

THE LOWER CHURCHILL PROJECT

Executive Summary

The Lcp project is a major hydro generation development composed of two sites located downstream of the existing 5428 Mw powerhouse Churchill Fall built at the end of the sixties on the Churchill River in Labrador.

Located 225 kms downstream Gull Island has a potential of 2250 MW and Muskrat Fall has 824 MW and is located 25 kms south of small city called Happy Valley/Goose Bay on the shore of the Labrador Sea.

SNC-Lavalin is involved since many years doing studies to develop the concept of the 2 projects.

In 2010 , Nalcor , subsidiary of Province of Newfoundland , responsible to serve the population of the island and Labrador in managing the electricity generation, transport and distribution and also responsible to develop all Energy sources potential for the government , went on the market with a RFP to source an EPCM firm to support the execution of the Muskrat fall generation phase.

SCOPE of the RFP

As an EPCM contractor, SLI was to perform the engineering, procurement and to manage all construction activities required to build the Muskrat fall hydro generation plant, AC substations, 2 x260 kms AC 315 kv lines in between Muskrat site and Churchill fall 735 kv AC substation , a 1100 kms DC line with a DC converter at each end between a site near St-John and Muskrat fall site.

The Strait of Bell-isle undersea water crossing was not part of the scope of the RFP.

In February 2011 , SNC-Lavalin was awarded the EPCM contract value of 285 cdn Millions dollars and start mobilizing resources in St-John as per the contract in early March.

The first milestone to meet was to hand to the client all described documents listed , a schedule with a basis of schedule and a class III estimate.The target date for the deliveries was December 15th 2011.This was described in the contract as;
Gate 3 Deliverable.

In January 2012, during the first meeting with Nalcor management we definitely feel that a gap was building up between the SLI team and the Nalcor team.

The main reason for the gap was the large difference in the project management hours and cost that has been issued with the gate 3 estimate compared with the estimate at the time of proposal, on which Nalcor has made their evaluation and decide to award to SLI the EPCM contract

After that January 2012 meeting, we spent a lot of time and working sessions to explain the basis of that estimate and clarifications and never succeeded to convince Nalcor management team to reconsider their evaluation. And that, even though, a provision under the terms of the contract allowed SLI to renegotiate the project hours and the fees accordingly.

The next phase after the gate 3 was the Early Works, where we were mobilizing the site staff to manage all infrastructure works required such as access roads, camp and temporary power supply.

This period has been very challenging since Nalcor management was micro managing on all decisions. Therefore, Either we were getting our own staff resignation or Nalcor would dismiss our site management team. The end result has been that Nalcor decided in April to take over all management roles and run the show.

An amendment No 10 for revised scope to reduce the EPCM services to to Engineering Design responsibilities and staff support Role to Nalcor as an integrated team.

All authority is currently under Nalcor representatives with the exception of design work.

At that time we were also in the deep procurement program to award contracts as per the schedule.

Really early in the process, we were in a position to see that bids results were trending on high to very high cost. The only packages at the time awarded within the budget was rock excavation for the powerhouse and the spillway and the T&G package.

In all workshop that we were having with Nalcor representatives SNC team was trying to convince them to adopt a packaging strategy limiting scope to a maximum of 500 millions dollars except for those like Turbine and Generator supply where standard practice is to scope supply and install.

Snc packaging strategy was promoting to built a strong management team able to perform good site coordination and interfaces management between contractors so not transferring all risks to contractors resulting in a potential 25% mark up on cost.

Nalcor project direction imposed their view to huge EPC or C packages covering very wide scope with value in the range of Billion dollars taking risks on unknowns.

We warned them that this strategy may end up to High cost and loss of control on the overall project schedule.

Finally SNC completed 90% of the engineering by December 2012 with the result that Nalcor decided to reduce the size of SNC staff in St-John and by the beginning of 2013 we were not having any SNC's manager working in St-John on a full time basis.

RECOMMENDATIONS

It is publicly recognized that LCP project is in a critical situation with huge cost and schedule overruns.

In fall 2015 , a new liberal government has been elected and have to find a solution on the path forward of the project and mitigate the impact of the overruns for the Newfoundland citizens.

SNCLAVALIN can be part of the solution but to be so , needs to have winning conditions

- Negotiate and agree on an amended contract that will be recognizing the real SNC's scope and responsibility and limiting risks.
- Obtain the commitment from the government and Nalcor Head to give us all necessary power of authority on deciding who will be part of the project team, decision making capability on all project decisions required to bring the project on track.
- Bring an SNC team to reassess cost, schedule and risks and do the necessary reforecast and get approval of the update budget and schedule
- Refund the project