Muskrat Falls Update

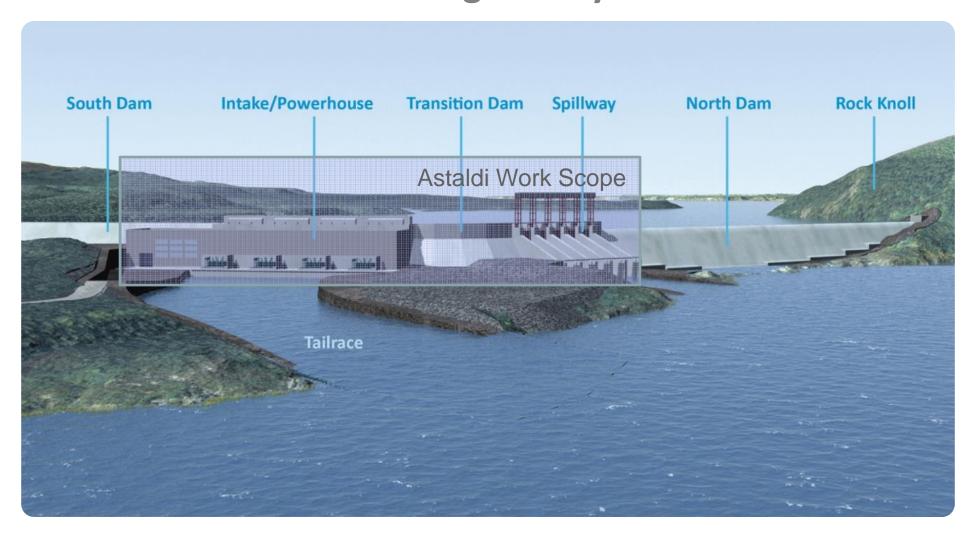
January 2016



DRAFT CABINET PRESENTATION



Privileged and Confidential- In contemplation of litigation Muskrat Falls Generating Facility



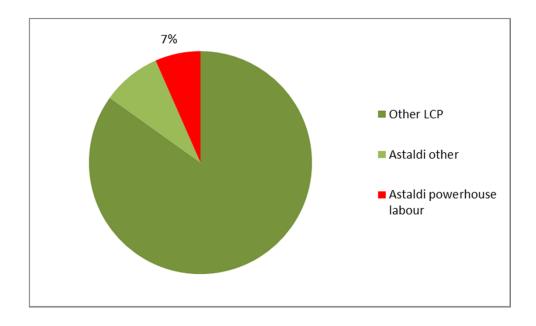


Astaldi in Context

Lower Churchill Project	
Component	Amount (\$M)
Transmission line	2,160
DC specialties	1,156
MF Generation	3,068
Other	1,082
Contingency	187
Total	7,653
lotai	7,653

MF Generation		
MF Component	Amount (\$M)	
Infrastructure and Services	550	
Electrical/ Mechanical & Hydro-Mechanical	622	
Civil works	739	
Astaldi Scope	1,157	
Total	3,068	

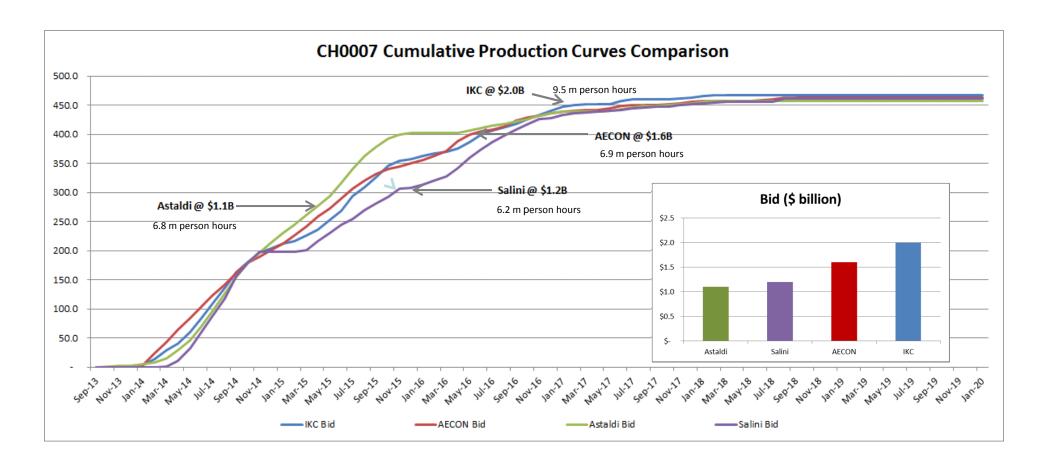
Astaldi Scope		
Astaldi Component	Amount (\$M)	
Mob/Demob. and Infrastructure	233	
Powerhouse Unit rated items (Fixed price)	201	
Powerhouse Labour	504	
Spillway and transition dams	219	
Total	1,157	





Benchmarking Astaldi with Competition

Privileged and Confidential in Contemplation of Litigation





Astaldi Performance to Date

- Exceedingly slow start in 2013-14
 - Astaldi ramp-up pace and missteps
 - Integrated Cover System (ICS) execution and consequential removal issues
 - Labor contract management opportunities missed
 - Astaldi mismanagement of the workforce allocation between production and support workers, particularly during 2014
 - Astaldi not realizing the productivity expectations in their bid
- Significant turnaround Summer 2015, as a result of the Project Team's work with the Contractor,
 - 150,000 cubic meters placed to date
 - performing much better at this point,
 - established, functioning team
 - potential for additional improvement



Nalcor Actions to Address Astaldi Issues

- Engagement at highest levels of Astaldi and Nalcor continuously over last 24 months – minimum of 18 Meetings at Senior levels including 6 CEO meetings
- Nalcor support and leadership in implementing performance improving initiatives and organizational improvements
 - Planning and Execution
 - Labour Management
 - Leadership and supervision, etc.
- Nalcor provided key Construction Management personnel to Astaldi
- Nalcor Site Team augmented with senior Project Management personnel to provide on site decision making and support to Astaldi
- 2015 Status
 - Astaldi concrete production rate vastly improved and Construction management team fully functional.
 - Nalcor continues to provide support, guidance and leadership



Current Situation

- Astaldi has not yet filed a formal claim, but has been constantly explaining their cost and solvency issues to us, and seeking to negotiate a solution.
- They have a very significant problem.
- We have continued to work in a collaborative manner with both parties focused on improving project execution, which is occurring.
- This has been the preferred mode of interaction to date, because premature submission of a formal claim in a contractual relationship of this magnitude would signal a change in working relationship which could adversely impact the optimum project execution by reducing the benefits of seeking continuous improvement opportunities in a collaborative fashion.
- Astaldi has now reached a point where they need to address issues which are fundamentally impacting their company's future.



Nalcor Analysis Completed

- Forensic audit on Astaldi cost, at their premises
- Cross industry project performance analysis of Astaldi global projects by third party
- Astaldi financial corporate performance including liquidity analysis
- Three separate reviews used to forecast likely ranges of cost and schedule to complete for Astaldi
- Historical data and fact capture done by claims and legal team to prepare for potential dispute and provide knowledge for negotiations
- Ongoing monitoring and analysis done of Astaldi's current operations and improvement to ensure ability and likelihood to complete
- Utilizing combination of internal expertise supported by external experts as outlined on following slide



Nalcor Expertise Utilized

- Westney Mega Project Risk consultants and Project Management Advisors
 - Examples of the expertise at this firm includes:
 - Retired CEO of one of the worlds largest construction companies
 - Retired senior VP of one of the worlds largest engineering and construction companies
 - Retired US Army corp of engineers Colonel
 - Founder of US Construction industry institute
 - They also utilize top tier financial sub-consultant to drive financial analysis
- Cleveland and Assoc.
 - Forensic Accountant with Construction Expertise
- McInnes Cooper Construction lawyers
 - Various subconsultants
- Long International
 - Construction Claims advisors
- Internal Team members with combined Mega Project experience of hundreds of years including:
 - Commercial Experts
 - Data analysts
 - Construction experts
 - Project Management Experts



What is the Contract Status?

- The contract with Astaldi is solid
- From a pure contractual perspective, the issues that have occurred are the result of Astaldi's actions and are the responsibility of Astaldi
- There are a combination of performance guarantee provisions in the contract
 - \$200 million Letters of Credit
 - \$150 million Performance Bond
 - Parent Company Guarantee Italy Head Office
 - \$75 million Liquidated Damages provisions



Why Negotiate with Astaldi?

- Although our pure contractual position is strong, the implications of not supporting Astaldi could result in very large exposure to the Project if Astaldi is not able to complete the job due to insolvency or even if Astaldi does not complete the job in a timely manner due to cash flow issues.
- The risk of these exposures is high, and just ignoring them because the contract position is strong is not a prudent or acceptable way forward.
- The burden of these risks will fall back to the Project by default if Astaldi is actually unable to manage them.
- The most effective way to minimize the risk and exposure when we can see it ahead of us is to do it up front, as early as reasonably possible, when we have the highest ability to contain it.



Potential Outcomes, No Solution

- Estimated cost to complete for the contractor represents a very significant increase over the contract value.
- If we do not seek a negotiated solution, this will result in two potential outcomes;

Outcome A

- In-depth analysis, coupled with Astaldi's direct feedback to Nalcor, indicates a significant
 probability that this situation could result in Astaldi insolvency and potentially cause default
- At that point we would bring in a new contractor to complete the job, resulting in significantly more cost to the Project to complete, and a higher probability of even more schedule delay

Outcome B

- At the very least, Astaldi's cash flow issues will result in significantly slowing concrete placement and frustrating tactics
- Focus will shift from effective project completion to Astaldi cash and solvency needs
- Massive claim will be filed by Astaldi
- Significant even higher knock-on effects to project cost and schedule



Preferred Outcome

 The preferred option is to continue to work with Astaldi who are performing much better at this point, assist them with some of their cost issues to a point, thereby significantly increasing the certainty of finishing the job with the least amount of cost and schedule growth to the project



Astaldi's Cost Issue + Schedule Impact

- Additional cost to Astaldi over contract bid to complete (as estimated by Astaldi) is \$600 - \$650 million, not including profit. (this range could be higher, 600 - \$800 million).
- Detailed discussions between Project Team and Contractor has identified a schedule delay impact of 12-18 month to powerhouse completion, provided we continue to work collaboratively



Commercial Principles

- Must continue to work diligently Threats to stop = default
- Must perform as good as another contractor
- Must continue to work on efficiency (Realistic Plan)
- Must achieve acceptable Quality
- Astaldi must take exposure equivalent to at least our value of time
- Astaldi must take exposure that equals at least their security (Not PG)
- We will not be exposed to any losses last year for poor performance
- Will not give up our strong contract position
- Must get something physical for any additional investment
- Must have full waiver of claims



How to protect any further payment?

Question

 Provided we reach an agreement to provide more to Astaldi, how do we ensure such value is protected in the event Astaldi does not perform and/or becomes insolvent anyway?

Answer

- 1. Any additional value provided to Astaldi would be tied to actual, physical performance, and would not be paid unless we could see corresponding progress as agreed no cash out until we see the agreed progress
- The amounts and timing of value provided would be structured to assist their cash flow and solvency profile



Options Analysis Outline

- Elements to consider
 - Schedule increase implications on powerhouse
 - Components of estimated all-in additional cost to Project;
 - Cost of delay to Project to keep support facilities operating
 - Cost to compensate other contractors for related changes
 - Cost to assist Astaldi, if this option proceeds
 - Cost to replace Astaldi with another contractor, if this option proceeds
 - Offset value of drawing on Astaldi contract performance guarantees
 - Relative level of certainty and risk associated with each option
- Implications on trade-off regarding IDC vs Bond Payment separate from this summary



Options Outline

Option 1 - Continue with Astaldi as is, no assistance;

- Outcome 1A Insolvency/default
 - Estimated net additional cost to Project with (higher probability)
 \$650-950
 - Estimated schedule increase 21-27 months
- Outcome 1B No default, continued solvency
 - Estimated net additional cost to Project with (lower probability) \$350 500 million
 - Accompanied by a large claim which would add to cost exposure
 - Estimated schedule increase: Difficult to quantify, depends on contractor situation, limited control, have to assume > 24 months
 - Value of working together minimized, significantly increasing risk
- Much less certainty, higher risk, clearly trending to the higher ranges



Options Outline

Option 2 - Continue with Astaldi as is, with assistance;

- Outcome
 - Assumes a net amount of cost assistance from Project to Astaldi in \$250-300 million range (note - not certain this will be accepted)
 - Estimated net additional cost to Project \$430-575 million
 - Estimated schedule increase: 12-18 months
 - Much higher certainty, less risk with this option, if successful

Option 3 - Astaldi is terminated for cause (Same outcome as Option 1A)

- Outcome
 - Estimated net additional cost to Project \$650-950 million
 - Estimated schedule increase: 21-27 months
 - Much less certainty, higher risk with this option



Why \$250-300 mm?

 Needs to be meaningful to mitigating exposures to both parties to have a chance of successfully achieving a way forward

Project Perspective

- Project most likely exposure without settlement is \$650-950 million
- A \$250-300 million dollar additional input to Astaldi has the following impact
 - reduces cost exposure range to from \$650-950 million to \$430-575 million (including the \$250-300 million)
 - Minimizes expected incremental schedule impact in range of 12-18 months
 - Payments are only made if measureable production targets achieved
 - Maintains collaborative approach, increasing probability of success
 - Significantly increases certainty of successfully meeting these outcomes, and maximizes risk reduction



Why \$250-300 mm?

<u>Astaldi Perspective</u>

- Astaldi most likely exposure without settlement is \$650-800 million
- A \$250-300 million dollar additional input to Astaldi has the following impact
 - Provides a cash flow injection which is material to their financing issues during their highest exposure period, 2016-2017
 - reduces Astaldi cost exposure range from \$650-800 million to \$400-500 million (including the \$250-300 million)
 - Maintains collaborative approach, increasing probability of success
 - Significantly increases certainty of successfully meeting these outcomes, and maximizes risk reduction
- Note, not certain if this will close a deal with Astaldi



Potential Parameter of a Settlement

Option 2 - Continue with Astaldi as is, with assistance;

- Outcome
 - Estimated net additional cost to Project \$430-575 million
 - Assumes a net amount of cost assistance from Project to Astaldi in \$250 300 million range (note not certain this will be accepted)
 - Estimated schedule increase: 12-18 months
 - Much higher certainty, less risk with this option, if successful
- Structured to ensure payment tied to measureable production
 - Unit Rates tied to Concrete Production
 - Key Milestone Payments
 - Stretch Targets
 - Performance Security Maintained
- Note, not certain if this will close a deal with Astaldi





MC2016-

NR/DM E Martin/Nalcor Deputy Clerk File XX2016-

A Presentation respecting Muskrat Falls Update – January 2016 was deferred.

Aulia Mullaley
Clerk of the Executive Council