

David.Nichols

From: Harrington, Tim <tharrington@cahillganotec.ca>
Sent: Tuesday, February 6, 2018 3:38 PM
To: Laurie.Hildebrand
Cc: Bursley, Brad; Lavigne, Charles; Mike.Buckle
Subject: [EXTERNAL] Concession #16
Attachments: CH0031 deliverables joint session with SNC in Montreal; RE: CH0031 Agenda/Timeline for meeting in Montreal; MOM-CH0031001-0057.pdf

Laurie,

As discussed, attached is some history on the evolution of concession #16. High-level summary:

- LCP invited our team to Montreal to meet with SNC to discuss opportunities to streamline documentation requirements and identify onerous project requirements (i.e. potential concessions). I believe that this idea was first initiated by project sponsors discussions in early November.
- Meeting was held on November 29th, attended by myself, Charles, Justin C, and John H. Minutes attached. They really pushed their need to reach first power and saw our contribution a key piece to make this happen. Lots of good discussions and positive reception to our ideas and spec items that we flagged as onerous. See Item #6 of the minutes; the cable tagging at tray exits was one item that we flagged as an opportunity. Concession #16 was born thereafter along with a string of other possible concessions we discussed during the session.
- As highlighted today:
 - Cable tagging at trays was likely never considered in our bid price. Thus, no hours carried and material cost.
 - Material cost would be relatively insignificant, maybe \$5K, this is purely a labour driven cost savings for the most part.
 - No idea where LCP came up with the 1200+ hours estimate provided with the concession response.
 - It was never discussed that we would be expected to reduce our ATCL with each opportunity we identified.
 - LCP is already getting a win: they will save on the labour and it will help relieve schedule pressure and lessen risk for punches at system turnover time.

Hope this helps...tough letter response to craft. Call if you have further questions.

Tim

Tim Harrington, P. Eng
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Minutes of Meeting

Project:	Lower Churchill Project	Package No.:	CH0031
Purpose:	CH0031 Document Deliverables Workshop	Package Title:	Balance of Plant
Location:	SNC Montreal, 12 th Floor Boardroom	Date / Time:	29-Nov-2017, 9:00am – 3:00pm EST

Attendees:	Tim Harrington (TH) – CG John Henley (JH) – CG Charles Lavigne (CL) – CG Justin Curlew (JC) - CG	Scott O'Brien (SB) - LCP David Wright (DW)–LCP Paul Adams (PA) – LCP Gord Haines (GH) – LCP Greg Snyder (GH) – LCP Martin Landry (ML) – LCP	Michel Trembley (MT) – SLI Benoit Marchand (BM) - SLI
Distribution:	Attendees, Peter Tsekouras, Bill Knox, Jason Crowley, Craig Philpott, Greg McKenney, Dave Burton, Paul Forsey, Albert Mitchelmore, Russell Hobbs, Michael O'Keefe, Derrick Drake, Tony Scott		
Recorded by:	David Wright (Added Contractor notes in red)	Signature:	

Item	Description	Action	Date
1	Safety Moment – Trips, Slips and Falls awareness during winter months	INFO	
2	SLI Vision and background for piping mechanical and electrical specifications <ul style="list-style-type: none"> Presented by Martin Landry and Gord Haines 	INFO	
3	Equipment/System Criticality Matrix was presented by Greg Snyder <ul style="list-style-type: none"> Equipment/Systems identified as having a criticality of 5 or higher will require a detailed review. Lower than 5 will be submitted for information with periodic spot checks (audits) of submittals to take place. 	INFO INFO	



Minutes of Meeting

Item	Description	Action	Date
4	<p>Review of SDR and SDRL Process</p> <ul style="list-style-type: none"> CG noted that it may be practical to utilize a procurement approach to grouping of document submittals as opposed to a system approach [ex. Same model pressure transmitters are utilized in various systems] All agreed that it is in the collective best interests of the project to ensure that the document submissions and oversight reviews by LCP are focused on key deliverables and that deliverables to be submitted for information only be designated and actioned as such. A further workshop to be scheduled prior to the return of the current SDR submission. LCP target for review turnaround of document submittals is 10 days. The Site Query (SQ) process is being used for all manner of contractor queries including general requests for information and engineering queries resulting in LCP home office team being over utilized. The SQ process is intended to be site based with support by LCP home office when required. LCP to review process with LCP Shift Engineers. Code 2 vs Code 3 document ranking discussed. All agreed that a document should never receive Code 3 rejection unless the review comments would result in a technical non-conformance or a material product change. Parties mutually agreed that Code 3 would not be issued to a document unless a joint discussion / review occurred before hand. 	<p>INFO</p> <p>INFO</p> <p>DW</p> <p>INFO</p> <p>GS/DW</p> <p>INFO</p>	<p>13-Dec-2017</p> <p>13-Dec-2017</p>

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Minutes of Meeting

Item	Description	Action	Date
5	<p>Review of deliverable timelines and Opportunities for Batch reviews</p> <ul style="list-style-type: none"> • ML & GH presented a detailed 'walk through' of piping/mechanical and electrical specs. • Preliminary listing of joint batch design reviews drafted: <ol style="list-style-type: none"> a. Automatic Transfer System – before year end b. Pumps (80-90%) – before year end c. HVAC dampers & fans – by mid Jan 2018 d. Dist. Equipment – by mid Jan 2018 e. Transformers (medium) – before year end f. Transformers (station service) – by year end g. HVAC EMCS – by mid Jan h. Lighting control panels – before year end i. HP/LP compressors – early Jan 2018 j. HVAC ducts (seismic) - w/o 4-Dec-2017 k. Duct support/platforms - by mid Jan 2018 • All agreed that there is a need to challenge the existing specification with respect to requirements for equipment supplier representatives on site. LCP to initiate review in conjunction with our quality department requirements. • Requirement for LCP engineering review of changes to field run piping to be reviewed/verified. • All ductwork is being fabricated at Atlantica in Dartmouth, NS • LCP confirmed that proof of code ^{CSA} compliance certificates (ex CSA) will only be needed to be provided for custom panels. • Large document packages will fall under SDRL category D04. Smaller packages will be covered as F01 category. 	<p>INFO</p> <p>JC/DAW</p> <p>GS</p> <p>ML</p> <p>INFO</p> <p>INFO</p> <p>INFO</p>	<p>15-Jan-2018</p> <p>13-Dec-2017</p> <p>13-Dec-2017</p>



Minutes of Meeting

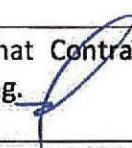
Item	Description	Action	Date
6	<p>CG Opportunities</p> <ul style="list-style-type: none"> • Anti-condensation Heaters – With the exception of control room, telecoms room and offices, the powerhouse is not humidity controlled. LCP is open to challenging requirement for AC heaters in electrical panels where appropriate and where catalog order (vs custom) equipment is unavailable. CG to prepare a concession request. • A construction review of the cable trench installation is necessary. Post meeting note – LCP will be updating routing for cable trench and will call review meeting. • Constructability meeting for GSU/GCB/IPBs to be called. • CG to submit concession request regarding layout of blocks on interconnection wiring drawings – requirement to match physical layout. • LCP to review requirement for cable identification tags on cable branches from trays. • LCP requirement for ring terminals and ferrules. • Cat 6 cable - LCP to review requirement for testing of each reel (box) • CG to submit concession request concerning SS cable tags – propose to use plastic. • LCP to clarify requirement for performance testing on mechanical systems (completions spec – Appendix A) • CG to submit concession request regarding requirement for testing of mortar and grout. • Parties agreed that spec requirements for manufacturer site visits to inspect proven material installations ^{COULD} should be waved. Some concession candidates included: TO BE EVALUATED ON A CASE BY CASE BASIS. <ul style="list-style-type: none"> ○ Pipe supports ○ Various architectural work (ex. tiling) ○ Air compressors 	<p>JC</p> <p>GH</p> <p>GH TH</p> <p>GH</p> <p>GH GH</p> <p>JC</p> <p>GH</p> <p>JC</p> <p>JC</p>	<p>13-Dec-2017</p> <p>15-Jan-2018</p> <p>13-Dec-2017 13-Dec-2017</p> <p>13-Dec-2017</p> <p>13-Dec-2017 13-Dec-2017</p> <p>13-Dec-2017</p> <p>13-Dec-2017</p> <p>13-Dec-2017</p> <p>13-Dec-2017</p>
7	<p>Path to First Power</p> <ul style="list-style-type: none"> • SLI Path to First power was presented. First power does not mean commercial power. • Draft Path to First Power report to be provided to CG. • Discussion about post first power and working under permit – risk of a drop in productivity. LCP clarified that first power is only for demonstration and then back to normal construction operations. • CG to perform a case study on completion percentage – Q4 2019 vs Q3 2019. 	<p>INFO</p> <p>GS/DW</p> <p>INFO</p> <p>TH</p>	<p>13-Dec-2017</p> <p>15-Jan-2018</p>



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Item	Description	Action	Date

Contract/Supplier hereby agrees that Contract/Supplier has reviewed and agrees with the content and accuracy of these Minutes of Meeting.

Signature: 
 Name (please print): Tim Harrington
 Date: Dec 10/2017

