AMPCO Interrogatory #132

Interrogatory

Reference: Appendix 2p - 2015 Superseding Release Execution BCS P17

The 2015 Superseding Release Execution BCS shows a project variance of $270.9 million. On page 19, OPG provides a Change Summary. These items are included in the table below.

Ref: Appendix 2q - 2018 Superseding Release Execution BCSD

The 2018 Superseding Release Execution BCS shows a project variance of $117.4 million.

Please modify and complete the attached table to summarize the key drivers of the increase in costs at the 2015 provide Superseding Release Execution BCS, the 2018 Superseding Release Execution BCS and at project completion.

D2O Storage Project Cost Variance Drivers

Events	Variance $M 2015 BCS	Variance $M 20158 BCS
The relocation of the building 7 metres to the west		
Increased materials quantities for piping, valves and equipment		
Requirement to have process piping run in a pipe chase/tunnel buried 7 metres below grade		
Design Scope growth required to meet design requirements		
OPG Requested Scope Changes		
Environmental Requirements		
Under estimate of effort		
Dewatering Requirements		
Client Requested Changes		

Schedule Extension		
Schedule Acceleration		
EPSCA		
TOTAL		

Response

Both the 2015 Superseding Release Execution BCS (Ex. D2-2-10, Attachment 2p, p.19) and the 2018 Superseding Release Execution BCS (Ex. D2-2-10, Attachment 2q, pp. 3) detail major project events that led to increased costs. Each of these events caused OPG to incur additional costs across numerous individual work packages. Because the project tracked costs at the work package level, and not by event, OPG is generally unable to attribute precise costs to the listed events, beyond what is provided in Ex. L-D2-02-Staff-162 and in Ex. D2-2-10, Attachments 2m -2q.

Also, the following events had been wholly completed prior to the execution of the 2018 Superseding Release Execution BCS and therefore contributed no amount to any variance as between the 2015 and 2018 Superseding Release Execution BCSs:

- "The relocation of the building 7 metres to the west"
- "Requirement to have process piping run in a pipe chase/tunnel buried 7 metres below grade"
- "Dewatering Requirements"
- "Environmental Requirements"

Finally, the total cost of the D2O Storage Project is $510M and therefore there was no overall variance against the estimate of $510M (including management reserve) in the 2018 Superseding Release Execution BCS.