



**LOWER CHURCHILL PROJECT
 BID EVALUATION AND AWARD RECOMMENDATION
 CD0501-001- SUPPLY AND INSTALL AGREEMENT FOR CONVERTER STATIONS
 AND TRANSITIONS COMPOUNDS**

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1.0 Purpose

The purpose of this document is to provide the results of the bid evaluation and recommend award of **CD0501-001– Supply and Install Agreement for Converter Stations and Transition Compounds** .The Award Recommendation is based the following evaluation criteria:

- Commercial
- Technical
- Execution Plan and Schedule
- Quality
- Health and Safety
- Environmental
- Benefits
- Risk Management

The Bid Evaluation was completed in accordance with the approved Bid Evaluation Plan dated 26-Jun-2013.

2.0 Recommendation

The Overall Scoring Matrix is included in Attachment 1. Bidders are ranked as follows:

1. Alstom Grid – [REDACTED]
2. ABB – [REDACTED]
3. Siemens – [REDACTED]

Based on the above, and in accordance with the attached evaluation, it is recommended that package **CD0501-001- Supply and Install Agreement for Converter Stations and Transition Compounds** be awarded to **Alstom Grid Canada Inc.** at a contract value of **CAD 353,119,397** calculated using the Project approved exchange rates.


Details of the comparison to budget, specific and non-specific growth, and exchange rates considerations are included in Attachment 2.

3.0 Bidders List

Request for Proposals (“RFPs”) were issued to the following approved Bidders:

- Alstom Grid as Alstom Grid Canada Inc.
- ABB as ABB Inc.
- Siemens as Siemens Canada Ltd.

All Bidders responded favorably and submitted fully compliant RFPs.

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4.0 Scope

This contract package includes all activities necessary to provide the following facilities to support the Muskrat Falls to Soldiers Pond HVdc link:

- Completely operational ± 350 kV, 900MW bipolar HVdc system, including the necessary communications interface equipment and the associated HVac equipment.
- Two HVdc converter stations based on Line commutated conversion (LCC) technology: one at Muskrat Falls next to the hydroelectric plant and the other at Soldiers Pond interconnecting with the Newfoundland Hydro network.
- Two cable transition compounds; one at Forteau Point and the other at Shoal Cove.
- Overall project management: studies; design; engineering; training; manufacture; factory testing; supply; delivery to site including loading and unloading; storing; preserving; handling and moving into final position; testing; commissioning at low and high power; placing into commercial operation and warranty.
- Engineering for the civil works at the transition compounds.
- Engineering, Procurement and Construction Management of the LCP issued civil contracts for the two converter stations


5.0 RFP and Schedule

RFPs were issued on 21-Dec-2012 with a closing date of 26-Jun-2013. All proposals were received before the closing date and time and were opened on 27-Jun-2013 at LCP's office in St. John's, NL. The Bid Opening Record is included in Attachment 3.

Following analysis of the bids received, including reviews with all bidders and comparison with the DG3 budget, the HVdc Specialties Project Delivery Team conducted an optimization exercise and issued Clarification 005 on 21-Oct-2013 requesting submittal of a final price breakdown on a revised scope of work and price schedule with a closing date of 12-Nov-2013. All revised proposals were received before the closing date (see Bid Opening Record in Attachment 3).

6.0 Evaluation Team

- Commercial: Ed Over(Lead), Caroline Decelles, Ken Almon, Aidan Meade
- Technical: Jeff Coady(Lead), Ali Dariani, Robert Collett, Rao Atmuri
- Execution Plan and Schedule: Ken Almon, Manon Lavoie, Tom Chudy
- Health and Safety: Bill Bishop
- Environmental: David Haley
- Quality: Ken Morrison
- Benefits: Maria Moran
- Risk: Jean Daniel Tremblay

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7.0 Evaluation Criteria

In accordance with the Bid Evaluation Plan, the following weighted evaluation criteria were used to evaluate Bidders' Proposals.

Criteria	Weighted Rating (%)
Commercial (including Benefits)	60%
Technical	30%
Execution Plan and Schedule	10%
Quality	Pass/Fail
Environmental	Pass/Fail
Risk	Pass/Fail
Health & Safety	Pass/Fail

For Health & Safety, Bidders had to obtain a score of 70% or greater to pass. For Environmental, Bidders had to obtain a score of 60% or greater to pass. For Quality and Risk management, targets of 60% were set.

8.0 Commercial Evaluation

The commercial evaluation included an analysis of the Price Schedule breakdown, a comparison against the estimate, the payment terms and conditions, the articles of the agreement and an evaluation of provincial benefits (see Attachment 10).

The commercial evaluation of the June 2013 bids (see Table 1-Commercial Summary-23 June 2013 Bids) concluded that:

- All bids exceeded the project budget
- [REDACTED]
- Bidders had identified cost savings opportunities
- There was a need to bring the bids to a common basis.

The four month exercise that followed, in an effort to close the gap between the budget and the bid amounts and to identify opportunities to reduce costs, concluded with receipt of the November 12th revised bids. The commercial evaluation of these revised bids (see Table 2-Commercial Evaluation-November Bids vs June Bids) concluded that:

- Alstom was still well below the other two bidders in terms of evaluated costs
- Alstom was 5% over the LCP budget
- The four month exercise had reduced prices by about 20%
- Siemens price was still indicative only.

TABLE 1
Commercial Summary
26-June-2013 Bids

Site	Alstom Grid	Siemens	ABB
Overall	\$ 76,262,845		
MF	\$ 219,600,373		
FP	\$ 44,881,069		
SC	\$ 45,976,716		
SP	\$ 192,278,996		
Grand Total	\$ 578,999,999		
% of Budget	131%		
\$ over Budget	\$136,150,921		

Notes: The DG3 budget is \$ 442,849,078 including escalation and PCN adjustments.
 Exchange rates as of 26 June 2013.


TABLE 2
Commercial Evaluation
26-Jun-2013 (Original) to 12-Nov-2013 (Updated) Bids

Site	Alstom Grid Original Bid	Alstom Grid Updated	ABB Original Bid	ABB Updated	Siemens**
Overall	\$ 76,262,845	\$ 54,727,971 (-28%)			
MF	\$ 219,600,373	\$ 193,926,866 (-12%)			
FP	\$ 44,881,069	\$ 16,467,935 (-63%)			
SC	\$ 45,976,716	\$ 16,356,110 (-64%)			
SP	\$ 192,278,996	\$ 182,270,513 (-5%)			
Grand Total	\$ 578,999,999	\$ 463,749,394 (-20%)			
% of Budget	131%	105%			
\$ over Budget	\$136,150,921	\$20,900,316			

** Siemens did not provide their updated pricing in the required Bid Tab. It is not clear what is in or not in the Siemens bid due to its supplied information. Pricing is **INDICATIVE** only for [REDACTED]

Original Budget is \$442,849,078 including escalation and PCN adjustments

Exchange rates used for comparison are the 26-Jun-2013 rates not the rates used by bidders for their November bids.

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As Siemens submitted a non-compliant bid with an indicative price only, it was decided to proceed with Alstom Grid and ABB only.

Because of the price difference, Alstom was identified as the preferred bidder on 20-Dec-2013

Subsequent negotiations with Alstom Grid clarified technical matters, securities required and led to removal of the package civil works for the Transition Compounds which will be executed by LCP. Alstom Grid will be responsible for the engineering and design support during execution of the civil work at the Transition Compounds.

In addition, LCP will issue the contracts for the Converter civil works at the Converter Stations. Alstom Grid shall retain the overall responsibility for the execution of the civil works in accordance with the Agreement. LCP shall be responsible only for the issuance of the civil works contracts and payment of approved Civil Works Subcontractors invoices. The Term Sheet explaining the agreement for civil work at the Converter Stations is presented in Attachment 12.

Alstom Grid reduced its markup by \$16 M and reduced its installation costs by \$129 M (\$11.5 M for Transition Compounds, \$107.3 M for Converter Stations).

The Commercial Evaluation of the November 2013 bids is presented in Attachment 4.

9.0 Technical Evaluation

The Technical Evaluation was completed on the Performance Requirements, Equipment, Buildings and Civil and others (Studies, Training and Testing).


The evaluation concluded that ABB [REDACTED] is slightly better than Alstom [REDACTED].

The Technical Evaluation is included in Attachment 5.

10.0 Execution Plan and Schedule

ABB organizational structure with Kiewit managing separately the construction work creates the issue of having LCP needing to interface with two separate entities. For this reason, Alstom Grid got a higher ranking.

The Execution Plan and Schedule Evaluation is included in Attachment 6

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11.0 Health and Safety Evaluation

All bidders passed.

The Health and Safety Evaluation is included in Attachment 7.

12.0 Environmental Evaluation

All bidders passed.

The Environmental Evaluation is included in Attachment 8.

13.0 Quality Assurance Evaluation

All bidders passed.

The Quality Evaluation is included in Attachment 9.

14.0 Benefits Evaluation

ABB has an edge over the other bidders because of Kiewit's local resources.

The Provincial Benefits Evaluation is included in Attachment 10.

15.0 Risk Management Evaluation

All bidders passed.

The Risk Management Evaluation is included in Attachment 11.