

From: emartin@nalcoreenergy.com
To: [Mullaley, Julia](#)
Cc: [Bown, Charles](#)
Subject: RE: Draft Cabinet Presentation
Date: Friday, January 22, 2016 5:36:43 PM
Attachments: [.png](#)
[MF Briefing V3 - January 2016.pptx](#)

Here is the version for the Premier. I had to modify Option 1B - I had the wrong numbers in there, just noticed on a quality check.

Ed



MF Briefing V3 - January 2016.pptx

"Mullaley, Julia" ---01/22/2016 05:26:45 PM---Any way to get in next few minutes as just getting ready to send draft to Premier? From: EMartin@nal

From: "Mullaley, Julia" <JMullaley@gov.nl.ca>
To: "EMartin@nalcoreenergy.com" <EMartin@nalcoreenergy.com>
Cc: "Bown, Charles W." <cbown@gov.nl.ca>
Date: 01/22/2016 05:26 PM
Subject: RE: Draft Cabinet Presentation

Any way to get in next few minutes as just getting ready to send draft to Premier?

From: EMartin@nalcoreenergy.com [mailto:EMartin@nalcoreenergy.com]
Sent: Friday, January 22, 2016 5:25 PM
To: Mullaley, Julia
Cc: Bown, Charles W.
Subject: Re: Draft Cabinet Presentation

Charles and Julia, I have to make a few modifications - found a couple of places need changing
Ed

From: Ed Martin/NLHydro
To: "Julia Mullaley" <jmullaley@gov.nl.ca>, "Charles Bown" <cbown@gov.nl.ca>
Date: 01/22/2016 02:14 PM
Subject: Draft Cabinet Presentation

Julia and Charles,

Here is a V2 draft of the presentation. I would appreciate feedback before finalizing. (Note: I am VERY CONCERNED about confidentiality).

Ed

Same questions as last time, as well;

1. Although I have not included it yet, because this is a presentation to Cabinet, with most folks will likely not having the Nalcor context, I believe I should add some context up front to provide some context, such as the following;
 - Nalcor financial outlook for next 6-8 years, indicating we will be providing significant returns to province post 2018
 - brief project rational, 2-3 slides, indicating significant value exists to mitigate rates as well
 - overall project status, 2-3 slides. progress and a picture or 2
2. Minister has also asked for governance outline, which I have - should we include it in this deck?

[attachment "MF Briefing V2 - January 2016.pptx" deleted by Ed Martin/NLHydro]

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Muskrat Falls Update

January 2016

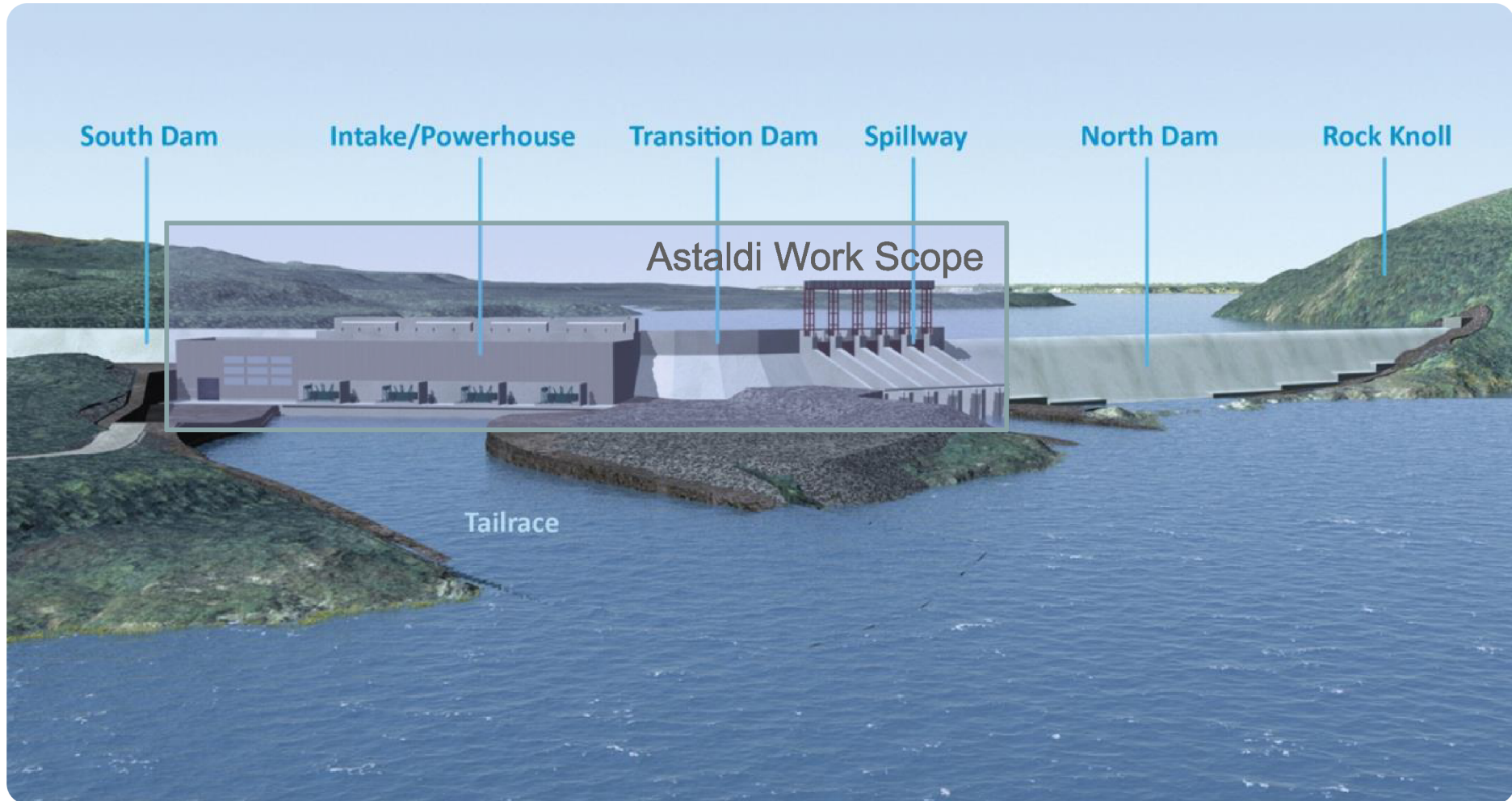
Boundless Energy



DRAFT CABINET PRESENTATION



Muskrat Falls Generating Facility

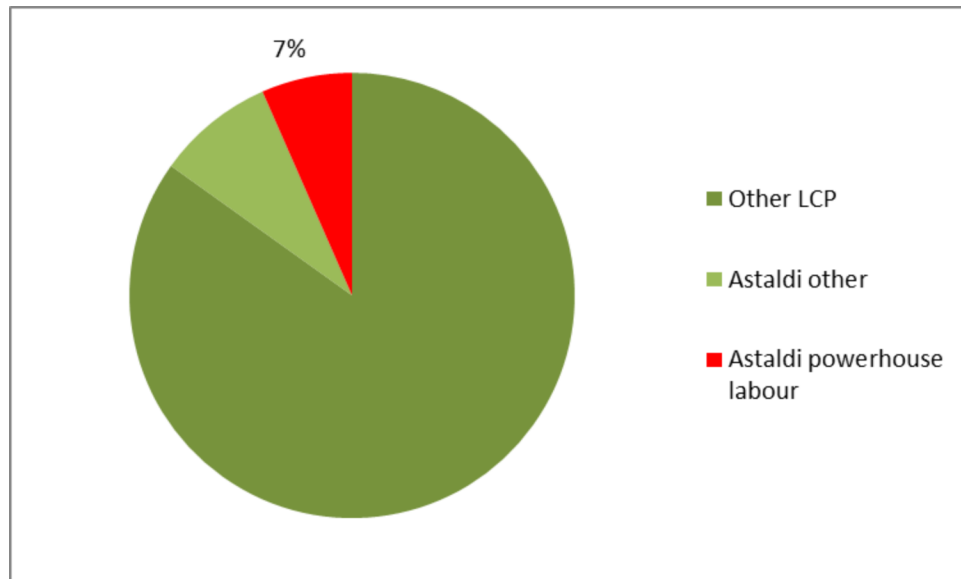


Astaldi in Context

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

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

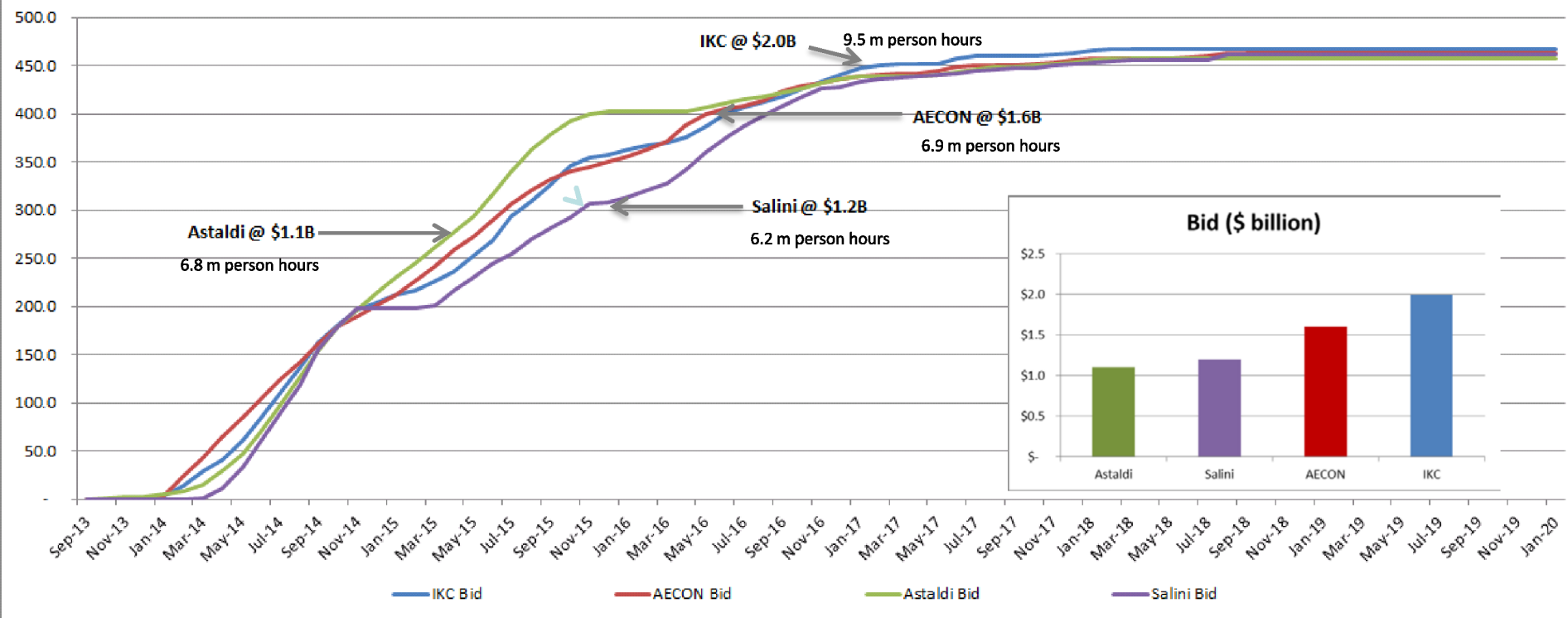
Astaldi Scope	
Astaldi Component	Amount (\$M)
Mob/Demob. and Infrastructure	233
Powerhouse Unit rated items (Fixed price)	201
Powerhouse Labour	504
Spillway and transition dams	219
Total	1,157



Benchmarking Astaldi with Competition

Privileged and Confidential in Contemplation of Litigation

CH0007 Cumulative Production Curves Comparison



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
2. 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





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