

Project Change Notice

PCN-0705 Appropriation of Additional Budget Due to Agreement Amendment for CH0007-001 Contract Construction of Powerhouse and Intake, Spillway and Transition Dams - AFE Rev. 4

Section 1: Request for Proposed Change

CM X-Ref. DAN-1944, DAN-2380	Date Originated	6 Jan 2017
	Originator	Stephanie Stewart
	Package Leader / Engineer	Mike Collins
	Area Manager	Mike Collins
	Scope / Project Manager	Scott O'Brien
Origin	Current Status	Under Review
<input checked="" type="checkbox"/> Internal PMT	<input checked="" type="checkbox"/> Contractor/Supplier	Revision
<input type="checkbox"/> Other Nalcor	<input checked="" type="checkbox"/> Construction Site Event	0
<input type="checkbox"/> SNC-Lavalin	<input type="checkbox"/> Other External	TL 267 Project <input type="checkbox"/>

Agreement No.	Description
CH0007-001	Construction of Intake and Powerhouse, Spillway and Transition Dams

Description

This PCN is to document and formalize approval for the appropriation of additional budget in the amount of \$270M CAD to the CH0007-001 Contract due to amendment of the agreement with the Contractor, Astaldi, on 01-Dec-2016 to finalize their scope of work.

This additional \$270M CAD was approved by the Board of Directors on 21-Dec-2016 (Reference Attachment 01).

Rationale

Current approved budget for CH0007-001 Contract Construction of Powerhouse and Intake, Spillway and Transition Dams Astaldi Contractor (AFE Rev. 3) is 1,638,337,364 CAD. The new agreement amendment for this Contract is \$1,830,000,000 CAD. The additional budget allocation of \$270M CAD is split as:

- Additional budget to cover agreement amendment: \$191,662,636 CAD
- Travel Allowance: \$60,000,000 CAD
- Growth Allowance: \$15,337,364 CAD
- Fee Letter of Credit: \$3,000,000 CAD

Total new current budget for this Contract including items indicated above is \$1,908,337,364 CAD.

Benefits

Approval of this PCN will facilitate revision of the current requisition for this Contract to the total new current budget of \$1,908,337,364 and provide alignment and compliance with the project Change Management Process.

Project Change Notice

Section 2: Impact of the Proposed Change to Project

Categorization

- Scope Addition/Deletion
- Scope Modification
- Non-Scope Change

Budget Transfer

Affected Project Component

- Muskrat Falls Generation
- Labrador Transmission Assets
- Labrador - Island Tx Link
- Maritime Link
- Nalcor PM
- Other

Cost Control Account Summary

Cost Control Account	Description	Estimated Cost
		Total Estimated Cost


Project Change Notice

Direct and Indirect Impact by Change Analysis Team

<input type="checkbox"/>	Basis of Design		
<input checked="" type="checkbox"/>	Construction		
There is no direct impact on construction activities as a result of this PCN, however, the amended agreement with the existing CH0007-001 Contractor has resolved outstanding items with the Contractor and will facilitate completion of their scope of work related to construction of Powerhouse and Intake, Spillway and Transition Dams.			
<input checked="" type="checkbox"/>	Contracts/Procurement		
The new amended agreement with Astaldi for the CH0007-001 Contract addresses all previous outstanding commercial issues with the Contractor. The Contract requisition requires revision.			
<i>G.C.</i> <input checked="" type="checkbox"/>	Cost Control	Reviewed By <i>EB</i>	Date Reviewed: <i>12-Jan-2017</i>
As noted in the description, an additional \$270M is required to bring the total budget to \$1,908,337,364 which is the required amount based on the new agreement plus allowances. This additional \$270M CAD was approved by the Board of Directors on 21-Dec-2016 (Attachment 01). SC0884 has been completed (Attachment 03).			
<input type="checkbox"/>	Design Philosophy		
<input type="checkbox"/>	Environment and Regulatory Comp.		
<input type="checkbox"/>	Execution Approach		
<input type="checkbox"/>	Health & Safety		
<input type="checkbox"/>	Operations/Reliability		
<input type="checkbox"/>	Property and Lands		
<input type="checkbox"/>	Quality		
<input type="checkbox"/>	Reputation		
<input checked="" type="checkbox"/>	Schedule	Reviewed By <i>EB</i>	Date Reviewed: <i>12-Jan-2017</i>
N/A			
<input type="checkbox"/>	Other		

Project Change Notice

Section 3: Risk Screening

N/A: <input checked="" type="checkbox"/>	Low	Medium	High	Comments
Risk Pre-Change	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	PCN is to document and formalize approval for the appropriation of funds required for the amended agreement between LCP and Astaldi for the CH0007-001 Contract. MFGR183 CH0007 Muskrat Falls Powerhouse Completion After Bridging Agreement has been retired since an agreement has been made with Astaldi to carryout the remainder of the Contract.
With Proposed Change	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
 Risk Coordinator	12-Jan-2017 Date			

* Reference Project Risk Management Plan for risk screening guidelines.

Whereas a risk assessment is not appropriate / applicable to this change, completion of the risk matrix is not required and therefore not included in this PCN printout.

Section 4: Implementation Plan

Implementation Strategy

The amended agreement with the CH0007-001 Contractor has been established. As noted in the description, this PCN is to document and formalize approval for the appropriation of additional budget to the CH0007-001 Contract due to amendment of the agreement. The required additional \$270M CAD was approved by the Board of Directors on 21-Dec-2016 (Reference Attachment 01).

Following approval of this PCN, the CH0007-001 requisition will be revised.

Project Change Notice

Actions

Action	Actionee	Status
Create / revise current requisition	Mike Collins	Incomplete

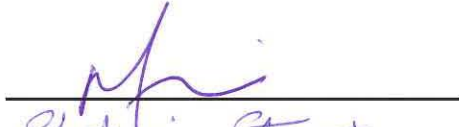
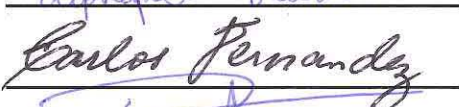

Documents

Name	File Name
Attachment 01	Attachment 01 - RESOLUTION - Revised Facilities Capital Cost AFE - 13th MFC Mtg - 21-Dec-2016.pdf
Attachment 02	Attachment 02 - Muskrat Falls Capital Cost AFE Rev4 21-Dec-2016.pdf
Attachment 03	Attachment 03 - SC0884.pdf

Process References

CH0007 Muskrat Falls Powerhouse Completion After Bridging Agreement

Additional Review

		Date
Area Manager		12-Jan-2017
Component Change Management Coord.	Stephen Stewart	12-Jan-2017
Component Project Controls Lead		12-Jan-2017
Component Deputy Project Manager		12-Jan-2017

Project Change Notice

Project Change Notice

Section 5: Distribution

- | | |
|---|--|
| <input checked="" type="checkbox"/> Originator | <input checked="" type="checkbox"/> GENERATION - General Project Manager |
| <input checked="" type="checkbox"/> Package Leader/Engineer | <input checked="" type="checkbox"/> GENERATION - Project Director |
| <input checked="" type="checkbox"/> Area Manager | <input checked="" type="checkbox"/> POWER DEVELOPMENT - Executive VP |
| <input checked="" type="checkbox"/> PM Muskrat Falls Generation | |
| <input type="checkbox"/> PM HVdc Specialties | <input type="checkbox"/> TRANSMISSION - Deputy Gen. Proj. Man. |
| <input type="checkbox"/> PM HVac & HVdc | <input type="checkbox"/> TRANSMISSION - General Project Manager |
| <input type="checkbox"/> PM Marine Crossing | <input type="checkbox"/> TRANSMISSION - Project Director |
| <input checked="" type="checkbox"/> Project Controls Manager | <input type="checkbox"/> POWER SUPPLY - Executive VP |
| <input checked="" type="checkbox"/> Supply Chain Manager | |
| <input type="checkbox"/> HSS & ER Manager | <input type="checkbox"/> Building the Prod. Org. (BTPO) Manager |
| <input type="checkbox"/> Quality Manager | <input type="checkbox"/> Ready for Integration (RFI) Manager |
| <input type="checkbox"/> Environment & Reg. Comp. Manager | <input type="checkbox"/> TRANSITION TO OPERATIONS (TTO) - VP |
| <input type="checkbox"/> Commercial Manager | <input type="checkbox"/> Other |
| <input type="checkbox"/> Completion Manager | <input type="checkbox"/> <input type="text"/> |
| <input type="checkbox"/> Technical & Design Integrity Manager | <input type="checkbox"/> Other |
| <input checked="" type="checkbox"/> General Manager Finance - LCP | <input type="checkbox"/> <input type="text"/> |
| | <input type="checkbox"/> Other |
| | <input type="checkbox"/> <input type="text"/> |

Project Change Notice

Section 6: Acceptance Phase

Decision			
<input checked="" type="checkbox"/> Approved	<input type="checkbox"/> Rejected/Cancelled	Decision Date	24-Jan-2017
<u>Functional Management</u>		<u>Organizational Management</u>	
<input checked="" type="checkbox"/> <u>[Signature]</u> Scope / Project Manager	<u>17 Jan 2017</u> (Date)	<input checked="" type="checkbox"/> <u>[Signature]</u> GENERATION - Gen. Project Manager	<u>24-JAN-2017</u> (Date)
<input checked="" type="checkbox"/> <u>Janyia Power</u> Project Controls Manager	<u>22-Jan-2017</u> (Date)	<input checked="" type="checkbox"/> <u>P. Hengler</u> Generation Project Director	<u>26 Jan 2017</u> (Date)
<input checked="" type="checkbox"/> <u>[Signature]</u> Supply Chain Manager	<u>23 Jan 2017</u> (Date)	<input checked="" type="checkbox"/> <u>[Signature]</u> POWER DEVELOPMENT - Executive VP	<u>24-Jan-17</u> (Date)
<input type="checkbox"/> _____ HSS & ER Manager	_____ (Date)	<input type="checkbox"/> _____ TRANSMISSION - Dep. Gen. Proj. Manager	_____ (Date)
<input type="checkbox"/> _____ Quality Manager	_____ (Date)	<input type="checkbox"/> _____ TRANSMISSION - Gen. Project Manager	_____ (Date)
<input type="checkbox"/> _____ Environment & Reg. Comp. Manager	_____ (Date)	<input type="checkbox"/> _____ TRANSMISSION - Project Director	_____ (Date)
<input type="checkbox"/> _____ Commercial Manager	_____ (Date)	<input type="checkbox"/> _____ POWER SUPPLY - Executive VP	_____ (Date)
<input type="checkbox"/> _____ Completion Manager	_____ (Date)	<input type="checkbox"/> _____ Building the Prod. Org. (BTPO) Manager	_____ (Date)
<input type="checkbox"/> _____ Technical & Design Integrity Manager	_____ (Date)	<input type="checkbox"/> _____ Ready for Integration (RFI) Manager	_____ (Date)
<input type="checkbox"/> _____ General Manager Finance - LCP	_____ (Date)	<input type="checkbox"/> _____ Ready for Integration (RFI) Manager	_____ (Date)
<input type="checkbox"/> _____ Other	_____ (Date)		
<input type="checkbox"/> _____ Other	_____ (Date)		
<input type="checkbox"/> _____ Other	_____ (Date)		

Project Change Notice

Section 7: Close-Out

Implementation Status Complete:

Signoff:

Change Management Lead:

Date:

Scope/Project Manager:

Date:

RESOLUTION

13TH MUSKRAT FALLS CORPORATION
BOARD OF DIRECTORS MEETING – DECEMBER 21, 2016

REVISED MASTER AFE

BE IT RESOLVED:

THAT the Master Authorization for Expenditure relating to Muskrat Falls Corporation be increased by \$270 million to facilitate the execution by the Corporation of the Completion Contract with Astaldi Canada Inc., as per the terms and conditions outlined to the Board at its meeting of December 21, 2016.

Authorization for Expenditure (AFE)

COMPANY NAME		AFE NUMBER	SUPP.	WBS No.
Muskrat Falls Corporation		LCPMF-2013-01	04	N/A
DEPARTMENT NAME		PROJECT DESCRIPTION		
Lower Churchill Project		Muskrat Falls Generation Facility		
PREPARED BY	DATE (Y/M/D)			
James Meaney	21-Dec-16			
AFE DESCRIPTION & JUSTIFICATION				
Master AFE to allow funding for progression of work to Gate 4 as defined in the Gateway Process LCP-PT-MD-0000-PM-PR-0001-01 and encompasses execution of work scope leading to in-service.				
Note: All amounts in Canadian currency.				
PARTICIPANTS NAME	INTEREST %	AMOUNT (\$)	TOTAL AFE AMOUNT	
AFE OPERATOR				
Muskrat Falls Corporation	100.00	\$270,000,000	\$5,071,412,435	
			WORKING INTEREST	
			100.00%	
			NET AMOUNTS	
			Pre-Sanction	\$ 269,217,813
			Prev. Supplements	\$ 4,606,515,146
			Transfer to AFE MF-FIN-2014-01	\$ (74,320,523)
			Current Supplement	\$ 270,000,000
			Cumulative Total	\$ 5,071,412,436
			NET EXPENDITURE FORECAST	
			YEAR	NET AMOUNT
			TTD Actual Dec 2016	\$2,943,964,508
			2017	\$1,012,619,074
			2018	\$789,745,527
			2019	\$288,193,016
			2020	\$36,890,310
			AFE TOTAL	\$5,071,412,435
			Full Power	May 2020
			Commissioning Complete	June 2020
TOTAL COST	100%	\$270,000,000		
AFE APPROVAL				
PROJECT CONTROLLER	DATE (Y/M/D)	VICE PRESIDENT	DATE (Y/M/D)	
GENERAL MANAGER OF FINANCE	DATE (Y/M/D)	VP FINANCE & CFO	DATE (Y/M/D)	
PROJECT DIRECTOR	DATE (Y/M/D)	PRESIDENT & CEO	DATE (Y/M/D)	



Scope Change Grouping Report
PROJECT: 505573 : LOWER CHURCHILL PROJECT
CLIENT: Nalcor Energy



Grouped by: Scope Change; Commitment Package
Period 066 From: 2016-12-01 To: 2016-12-28

Project Currency: CAD
Report Currency: CAD at the rate of: 1.00000000

Seq.	Org. #	Description	C.P.	PO/Contract	Facility	CRC	Change O/C No	Qty.	UoM	Hours	Equipment	Material	Installation	Total	AI	Forecast		
																(a) Prev.	(b) Current	(b - a) Var.
SC0884 - AFE rev4 budget increase (St: AP Category: SCCH)																		
CH0007 - Intake, Powerhouse, Spillway & Trans Dam																		
72476	0	Increase of budget in alignment with AFE rev4		CH0007	CH0007-001	330000	28100	1.00	LOT	10.00	0	270,000,000	0	270,000,000	AV	0	270,000,000	270,000,000
Sub Total for : CH0007 - Intake, Powerhouse, Spillway & Trans Dam										10.00	0	270,000,000	0	270,000,000	0	270,000,000	270,000,000	
Sub Total for : SC0884 - AFE rev4 budget increase										10.00	0	270,000,000	0	270,000,000	0	270,000,000	270,000,000	
Grand Total										10.00	0	270,000,000	0	270,000,000	0	270,000,000	270,000,000	

Scope Change Status: PO - Potential CA - Cancelled RE - Refused IP - In Preparation PA - Pending Approval AP - Approved

Allocation Status: AV - Available RS - Reserved AL - Allocated AP - Allocated this period

Parameters: Scope Change: LIKE: sc0884 FROM: All TO All; Commitment Package: LIKE: All FROM: All TO All