

From: [Nikolay Argirov](#)
To: [Krupski, Joseph \(Joseph.Krupski@NRCan-RNCan.gc.ca\)](#); [Anoop Kapoor \(anoop.kapoor@NRCan-RNCan.gc.ca\)](#); [Freeman, Michael \(TD Securities\) \(Michael.Freeman@tdsecurities.com\)](#)
Cc: [jamesmeaney@lowerchurchillproject.ca](#)
Subject: Review of invoices and payment process - NALCOR
Date: Monday, November 10, 2014 8:48:51 PM
Attachments: [_png](#)
[_png](#)
[2014-11-10 Memo - Review of Invoicing Process \(Nalcor\).pdf](#)
[image001.png](#)

Gentlemen,

Please find attached the memo on the IE invoice audit of NALCOR's contracts , performed by the IE on Oct 22 to24, 2014.

Regards ,

Nik

cid:image002.png@01CF9AAC.BE6CD690

MWH Canada, Inc

Nik Argirov, M.Eng., P.Eng., PMP

VP, Regional Manager, BC

Dams and Hydro Canadian Practice Leader

tel. 604 648 6162

cell. 604 340 7968

fax 604 648 6181

740-1185 W. Georgia Street

Vancouver, BC, V6E 4E6



**BUILDING A BETTER WORLD****MEMORANDUM**

TO: Natural Resources Canada and Toronto-Dominion Bank (the "Collateral Agent") **DATE:** Nov 10, 2014

FROM: Nik Argirov, MWH Canada **CC:** Nalcor Energy

SUBJECT: Muskrat Hydro Project **REF:**
Review of Invoicing & Progress Payment Procedures

As part of the IE services scope of work MWH is required to perform periodic audits of the progress payment and invoicing process on randomly selected Construction Contracts.

The MWH Independent Engineer team, represented by Nik Argirov (IE Project Manager) and Paul Hewitt (IE Cost and Schedule SME), visited Nalcor's project office during October 22 to 24, 2014.

Nalcor presented their contract invoicing and progress payment and control procedures on the first day (October 22, 2014) and then assisted us in reviewing sample invoices from both CH0030 (Supply and Install Turbines & Generators) and CH0007 (Construction of Intakes & Powerhouse, Spillway and Transition Dams) contracts on subsequent days.

Nalcor was fully transparent in demonstrating their contract payment tracking system and their staff was available during our visit to answer any questions we had.

Invoice & Progress Payment Procedures

Nalcor has a rigorous approval system setup that verifies all scope of work completed and invoiced on each contract each month. The contractors are required to follow a progress payment procedure that starts with the issuance of Payment Certificate by the contractor. Work completed is verified at site by the contractor and Nalcor Management Staff. In the case of unit price items, the quantities are jointly measured each month by survey. Once the progress payment has been approved, Payment Certificate Approval form is issued by Nalcor and it is returned to the contractor. The contractor then attaches a cover invoice and submits back to Nalcor for payment. The contractors are required to submit a statutory declaration with each invoice to ensure that all subcontractors and suppliers have been paid. Any unresolved issues are listed each month on the statutory declaration. Payment Certificates may also be rejected or just returned for adjustment and then the process follows again the aforementioned sequence.

CH0030 (Andritz Hydro Canada Inc. - Supply and Install Turbines & Generators)

On day 2 we examined sample invoices from Andritz for the Turbines & Generators contract. This contract is Lump Sum with a schedule of lump sum payments based on milestone dates included with their tender. The progress and milestones are monitored by onsite inspection staff. In this case besides the payment certificate approval process there is also a milestone completion verification process which involves the issuance of Milestone Completion Certificate

MWH

MEMORANDUM

by the contractor which is then verified and approved by Nalcor. The invoices that we inspected were straight forward and in order. They were associated with milestone payments and/or with approved CO payments. No technical or procedural deficiencies were observed. Established process of verification and approval is strictly followed. One unresolved issue involving an increase in labour rates based on the collective agreement after the tender was issued remains outstanding and is tracked and reported by the contractor through the monthly reports change request register.

CH0007 (Astaldi Canada Inc. - Construction of Intakes & Powerhouse, Spillway and Transition Dams)

On day 3 we examined sample invoice from Astaldi for the Construction of Intake, Spillway & Powerhouse and Transition Dams contract. Craft Labour covered by the collective agreement is paid on a cost reimbursable basis. Staff Salaries not covered by the collective agreement are based on tendered hourly rates. The contract includes a Labour Target and a Labour Maximum Cap. There is a risk sharing formula for labour costs below and above the target. The contractor is fully at risk for labour costs above the cap. A profit is applied to the labour each month based on the % complete concrete pours / quantities up to the cap.

The Target is adjusted to account for any changes to the scope of work.

All other costs (equipment, material) are paid for on a unit price basis. Payment is based on measured quantities of work complete. These unit prices include contractor's overhead & profit.

We examined several monthly invoice and payment (progress) certificates. The reimbursable labour was verified utilizing the contractor's payroll system and verified by a 3rd party (ADP) independent payroll system.

Any unresolved (unpaid) labour expended for rework or errors on the contractor's part is tracked in separate accounts and is listed separately on the progress certificate.

The unit prices are based on quantities of work completed. The concrete quantities are based on the concrete lift drawings verified by use of a 3D model. Any items not covered on the lift drawing are measured by mutual survey in the field.

Nalcor has rigorous procedures in place to certify the reimbursable labour and unit price quantities.

The invoice and progress certificates we inspected were in order.

Sincerely



Nik Argirov