From: <u>kenmcclintock@lowerchurchillproject.ca</u>
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**Subject:** Justification for BPJV

Date: Wednesday, August 12, 2015 4:04:36 PM

Attachments: \_\_png

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### Scott

Here is the new wording I have put into the Award Recommendation. You may need it to discuss our position and for follow-up with Bidder 3.

The most important piece is Section 2

Cheers Ken



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### **Ken McClintock**

Consultant

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You owe it to yourself, and your family, to make it home safely every day. What have you done today so that nobody gets hurt?



# LOWER CHURCHILL PROJECT BID EVALUATION AND AWARD RECOMMENDATION CH0009-001 CONSTRUCTION OF THE NORTH AND SOUTH DAMS

SLI	TITLE	NAME	SIGNATURE	DATE
PREPARED BY:	Contract Administrator	Ed Over		
REVIEWED BY:	Sr. Commercial Advisor	Ed Over		
REVIEWED BY:	C1 Project Controls Lead	Carlos Fernandez		
REVIEWED BY:	Package Lead/Area Manager	Ken McClintock		
APPROVED BY:	Project Manager	Scott O'Brien		
APPROVED BY:	Supply Chain Manager	Pat Hussey		
REVIEWED BY:	Project Controls Manager	Anthony Embury		
REVIEWED BY	Deputy Project General Manager	Jason Kean		
APPROVED BY:	Project General Manager	Ron Power		



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### 1 PURPOSE

The purpose of this document is to provide the results of the bid evaluation and recommend award of CH0009-Construction of the North and South Dams.

### 2 RECOMMENDATION

Bidders are ranked as follows based on the calculated Final Estimated Contract Value:

First Place - Barnard-Pennecon JV (BPJV)

Second Place - H.J. O'Connell-Dragados JV (ODJV)

Astaldi Canada Inc. - not evaluated for reasons stated in Section 8.1

Based on the approved Evaluation Plan, the "Final Estimated Contract Value" is a composite value which takes into account the initial bid price, bid normalization, commercial assessment and technical evaluation for each bidder. The ranking above takes into account the addition of 113,295 Mhrs (\$9,970,000 or \$6,100,000 after application of the bidder's Risk/Reward credit presented in Attachment 1c) as a normalizing factor to account for the additional site craft labour Mhrs believed to be required to complete the work by Barnard-Pennecon JV. In addition, and to account for the fact that Barnard-Pennecon JV does not include a cap on its craft labour Mhrs, whilst H.J. O'Connell-Dragados JV includes a lump sum, a further sensitivity analysis was conducted. The result indicates that the "Final Estimated Contract Value" would become equal between the two bidders following the addition of 140,000 craft labour Mhrs to the Barnard-Pennecon JV bid. This would be equivalent to a 25% overrun in BPJV's craft labour Mhrs.

The following Attachments are provided to support the above analysis and conclusion:

Attachment 1 – Main Summary Normalized

Attachment 1a – BPJV Mhrs. Normalization & Cost Impacts

Attachment 1b - Sensitivity Analysis

Attachment 1c - Craft Labour Target Price Model

Based on the above, it is recommended that CH0009 –Construction of the North and South Dams be awarded to BPJV at an Estimated Contract Value of \$288,793,726 (excluding HST, Optional scope and escalation on fuel, cement and flyash. BPJV's defining factors are schedule assurance, solid execution plan and an experienced project team.

As stated in Section 5, there has been a significant delay in bringing this Package to this point. The development of the Evaluation Plan and initial assessment of the bids received



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was carried out by a Bid Evaluation Team (BET) that included Roy Lewis (Contract Administrator) and Mark Turpin (Package Lead/Area Manager). In May, due to project resource requirements and other circumstances, bid evaluation activities were taken over by Ken McClintock, John Mulcahy, Ed Over and Greg Snyder. This team completed all activities necessary to bring this Package to this Recommendation stage.

This new BET reviewed all previous work carried out by the first BET. In addition to the activities stated in Section 8.2 below, the BET believed that an alternative evaluation methodology would be more suited to the nature of the work. More specifically, the BET believed that the evaluation should focus more on project execution, schedule and quality of the proposed project management teams. Accordingly, this alternative methodology was employed as part of the sensitivity analysis conducted. Attachments 10a and 10b provide the basis of evaluation (methodology) as well as the results using two normalizing scenarios (113,295 and 382,000 Mhrs).

This method supported the result reached using the approved evaluation plan ie. that BPJV achieved the first place score (see Attachment 10a). Further, and as provided in Attachment 10b, this alternative methodology indicated that an additional 382,000 Mhrs would have to be added to BPJV's bid as a normalizing factor before it would move to a second place position.

Although both of these evaluation methodologies attempt to determine the best bid, they do not adequately accommodate selection of a bidder on a "best for Project" basis. Accordingly, the BET wishes to highlight the following as a confirmation that its selection of BPJV is "best for Project".

- 1. Although completion of the RCC North Dam is an important Milestone, focus must be on the achievement of the River Diversion as being critical to overall Project success. River Diversion has always been somewhat at risk due to the nature of the work and the unpredictability of Spring river conditions. This Milestone is now further at risk due to the delay in awarding this Package.
- 2. To achieve River Diversion as planned, the successful bidder must "hit the road running" upon Award. The BET believes that BPJV is better prepared to meet this challenge as its project team is experienced and balanced with a strong leader.
  - The BET does not have the same confidence in ODJV's proposed team.
- 3. BPJV's River Diversion execution plan is solid, demonstrating a good understanding of the work and infrastructure. They have also proposed equipment resources and an upstream bridge design which supports their plan and schedule.
  - ODJV has struggled to provide an execution plan which can be validated by the BET. Its equipment specifications and proposed upstream bridge design will seriously limit ODJV ability to meet the Project schedule for River Closure.
- 4. BPJV's schedule for River Closure has built-in capacity to handle progress issues. In addition, its schedule completion date for River Closure shows a seven day float.



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ODJV has not demonstrated that there is any additional capacity in its schedule. ODJV's schedule completion date for River Closure shows zero days float.

In order to allow **Barnard-Pennecon JV** to proceed with early activities while the final Agreement is conformed, it is also recommended to issue a Limited Notice to Proceed (LNTP) to **Barnard-Pennecon JV** for a 60 day period, the value and scope of which will be determined immediately following approval of this recommendation.

### 3 BIDDERS LIST

Request for proposals were issued to the following companies:

- 1. Astaldi Canada Inc.
- 2. Barnard-Pennecon JV
- 3. H.J. O'Connell-Dragados JV

### 4 SCOPE

The work consists of the following:

- a) Construction of the North and South Dams
- b) Construction of the upstream, downstream and intake channel cofferdams
- c) Removal of Cofferdams 1, 2 and 3 and downstream section of the RCC riverside cofferdam
- d) Excavation of the Tailrace Rock plug and
- e) Supply, installation and removal of the temporary upstream bridge over the spillway approach channel.

### 5 RFP SCHEDULE AND EVALUATION KEY DATES

RFPs were issued on 01-August-2014 with a closing date of 22-October-2014. All proposals were received before the closing date and time and were opened on 24-October-2014 at Nalcor's office in St. John's, NL. The Bid Opening Record is included in Attachment 9.

Although the original schedule was to award the package by Dec 23, 2014, two serious issues prevented this from occurring.

Firstly, there was a great deal of uncertainty around the completion dates related to the construction of the powerhouse, spillway and gate installation. As CH0009 delivery performance is highly dependent on interfaces with the other contractors executing this scope, it would not be prudent to award CH0009 without more certainty on completion dates. The focus of this strategy was claims avoidance.

Secondly, the Estimated Contract Value exceeded the budget by more than 50%. It was decided, therefore, to carry out a cost reduction program to identify areas of cost savings, which could be achieved.



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Both these issues have been addressed and taken into account in this recommendation.

### 6 EVALULATION TEAM

- Commercial: Ed Over (Lead), Ken McClintock, Steve Goulding, John Mulcahy, Aiden Meade
- Technical: Ken McClintock (Lead), John Mulcahy, Greg Snyder, Abdellah El-Bensi, Todd Smith
- Health and Safety: Sean LeeEnvironmental: Dave Haley
- Quality: Paul FraserBenefits: Maria MoranRisk: Carlos Fernandez

### 7 EVALUATION CRITERIA

The Bid Evaluation was completed in accordance with the approved Bid Evaluation Plan dated 15 September 2014.

The following evaluation criteria were used to evaluate Bidders' Proposals:

### Criteria

- Commercial
- Technical
- Newfoundland Benefits
- Quality
- Environmental
- Risk
- Health & Safety

### 8 COMMERCIAL

The commercial evaluation included an analysis of the Schedule of Price Breakdown (Appendix A2.1) against the estimate, review and assessment of the bidder's exceptions and proposed changes to the payment terms and conditions and the Articles of the Agreement, and the development of a Final Estimated Contract Value. The Commercial Evaluation is included in Attachment 2. The scoring of the terms and conditions has been applied to the Total Estimated Value After Normalization.

The package is forecasted to be \$107,000,000 over budget. A recent bottoms up estimate was completed by Company, which indicated an overrun of \$87,000,000 against the estimate. The scope of work has been reviewed in detail with the two lowest priced proponents. The two major cost contributors to the budget overrun are the Bidder's indirect costs and labour costs associated with low productivity.



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See Attachment 2a – Estimated Contract Value and Comparison to Estimate

### 8.1 BID OPENING

The commercial evaluation of the bids concluded that:

- All bids significantly exceeded the DG3 project budget.
- There was a need to bring the bids to a common basis.
- Following a preliminary evaluation it was determined that the bid received from Astaldi
  was not commercially attractive from a cost and risk perspective. The proposed target
  price was significantly higher than the two other bids. Accordingly, Astaldi was
  excluded from further evaluation and was informed that they were not the successful
  hidder
- There was a need to explore potential cost reduction opportunities.

### 8.2 CLARIFICATIONS AND COST CUTTING ACTIVITIES

As identified in Section 5 above, a cost cutting program was initiated following an initial review of the proposals received.

After an in-depth commercial and technical evaluation including face to face meetings with the remaining two commercially acceptable Bidders (Barnard-Pennecon JV and O'Connell-Dragados JV) in February and March, the two Bidders tabled cost reduction opportunities including changing the cost risk for trades labour. The two Bidders proposed unit prices with hybrid target cost models for the labour portion of the work.

While the hybrid target cost proposals both presented the opportunity for lower labour costs they also increased the Company's cost risk. Further discussions have been held with the Bidders to mitigate this risk, with some movement by one of the bidders by removing the staff labour risk from the target cost. The other bidder only proposed marginal savings.

During the period from mid-May until July 24, all technical exceptions were re-evaluated with responses provided. Clarification teleconferences were held with each Bidder to introduce cost saving ideas generated by Company. At Company's request, and due to the extent of the execution and specification changes introduced by Company, both bidders submitted updated proposals on June 30. Subsequent to the receipt of the updated proposals, further changes to site access and laydown areas were required to accommodate current field activities. These changes were communicated to both bidders to request the impact, if any, on their proposals. The bidders' responses have been incorporated into this recommendation. See Section 9 for a summary of the changes incorporated into the revised proposals.



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### 8.2 FINALIZATION

On July 24, **Barnard-Pennecon JV** was recommended during a meeting with senior management. After this meeting work proceeded to finalize all documents and gain required approvals.

### 8.3 ARTICLES

The **Barnard-Pennecon JV** made very few minor changes to the terms and conditions. The only major exception was that they refused to accept the trades labour risk. The H.J. O'Connell- Dragados JV initially submitted many exceptions to the terms and conditions, which during the clarification phase were withdrawn. We have negotiated satisfactory terms and conditions with both bidders.

### 8.4 PAYMENT TERMS AND CONDITIONS

The Company has negotiated acceptable payment terms.

### 9 TECHNICAL EVALUATION REPORT

The Technical Evaluation was completed based on scoring the bidders' responses to the RFP requirements as well as all subsequent information received.

Following bid closing, technical review meetings were held with all Bidders. Further technical and commercial clarification meetings were held with two of the Bidders in February and again in May 2015 to better understand their respective proposals, and to discuss potential cost reduction opportunities.

The two bidders were asked to update/revise their proposals based on review of all technical exceptions, and incorporation of the following changes to the technical requirements and schedule:

- Transmission line ROW was removed as an available laydown/staging area
- Provision (Option) for possible delay of River Diversion into 2017
- Delay in availability of Spillway to 15-Jul-2016 for river diversion
- Change in RCC mix design responsibility from Company to Contractor
- Cost reductions related to new spec for roads & culverts, tailrace bridge removal and selection method for 3C material



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## Option for road to C1 & jet grouting

In addition, the attached Technical evaluation incorporates both bidders' responses related to interface issues with other site contractors (Area J & Intake Cofferdam area) and the thorough review of the proposed execution plans, schedule and project teams.

The evaluation concluded with scores of 79.20 for the Barnard-Pennecon JV and 76.85 for the O'Connell-Dragados JV. The Technical Evaluation is included in Attachment 3.

### 10 QUALITY ASSURANCE EVALUATION REPORT

All Bidders scored above 70% for their quality processes. The Quality Assurance Evaluation is included in Attachment 4

### 11 BENEFITS EVALUATION REPORT

The H.J. O'Connell-Dragados JV scored 79.5, slightly higher in this category than the Barnard-Pennecon JV, which scored 77.0. The Benefits Evaluation is included in Attachment 5

### 12 RISK MANAGEMENT EVALUATION REPORT

Top risks seen by the H.J. O'Connell JV are labour unrest, camp space, river diversion, interface points, and critical items. Top risks seen by the Barnard-Pennecon JV are labour productivity, spillway availability, bridge removal before North Dam completion, weather, and RCC construction methodology.

Although neither bidder achieved a passing score of 70%, this element of the evaluation was not considered as a serious flaw and therefore had no bearing on the outcome.

The Risk Management Evaluation is included in Attachment 6.

### 13 HEALTH AND SAFETY EVALUATION REPORT

The **Barnard-Pennecon JV** and the O'Connell-Dragados JV both obtained a passing grade above 70%. Based on the information provided in its proposal, Astaldi did not obtain a passing grade. The evaluation team did not request further information.

The Health and Safety Evaluation is included in Attachment 7.

### 14 ENVIRONMENTAL EVALUATION REPORT

All Bidders obtained a passing grade above 70%.

The Environmental Evaluation is included in Attachment 8.



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### **ATTACHMENTS**

Attachment 1- Main Summary Normalized

Attachment 1a- BPJV Mhrs Normalization and Cost Impact

Attachment 1b- Sensitivity Analysis

Attachment 1c- Craft Labour Target price Model

Attachment 2 - Commercial Evaluation

Attachment 2a – Contract Value & Comparison to Estimate

Attachment 3 - Technical Evaluation

Attachment 4 – Quality Evaluation

Attachment 5 – Provincial Benefits Evaluation

Attachment 6 – Risk Management Evaluation

Attachment 7 – Health and Safety Evaluation

Attachment 8 – Environmental Evaluation

Attachment 9 – Bid Opening Record

Attachment 10a – Scoring Summary (113,295 Mhrs) – Revised Method

Attachment 10b - Scoring Summary (382,000 Mhrs) - Revised Method



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**Attachment 1 – Main Summary Normalized** 

**Attachment 1a – BPJV Mhrs Normalization and Cost Impacts** 

**Attachment 1b – Sensitivity Analysis** 

Attachment 1c – Craft Labour Target Price Model



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**Attachment 2 - Commercial Evaluation** 

Attachment 2a – Estimated Contract Value and Comparison to Estimate



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**Technical Evaluation** 



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**Quality Assurance Evaluation Report** 



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**Provincial Benefits Evaluation Report** 



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**Risk Management Evaluation Report** 



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**Health and Safety Evaluation Report** 



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**Environmental Evaluation Report** 



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**Bid Opening Record** 



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Attachment 10a – Scoring Summary (113,295 Mhrs) – Revised Method Attachment 10b – Scoring Summary (382,000 Mhrs) – Revised Method