

Nalcor Energy – Lower Churchill Project



CIVIL WORKS CONTRACT PLAN FOR COMMITMENT PACKAGES
CD0501 / CD0502 / CD0534

Nalcor Doc. No. LCP-PT-MD-0000-SC-PL-0005-01

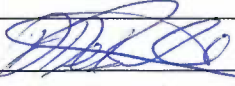
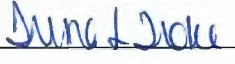
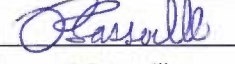
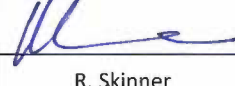


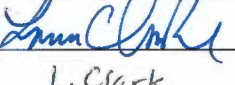
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B1	04-Nov-2014	Issued for Use				
Status / Revision	Date	Reason for Issue	Prepared by	Functional Manager Approval	Quality Assurance Approval	General Project Manager Approval

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Inter-Departmental / Discipline Approval (where required)

Department	Department Manager Approval	Date
Project Manager – HVdc Specialties	 D. DeBourke	6-Oct-2014
Deputy Project Manager – HVdc Specialties	 T. Troke	6-Oct-2014
Sr. Contracts Administrator	 P. Sasseville	6-Oct-2014
Area Manager – Sync. Condensers and Electrodes	 R. Skinner	6-Oct-2014
Area Manager – AC Switchyards	 M. Makky	06-Oct-2014
Area Manager – Converters and Trans. Compounds	 K. Almon	14-Oct-2014
Business Services Mgr.	 L. Clark	24-Oct-2014

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1 BACKGROUND

Alstom Grid Canada, Inc. (“Alstom”) has been awarded the following contracts:

- CD0501-001 Converter and Cable Transition Compounds
- CD0502-001 Construction of AC Substations

Alstom Renewable Power Canada (“Alstom”) has been awarded the contract for CD0534-001 Synchronous Condensers at Soldiers Pond.

As part of these contracts, Alstom’s responsibilities for the civil works portion of the package scope have been amended as follows:

- Complete civil works design and engineering
- Issue the civil works RFPs (RFPs can be in Alstom’s format; however, the form of Contract must be LCP’s standard contract documents)
- Evaluate the RFPs submitted
- Retain the overall responsibility for the management and execution of the civil works in accordance with the Contract, including cost, schedule, safety, environment, and quality control risks during construction
- Coordinate, manage and supervise all construction activities of civil works contractors
- Attest civil works contractor’s payment certificates

A fixed amount (“Civil Works Baseline”) has been removed from Alstom’s lump sum contract price and the civil works will be bid at a later date, following Alstom’s completion of detailed civil works design. Alstom will complete the civil works engineering, administer the civil works contracts and maintain overall site management; however, the civil works contracts will be executed directly with LCP and LCP will be solely responsible for the payment of the civil works contractor(s). Both LCP and Alstom will share 50/50 in any savings achieved upon award of the civil works contract(s). Alstom will be responsible for any costs exceeding the Civil Works Baseline amount (refer to Exhibit 17 titled “Joint Cost Savings Initiative for Civil Works” of each of the CD0501-001, CD0502-001 and CD0534-001 contracts).

2 PURPOSE

The purpose of this document is to provide guidelines for LCP oversight and management of the selection of the civil works contractors recommended by Alstom in order to:

- Provide an overall technical interface with Alstom’s design process (i.e., review technical specifications to ascertain the type and quantity of services required for the implementation of the civil works)
- Jointly evaluate RFPs received by Alstom and agree as to which bidder(s) shall be selected as civil works contractor(s)
- Insofar as possible, optimize synergies between all three of the Alstom contracts
- Achieve best overall value for LCP

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- Positively influence achievement of Alstom’s schedule milestones
- Provide a commercial management interface

In no way should LCP interfere in Alstom’s responsibilities as defined under the contracts between LCP and Alstom. Moreover, LCP shall ensure Alstom’s overall EPC approach, objectives, and schedule is preserved.

3 SCOPE

This plan shall be used by the package teams involved in administering contracts CD0501-001, CD0502-001, and CD0534-001.

4 DEFINITIONS

“Civil Works Baseline” means the cost of the civil works that has been estimated by Alstom but has been excluded from Alstom’s lump sum contract price and from which joint savings can be calculated.

5 RESPONSIBILITIES

A Coordination Team will be established by LCP to provide oversight of Alstom’s civil works contracting process. The Coordination Team will be comprised of the following individuals:

- LCP Deputy Project Manager – HVdc Specialties
- LCP Civil Works Technical Lead – HVdc Specialties
- LCP Civil Works Contracts Lead – HVdc Specialties
- LCP Construction Manager – HVdc Specialties
- LCP Contracts Manager – HVdc Specialties
- LCP Area Managers for each contract (CD0501-001, CD0502-001, and CD0534-001)
- LCP Project Controls Lead – HVdc Specialties
- LCP Sr. Advisor Commercial Strategies
- Alstom team members responsible for civil works

The Coordination Team will meet weekly (or as required) with Alstom in order to ensure the civil works contracts are executed in a timely manner to avoid schedule delay or related claims. The LCP Civil Works Contracts Lead will be responsible for managing the activities of the Coordination Team and chairing the meetings.

6 REFERENCES

Nalcor’s Capital Expenditure Authorization Procedure
 Prepare and Issue Contract
 Uploading Key Procurement Documents into Aconex

Doc. No. LCP-PT-MD-0000-FI-PR-0001-01
 Doc. No. LCP-PT-MD-0000-SC-PR-0026-01
 Doc. No. LCP-PT-MD-0000-SC-PR-0027-01

Exhibit 1 and Exhibit 17 of contracts:

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- CD0501-001 Converter and Cable Transition Compounds
- CD0502-001 Construction of AC Substations
- CD0534-001 Synchronous Condensers at Soldiers Pond

7 MANAGEMENT PLAN

7.1 WORKSHOPS

One of the early activities for LCP and Alstom will be to arrange a workshop(s) to discuss an overall civil works strategy. This activity will be managed by the LCP Civil Works Contracts Lead. The outcome of the workshop(s) will be to jointly agree on:

- Overall contracting strategy for civil works (which shall be documented by Alstom)
- List of potential civil works bidders (i.e., bidder selection process)
- Civil works schedule showing engineering, RFP, contract award, and mobilization milestones aligned with the overall contracting strategy
- Alstom's proposed RFP and award recommendation format
- Timeline for civil works engineering design review(s)
- Other items as needed

7.2 RFP PROCESS

The Coordination Team will review all RFPs prepared by Alstom before they are issued to Bidders. The Coordination Team shall:

- Review the scope of work, technical specifications and drawings;
- Review timelines for the RFP process;
- Ensure proper performance security is in the form and at the value determined by LCP. LCP requires a minimum of 10% of the civil works contract price as performance security and 10% of the civil works contract price in some form as financial and/or lien holdback;
- Ensure the form of Contract included with the RFP is in LCP's standard format. In addition, review Articles and Exhibits to ensure contractual obligation are adequately addressed and reflect value/type of the work (i.e., Exhibit 3 - Coordination Procedures, Exhibit 5 – Health and Safety Requirements, Exhibit 6 – Environmental and Regulatory Compliance Requirements, Exhibit 7 - Quality Requirement, Exhibit 13 – Provincial Benefits, etc.);
- Review pricing schedule(s) and ensure schedule milestones are properly stated in Exhibit 9 – Schedule
- Ensure Alstom issues the agreed RFPs to all potential contractors including any that LCP may propose
- Ensure any other LCP requirements are properly reflected in the documentation

It should be noted Alstom may bid the civil works packages separately by site (MF, CF, and SP) or by scope (buildings, foundations, etc.) consistent with its overall contracting strategy. This may result in multiple RFPs and contracts depending on the outcome of the bid evaluation process and timing of completion of engineering. LCP's complete review of RFPs prepared and ready for issue by Alstom shall

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not take longer than ten (10) business days. The routing, review and approval of RFPs will be managed by the LCP Civil Works Contracts Lead (or delegate) in accordance with Attachment 1 – Civil Works Approval Matrix.

7.3 EVALUATION AND AWARD OF CIVIL WORKS CONTRACTS

Upon receipt of proposals from bidders in response to the RFP, LCP and Alstom shall jointly evaluate such proposals and jointly come to an agreement as to which bidder(s) shall be selected as the civil works contractor. Alstom shall then prepare an award recommendation and formally issue it to LCP for review, approval, and filing. The routing, review and approval of the award recommendation will be managed by the LCP Civil Works Contracts Lead (or delegate) in accordance with Attachment 1 – Civil Works Approval Matrix.

In some cases, Alstom may have already received pricing from civil works contractors that can be adequately verified through Alstom’s award recommendation process. As long as LCP is satisfied that it can be demonstrated that Alstom has achieved best value through this process, then the RFP process can be circumvented and Alstom can proceed with issuing its award recommendation. Regardless, Alstom shall formally submit supporting documents to LCP for filing.

Alstom shall negotiate, with input from LCP, the final form of the civil works contract with the preferred bidder. All contracts for the civil work shall be reviewed and approved by LCP prior to signing (refer to Attachment 1 – Civil Works Approval Matrix). In all cases, either Alstom Grid Canada, Inc. or Alstom Renewable Power Canada has to be defined as the Engineer in the Contract Articles (not LCMC). Lastly, civil works contracts prepared by Alstom will be subject to LCP Due Diligence review.

An approved Requisition (form no. LCP-PT-MD-0000-SC-FR-0075-01) is required to be prepared in conjunction with the award recommendation. The Requisition will be prepared by the LCP Civil Works Contracts Lead – HVdc Specialties. The Estimated Contract Value and Comparison to Budget document (completed by LCP Project Controls Lead – HVdc Specialties, or designate – commonly referred to as “RFA”) will form the basis of the Requisition. The Requisition will be approved according to Nalcor’s Capital Expenditure Authorization Procedure (Nalcor Document No. LCP-PT-MD-0000-FI-PR-0001-01). The Requisition must be approved prior to award of any civil works contract. After the Requisition is approved, LCP can notify Alstom that LCP has accepted the award recommendation and Alstom can proceed with issuing the contract to the successful bidder for signature. The routing, review and approval of the requisition and contract will be managed by the LCP Civil Works Contracts Lead (or delegate) in accordance with Attachment 1 – Civil Works Approval Matrix.

7.4 CIVIL WORKS FORM OF AGREEMENT

As previously noted, the final civil works contract will be prepared by Alstom using LCP’s standard contract document template. Because Alstom will retain the overall responsibility for the management and execution of the civil works, the contract template will need to be modified such that Alstom is identified as the Engineer and all subsequent correspondence, communication, claims, progress

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reports, accident/incident reports, etc., will be submitted directly to Alstom. Listed below are some key points to consider when reviewing the final form of Agreement.

Articles	Alstom will need to ensure flow down of appropriate Articles to the civil works contractors. Modifications to some Articles will be required to suit Alstom’s subcontracting process. For example, Engineer is Alstom (and not LCMC), role of the Company will need to be modified in some Articles such that the information is provided directly to Alstom (and not LCP), Alstom may have its own document management system (not Aconex), the change management process will need to be modified to suit Alstom’s change management procedures, etc. Exceptions to the Articles by the civil works contractor will need to be reviewed by LCP.
Exhibit 1 – Scope of Work	Alstom will be responsible for providing the scope of work, drawings and specifications for the work.
Exhibit 2 – Compensation	<ul style="list-style-type: none"> • Alstom and LCP will need to agree on the type and amount of performance security required for the contract. • Liquidated Damages (LDs) related to schedule will have to be customized, if required. • Appendix A – Alstom to develop the Schedule of Price Breakdown for the work. • Appendix B – Alstom to develop the Payment Milestone Schedule. • Appendix C - Spare parts schedule will be specific to the contract (if required). • Appendix D – Civil works contractor to provide labor rates. • Appendix E - Civil works contractor to provide equipment rates. • Appendix F – LCP’s Sworn Declaration form will need to be included since LCP is paying the invoices.
Exhibit 3 – Coordination Procedures	Customization required by Alstom specific to Alstom’s standard subcontracting process. For example Alstom’s cost and schedule reporting may be a flow down of LCP’s cost and scheduling requirements; however, Alstom’s change management process may be different to suit its own internal processes and procedures.
Exhibit 4 – Supplier Document Requirements List	Alstom will need to ensure proper flow down of document deliverables required by the civil works contractors. Alstom will be expected to modify this document to suit its own document deliverables (i.e., civil works contractor’s health and safety plan, C-SEPP, etc.).
Exhibit 5 – Health and Safety Requirements	Alstom’s organizational structure combines Environment, Health, and Safety so Exhibits 5 and 6 may be combined to match Alstom’s internal processes and procedures. Alstom will need to perform a gap analysis to ensure the most stringent of Alstom’s and LCP’s environment, health and safety requirements are expected of the civil works contractor.
Exhibit 6 – Environmental	See above.

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and Regulatory Requirements	
Exhibit 7 - Quality Requirements	Alstom will need to modify this Exhibit to suit its own QA/QC requirements.
Exhibit 8 – Subcontractors, Manufacturers and Material Sources	This will be a listing of the civil works contractor’s subcontractors, manufactures and material sources.
Exhibit 9 – Schedule	This will be developed by Alstom based on Alstom’s schedule for the work.
Exhibit 10 – Declaration of Residency	Same or similar format can be used as per current LCP template.
Exhibit 11 – Company Supplied Documents	Alstom may include its own documentation in this Exhibit. Alstom will need to flow down some LCP documents down to civil works contractor, where required.
Exhibit 12 – Site Conditions	Most of this Exhibit can be flowed down to the civil works contractor with minimal modifications from Alstom.
Exhibit 13 – Provincial Benefits	Most of this Exhibit can be flowed down to the civil works contractor with minimal modifications from Alstom. Civil works contractor will need to provide its "Completed Provincial Benefits Questionnaire" to be included in Attachment 1.
Exhibit 14 – Performance Security	Performance security will need to be in format to be agreed between Alstom and LCP. For LOC, Alstom and LCP will need to be named as the beneficiary. For Bonds, Alstom, LCP and the Security Agent (Computershare Trust Company of Canada) will need to be named as “Obligee”.

7.5 CHANGES AFTER CIVIL WORKS CONTRACT AWARD

Details of how changes are managed are fully described in Exhibit 17 of each Contract; however, it’s provided below for clarity.

1. For a change to the Civil Works Baseline requested by LCP:
 - (a) LCP shall issue a Change Request to Alstom for its review and submittal back to LCP;
 - (b) If the Change Request is approved by LCP, LCP shall issue a Change Order to the civil works contractor (with a copy to Alstom) in accordance with the provisions of the Civil Works contract;
 - (c) LCP shall issue a Change Order to Alstom as determined in accordance with Article 26 of the Contract to cover any changes to Alstom’s reasonable costs and schedule; and,
 - (d) Alstom’s mark-up in accordance with Exhibit 2 – Compensation shall be adjusted by the percentage in Section 5(b) (iii) of Exhibit 2 – Compensation for the increase or decrease to

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the civil works contractor's price as if the civil works contract and related Change Orders had been issued by Alstom.

2. If the civil works contractor or Alstom requires a change order to the civil works contract to be issued during the performance of the civil works for reasons other than changes requested by LCP, then LCP and Alstom shall jointly evaluate the need for the proposed Change Order. In the event that LCP and Alstom agree on the necessity for a Change Order:
 - (a) LCP shall issue a Change Order to the civil works contractor;
 - (b) LCP shall pay for the price of the work performed under such Change Order; and
 - (c) LCP shall issue a Change Order to Alstom for reimbursement by Alstom to LCP for the price of the civil works contractor change order.

3. If a civil works contractor makes a claim for additional compensation against LCP, then LCP and Alstom shall jointly evaluate the claim and determine factual basis and the merits of the claim. If the LCP and Alstom determine that the factual basis giving rise to the claim is due to:
 - (a) any act or omission by LCP, then LCP shall be solely responsible for defending against and/or resolving the claim;
 - (b) any act or omission of Alstom, then Alstom shall cooperate with LCP in defending against and/or resolving the claim and Alstom shall reimburse LCP's costs to respond to the claim and any amount paid to the civil works contractor in satisfaction of the claim;
 - (c) a combination of acts or omissions of both LCP and Alstom, then both LCP and Alstom shall cooperate with each other in defending against and/or resolving the claim and each Party shall be responsible for any amount payable to the Substation contractor in satisfaction of the claim in the proportion that the Party's acts or omissions were the cause for the claim (for greater certainty - where Alstom has responsibility for a part of the claim, Alstom shall reimburse LCP for that portion of the amount payable to the civil works contractor corresponding to the proportion of LCP's responsibility).

8 RECORDS

8.1 CIVIL WORKS CONTRACT NUMBERING

The civil works contracts will be numbered as follows: CDXXXX-00X, where CDXXXX represents the contract (commitment package) number and 00X represents the Contract unique sequential number. For example, the civil works contracts related to AC Substations will be CD0502-002, CD0502-003, etc.

8.2 PERFORMANCE SECURITY

All signed originals of the performance security documents will be given to the Supply Chain Manager, or his designate, for logging and furtherance to Nalcor's Assistant Treasurer. Performance Securities include:

- Performance Bond
- Labour and Material Payment Bond

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- Letter of Credit

The LCP Civil Works Contracts Lead – HVdc Specialties shall keep a copy in the Contract file. The signed original Parent Company Guarantee (where applicable) remains part of the original signed Contract.

8.3 CIVIL WORKS - KEY PROCUREMENT DOCUMENTS

The following pre-award key procurement documents shall be uploaded into the Aconex Procurement Module:

- Alstom’s Civil Works Overall Contracting Strategy
- Alstom’s Bidders List Recommendation
- Approval to issue RFP
- Alstom’s Bid Evaluation and Award Recommendation
- LCP Requisition

The following post-award key procurement documents shall be uploaded into the Aconex Construction Mgmt Module:

- Contracts (Agreements) – This shall be the executed signed copy and shall include all drawings, specifications, and all other company supplied documents as listed in Exhibit 11.
- Change Orders
- Change Order Authorization Forms
- Change Requests (including Change Request Review Forms)
- Payment Certificates
- Meeting Minutes

9 ATTACHMENTS

9.1 CIVIL WORKS APPROVAL MATRIX

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ATTACHMENT 1

CIVIL WORKS APPROVAL MATRIX

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		Overall Civil Works Contract Strategy	Bidders List Recommendation	Approval to Issue RFP	Bid Evaluation & Award Recommendation	LCP Requisition	Final Confirmed Contract
Timelines / Review Period				5 days	5 days	5 days	5 days
Title	Name						
Alstom	TBD	P	P	P	P	C	P
Civil Works Technical Lead – HVdc Specialties	Blair McNiven	R	R	R	R	I	R
Civil Works Contracts Lead – HVdc Specialties	Anthony Jackman	R	R	R	R	P	R
Project Controls Lead – HVdc Specialties	Tanya Power	R	I	R	R	R	I
Construction Manager – HVdc Specialties	Ray Butler	R	R	R	R	I	I
Area Manager – HVdc Specialties	Package Specific	R	R	R	R	R	R
Deputy Project Manager – HVdc Specialties	Trina Troke	R	R	R	R	R	R
Supply Chain Manager	Pat Hussey	R	R	R	R	A	A
Business Services Manager	Lance Clark	C	C	C	C	C	C
Project Manager – HVdc Specialties	Darren DeBourke	A	A	A	A	R/A (See Note 1)	R/A (See Note 1)
Deputy Project General Manager	Jason Kean						
Project General Manager	Ron Power						
Project Director	Paul Harrington						
VP LCP	Gilbert Bennett						
CEO	Ed Martin						
Nalcor Due Diligence Review							
Assistant Corporate Secretary & Senior Legal Counsel	Peter Hickman						R
External Legal	Aidan Meade						R
Manager Risk & Insurance	Marilyn Leonard						R
Manager of Tax	Sonali Roy						R
Project Controller	Gerald Cahill						R
Corporate Treasurer	Andrew Sinnott						R

- P** Prime responsibility for initiating action
- R** Reviews / Validates / Recommends for Approval - Signs Document
- A** Approves - Signs Document
- C** The right to be consulted and kept informed of developments.
- I** Right to be informed

Notes:

1. Approval hierarchy based on latest revision of Nalcor's Capital Expenditure Authorization Procedure (LCP-PT-MD-0000-FI-PR-0001-01).