



30-Aug-2016

Muskrat Falls Corporation
350 Torbay Road, Suite 2
St. John's, NL Canada

ACI- MFC-0803

LTR-CH0007001-1390

Attention: Mr. Scott O'Brien, Company Representative**Agreement No.: CH0007-001****Title: Construction of Intake Powerhouse, Spillway and Transition Dams****Subject: Critical Path Progress****Reference: LTR-CH0007001-1380**

Dear Mr. O' Brien:

Contractor acknowledge receipt of LTR-CH0007001-1380 and provides the following response:

1) Intake #2:

- Contractor has poured I2PSB-05 combined with I2PSA-03 on the 24th July. Contractor raised CON-0610 to pour I2PSC-05 at the same time but this was rejected by Company.
- Contractor brings to Company's attention that the critical path for Intake #2 runs through Intake #1 and more specifically, through the D/S part of it. In order to be able to work on I2PSC-05, I1U1B-01 has to be poured and formwork jumped for rebar verses formwork clashes and access issues as well (see attached Picture#1). As previously explained and demonstrated to Company, where a contraction joint applies, two to three lifts difference are at minimum required between two adjacent units in order to maximise pour cycles efficiency by avoiding cutting the vertical bars and maximising the use of DOKA panels instead of BIP. Therefore, Contactor will have no real gain on the schedule by having the shoring for I2PSC-05, and subsequently the shoring of I2U1B-01, ready ahead of time before jumping the north panels of I1U1B-01 and becoming able to work on I2PSC-05. Therefore, Contactor decided to increase manpower on I1U1B-01 (shoring, soffit, and rebar) considering it the real critical path for both Unit #1 and Unit #2.

2) Intake #3:

- Contractor disagree with Company on considering that the Intake of Unit #3 is the critical path for Unit #3. As discussed during the August 9th schedule workshop with Company, and in consideration of the OHS SWO related to Draft Tube #2, the tailrace of Unit #3 is the critical path for Unit #3.



LOWER CHURCHILL PROJECT – MUSKRAT FALLS

CH0007: CONSTRUCTION OF INTAKE AND POWER HOUSE, SPILLWAY AND TRANSITION DAMS

3) Powerhouse #3:

- In order to start work on D3ESA/ENA-02, some extra modules/towers of the draft tube elbow have to be installed (needed for the vertical bars). Contractor is currently working on building the extra towers as per the new design (see attached Picture #2).
- Further, Contractor would like to bring to Company's attention that due to uncertainties about the release dates, Contractor could not have a dedicated crew on standby for this work. Therefore, manpower had to be transferred from some other ongoing work fronts.

4) Powerhouse #4:

- In order to start work on the shoring system of Draft Tube #4, after receiving the release, Contractor had to safe out the area, clean up and strip the tailrace shoring to gain access. This work is currently ongoing.
- As explained under Powerhouse #3, due to uncertainties about the release dates, Contractor could not have a dedicated crew on standby for this work. Therefore, manpower had to be transferred from some other ongoing work fronts.

Sincerely,
Astaldi Canada Inc.



Don Delarosbil
Project Manager
Lower Churchill Project – Muskrat Falls

cc: MFC – Mr. Mike Harris, Mr. Mel Melhem, Ms. Vivian Wang
Astaldi – Mr. Georges Bader, Mr. Riccardo Rocci, Mr. Robert Gregoire, Mr. James Walsh, Mr. Martin Duquet, File

6.12
YBA

Attachments:

- 1) Picture # 1 - Formwork; Intake #2
- 2) Picture # 2 - Towers; Powerhouse #3



