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Sent: Tuesday, June 23, 2015 8:40 AM
To: David Steele; Richard Noble
Subject: Response to "Preliminary Findings"
Attachments: response to E&Y FINAL_june 17.docx

David and Richard,

For our discussion.

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Nalcors Lower Churchill Project (LCP) Team has reviewed the draft document of Preliminary Findings for Nalcor feedback dated June 8th, 2015. We believe this proposed section requires a significant re-write to conform to the stated scope of work associated with the intended review and to more accurately reflect the information provided to facilitate this review.

General

In General, the LCP project team notes that the terminology adopted in many cases is indicative of an audit when the scope clearly intended for this to be a review. Examples are the title, "Preliminary Findings" and the label "observation" and/or "gap" for which we believe is intended to be a "suggestion" from the consultant. This may be characterized better in some other section of the overall report. However, it may be useful to restate this intent again in a preamble to the section on the outcome of the review.

Similarly, many of the suggestions (this response will use this term in lieu of "observation or gap") listed deviate from the review criteria and we believe they should be removed from, or altered within, the report. We believe many of the suggestions made address issues in the status of the project and/or performance of the Contractors (a Contract Administration focus). This is out of scope as these issues are not aligned to the principles and objectives of the review, which was to confirm project controls has effective processes in place and the quality of the reporting is appropriate. Furthermore, it does not properly address the fact that the LCP team is very much aware of project status and performance issues, has taken steps to mitigate and correct same (or maintain alternative methods until contractor rectification). All this was discussed with the consultant throughout the review period.

Among the suggestions being made, it should be expected that the consultant provide a reference to a standard and/or practice for review related to the execution of mega-capital projects. Otherwise, the statements made constitute an opinion expressed by the consultant, which is out of scope for this review.

In summary, the LCP team believes each of the suggestions made should not be incorporated as written in the report as they hinge on Contract Administration (not reviewed) rather than Project Controls issues according to the criteria of the review or are opinions of the Consultant which did not reasonably contemplate the Owner and Construction Management needs and requirements in reporting methodologies. Detailed feedback on the overall text and suggestions are provided in the following sections.

Section i) Schedule Management Processes

Reference	Feedback
Page 3, 2 nd	LCP does not find it helpful that the consultant chooses to start the review by
Paragraph	stating what we are not doing rather than state what it is that we are doing.
	Furthermore, we do not agree with the statement that a full earned value
	management system constitutes leading practice when the structure and set up of

Reference	Feedback
	LCP is an integrated Owners and Construction Management portfolio.
	We believe the statement used misleads the recipients of the report that we do not have leading practice systems in place, that that is simply not true. Owner's level reporting does not benefit from Earned Value analysis when that system is employed at the lower detailed level, and the true structure of the project is managed via individual projects (components) that have integration points, yet remain as individual projects with their own critical paths and execution strategies. At the Contractor reporting level, full earned value systems are in place, to capture the intent, in accordance with PMBOK.
Page 4, 1 st paragraph	We reiterate that using the word "gaps" implies this is an audit, which this is not, nor applicable for the current review process.
Detailed Observation 1	The LCP team believes that the process is fully documented to an appropriate level of detail within the procedures provided to the consultant (i.e., Project Controls Management Plan and the internal working document IPS [resent due to error made in copy uploaded to data room]).
Detailed Observation 2	We agree that, according to PMBOK, appropriate thresholds should be defined to trigger an action response for deviations, however, it is our belief the LCP has defined appropriate processes and procedures which comply with these threshold requirements. The team utilizes a variety of milestones and integration points within the Contractor's and Component schedules to monitor slippage in the program and any slippage within those constitutes a deviation. In the meantime, any and all variances in performance are noted and managed at the component and Contractor levels for mitigation and corrective actions. Therefore LCP believes we are applying the most stringent thresholds as the Contractors are expected to provide mitigation strategies for all reported deviations no matter the scale of variation.
	If the consultant has other ideas, the LCP team requests a reference to Variance Threshold Standards the consultant is advising should be in place.
Detailed Observation 3	The purpose of the IPS is to function as an Owners level schedule and not a roll up of the detailed schedules of each of the projects. The LCP team manages both the Owners team and Component levels and applies appropriate controls for each intended purpose. LCP disagrees that both shall be a roll up of the component levels due to the independent nature of the components on the overall outcome of the entire Project as discussed with the reviewer. The ability to cross check forecasted end dates is managed by understanding the relationship of the activities mapped that influence the IPS from the Component or Contractors Schedules.
Detailed Observation 4	We do not believe this to be an observation but a comment that a misunderstanding of the purpose and how the IPS and Component reporting functions. The IPS is an Owners level report which reflects the variances of the Components of major or crucial areas of the project. Our reporting does not, nor is it intended to, use the IPS as a stand alone tool for understanding where delays occur on the Project. The Component level reporting is the source for that information. The Engineering and Procurement portions of the Component level

Reference	Feedback
	schedules would influence the Construction phase if any delays were noted and thus would be reflected in the IPS.
	However, it is also worthy to note, the Engineering is essentially complete for C1, C4 and SOBI. C3 engineering is contained within the EPC forms of Contracts and managed at the component level.

Section ii) Schedule Management Compliance

Deference	Pandhad.
Reference	Feedback
1 st sentence	What does "established a reasonably conventional organization structure" mean exactly? Is the consultant trying to offer an opinion on the organization structure adopted to support management of the program? Why not drop the qualifiers "reasonably conventional".
Paragraph 2	The word "assessment" implies more of an audit function? We believe "review" is more consistent with the scope and would be more appropriate?
Bullet 1	The IPS is not the "Core" schedule management tool. It is the Owners level reporting tool. The Core is the use and integration of all Schedules including the IPS.
Bullet 4	Typo - "Contractors to get them to comply" add bolded words
Detailed Observation 1	LCP believes the observation should be adjusted in its direction due to the fact that the Process is fully deployed and consistently executed on how the contractor's schedules are to be incorporated, and that full implementation will not occur until all Contracts are executed. Where Contractor's Schedules are approved and functioning according to the requirements, they have been embedded. The issue that remains, and is not properly represented by the Consultant (as it implies "all" rather than in instances, relevant to the timing of the execution of the Contract), that the schedule control document and plans are incomplete and/or fail is a Contract Administration issue, not examined as part of the scope of this review, whereby there are known challenges with some of the Contractors that have not submitted compliant schedules and/or plans in a timely manner upon Contract execution. It should also be noted that this is an industry known issue across all Mega projects.
	The management team is aware and addressing these challenges. Our response to this matter is that the management team is utilizing additional elements to ensure the integrity of delays and corrective actions can still be employed and has demonstrated the efforts within the correspondence to Contractors and highlighted deviations in reporting at all levels. The need to roll up to the IPS level is again, not the intent and purpose of the IPS
Detailed Observation 2	This observation is out of scope as it directly relates to status and performance of a contractor. With the procedures in place, the observation noted has indeed been escalated to the highest levels of the Organization as well as the Contractor.
Detailed	LCP Team disagrees with the statement that corrective actions are not implemented

Reference **Feedback** Observation 3 timely based on the examples provided in Appendix C. Both Alstom and Valard's baseline schedules were approved with the typically frowned upon constraints. However, due to the logic employed by the contractor and confirmed with the approval of the schedule in accordance with our procedures, these constraints were deemed appropriate. For Alstom the constraints are mainly on Owner supplied transformers, which is an appropriate constraint for the activity noted. For Valard, although the Coordination Procedures state that the use of constraints should be minimized. This schedule uses these constraints on the completion milestones for major construction efforts (4) for each of 4 Work Fronts—Foundations, Assembly, Erection and Stringing—resulting in 16 constraints. The other two constraints are on the start and end of this project and are typical. The use of these 16 constraints on a complex network of 5,499 activities is not excessive—this project consists of 5 segments over 3 Work Fronts. Although Finish On or Before constraints will not allow an activity to develop positive float but will reflect negative float which is the reason for their use in a T/L schedule such as this. Using these constraints provides heightened visibility of these various series of activities which is beneficial to the C4 project. These milestones may not necessarily be on the longest path to project completion and the use of these constraints provides knowledge of how late these milestones may be from originally planned completion dates and therefore their use on this schedule was deemed appropriate. Engineer's approval was received when this baseline schedule was approved in Aconex. NOTE: The use of the word Engineer in these documents is a left over from the SNC beginnings. It means Owner or Project Representative. For Nexans, the timeliness is subjective by the consultant. LCP team does not see a concern with the time since awareness of the constraints was made by LCP and the ongoing changes the Contractor is implementing. An agreement to complete the corrective action was made with the Contractor and falls outside the timeline of this review, yet will be completed well ahead of the start of Construction for this portion of the Contract. Detailed LCP team refers to the discussion that the Owner's schedule and Component or Observation 4 Contractors detailed schedules are not executed as exact roll ups of the other, the IPS filters to critical significant work while the detail schedules can include significant other work not deemed a requirement for the IPS report. The examples noted are of insignificant value to the outcome of the reports. Detailed This observation has not been tested against the Contract Administration **Observation 5** department as it was not part of the review thus possibly should not be included. LCP PC Team does not agree with setting a Target date for the completion of corrective actions by contractors as the contractor has a responsibility to complete the action in accordance with their Contract. The delays to this are being monitored and part of the overall management of the Contractor.

Section iii) Cost Management Processes

Reference	Feedback
Paragraph 2	Similar to the introduction to Section i), it is not helpful to start the discussion with what LCP is not doing rather than get to the point of what we are doing. Furthermore, LCP disagrees with the statement that we are not following Leading Practices. As discussed in the review, a full earned value management system is not applicable at the summary level on a Mega Project as the use of, and intended actions that stem from Earned Value Methodologies are effective and maintained at the Contractor level in accordance with the type of contract fit for Earned Value practice. The attempt to use and control the project at the highest level using Earned Value would be extremely cumbersome and ineffective for determining necessary corrective actions. This can only be effective at the proper levels within each contract.
Bullets 1 and 2	We recommend "reasonably" be replaced with "appropriately" to align to adherence to PMBOK or other leading practices.
Detailed Observation 1	Cost Variance thresholds are not necessary as all cost items are maintained under Contract line items which are, through numerous methods, reviewed and forecasted monthly. Any deviations are reviewed and upon validation, raised through the trend and change management process which is visible to senior management. Due to the wide variations of contract models and line item progress methods employed, a "one-size-fits-all" variance threshold analysis would prove effort intensive and of little value as other processes in place are superior.
	If the consultant has other ideas, the LCP team requests a reference to Variance Threshold Standards the consultant is advising should be in place.
Detailed Observation 2	It is not appropriate to try to define explicit criteria of when to Re-baseline. The overarching basis is when a significant event occurs whereby the previous execution plan is deviated against, a revised plan due to scope, mitigations or revised execution plan. The discretion to re-baseline is maintained as noted in the procedures with the Project Director's direction.
Detailed Observation 3	LCP team does believe a detailed checklist is in place to validate contractors cost. Contractor costs are validated through the Payment Certificate process, against the terms of the Contract (quantity takeoffs, measurement, man-hours signed for etc.). Each line/pay item of the Contract has its own means and methods to calculate and verify the accuracy of the submission by the contractor. Thus the Payment Certificate in itself is the checklist.
Detailed Observation 4	LCP team believes the review has mixed the intention of the Contingency and Risk Management. The Contingency is to manage known unknowns and is typically modelled against the progress of the Project and the certainty earned as the project progresses through development and execution. Uncertainties or Risk are managed outside the Project contingency and, in practice, are handled through a management reserve (not reported at the Project level).

Section iv) Cost Management Compliance

Reference	Feedback
1 st paragraph	We recommend replacing "a reasonably" with "an appropriate"
Detailed Observation 1	LCP maintains it has raised and communicated the issues through all levels of management appropriately and has continually reviewed the situation in accordance with the Astaldi Contract, which at the time of the review and reporting periods remains with the Contractor to develop a solution. Quantification of an impact is not possible due to the terms of the Contract that maintains the figures as reported; this was discussed with the consultant.
Detailed Observation 2	LCP team does not view this item as an issue with Cost Management Compliance. The team has demonstrated practices to ensure faulty Contractor forecasts are not used and carried forward to upper management in order that proper information as known at the time is best utilized. Our means and methods and knowledge of the Contracts provide a greater demonstrated level of understanding than some Contractor reports.
Detailed Observation 3	LCP team does not believe the review has appropriately reported the issue. The different system stated is irrelevant to trending and forecasting. Nexans forecast remains in line with projections thus no trending has been raised.

Appendix A

- CD0502 Alstom Status of control Schedule baseline comment incorrect Approved baseline was provided to the Reviewer.
- CT0327 Valard Status of control Schedule baseline comment incorrect Approved baseline
 was provided to the Reviewer, there is no re-baseline anticipated during the period of review.
- LC-SB-003 Status of control Schedule baseline comment should add "due to change order issued".

Appendix B

- Construction Power 100% Complete according to the requirements of the IPS, secondary construction power elements are of contractors own need and both primary and secondary elements are included at the detailed component level.
- South Dam The reference to South Dam under the IPS bar Chart relates to 1 particular area
 whereas in the Rosetta stone spreadsheet, South Dam and South transition dam are together.
 Thus only work has progressed on the South Transition dam not the South dam.
- 735kV AC The particular area on the IPS bar chart shows work complete, however the IPS
 progress rosetta stone includes other areas whereby the 100% of the item noted accounts for
 an overall insignificant amount of progress.

Appendix C

Comments noted above under response to Section ii) Schedule Management Compliance – Detailed Observation 3.