From:ronpower@nalcorenergy.comTo:lanceclarke@nalcorenergy.com; pathussey@nalcorenergy.comSubject:PresentationDate:Tuesday, December 7, 2010 4:26:01 PMAttachments:..png<br/>LC-G-002 RFP - Deck for Ed - 05 Dec. 2010.ppt

LC-G-002 RFP - Deck for Ed - 05 Dec. 2010.ppt

## RFP for EPCM Services Evaluation Summary and Recommendation 06-Dec-2010

**Boundless Energy** 





## Purpose

- Recap the RFP process
- Present evaluation results.
- Seek approval on recommended way forward.
- Discuss next steps and timing.



# **Evaluation Scope**

- The following Components and Scenario were evaluated:
  - Component 1 Muskrat Falls Generation
  - Component 3 HVdc Specialties
  - Component 4 Overland Transmission Lines
  - Muskrat Falls Scenario A (C1, C3, C4 a/b/c) Consistent with Phase 1 development recommended at Decision Gate 2
- The RFP Evaluation Plan was followed except for evaluation of the following:
  - Component 2 Gull Island Generation
  - Muskrat Falls Scenario B
  - Gull Island Scenario A & B



## Recap

- Three (3) proposals for EPCM services received on Sept 16 for each of Muskrat Falls, Gull Island, Overhead Transmission, and HVdc Specialties.
  - Proposals received from Black & Veatch, Hatch and SNC
- Following a preliminary evaluation, B&V was dropped from the process (22 Oct.)
  - Debrief held with B&V ?? no subsequent issues have arisen
- Evaluation activities have continued with Hatch and SNC toward making final recommendation.
- Target Date for issue of Letter of Intent to successful bidder – December 22



# **Key Activities**

- Efforts have been directed towards confirming full EPCM capability of the bidders.
  - Per Nalcor request, Construction Management specific presentations made by Hatch and SNC.
  - 6 formal clarifications issued
  - Conducted interviews of proposed staff, including Key Personnel
    - Several Key Personnel rejected
- Clarification of commercial proposals
- Negotiations on T & C's
- Ongoing Technical & Commercial Evaluation



# Evaluation Plan: Scoring Synopsis for M. Falls Scenario A

- Technical (75/100)
  - Muskrat Falls 48.75/100
  - HVdc Specialties
  - Overland Transmission
- Commercial (25/100)
  - Base Rates
  - Mark-ups
  - Fixed Fee

48.75/100 7.50/100 18.75/100



# **Evaluation Findings**

- Technically, both bidders were determined to be acceptable and capable of executing full EPCM scope
  - Overall Bidder 1 had a slightly stronger technical score, in particular for Overland Transmission and HVdc Specialties
- Commercially, there exists a substantial delta between the proposals.
  - Base labor rates are deemed comparable
  - Significant delta on the fixed fee portion of the proposals.
- Based upon above, Bidder 1 scores greater than Bidder 2.
  - Substantial financial premium for Bidder 2 (approximately 50% of contract value).



## **Evaluation Findings – Bidder 1 Attributes**

### **Strengths**

- Very attractive commercial proposal
- World class senior staff proposed
- Demonstrated deep personnel resource base
- Current cold climate Canadian EPCM hydro electric experience
- Commitment to perform engineering for all components in St. John's
- EPCM competence
- Recent construction management
   experience in Labrador
- Strong technical expertise
- Established work history with Nalcor and Lower Churchill Project knowledge

## **Areas of Concern**

• Add input



## **Evaluation Findings – Bidder 2 Attributes**

### **Strengths**

## **Areas of Concern**

• Add input

• Add input



# **Evaluation Scoring**

DEVELOPMENT OPTION	Percentage	Bidder 1		Bidder 2	
MF Scenario A	Weighting	Component Summary Score	Weighted Score	Component Summary Score	Weighted Score
Component 1					
Component 3					
Component 4 a/b/c					
Commercial					
Total Score					



# **Normalized Contract Value**

 Add summary chart indicating the estimated contract value if award to each bidder as well this compares to our "expected" based upon norms.



# **Fixed Fee – Discussion Points**

• Discussion on why the fundamental gap exist and what we have done to explain it.



# **Evaluation – Other Points of Note**

- Anything required here?
  - E.g. Hatch Alliance secondee arrangements



# **Testing Alignment with Strategic Risks**

	Strategic Risk	Management Strategy – Consider when selecting EPCM		
$\checkmark$	Labor productivity and performance aligned with expectations.	<ul> <li>Establishing a benefit / reward relationship with the EPCM consultant and construction contractors that entices them to put the "A-team" on the job.</li> <li>Consider appropriate incentives for the EPCM consultant that are strategically aligned with achieving design and construction readiness outcomes that support increased worker productivity.</li> </ul>		
√	Achieving a Zero Harm – Nobody Gets Hurt mindset in a transient construction workforce.	<ul> <li>Early and proactive program to promote and secure commitment to best practices.</li> <li>Work with EPCM to develop and implement a behavioural based safety program across the Project.</li> <li>Engaging and retaining contractors who are leaders in safety performance and have demonstrated the ability to proactively manage all aspects of HSE performance on remote worksites.</li> <li>Recognizing HSE performance is imperative and start embedding an HSE culture early in the project. It all starts with management's commitment to safety.</li> <li>Maintaining team awareness and establish strong &amp; open communication channel on all aspects of HSE.</li> </ul>		
<b>~</b>	Attracting a capable EPCM contractor who has a strong background in all engineering, procurement and construction management activities for large hydro and transmission projects.	<ul> <li>Developing an innovative contracting strategy to make project attractive to contractors with risk/benefit balance.</li> <li>Implement a rigorous EPCM selection process.</li> <li>Taking early and aggressive action to secure required engineering competencies and resources.</li> <li>Scheduling sufficient time for engineering completion prior to start of construction.</li> <li>Implementing a project-wide Quality Management System and embed QA requirements in all contracts.</li> </ul>		



## **Bidder 1 – Concerns and Mitigation Plans**

#### **Areas of Concern**

1. Bidder is "buying" the job.

- **Mitigation Plan**
- Aggressive manage change.

2. H&S strength



# Recommendation

• Award all Components to Bidder 1.

Contract Value estimated at

- Continue negotiations with both parties (when do we call this off?)
- Implement plan to address identified gaps and risks for recommended EPCM.



# Next Steps and Timing

- Confirm Gatekeeper alignment with plan to continue negotiations with preferred bidder.
  - Continue to interact / clarify / negotiate with both
     Proponents for interim.
  - Target issue Letter of Intent prior to Xmas.
- Plan strategy to notify unsuccessful Bidder.
- Select way forward with respect to office facilities.
- Commence preparation of final contract document.
- Continue mapping out mobilization phase (Award + 120 days) priority activities.





Page 19

# **Back-up Material**



Fixed Fee Overview						
Component	Bidder 1	Bidder 2				
<b>1</b> - MF Hydro Development						
<b>3</b> - HVdc Specialties						
<b>4A</b> - OH Transmission - Gull Island to Soldiers Pond						
<b>4B</b> - OH Transmission - Muskrat Falls to Gull Island						
<b>4C</b> - OH Transmission - Gull Island to Churchill Falls						
MF Scenario A (Discounted Fee)						
Cost per manhour						
MF Scenario A (Normalized Hours)						



# New Approach to Office, Computer and Reproduction Rates

## Office

- Nalcor to provide direct cost reimbursement for office space, furnishings, operations, supplies, administrative staff etc
- Consultant office overhead reduced accordingly to include non reimbursable personnel, insurances (CGL and E&O), interest, accounting, training and orientation

#### • Computer Services

- Nalcor to provide direct cost reimbursement for computer hardware, IT staff
- Consultant rate to include standard Consultant software, home office network file servers and associated hardware

#### • Reproduction Services

– Nalcor to reimburse for all printers, copiers, supplies, maintenance



# Definitions

- **As-Bid scoring** is based on Proponent data submitted in their proposals. Adjustments made for missing, erroneous or incomplete data,
- **Preliminary "Normalized" scoring** makes further adjustments to the As-Bid data and introduces a normalized manhour estimate for each element of the work (Project Mgmt, Engineering, Procurement & Construction Mgmt).
- **Final "Normalized" scoring** makes final refinements to the Preliminary "Normalized" scoring to reflect feedback and information received at review sessions and formal clarifications. In addition, the Final scoring reflects a modified approach to the provision of the office, office overhead staff and all office, computer and reproduction facilities.



# Mobilization Period (Award + 120d)

• Discuss key activities



# **Changes to the Services**

• Elaborate on proposed concept



# Next Steps (from earlier revision)

- Continue to interact / clarify / negotiate with both Proponents until award
- Commence preparation of contract
- Develop concept of Phased Approach
- Feedback from Paul on next steps and final deliverable for presentation to Executive Management
- Identify risks and related mitigation measures
  - Nalcor organization readiness
  - Office accommodations
  - Project description
  - T & C's need to be clear on changes
  - EA Delay
  - Innu Agreement



# **Alignment with Drivers**

#### 1. Project Management by Owner / Integrated Team Approach

- By its nature the Owner led integrated team will ensure FULL Owner involvement / control;
- Absolutely clear business and project objectives improve cost and schedule performance - best achieved with Owner driven Integrated Team which would provide clear understanding of what we are trying to achieve;
- Improved ability to include experienced plant (operations) personnel in the picture at all times – inclusion of Operations deemed "best value added";
- Engineering within team increases management visibility;
- Owner will manage staffing adequately staffed teams, in all functional areas, are successful / are predictable / lead to better project definition and good level of FEL;
- Promotes controlled integration of NLH staff into Project team development of Project Management capability for future opportunities (hydropower and other areas);
- Better allows for NL engineers / other professionals to participate and to assume more key positions over time – less turnover of staff / continuity.



### 3. Cost & Schedule Predictability

- Strong Owner-led Project Controls organization is essential for "real-time" cost and schedule control / predictability (recent stats indicate LS EPC arrangements tend to overrun considerably removing the predictability once perceived to be inherent in them).
- Improved cost performance is best achieved with Owner driven Integrated Team.
- Integrated team estimates can be vetted and estimate assurance built into the process rather that depending on external consultants, thus increasing comfort levels.



## 4. High FEL / Achievement of Project Definition

- Strategy allows LCP team (rather than handing over this decision making to others) to set the schedule and define the level of definition that best fits:
  - moving through each gate
  - Contracting strategy for each package
- Integrated team facilitates construction / constructability reviews early improves cost and schedule predictability.



## **5. Optimal Allocation of Risk**

- Strategy results in balanced / optimal allocation of risk and liability
  - realistic in today's market
  - forcing contractors to assume all financial risks / liabilities will preclude them bidding - in today's market environment not fully realistic or achievable.
- Design liability will be with engineering contractors
- Owner to accept much of the execution cost and schedule risk for engineering and construction management in EPCm anyway
- Risks can be mitigated with Independent Engineer / Expert Review Panels
- Risks for actual construction / fabrication will be with contractors.
- Integrated team approach better facilitates dynamic Owner driven Risk management process and techniques with full team involvement. Better enables culture that supports proactive risk management, particularly identification and management of opportunities.
- Integrated teams are less likely to experience claims.



#### Page 30

# Alignment with Drivers (cont'd.)

### **5.Optimal Allocation of Risk (cont'd.)**

- Methods to assume risk (IPA)
  - Owner leads / performs risk id / analysis / methods;
  - Strong Owner project controls;
  - Detailed Owner cost estimate;
  - Interface management is led by Owner;
  - Active Owner involvement in planning for labour planning / sourcing.
- Mixed strategy is most cost effective.
- Owners pay a significant premium to transfer risk to EPC contracts Contractors' financials cannot support the types of risks that Owners often ask them to carry.
- Careful contractor evaluation and selection mitigates the risk of contracting problems.
- Effective controls mitigate the risk of poor contractor performance.



# Alignment with Drivers (cont'd.)

6.Alignment with contractor availability / capability (Contractor Appetite for Mega Projects)

- Strategy allows for "intelligent" sized contract packages given that there is major consolidation resulting in limited contractors and equipment suppliers
- Package sizing allows competitive bidding, thereby ensuring best value for the Owner from a quality, cost and schedule perspective.
- Owner control supports selling of the project through workshops, ads, etc.
- Major engineering contractors stretched thin Creditworthiness and issue
- In more recent years, to reflect market reality that engineering companies do not now have the wherewithal for full EPCM services (most personnel utilized by eng. companies are project hires / consultants or JV partners), trend is for the Owner organization to become more of an EPCM organization for mega (including hydro) projects.



# Alignment with Drivers (cont'd.)

#### Alignment with Provincial Policies / IBA Agreement

- Recommended strategy allows for best opportunity for achievement of benefits commitments as the Owner is part of the team developing the execution strategy.
- On the professional side, the strategy promotes opportunity for LCP to better avail of existing NL expertise and capability to further embellish the team (ref. offshore industry as an example wherein NL capability is now world-class).
- Provides opportunity to ensure maximum benefits for Aboriginal groups



### Flexibility to accept / manage change (e.g. alternate concepts)

- Model allows flexibility in early design stages.
- No serious contractual impacts to changes until construction contracts are entered into.

