

**LOWER CHURCHILL PROJECT**

**MUSKRAT FALLS CH0007**

**MEMORANDUM RE: LATE START OF CONSTRUCTION ACTIVITIES DUE TO THE  
BELATED EXECUTION OF THE CONTRACT AGREEMENT**

**CHRONOLOGY OF EVENTS**

**INTRODUCTION**

The Lower Churchill Falls Project (“LCP”) is being developed by Nalcor Energy (“Nalcor” or the “Company”) a wholly owned public company by Newfoundland and Labrador.

LCP is located on the Churchill River in the Province of Newfoundland and Labrador, it consists of the Muskrat Falls Generating Station with a capacity of eight hundred and twenty-four megawatts (824 MW) and associated transmission line works.

The project Site for Muskrat Falls is located on the lower reaches of the Churchill River approximately 35 km west of the Town of Happy Valley – Goose Bay. Permanent access to the Site is from the south shore, via a road extension from the existing Trans Labrador Highway.

The Project has several components: (1) building of main access road (including the construction of over 22 km of new road with several stream crossing, the construction of site roads), (2) building of a 1,500 accommodation complex, (3) building of laydown area, (4) Reservoir preparation including some 130 km of forest access road, forest, harvesting, and bank stabilization, (5) building of Intake, Powerhouse, Spillway, Transition Dams, North RCC Dam and South Dam, (6) North Spur stabilization works, (7) building of Switchyards at Muskrat Falls and Churchill Falls, (8) building of high voltage transmission lines and converter stations, (9) some environmental work (fish habitats, protection, remediation, etc.).

N.	DATE	REFERENCE	DESCRIPTION
1.	15 March 2012	ITB	The Joint Review Panel, which had been appointed by the Newfoundland and Labrador Minister of Environment and Conservation and the Minister for Intergovernmental Affairs, and the Canadian Federal Minister of the Environment, to assess the environmental effects of the Project, confirmed that the Project is justified on both economic and environmental grounds.
2.	<b>30 April 2012</b>	Request for Prequalification	Nalcor issues the Prequalification documents. The preliminary milestone schedule provides for <ul style="list-style-type: none"> <li>- Submission of Proposal      First quarter 2013</li> <li>- Contract Award                <b>Second Quarter 2013</b></li> <li>- Final Completion              Fourth Quarter 2016.</li> </ul>
3.	26 June 2012	Application for Pre-qualification	Astaldi SpA submits its prequalification application to be a bidder for the Package CH 0007 relevant to the Intake and Powerhouse, Spillway and Transition Dams.

N.	DATE	REFERENCE	DESCRIPTION
4.	31 July 2012	ITB	Nalcor Energy, and Emera Inc., along with the Governments of Nova Scotia and Newfoundland & Labrador, completed and signed formal agreements for the development and transmission of hydroelectric power from Muskrat Falls. These agreements reflect the core principles established in the Term Sheet announced in November of 2010.
5.	<b>28 Sep. 2012</b>	Invitation letter	Nalcor invites Astaldi to submit a Proposal for the CH0007 package. Proposals shall be submitted no later than <b>28 January 2013</b> .
6.		RFP	Exhibit 9, Interface and Milestone Schedule provides for the following: <ul style="list-style-type: none"> <li>- M0 Limited Notice to Proceed: N/A;</li> <li>- M1 Contract Award <b>03-Jun-2013</b>;</li> <li>- M4 Spillway 4-Aug-2014;</li> <li>- M2 Substantial Completion 28-Nov-2017</li> <li>- I 1 Spillway Site ready to start works 2-Sept-2013;</li> <li>- I 7 Powerhouse Site Ready for Start of the works 25-Oct-2013</li> </ul>
7.	21 Nov. 2012	Add. No. 2 to RFP	Question Number 51 Nalcor confirms that if Bulk excavation contract is delayed, Company will issue a Change Order in order to accelerate the Work of package CH0007 so that Milestone dates will be maintained or delayed depending on Company's planning.
8.	5 Dec. 2012	Astaldi Power Point presentation	A meeting was held with representatives of Nalcor Energy in Rome.  Astaldi presentation about its understanding of the Project. Among others, the current project status update, particularly with respect of the early works (any delays/issues need to be discussed).
9.	21 Dec. 2012	Add. No 7 to RFP	Question No. 195 Bidder request to provide new milestone dates for CH0006, NALCOR states that Interface and Milestone dates for Package CH0007 will not (need to) change (subsequently are changed).
10.	4 February 2013	Add. No 8 to RFP	Question No. 225 Company confirms that Milestone dates in CH0006 are aligned with the Interface Dates in the Schedule of CH0007.
11.	8 February 2013	Add. No. 9 to RFP	Nalcor informs that the Closing Date for the submission of the Proposal has been revised from 4 March 2013 to <b>9<sup>th</sup> April 2013</b> .  A new set of documents has been issued for Option 2 – FPTCL (question No. 207)

N.	DATE	REFERENCE	DESCRIPTION
12.	16 February 2013	Add. No. 10 to RFP	<p>Nalcor informs that the Closing Date for the submission of the Proposal has been revised to <b>16<sup>th</sup> April 2013</b> upon Bidders request instead of April 26<sup>th</sup> as requested by the Bidders.</p> <p>Nalcor needs to ensure that there will be an adequate duration to evaluate the proposals and award the contract without affecting the schedule for execution.</p>
13.	14 March 2013	Add. No. 12 to RFP	<p>Question 296</p> <p><b>Since the Contract Award is still scheduled on July 31 2013</b>, Bidders requested confirmation that contractor can start mobilization on August 1st, right after contract award. Nalcor says that prompt mobilization is expected.</p>
14.	16 April 2013	Proposal	<p>ASTALDI submits its Proposal for Package CH 0007 relevant to the Intake and Powerhouse, Spillway and Transition Dams.</p>
15.		Proposal Appendix A9	<p>Astaldi demonstrates its ability to comply with the requirements outlined in Part 2, Exhibit 9 - Interface and Milestone Schedule by including its proposed Construction Schedule (Level 2) in Primavera format.</p> <p>The Construction Schedule provides for the following Milestones:</p> <ul style="list-style-type: none"> <li>- M0 Limited Notice to Proceed: N/A;</li> <li>- <b>M1 Contract Award            31 July 2013;</b></li> <li>- M4 Spillway                            15 February 2015;</li> <li>- M2 Substantial Completion 30 June 2018.</li> </ul> <ul style="list-style-type: none"> <li>- I 1 Spillway Site ready to start works    11 November 2013;</li> <li>- I 7 Powerhouse Site Ready for Start of the works 04 NOV 2013.</li> </ul>
16.		Proposal Execution Plan Executive Summary	<p>Executive summary</p> <p>To achieve Project success, Astaldi requires that it be able to:</p> <ul style="list-style-type: none"> <li>- organize and realize an efficient early mobilization;</li> <li>- be ready at site prior to the first winter (2013-2014) with all temporary equipment and the site organization infrastructure in place;</li> </ul>

N.	DATE	REFERENCE	DESCRIPTION
17.	5 July 2013	Appendix No. 14	<p>NALCOR issue a post bid Addendum to allow the shortlisted bidders to update their proposals based on:</p> <ul style="list-style-type: none"> <li>- a revision of drawings;</li> <li>- updated quantities;</li> <li>- update of the scope of works; and</li> <li>- the revised Milestones dates for access to site and award of Agreement (Exhibit 9 – Rev. 5) .</li> </ul> <p>The revised Milestones are as follows:</p> <ul style="list-style-type: none"> <li>- M0 Limited Notice to Proceed: 15 sept 2013;</li> <li>- M1 Contract Award 31 October 2013;</li> <li>- M4A Spillway (Hydro-mech. Installation) 15 February 2015;</li> <li>- M4B Spillway 31 July 2015</li> <li>- M2 Substantial Completion 30 June 2018.</li> <li>- I 1A Spillway Site shared access 15 November 2013</li> <li>- I 1B Spillway site ready for unrestricted works 1 January 2014;</li> <li>- I 7A Powerhouse Site shared access 30 November 2013;</li> <li>- I 7 B Powerhouse Site Ready for unrestricted works 01 January 2014.</li> </ul>
18.	18 July 2013	NALCOR LTR 0014 Supplementary Bulletin No. 1	<p>Nalcor provides clarifications on the status of the Interfaces dates (Spillway and Powerhouse) and on Milestone M0 (LNTP). Nalcor intends to have resolved all material issues relevant to the Proposal and to be ready to sign the Agreement. In the event, Nalcor is unable to sign the agreement by September 15<sup>th</sup>, <i>and given the necessity of timely commencement</i>, a LNTP will be issue to allow the work to commence.</p>
19.	22 July 2013	AST LTR	<p>Astaldi submits a revised draft of the Civil Works Agreement with respect to the version prepared by Nalcor on July 2<sup>nd</sup> 2013. Astaldi, <i>inter alia</i>, expresses its concerns about the effect of the introduction of the Limited Notice to Proceed concept.</p>
20.	4-5 Sep. 2013	Meeting in St. John's	A clarification meeting is held between Nalcor and Astaldi.

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21.	4 Sep. 2013	Nalcor Memo	<p>Nalcor provides some information required by Astaldi about the sources of funds to which Muskrat falls Corporation ("MFC") will have access in order to complete the Project.</p> <p>Nalcor has approached the financial markets in order to raise up to 2.6 billion CAD in debt financing to finance the new hydro-electric generation plant project. The structure of the Debt Financing is that Canada, through its guarantee, is indirectly providing to MFC the Debt Financing. The Project costs to be incurred prior to the Debt Financing close are being funded solely by Nalcor by way of equity contributions. The structure of the Debt Financing is described in a press release from Moody's Investor services dated April 18 2013.</p>
22.	14 Sep. 2013	Meeting in London	<p>A meeting is held between Astaldi and Nalcor.</p> <p>Astaldi can reduce the Target Cost of Labour of 40,0 mln CAD subject to the award to Astaldi the work relevant to the Main Dam and the North Spur Stabilisation Work.</p>
23.	30 Sep. 2013	Limited Notice to proceed	<p>A LNTF is issued by Nalcor. The activities included are as follows:</p> <ul style="list-style-type: none"> <li>- Site inspection to define availability of assigned areas to allow all temporary construction activities that can be realized <b>outside</b> the Spillways and Powerhouse;</li> <li>- Detailed design of Integrated Cover System</li> <li>- Mobilization of subcontractor for Powerhouse ICS</li> </ul> <p>The CWA execution is expected on or before 30 October 2013.</p> <p>Astaldi has staff and resources committed, expecting access to site.</p>
24.	9 October 2013		<p>Nalcor Energy announces that it has selected Astaldi Canada Inc. as the preferred contractor for the construction of major civil works for the Muskrat Falls hydroelectric generating facility. Negotiations are expected to conclude in the coming weeks for the contract which includes construction of the powerhouse, intake, gated spillway, transition structures and other associated work.</p>
25.	31 Oct. 2013	Amendment # 1 to the LNTF	<p><b>The CWA execution is further delayed to on or before 30 November 2013.</b></p>

N.	DATE	REFERENCE	DESCRIPTION
26.	29 Nov. 2013	Civil Works Agreement (CWA) execution	<p>The Main contract between Contractor and Muskrat Falls Corporation is executed.</p> <p>Contractor's scope of work is described in Exhibit 1 of the contract as the:</p> <ul style="list-style-type: none"> <li>• "Intake and Powerhouse, Spillway and Transition Dams package (CH0007)"</li> <li>• "Consists generally of the construction of the Intake, Powerhouse, Spillway complete with Upstream and Downstream Permanent Bridges, Downstream Temporary Bridge, South, Centre and North Transition Dams, Separation Wall, concrete lining of Discharge Channel, access road between the Powerhouse and the Spillway, the Underground Piping and Duct Banks between the Powerhouse and the Switchyard and related work."</li> </ul>
27.	15 Dec. 2013	Letter LTR 0046	<p>Shared access to powerhouse and intake area is first available 76 days past LNTP (15 days of post contract delay). Unrestricted access to Spillway is available.</p>
28.	11 January 2014	letter LTR0052	<p>Company confirms that Contractor was given unrestricted access to Powerhouse on December 20, 2013 (Interface Milestone date was January 1st, 2014).</p>