, if at all.	√	√	√	√	
10	Risk shifting - Project Team does not fully understand the nature of target price work.	√	√	√	√	√
11	The process of bid evaluation scoring and metrics used varies among Project Teams.	√	√	√	√	√
12	The process of comparing bids and 3rd party estimates varies among Project Teams.	√	√	√	√	
13	Significant differences between Vendor Quotations (from 50% to > 100%).	√	√	√	√	
14	Vendor quotes and 3rd Party Estimates (Faithful + Gould) are not aligned for ease of comparison to facilitate a comprehensive review of differences.	√	√	√	√	
15	The contractor selection process compelled the contract to be awarded to the lowest bidder over other qualifying considerations.	√	√	√	√	
16	Risks materialized greater than expected during execution, i.e. underground utilities.	√	√	√	√	
17	Senior Management is reluctant to increase contingency on the front end despite selecting the lowest bidder.		√	√		
18	Project Manager is young and appears inexperienced to manage size of project.		√	√	√	
19	Project Team has difficulty in obtaining reliable cost and schedule data from contractor resulting in OPG's inability to effectively forecast costs to complete.	√	√	√	√	√
20	Contractor performance issues have increased costs	√		√	√	
21	OPG performance issue has increased costs, or has the potential to increase costs					√
22	Scope growth beyond what was anticipated for the project.		√	√	√	
*	*Project is in its early stages.*					

1.0 DIRECTION

1.1 Overview

Projects are initiated, funded, and executed by many different groups and organizations within OPG. The requirements for effective management of a project are dependent on the level of risk inherent to the project. Projects should be managed using a graded, risk based approach that properly matches project management processes with the degree of risk associated with the delivery of a project.

1.2 Project Management

Project Management is the discipline of planning, organizing, securing, and managing resources to bring about the successful completion of specific project goals and objectives. It is the application of a methodical and iterative approach for guiding a project through the projects life cycle. It incorporates tools and processes to plan, execute, monitor, and control project activities to ensure requirements are met.

Managing a project typically involves:

- Identifying and documenting project requirements, scope of work, and deliverables to satisfy the project needs and objectives including key constraints and assumptions.
- Providing graded, risk based oversight of the project, project team, supporting departments, contractors, and suppliers.
- Addressing the various needs, concerns, and expectations of stakeholders.
- Developing project plans, estimates and schedules.
- Developing project delivery, gate progression, funding and contracting strategies.
- Monitoring, reporting, communicating, and controlling project performance.
- Documenting and managing project risks and implementing recovery plans.
- Planning, managing and directing the project execution.
- Managing and controlling project changes and priorities.
- Incorporating operating experience and lessons learned.
- Balancing competing project constraints relating to the following:
    - Scope
    - Schedule
    - Cost/Budget
    - Resources
    - Risks
    - Value for money

1.2.1 The Project Manager has the overall accountability for project planning and delivery on behalf of the Project Sponsor. The required level of Project Management and controls are a function of the project scope, risk, complexity, duration, cost and project execution strategy.

1.2.2 All work performed during a project shall:

a) Maintain safety as the overriding priority.

b) Meet the specified quality requirements for the project.

c) Be executed by staff that are proficient for the type of work they are performing.

d) Be executed in phases. Progression from one phase to the next is approved at a phase-gate where project progress and performance is reviewed by management and validated to ensure project requirements and objectives are being satisfied, prior to proceeding through the gate and into the next phase.

e) Use as required, the corporate-level manuals, guides, instructions, forms and best practices for the specific project management area.

1.3 Scalability

While all elements of the Project Management Standard should be considered for all projects, not all projects require the full application of each element. The time, effort, degree of detail, and extent of application of some project management elements associated with fulfilling the requirements of this Standard should reflect the complexity (including risks) and cost of the project. All projects should be classified to a project level based on the project's complexity and anticipated cost at completion. Each project should be planned, executed, monitored and controlled, and closed out in accordance with scaled requirements associated with its project level. In some cases, certain aspects or phases of a project will be managed on behalf of OPG by an external contractor. Contractors will be expected to manage OPG projects with at least equivalent levels of rigor and discipline as OPG would apply.

1.4 Project Management Processes

The following key project management processes are based on industry standards, norms and best practices for project management, and should be adhered to when implementing project management at OPG:

- Phase-Gate Management
- Integration Management
- Integrated Change Control
- Scope Management
- Quality Management
- Schedule Management
- Cost Management
- Estimating
- Risk Management
- Communication & Stakeholder Management

These processes are only a subset of the full range of activities that may be performed in order