

**NALCOR ENERGY
73RD BOARD OF DIRECTORS MEETING
DECEMBER 18, 2013**

WAYNE CHAMBERLAIN



NALCOR ENERGY
SEVENTY-THIRD MEETING OF BOARD OF DIRECTORS

Hydro Place
Boardroom Level 6
St. John's, NL

WEDNESDAY
December 18, 2013
at 10:30 am

AGENDA

TAB

1.	Constitution of the Meeting: * Chairperson – Terry Styles * Secretary – Wayne Chamberlain * Notice of meeting sent out on November 19, 2013	
2.	Safety Moment	
3.	Verification of the Minutes of the 68 th meeting of the Board held on September 27th, 2013 (RESOLUTION)	
4.	Business Arising	
5.	Board Committee Reports	
	• Audit	
	• Governance	
	• Safety, Health and Environment	
6.	Financial Report	
	• Financial Summary	2
	• 2014 Financing Plan (to follow)	3
	• Approval of 2014 Operating and Capital Budgets (RESOLUTION).....	4
	• Approval of 2014 Financial Risk Management Strategy (to follow) (RESOLUTION).....	5
	• Compliance Certificate	6
7.	President's Report	
	• 2013 Corporate Performance Review	7
	• 2014 Corporate Plan (Draft).....	8
8.	Business Unit Reports	
	• Newfoundland and Labrador Hydro	9
	• CF(L)Co.....	10
	• Lower Churchill.....	A
	• Oil and Gas.....	B
	• Bull Arm.....	C
	• Energy Marketing.....	D
9.	Ratification of Resolutions (RESOLUTIONS)	E
10.	Nalcor Board Annual Work Plan	F
11.	2014 Meeting Schedule	G
12.	Pre-paid Rent (RESOLUTION) (to follow).....	H
13.	Other Business	
14.	Date for next meeting * Friday, March 7, 2014	
15.	In Camera Session	
16.	Termination	
17.	Lunch	

RESOLUTION

73RD NALCOR ENERGY BOARD OF DIRECTORS MEETING
DECEMBER 18, 2013

VERIFICATION OF MINUTES

BE IT RESOLVED

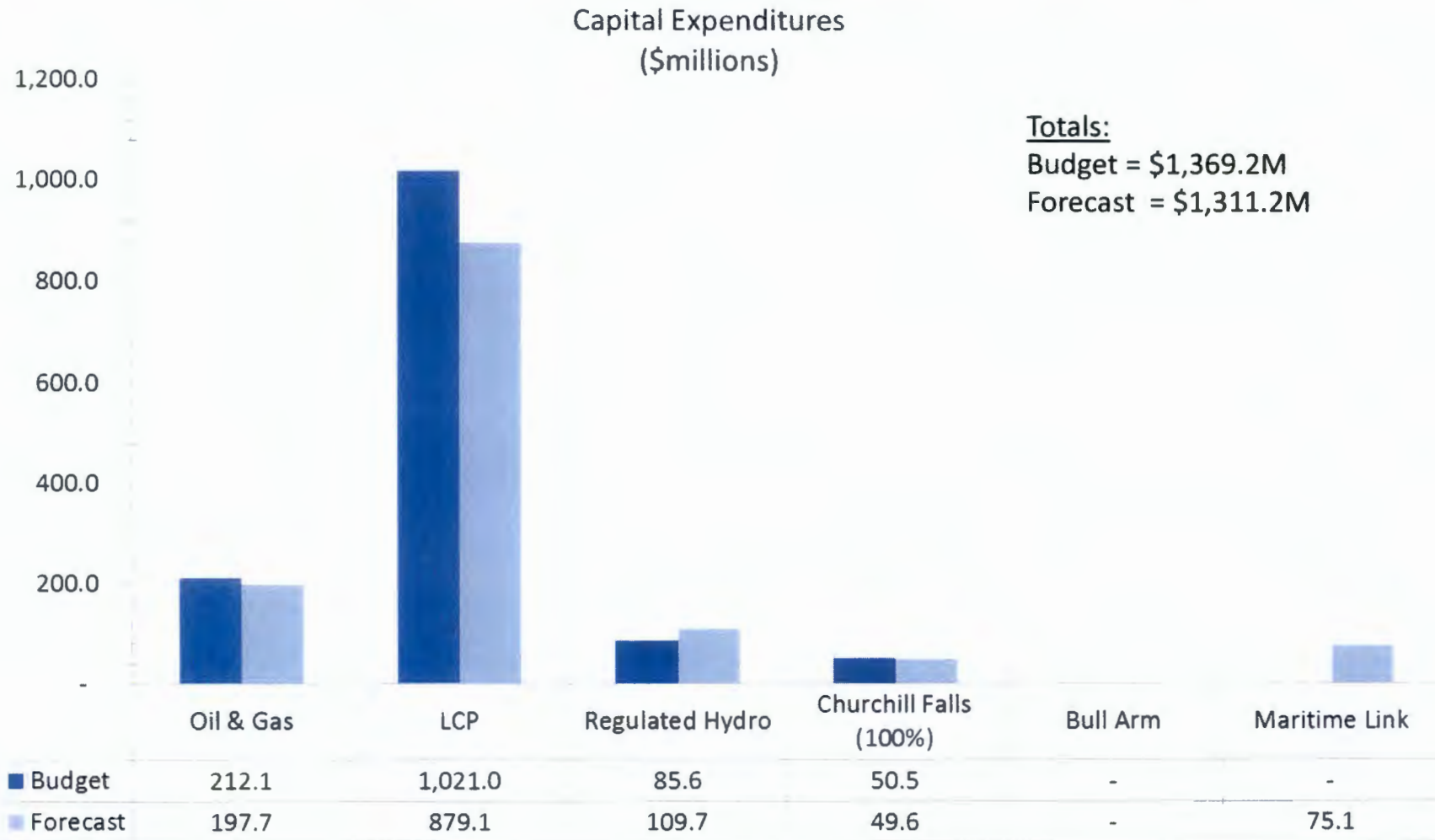
THAT the minutes of the **SIXTY-EIGHTH** meeting of the Board of Directors of Nalcor Energy held on September 27, 2013, which minutes are currently before this meeting, be and they are hereby verified as being correct; and

THAT the Chairperson be and is hereby authorized to verify the minutes by signing the Minute Book.

EM TC

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2013 Forecast Capital Expenditures



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2013 Nalcor Plan Performance Report

Nalcor Energy Board of Directors

December 18, 2013

Boundless Energy



GOAL	HYDRO	CHURCHILL FALLS	LOWER CHURCHILL	OIL & GAS	BULL ARM FABRICATION	ENERGY MARKETING	OTHER ENERGY ACTIVITIES
1. SAFETY	Lead/lag ratio 600:1			All Injury Frequency (AIF) ≤ 1.0		Lost Time Injury Frequency (LTIR) ≤ 0.20	
	Achieve target completion of work methods for high-risk tasks				Deliver planned grounding and bonding training ¹		
	Complete Phase II Safety Coaching workshops.						
2. ENVIRONMENT	Complete ≥ 95% of environmental leadership targets ²						
3. BUSINESS EXCELLENCE							
Finance	Cash from Operations ≥ \$190.2M			Capital Expenditures \$ 1,369M		Operating Expenditures ≤ \$224M	
	Net Income ≥ \$87.5M						
Project Execution	Complete 2013 phase of project execution excellence implementation plan ³						
Integration	Integration Management: Complete 2013 target process and structure activities to enable integration ⁴						
Operations	Asset management: Complete 2013 phase of asset management plan ⁵						
			<u>MRF/LIL (Phase 1)</u> • Complete planned 2013 scope within approved cost and schedule • Project forecast final cost and schedule on track				
			<u>Gull Island (Phase 2)</u> Complete planned 2013 activities outlined in Phase 2 work plan				
Growth							
4. PEOPLE	Complete ≥ 95% of 2013 activities identified in Employee Engagement Survey Action plans						
5. COMMUNITY	Benchmark reputation measures and develop three-year Nalcor Reputation Management and Marketing Communications Strategy						
	Complete 2013 phase of Shareholder and Board of Directors Relations Strategy						



Metric	HYDRO	CHURCHILL FALLS	LOWER CHURCHILL	OIL & GAS	BULL ARM FABRICATION	ENERGY MARKETING
Cash from Operations			N/A			
Capital Expenditures			\$6,200M			
Operating Expenditures			N/A			
Capital Structure			N/A			
Net Income			N/A			

* Targets for metrics relevant to a particular line of business

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Planning for 2014-2018

2014 Nalcor Corporate Plan Highlights

Nalcor Energy Board of Directors

December 18, 2013

Boundless Energy



GOAL	HYDRO	CHURCHILL FALLS	LOWER CHURCHILL	OIL & GAS	BULL ARM FABRICATION	ENERGY MARKETING	OTHER ENERGY ACTIVITIES
1. SAFETY	Lead/lag ratio 750:1			All Injury Frequency (AIF) ≤ 0.80		Lost Time Injury Frequency (LTIR) ≤ 0.15	
	Complete electricity grounding and bonding standard and training package for plants and stations						
2. ENVIRONMENT	Complete ≥ 95% of environmental leadership targets ¹						
3. BUSINESS EXCELLENCE							
Finance	Cash from Operations ≥ \$xxx.x M			Capital Expenditures \$ xxxx M		Operating Expenditures ≤ \$xxx M	
	Net Income ≥ \$xxx.x M						
Project Execution	Complete 2014 phase of project execution excellence implementation plan ²						
Integration	Finalize electricity ready for operations multi-year strategy and complete 2014 activities						
Operations	Asset management: Complete 2014 phase of asset management plan ³						
			<u>MRF/LIL (Phase 1)</u> •Complete planned 2014 scope within approved cost and schedule •Project forecast final cost and schedule on track				
Growth			<u>Gull Island (Phase 2)</u> Complete planned 2014 activities outlined in Phase 2 work plan				
4. PEOPLE	Complete external best employer benchmarking survey – achieve 80% participation						
5. COMMUNITY	Complete planned 2014 activities outlined in Nalcor Reputation Management Plan ¹² Complete planned 2014 activities outlined in multi-year Shareholder Relations Strategy ¹³ and complete 2014 annual engagement plan activities to support Board Relations Strategy ¹⁴						

Metric	HYDRO	CHURCHILL FALLS	LOWER CHURCHILL	OIL & GAS	BULL ARM FABRICATION	ENERGY MARKETING
Cash from Operations			N/A			
Capital Expenditures			\$xxxx M			
Operating Expenditures			N/A			
Capital Structure			N/A			
Net Income			N/A			

* Targets for metrics relevant to a particular line of business

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Lower Churchill

Nalcor Energy Board of Directors

December 18, 2013

Boundless Energy



2013 Lower Churchill Plan Highlights

GOAL	
1. SAFETY	Lead/Lag Ratio 600:0 All Injury Frequency (AIF) = 0 Lost Time Injury Frequency (LTIR) = 0
2. ENVIRONMENT	Achieve release from Environmental Assessment for LIL Work with Emera to submit EIS for ML as per project schedule
3. BUSINESS EXCELLENCE	
Finance	Achieve milestones required to secure financial close for MF/LTA/LIL debt
Project Execution	Phase 1: Be on schedule to deliver First Power from Muskrat Falls to the Island as per the approved Master Project Schedule and Final Forecast Cost remaining within Project Sanction budget. - Support Emera in achieving ML DG3 Phase 2: Complete planned 2013 activities to advance market access options to support Gull Island
Systems Operations/ Planning	Manage interfaces between project, Nalcor Corporate and Emera Develop operations organization design
4. PEOPLE	Advance and implement collective agreements
5. COMMUNITY	Execute 2013 communications and community relations plan

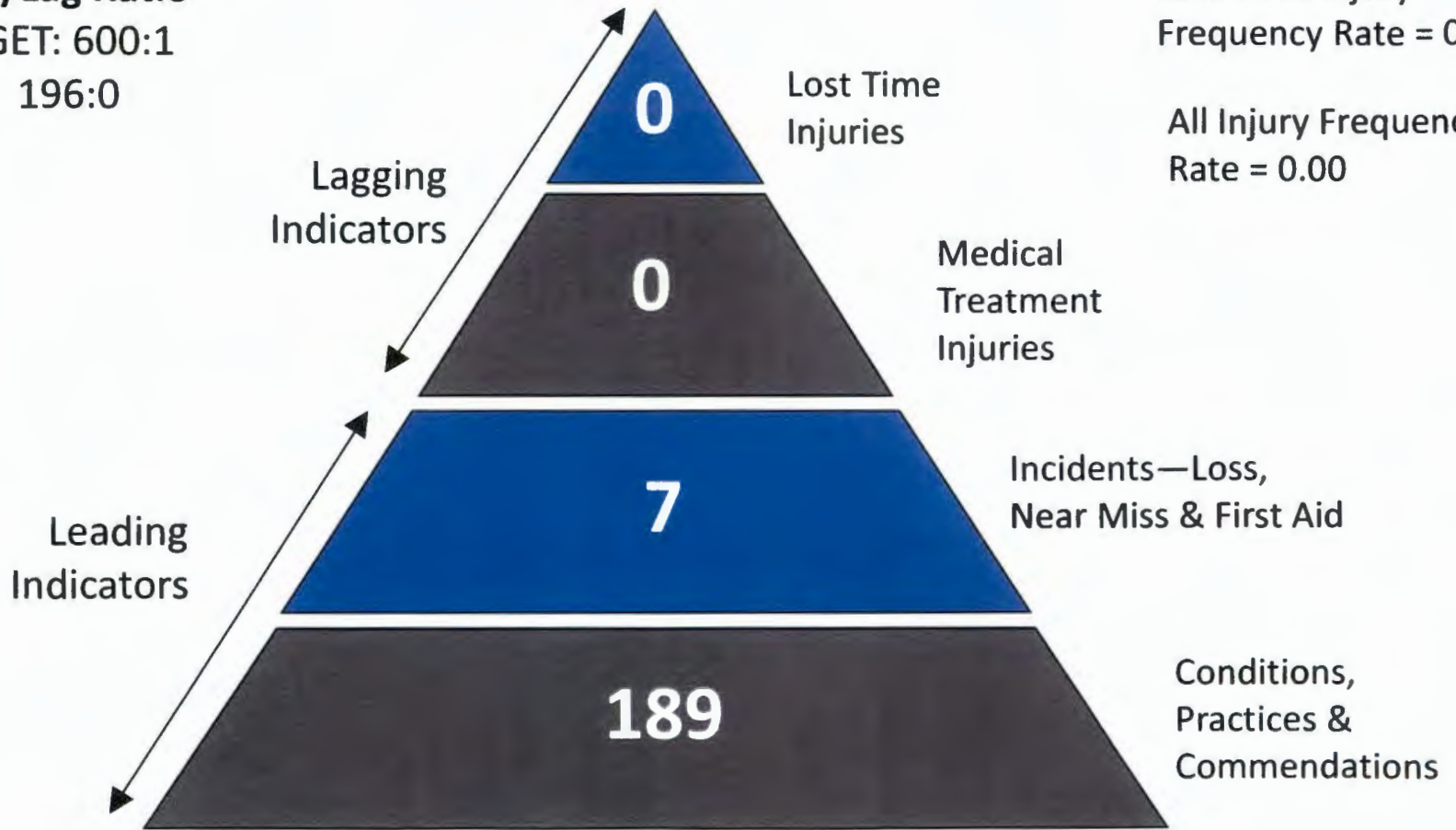
Key Performance Measures

Lower Churchill Safety Performance: October 2013

Lead/Lag Ratio
TARGET: 600:1
YTD: 196:0

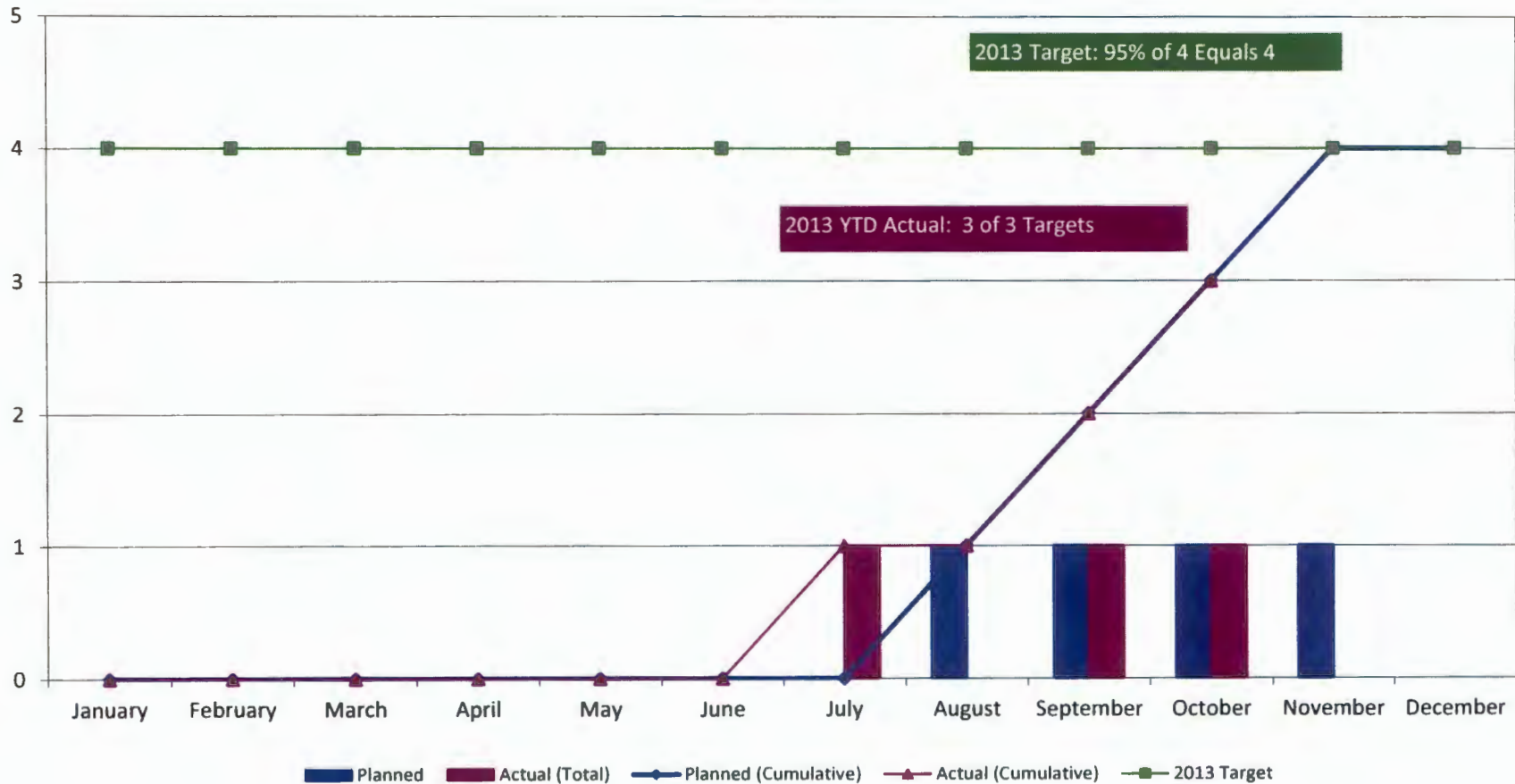
Lost Time Injury
Frequency Rate = 0.00

All Injury Frequency
Rate = 0.00



Environment

Lower Churchill Project Targets 2013 Actual Compared to Planned



Significant Events/Future Risks and Opportunities

Phase 1 – MF, LIL, ML

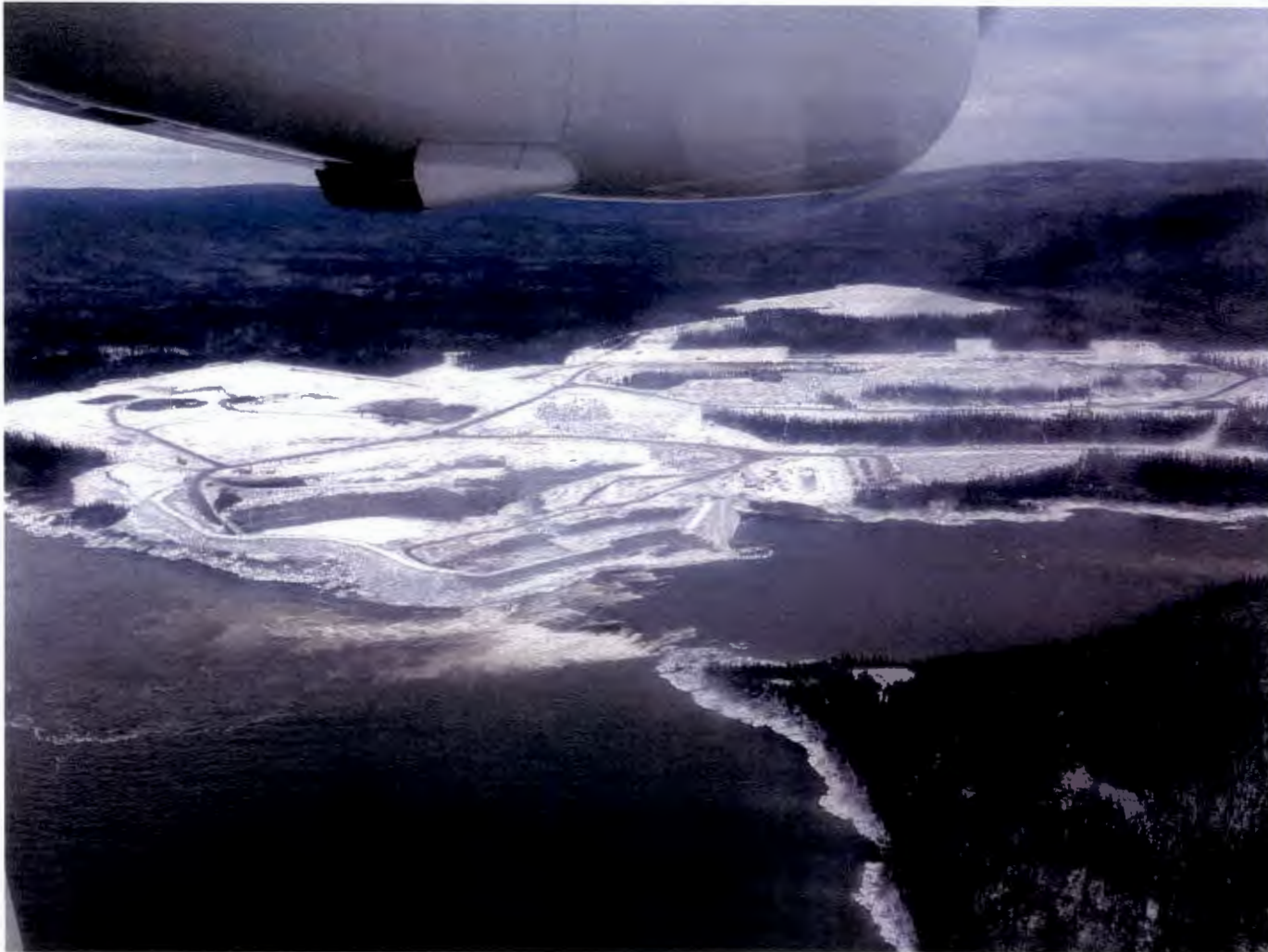
Project Execution

- Total project workforce = 1,682 (76% NL residents)
- Construction continuing at MF site
 - Bulk excavation contract nearing completion
 - RCC coffer dam clean-up complete
 - Spillway approach channel complete
 - Blasting completed on powerhouse and bull noses
 - Power house clean-up winding down
 - Astaldi continues to ramp up its NL operations. Offices open in St. John's and Labrador
 - Reservoir tree clearing operations continuing

MF Site layout



Bulk excavation at MF site



Power House excavation



RCC Cofferdam and Spillway



Spillway approach channel



SOBI HDD drilling underway



Phase 1 – MF, LIL, ML (cont'd.)

- Labrador AC Transmission Right of Way clearing (MF to CF) resumed under new contractor
- SOBI Marine Crossing
 - Horizontal Directional Drilling commenced in Shoal Cove
- Project engineering more than 90% complete; Demobilization underway
- Procurement – Finalizing evaluation of contract for transmission construction
- 2013 historical artifacts recovery program complete

Phase 1 – MF, LIL, ML (cont'd.)

Environmental

- Received LIL EA release from Government of Canada as of late November 2013
- Release says while project is likely to cause significant cumulative adverse effects on Red Wine Caribou, these effects are justified in view of economic benefits and reductions in greenhouse gases
- This decision allows the project to continue with the regulatory approval process. A number of mitigation measures are required which was anticipated

Phase 1 – MF, LIL, ML (cont'd.)

Commercial

- Emera agreements
 - Finalizing changes to commercial agreements as per Sanction Agreement
 - ML DG3 estimate agreed by Nalcor
- NLA agreements
 - Executed commercial agreements with NLH for transmission and power purchases

Phase 1 – MF, LIL, ML (cont'd.)

Financing

- Financing process / Federal loan guarantee
 - Received Federal Loan Guarantee and proceeding with execution activities in anticipation of funding
- Equity Commitment
 - Executed equity support and equity guarantee agreements per NL Commitment Letter

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RESOLUTION

73RD NALCOR ENERGY BOARD OF DIRECTORS MEETING
DECEMBER 18, 2013

RATIFICATION OF INCORPORATION/APPOINTMENT OF DIRECTORS
LOWER CHURCHILL PROJECT SUBSIDIARIES

BE IT RESOLVED

THAT the email approval of the Board of Directors of the incorporation/appointment of Directors of the Lower Churchill Project Subsidiaries dated November 12, 2013, be and it is hereby ratified.

CS GM

RESOLUTION**NALCOR ENERGY BOARD OF DIRECTORS****APPROVAL OF INCORPORATION/APPOINTMENT OF DIRECTORS
LOWER CHURCHILL PROJECT SUBSIDIARIES**

WHEREAS the Lieutenant-Governor in Council has authorized the incorporation of Muskrat Falls Corporation, Labrador-Island Link Operating Corporation, Lower Churchill Management Corporation and Labrador Transmission Corporation as wholly owned subsidiaries of Nalcor Energy;

THEREFORE BE IT RESOLVED THAT the incorporation of each of Muskrat Falls Corporation, Labrador-Island Link Operating Corporation, Lower Churchill Management Corporation and Labrador Transmission Corporation, as wholly owned subsidiaries of Nalcor Energy, be and it is hereby approved;

AND BE IT FURTHER RESOLVED THAT the individuals listed below shall be the directors of the aforementioned subsidiaries of Nalcor Energy:

Muskrat Falls Corporation:

- Ed Martin
- Gerry Shortall
- Ken Marshall
- John Quicoe
- Rick Daw

Labrador-Island Link Operating Corporation:

- Ed Martin
- Gerry Shortall
- Allan Hawkins
- Chris Loomis
- Desmond Whalen

Lower Churchill Management Corporation:

- Ed Martin
- Gilbert Bennett
- Gerard McDonald
- Derrick Sturge
- Donna Stone
- June Perry

Labrador Transmission Corporation:

- Ed Martin
- Gilbert Bennett
- Derrick Sturge
- Paul Humphries
- Ann Marie Hann
- Chris Woodford

GS EM

RESOLUTION

73RD NALCOR ENERGY BOARD OF DIRECTORS MEETING
DECEMBER 18, 2013

RATIFICATION OF APPROVAL OF BORROWING OF SUBSIDIARIES IN
CONNECTION WITH THE LOWER CHURCHILL PROJECT PHASE 1 FINANCINGS

BE IT RESOLVED

THAT the email approval of the Board of Directors of the Borrowing of Subsidiaries in connection with the Lower Churchill Project Phase 1 Financings dated November 26, 2013, be and it is hereby ratified.

GS EM

RESOLUTION

**MEETING OF THE BOARD OF DIRECTORS OF
NALCOR ENERGY
HELD ON NOVEMBER 26, 2013**

**APPROVAL OF THE BORROWING OF SUBSIDIARIES IN CONNECTION
WITH THE LOWER CHURCHILL PROJECT PHASE 1 FINANCINGS**

WHEREAS Nalcor Energy (the "**Corporation**") was established pursuant to the Energy Corporation Act (Newfoundland and Labrador) with the object to invest in, engage in and carry out activities in all areas of the energy sector in Newfoundland and Labrador and elsewhere;

AND WHEREAS the Corporation has approved a financing plan and structure designed to finance a new hydro-electric generation plant to be constructed on the Churchill River in the in the vicinity of Muskrat Falls (the "**MF Plant**");

AND WHEREAS the Corporation has approved a financing plan and structure designed to finance the transmission facilities to be constructed between the MF Plant and the generating plant located at Churchill Falls, Newfoundland and Labrador (the "**Labrador Transmission Assets**" or the "**LTA**");

AND WHEREAS the Corporation has approved a financing plan and structure designed to finance the transmission facilities to be constructed from central Labrador to Soldiers Pond, Newfoundland and Labrador (the "**Labrador-Island Link**" or the "**LIL**");

AND WHEREAS the Corporation and its subsidiaries: Muskrat Falls Corporation, Labrador Transmission Corporation, Labrador-Island Link Holding Corporation, Labrador-Island Link General Partner Corporation, Labrador-Island Link Operating Corporation and Lower Churchill Management Corporation (the "**Subsidiaries**"), have, in connection with resolutions of the directors of the Corporation and the Subsidiaries dated November 15, 2013 (except for Lower

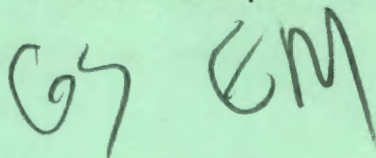
Churchill Management Corporation whose board of directors meeting was held on November 22, 2013), resolved to negotiate, execute and deliver various agreements for undertakings and financings, as disclosed therein (the "**Authorized Agreements**");

AND WHEREAS pursuant to Section 14.1(3) of the Energy Corporation Act (Newfoundland and Labrador), the Corporation is required to approve all undertakings and borrowing of each of the Subsidiaries which would have been required to have been approved by the Lieutenant-Governor in Council if engaged in by the Corporation;

NOW THEREFORE BE IT RESOLVED THAT:

The Corporation does hereby authorize, all business, undertakings and financing to be engaged in by the Subsidiaries in connection with the MF Plant, LTA, LIL or the Authorized Agreements, including without limitation, that each Subsidiary is authorized to do any of the following:

- a. Borrow money for purposes related to the MF Plant, LTA, LIL or the Authorized Agreements;
- b. Secure the repayment of money borrowed;
- c. Issue bonds, debentures, or other securities of the Subsidiaries;
- d. Execute and deliver mortgages, assignments, conveyances, charges or other encumbrances of and over the property of every nature and kind, both present and future, title to which is vested in any of the Subsidiaries; and
- e. Enter into, execute and deliver a trust deed, trust indenture or an agreement with a lender, a trustee acting for the holders of bonds and debentures or other persons.



**MEMO**

Date: December 9, 2013
To: Nalcor Board of Directors
Subject: **Work Plan**

Attached is the annual work plan of agenda items for the Nalcor Board meetings. This outlines the regular items that are on Board meeting agendas throughout the year and will be used to develop the agendas for the 2014 Board meetings. It was prepared by the Corporate Secretarial Department primarily for our use, but is being provided here for the information and reference of directors.

Regards,

for 
Peter A. Hickman
Assistant Corporate Secretary

PAH/ab

Attachment

**NALCOR BOARD MEETINGS
ANNUAL GENERAL MEETINGS (AGM)
AGENDA ITEMS**

DATE	LOCATION	COMPANY	MEETING TYPE	AGENDA ITEMS
1ST QUARTER - (January – March)				
JANUARY		ALL		Send out Interests Form to All Directors
MARCH	Level 6 Board Room	NALCOR	BOARD	Audit (year end) <ul style="list-style-type: none"> - Approval of Consolidated Financial Statements - Review Audit Results Report Financial Report <ul style="list-style-type: none"> - Financial Summary (Year End) - Compliance Certificate President's Report <ul style="list-style-type: none"> - Year End Performance Report - 5 Year Corporate Plan Business Unit Reports (year end) Appointment of Proxy for AGM (GIPCO) Code of Business Conduct & Ethics Report (previous year)
2ND QUARTER (April – June)				
APRIL	Level 6 Board Room	NALCOR	BOARD	President's Report <ul style="list-style-type: none"> - Corporate Performance Review Business Unit Reports Financial Report <ul style="list-style-type: none"> - Financial Summary - Compliance Certificate
JUNE		NALCOR	AGM	Corporate Overview Financial Overview Q&A
JUNE	Level 6 Board Room	NALCOR	BOARD	President's Report <ul style="list-style-type: none"> - Corporate Performance Review Business Unit Reports Finance Report <ul style="list-style-type: none"> - Financial Summary - Compliance Certificate Approval of Annual Transparency and Accountability Performance Report Approval of Shareholder Resolutions (O&G, BA & GIPCO)
3RD QUARTER (July – September)				
SEPT.	Level 6 Board Room	NALCOR	BOARD	President's Report <ul style="list-style-type: none"> - Corporate Performance Review Business Unit Reports Financial Report <ul style="list-style-type: none"> - Financial Summary - Compliance Certificate

**NALCOR BOARD MEETINGS
ANNUAL GENERAL MEETINGS (AGM)
AGENDA ITEMS**

DATE	LOCATION	COMPANY	MEETING TYPE	AGENDA ITEMS
4TH QUARTER (October – December)				
NOV.	Level 6 Board Room	NALCOR	BOARD NLH Mtg. first before Nalcor Mtg	President's Report <ul style="list-style-type: none"> - Corporate Performance Review - Corporate Plan (Upcoming year) Board Committee Reports Business Unit Reports Financial Report <ul style="list-style-type: none"> - Financial Summary - Financing Plan (for upcoming year) - Approval of Financial Risk Management Strategy (for upcoming year) - Approval of Operating and Capital Budget (for upcoming year) - Compliance Certificate Meeting Schedule (for upcoming year) Review Performance of Board and Mandate

**NALCOR ENERGY
BOARD OF DIRECTORS**

2014 MEETING SCHEDULE

Friday, March 7, 2014

Friday, April 25, 2014

Friday, June 27, 2014

Friday, September 26, 2014

Friday, November 28, 2014



Nalcor Board Meeting - Pre-Paid Rent Agenda Item

Peter Hickman to: Ed Martin, tclift, ken.marshall, g.shortall,
ebreen, labbass, mayor, appalachi

12/17/2013 04:42 PM

Cc. Wayne Chamberlain

Attached is a memo relating to item 12 on the Nalcor Board agenda with respect to Pre-Paid Rent. Hard copies will be available tomorrow. The related resolution will be presented at the meeting.

Regards,
Peter



2013 Board Memo re Prepaid Rent.pdf



MEMO

Date: December 17th, 2013

To: Nalcor Energy Board of Directors
Labrador Island Link Operating Corporation Board of Directors

Subject: **2013 Prepaid Rent**

Background

The Labrador-Island Link Limited Partnership Agreement (the “**Partnership Agreement**”), to which an affiliate of Emera Inc. (“**Emera**”) is a party, provides that the general partner shall take all reasonable steps as are necessary to ensure that the taxable income (*i.e.* the amount of income for purposes of the *Income Tax Act* (Canada)) allocated to each limited partner in respect of each fiscal year shall not be less than \$1.00.

As financial closing occurred on December 10th, 2013, the Labrador-Island Link Limited Partnership (the “**Partnership**”) has incurred significant financing expenses, such as the underwriter’s fees, legal fees, collateral agent fees and stand-by fees for funds remaining available and not disbursed to the Partnership before the end of the year.

As would be expected during the construction phase of the project, all of the financing expenses referred to above, and all other expenses incurred by the Partnership in 2013, will be in excess of the income earned by the Partnership during the year.

Prepaid Rent

Pursuant to the LIL Assets Agreement providing, amongst other things, for the lease of the Labrador-Island Link, entered into by the Partnership, as lessor, and Labrador-Island Link Operating Corporation (“**LIL Opco**”), as lessee, LIL Opco has, at its sole discretion and option, the right to prepay to the Partnership all or any portion of the rent due and payable for a future operating year(s). The purpose of the prepayment of rent is to allow the Partnership to earn income to offset any deduction it has available in computing its income so that the taxable income allocated to each limited partner in respect of the 2013 fiscal year is not less than \$1.00.

Now that financial closing has occurred, the Nalcor team and its advisors are working on establishing and recommending a reasonable amount for the prepaid rent. It is recommended, that the prepaid rent be in excess of the anticipated expenses in order to cover for unexpected expenses/deductions. When the Partnership calculates its final numbers related to the 2013 year, it will claim a reserve against any overpaid prepaid rent in order to avoid any income taxes for its limited partner who is not tax-exempt.

Any prepaid rent received by the Partnership will be deposited in a special account maintained by the Partnership and will be invested. All the income generated by the investment is payable every year to Labrador-Island Link Holding Corporation, a wholly-owned subsidiary of Nalcor acting as limited partner.

Manner of Funding Paying/Prepaid Rent

Nalcor will subscribe for additional shares of the share capital of LIL Opco. Upon approval by the directors of LIL Opco, the Partnership will be notified and the payment of prepaid rent will be made before December 31, 2013.

Recommended Course of Action

Based on the above, it is recommended that the board of directors of Nalcor and the board of directors of LIL Opco, as required:

1. Approve the principle of a prepayment of rent by LIL Opco before the end of 2013;
2. Approve the subscription for additional shares by Nalcor in the share capital of LIL Opco;
3. Authorize any two of the officers or directors of Nalcor to sign the documents required for the subscription of shares following the reception of a recommendation from the president of LIL Opco with respect to the amount of prepaid rent (plus tax) for 2013;
4. Authorize any two of the officers or directors of LIL Opco to sign the documents required for the prepayment of rent to the Partnership before December 31, 2013.

Derick Sturge
Vice President, Finance & Chief Financial Officer

RESOLUTION**MEETING OF THE BOARD OF DIRECTORS OF
NALCOR ENERGY
HELD ON DECEMBER 18, 2013****SUBSCRIPTION FOR COMMON SHARES IN THE CAPITAL
OF LABRADOR-ISLAND LINK OPERATING CORPORATION**

WHEREAS pursuant to the LIL Assets Agreement and the LIL Lease, Labrador-Island Link Operating Corporation (“LIL Opco”) has, at its sole discretion and option, the right to prepay to the Labrador-Island Link Limited Partnership all or any portion of the rent due and payable under the LIL Lease for a future or future operating year(s);

AND WHEREAS the Corporation has determined it is in its best interests to facilitate the pre-payment by LIL Opco of rent in relation to the operating year 2020;

WHEREAS the Corporation has determined that in relation to the above, it is in its best interests to subscribe for 100 common shares in the capital of Labrador-Island Link Operating Corporation pursuant to the terms of a subscription agreement (the “**Subscription Agreement**”), a draft copy of which has been presented to the directors;

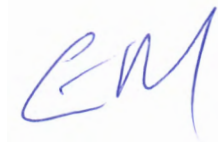
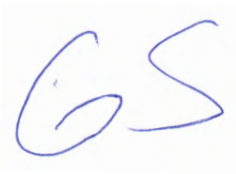
AND WHEREAS the directors consider it to be in the best interests of the Corporation to enter into the Subscription Agreement;

NOW THEREFORE BE IT RESOLVED THAT:

1. The subscription by the Corporation for 100 common shares in the capital of Labrador-Island Link Operating Corporation be and it is hereby approved;
2. The Corporation is hereby authorized, empowered and instructed to execute and deliver the Subscription Agreement, together with all documents and instruments considered necessary or desirable in connection with the Subscription

Agreement in such form as any two directors or officers of the Corporation may approve (such documents and instruments are collectively referred to as the "**Documents**"), the whole upon the terms and subject to the conditions set out in the draft Subscription Agreement which has been submitted to the directors and which is hereby approved, such approval to be conclusively evidenced by the execution thereof by any two directors or officers of the Corporation;

3. Any two of the directors or officers of the Corporation be and are hereby authorized, empowered and instructed, acting for, in the name of and on behalf of the Corporation, to execute or to cause to be executed, under the seal of the Corporation or otherwise, and to deliver or cause to be delivered, the Subscription Agreement, in or substantially in the same form and terms as the draft thereof submitted to the directors, and the Documents, and to do or cause to be done all such other acts and things as any two directors or officers of the Corporation consider necessary or desirable in connection with the Corporation performing its obligations under the Subscription Agreement and the Documents or in order to fulfill the intent of the foregoing paragraphs of this resolution; and
4. All acts and things heretofore done by any of the officers and directors of the Corporation in respect of the matters aforesaid be and the same are hereby ratified, confirmed and approved.



SUBSCRIPTION AGREEMENT

TO: LABRADOR-ISLAND LINK OPERATING CORPORATION

AND TO: The Directors thereof

The undersigned hereby subscribes for 100 Common shares at \$_____ per share and tenders herewith the total subscription price therefor of \$_____.

DATED as of 18th December, 2013.

NALCOR ENERGY

BY: _____

BY: _____

**Nalcor Board Mtg Papers - Dec. 18th - Agenda Items Tab 3 and Tab 5**

Peter Hickman to: appaiachi, ebeen, labbass, mayor, g.shortall,
ken.marshall, tclift, Ed Martin

12/13/2013 04:23 PM

Sent by: **Audrey Brophy**

Cc: Wayne Chamberlain

Good afternoon,

The Nalcor Agenda indicated Items 3 and 5 to follow, please find attached an electronic copy of those items (2014 Financing Plan and 2014 Financial Risk Management Strategy). We will provide you with a printed hard copy when you arrive for the meeting .

Regards,

Peter



Nalcor - 2014 Financing Plan - Board Presentation.pdf



Nalcor - Fin Risk Mgmt Strategy - 2014.pdf

Pages 180-181
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2014 Financial Risk Management Strategy Nalcor Energy – Treasury and Risk Management

December 18, 2013

Boundless Energy



Confidential and commercially sensitive

Outline

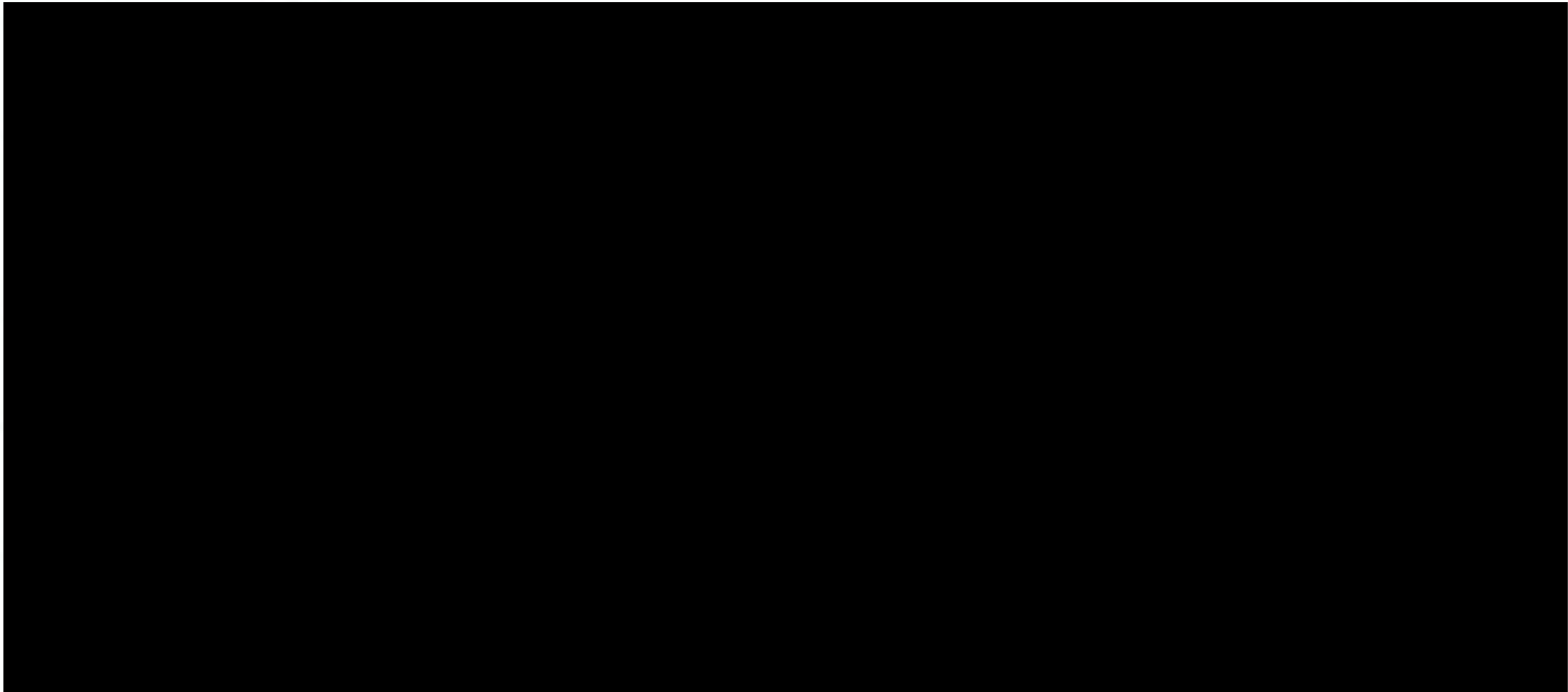
1. Purpose
2. Executive Summary
3. Summary of Financial Risk Exposures by LOB for 2014
4. Recommended Corporate Financial Risk Tolerance for 2014
5. Summary of 2013 Hedging Results
6. Detailed Review and Recommendation by LOB:
 - Nalcor Energy – Oil & Gas (“OilCo”)
 - Energy Marketing (“NLH - EM”)
 - Nalcor Energy – Bull Arm Fabrication (“BAF”)
 - Nalcor Energy – Lower Churchill Project (“LCP”)
7. Summary and Next Steps
8. Appendices:
 - APPENDIX A – Foreign Exchange Risk – Commentary on USD/CAD
 - APPENDIX B – Commodity Price Risk -- Commentary on NYISO Zone A
 - APPENDIX C – Commodity Price Risk -- Commentary on Dated Brent
 - APPENDIX D – Financial Risk Management Summary Dashboards by Line of Business

Purpose

- Outline significant financial risk exposures facing each line of business (“LOB”) for 2014
 - Analysis considers foreign exchange risk, commodity price risk, interest rate risk, liquidity risk and counterparty risk
- Propose management strategies in instances where either risk mitigation or transfer is recommended
 - For each LOB, risk mitigation strategies formulated in the context of the market outlook, the overall risk profile, including an assessment of risk capacity, and the Company’s Financial Risk Management Policy Statement which has been approved by the Board of Directors
- To present the results of the risk management strategies implemented for 2013
- *This presentation is aligned to the current version of the 2014 Consolidated Budget, which excludes the budgeted results of the LCP – therefore, any reference to consolidated cash flow, capital expenditures or equity contributions specifically excludes LCP*

Executive Summary

- Financial close was a significant event from the perspective of Nalcor's consolidated financial risk profile:
 - With fixed rate debt for Muskrat Falls project now secured - interest rate risk and liquidity risk no longer significant factors for LCP
- Otherwise, there are no significant changes to the Company's financial risk profile for 2014



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Summary of Financial Risk Exposures by Line of Business - 2014

Line of Business (LOB)	Foreign Exchange Rate	Interest Rate	Commodity Price	Liquidity Risk	Credit/Counterparty Risk
NLH Regulated Operations					
Churchill Falls					
Lower Churchill Project	CAPEX denominated in various currencies, including USD, EURO and KRONER	No material exposure identified (<i>interest rate on project debt fixed at blended rate of 3.8% at financial close</i>)	As a result of fluctuations in commodity prices (fuel, oil, copper, steel, etc.), contracts based on variable pricing formulas linked to commodity prices come in under/over budget	No material exposure identified (<i>liquidity was addressed as part of the financing strategy through creation of a working capital reserve</i>)	As a result of financial difficulty, a major contractor defaults and cannot complete its scope of work, resulting in cost overruns and/or schedule delays
Bull Arm Fabrication					

Pages 189-200
have been redacted

2014 Financial Risk Management Strategy:
NALCOR ENERGY – LOWER CHURCHILL PROJECT

LCP - Key Messages

- With fixed rate debt for Muskrat Falls project now secured - interest rate risk and liquidity risk no longer significant factors for LCP
- Otherwise, no significant change to the LCP financial risk profile for 2014
- In terms of addressing remaining financial risks in 2014:
 - FX risks and commodity price risks emanating from contracts with variable input costs/foreign currencies will continue to be dealt with through the LCP Contracting Strategy – if the contractor is better positioned to address these risks, then to the extent possible the risks will be pushed off to the contractor
 - Ensuring that major contractors have the financial capacity to complete the contracts remains a priority – to that end, counterparty credit risk will continue to be addressed through the LCP Contractor Creditworthiness Verification Procedures, **which apply to all contract packages > \$10M**

LCP – Contractor Creditworthiness

- *Guidelines for Credit Worthiness Verification* policy developed in 2011 with considerable input from Treasury & RM
- Policy outlines a series of financial tests/ratios and other qualitative measures (e.g. ratings of third party credit agencies, review of MD&A and notes from annual/quarterly reports, analyst reports, etc.) used to score bidders on their suitability as a contractor or supplier for any LCP related contract
- Key financial ratios include those noted below, which are consistent with those used by major rating agencies such as Standard & Poor's
 - FFO / Debt
 - Debt / Capital
 - Debt / EBITDA
 - EBIT Interest Coverage
 - Quick Ratio
- Policy provides for Nalcor requesting credit support in the form of parent guarantees, performance bonds, payment bonds or letters of credit, or a combination thereof, when deemed prudent

LCP - Major Contract Packages Awarded in 2013

Contract Package	Contract Value (CAD)	Contractor	Status	Security Position
MF – Construction of Powerhouse, Dams and Spillways (CH0007)	\$1 billion	Astaldi SpA (Italy)	Awarded	<ul style="list-style-type: none"> • Mobilization payment of \$100M will be fully secured by a letter of credit • 10% letter of credit • 50% performance bond
MF – Powerhouse and Spillway Hydro-Mechanical Equipment	\$200 million	Andritz (Austria)	Award pending	<ul style="list-style-type: none"> • 50% performance bond • 10% letter of credit
MF – Turbines and Generators (CH0030)	\$167 million	Andritz (Austria)	Awarded – contract underway	<ul style="list-style-type: none"> • 50% performance bond • 15% letter of credit
MF – Reservoir Clearing for North and South Banks (CH0023 and CH0024)	\$129 million	Johnson’s Construction Ltd (Canada)	Awarded – contract underway	<ul style="list-style-type: none"> • 50% performance bond • 50% labor and materials bond
SOBI – HDD Rig and Surface Spread (LCSB022)	\$37 million	Direct Horizontal Drilling (Canada)	Awarded – contract underway	<ul style="list-style-type: none"> • 50% performance bond

2014 Financial Risk Management Strategy

SUMMARY AND NEXT STEPS

Financial Risk Management: Summary of 2014 Recommended Strategies

Line of Business	Foreign Exchange Rate	Interest Rate	Commodity Price	Liquidity Risk	Credit Risk
Nalcor Energy Corporate					
Oil & Gas					
Energy Marketing					
NLH Regulated Operations					
Churchill Falls					
Lower Churchill Project	MITIGATE – being addressed through LCP Contracting Strategy	ACCEPT – risks deemed minimal	MITIGATE – being addressed through LCP Contracting Strategy	ACCEPT – risks addressed via Project Financing structure	MITIGATE - Continue to participate in evaluation of LCP related contractors/ continue ongoing monitoring of existing contractors
Bull Arm Fabrication					

Pages 207-218
have been redacted

Audit & Resource Plan Internal Audit 2014 - 2018

Boundless Energy



Presentation Purpose

1. To outline criteria used in the selection of audit universe items for inclusion in the 5 Year Audit Plan
2. To outline refinements to audit planning and execution in the area of internal control
3. To outline resource requirements associated with plan alternatives as presented
4. To present pros and cons for each alternative
5. To obtain approval for the preferred Five Year Internal Audit Plan alternative covering the period 2014 – 2018

Audit Plan Selection Criteria

Nalcor Energy – Audit Universe



Note: Evaluation of Internal Control based on COSO Integrated Framework

Audit Universe

The auditable components of the audit universe should draw on information from multiple sources including:

- Interviews with key members of management and/or the Board
- Reference to the corporation's strategic plan
- Review of organization charts and related functional management plans
- Consideration of Matrix Organization RACI Charts
- Understanding of company operations
- Knowledge of emerging issues based on the Manager Internal Audit's involvement as member of the Leadership Team and in the manager's role
- Review of inspection findings of insurer as provided by the Manager Risk and Insurance
- Information Systems workplan – in addition to highlighting potential emerging risks, this may present advisory opportunities
- Consideration of the risks as identified under the corporation's Enterprise Risk Management process. This would include consultation with the Chief Risk Officer

Audit Planning

- Risk based approach to the selection of “universe” items for inclusion in the Audit Plan
- 5 Year Planning Window
- Linkage to the COSO Internal Control Framework
- Broad focus on governance, risk, control & compliance
- Opportunities to provide consultative services also explored

Use of ERM Toolset in Audit Planning

- Following compilation, items in the audit universe must be assigned a risk rating
- Items lifted from the ERM Risk Registers have already been rated by management
- Other auditable areas identified by Internal Audit require an assessment of risk levels utilizing the ERM Toolset
- Risk appetite levels for the different Lines of Business (LOB's) considered during audit when assessing risk strategy effectiveness (tolerances not yet fully defined)
- Objective of the risk based approach - optimize the assignment of audit resources

Audit Focus – Inherent Risk

NALCOR ENERGY Risk Rating Matrix

- Audit focus area
- Items outside this area will not be ignored, but will have lesser coverage

					IMPACT*				
					Insignificant	Minor	Moderate	Major	Extreme
					1	2	3	4	5
					An event that has virtually no impact.	An event that could be considered as minor and of no lasting consequence.	An event that causes a disruption in performance levels without suspending operations	An event that results in substantial losses and that forces a suspension of certain operations for a period of time, or that permanently compromises the ability to realize one or more Corporate goals.	A catastrophic event that forces the suspension of all operations over a sustained time frame, perhaps permanently.
LIKELIHOOD	Almost Certain	5	>90%	Almost inevitable that this event will occur unless circumstances change	Low	Medium	High	High	High
	Likely	4	>50% to 90%	Likely to occur in most circumstances	Low	Medium	Medium	High	High
	Possible	3	1% to 50%	Might occur under certain circumstances	Low	Low	Medium	Medium	High
	Unlikely	2	0.01% to < 1%	Remote possibility of occurrence	Low	Low	Medium	Medium	Medium
	Rare	1	< 0.01%	Rare or Extremely Improbable - An unusual combination of factors would be required for the event to occur	Low	Low	Low	Low	Medium

* For further guidance in the assessment of impact, refer to the Impact Measurement Tool and also the Financial Impact Matrix.

Statistical Overlay - Definitions

- Confidence Level – Specifies the reliability of the sample. For example, 95% confidence in the sample would suggest it would likely be wrong only one time in 20.
- High Error Rate(Upper Error Limit) - Specifies the error rate we wish to prove is not exceeded in the population.
- Expected Error Rate - Specify the percentage error rate expected in the population. This is the maximum amount of errors we are willing to accept in the population without detection.

Statistical Overlay

AUDIT COVERAGE		
Alt#1	Alt#2	Alt#3

Outside Focus Area - Low Risk Items			
Confidence	50%	60%	70%
High Error Rate	25%	20%	15%
Expected Error Rate	5%	5%	5%
Population	92	92	92
Sample Size	7	11	17

Outside Focus Area - Medium Risk Items			
Confidence	60%	70%	80%
High Error Rate	20%	15%	10%
Expected Error Rate	5%	5%	5%
Population	138	138	138
Sample Size	11	17	56

Inside Focus Area - Medium Risk Items			
Confidence	90%	95%	100%
High Error Rate	20%	15%	N/A
Expected Error Rate	5%	5%	N/A
Population	65	65	65
Sample Size	20	52	65

Note: All "high risk" items are automatically selected for audit.

Refined Approach to the Assessment of Internal Control

Assessment of Internal Control - Past Practice

- Operational audits were broad in scope
- Audit planning focused on the relative risk of “universe” items but not specifically targeted at specific internal control components
- Reporting on the adequacy and effectiveness of control processes ad hoc in nature

Assessment of Internal Control – Future State

- Assessment of internal control will be founded on the COSO Internal Control Integrated Framework
- Audit planning will consider not only the relative risk of “universe” items but will also consider coverage of internal control components
- Each audit will be targeted at one or more internal control components with a view to ensuring some coverage of all five (5) components during the audit year
- This approach should result in a more effective and efficient analysis of internal control and should reduce overall audit time spent on each operational audit
- A formal report outlining the results of our examination of control processes will be delivered to the Audit Committee annually (targeting Q2 2014 for first report)

Resourcing Requirements

Audit Types

AUDIT TYPE	CHARACTERISTICS	OBJECTIVES
Recurring Audit (RA)	Mandatory and that occur at regular intervals	Effectiveness of controls/procedural compliance
Operational Audit (OA)	Focused on a particular operational area as indicated in corporate organization charts	Assessment of one or more internal control components
Process Audit (PR)	Examination of processes spanning corporate lines	Assess process efficiency and effectiveness in context of best practices
Risk Audits (RR)	Risk areas as identified in the corporate risk registers	Assess appropriateness of risk rating and the effectiveness of related management strategy
LCP Functional Areas	Management plans & related procedures/templates governing the management of the Lower Churchill Project in key functional areas for LTA/LIL/MF/ML	Assessment of effectiveness, efficiency & general compliance
LCP Contracts	Service and supply contracts with contractors in respect to the LTA/LIL/MF/ML	Examine contractor compliance with financial & QHSE contractual provisions

Time Estimates by Audit Type

	AUDIT TYPE	Hourly Time Estimate Per Audit		BASIS FOR TIME ESTIMATE
		Actual	Generic Allowance	
NON-LCP AUDITS	Recurring Audit (RA) – Mandatory and that occur at regular intervals	118	120	Historical Results
	Operational Audit (OA) – Focused on a particular operational area as indicated in corporate organization charts	302	200	Historical results adjusted for revised COSO based approach re internal control
	Oil & Gas JV Audit (JV)	347	200	Scaled back as historical stats skewed by first White rose audit. Put more in line with operational audit time.
	Process Audit (PR) – Focus on the efficiency and effectiveness of corporate processes as identified in the RACI database contained on the Grid	n/a	300	Based on professional judgment. Broader than an operational audit.
	Risk Audits (RR) – Examine risks as identified in the corporate risk registers for appropriateness of risk rating and the effectiveness of related management strategy	58	60	Historical Results
	External Audit Assistance	649	600	Historical results with LCP transactional testing now performed by Deloitte.
LCP AUDITS	LCP Functional Areas – Examine efficiency & effectiveness of Project functional areas thru examination of related management plans. For estimation purposes, we have assigned hours based on a consideration of the number of management plans related to a particular functional area.			Based on professional judgment.
	IA Lead - Main Functional Management Plan	n/a	100	
	IA Lead - Subsidiary Functional Procedures/Templates	n/a	10	
	IA Secondary (reliance placed on other assurance provider/s) - Main Functional Management Plan	n/a	50	
	IA Secondary (reliance placed on other assurance provider/s) - Subsidiary Functional Procedures/Templates	n/a	5	
	LCP Contracts – To examine contractor compliance with financial, HSE & QA contractual provisions			Based on professional judgment.
	IA Lead	n/a	100	
	IA Secondary	n/a	50	
	LCP Risk Register Items	n/a	75	Based on professional judgment.

Available Hours

	<u>Mgr.</u>	<u>PM</u>	<u>SW</u>	<u>PT</u>	<u>COOP</u>
AVAILABLE HOURS CURRENTLY					
Per year	1950	1950	1950	1950	1755
Less:					
Floaters	15	15	15	15	
Family Resp	23	23	23	23	
Annual	113	210	210	173	
Stats	98	98	98	98	68
Training	118	118	118	118	176
Admin	1268	595	298	305	302
NET AVAILABLE CURRENTLY	317	893	1190	1220	1210

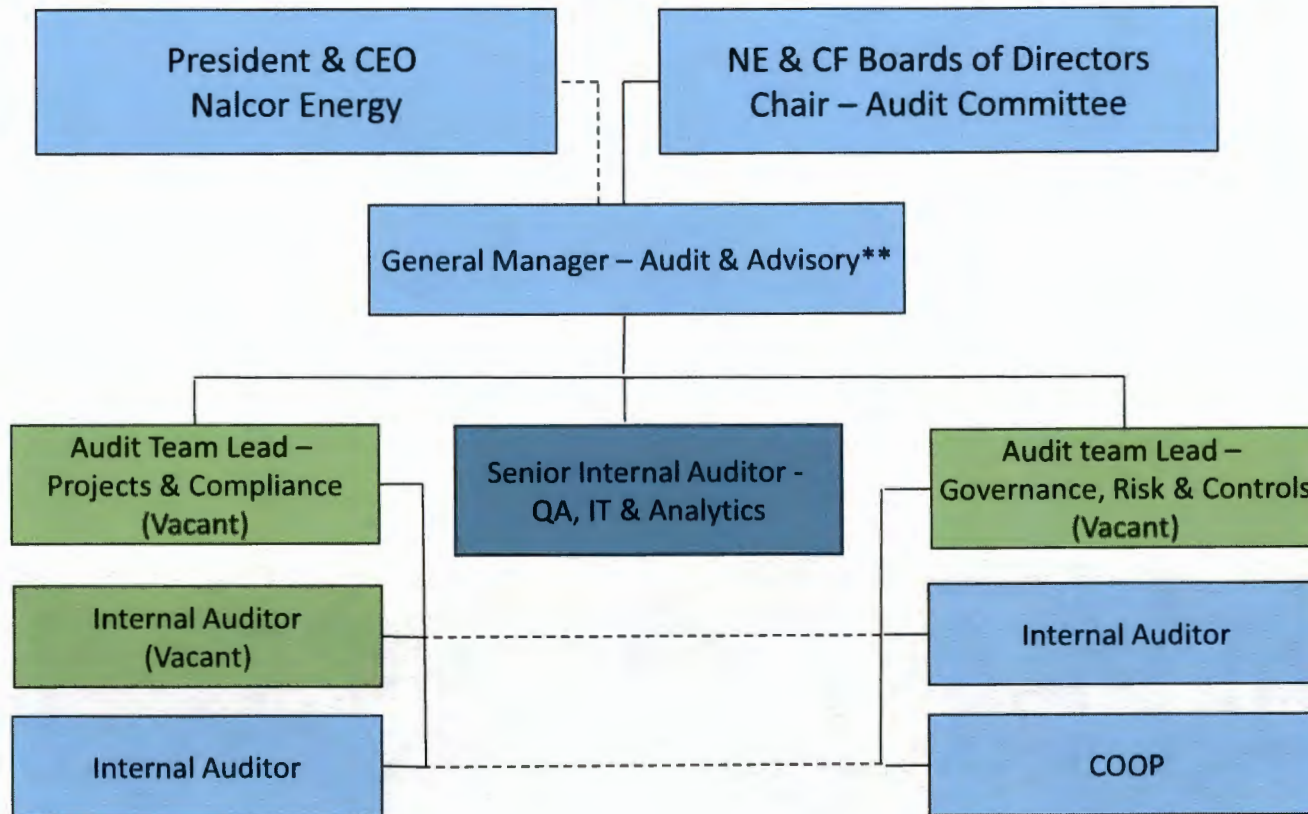
Estimated Available Per new FTE 1128 (Average of Audit team Net Available Hours Mgr. excluded))

Preliminary Assessment of Resourcing Impacts

*Legley cur
alt #2*

ADDITIONAL FULL TIME EQUIVALENTS REQUIRED					
AUDIT COVERAGE	AUDIT YEAR				
	2014	2015	2016	2017	2018
Alternative # 1	3.1	2.3	1.3	1.2	0.9
Alternative # 2	3.3	3.0	2.3	2.6	2.1
Alternative # 3	5.1	5.4	3.7	3.9	3.8

Proposed Resource Deployment *



* Assumes 3 new Full Time Equivalent positions. There is some variability in resource requirements over the 5 year planning period under either alternative. Some combination of permanent and contractual/co-sourcing might be advisable.
 ** Proposed Title Change

NEW FTE POSITION
 BROADENED POSITION

Analysis of Alternatives

Analysis of Alternatives

Alt # 1	Alt # 2	Alt # 3
<p>Pros</p> <ul style="list-style-type: none"> • Least resource requirement over 5 year span • Risk-based approach 	<p>Pros</p> <ul style="list-style-type: none"> • Better audit coverage in non-LCP areas • Risk-based approach 	<p>Pros</p> <ul style="list-style-type: none"> • Best coverage in non-LCP areas • Risk-based approach
<p>Cons</p> <ul style="list-style-type: none"> • Lower level of audit coverage in non-LCP areas but could still be considered as acceptable • Between 2.5 & 3.0 additional FTE's in '14 & '15 falling to approx. 1.0 FTE thereafter 	<p>Cons</p> <ul style="list-style-type: none"> • Approx. 3.0 additional FTE's in '14 & '15 falling to approx. 2.0 FTE's thereafter 	<p>Cons</p> <ul style="list-style-type: none"> • Approx. 5.0 additional FTE's in '14 & '15 falling to approx. 4.0 FTE's thereafter

QUESTIONS?

APPENDIX A

5 Year Plan Detail

Alternative # 1

Alt # 1 - Work Hours/Resourcing Summary

	2013	2014	2015	2016	2017	2018
NE	780	276	1,081	1,104	1,627	1,288
NLH	3,022	1,478	1,219	1,903	1,777	2,059
CF	635	748	518	460	460	610
O&G	130	460	230	460	299	529
BAF	40	0	0	0	0	230
SP&BD	150	0	299	0	0	0
Pre LCP Subtotal	4,757	2,961	3,347	3,927	4,163	4,715
LCP - MF/LIL/LTA Mgt Plan	0	2,335	1,202	1,167	601	601
LCP - MF/LIL/LTA Contracts	0	1,150	1,898	575	949	0
LCP - ML Mgt Plan (1/3)	0	778	401	389	200	200
LCP - ML Contracts (1/3)	0	383	633	192	316	0
LCP Risk Register	0	776	0	0	0	388
LCP Subtotal	0	5,422	4,132	2,323	2,066	1,189
GRAND TOTALS	4,757	8,384	7,479	6,250	6,229	5,904
Available Resources		4,834	4,834	4,834	4,834	4,834
Shortfall		3,550	2,645	1,417	1,396	1,071
FTE		3.1	2.3	1.3	1.2	0.9

NOTES:

1. LCP MF/LIL/LTA hours for 2016 & 2017 assume some reliance on work performed in 2014 & 2015 and hence hours cut in half. 2018 assumes time allotment to ongoing audit oversight of new LCP companies.
2. Maritime Link (ML) hours based on 1/3 of MF/LIL/LTA hours.
3. LCP Risk Register hours based on an initial review of risk management practices in key functional areas.
4. Plan assumes transition in 3 years to oversight of environmental assurance function rather than direct audit involvement as is the case presently.
5. Contingency allowance of 10% integrated into all estimates.
6. Allowance of 5% for audit follow-up on corrective actions.

Alt # 1 – Audit Time Allocation

	2013 % Allocation	2014 % Allocation	5 Yr % Allocation Grand
NE	16%	3%	16%
NLH	64%	18%	25%
CF	13%	9%	8%
O&G	3%	5%	6%
BAF	1%	0%	1%
SP&BD	3%	0%	1%
Pre LCP Subtotal	100%	35%	56%
LCP - MF/LIL/LTA Mgt Plan	0%	28%	17%
LCP - MF/LIL/LTA Contracts	0%	14%	13%
LCP - ML Mgt Plan (1/3)	0%	9%	6%
LCP - ML Contracts (1/3)	0%	5%	4%
LCP Risk Register	0%	9%	3%
LCP Subtotal	0%	65%	44%
GRAND TOTALS	100%	100%	100%

Pages 244-250
have been redacted

Alt # 1 Plan Detail – LCP Management Plans

Function	IA Inherent Risk Rating	Primary Assurance Providers	Audit Type	Est Hrs 2014	Est Hrs 2015
Project Governance	M	IA/FA/EX	1	260	
Project Charter	H	IA	1	305	
Project Execution	H	IE/IA	1	200	
Engineering Management	H	QA/IE	1	205	
Project Change Management	H	QA/IE	2	60	
Contract Administration	M	QA	2	100	
Procurement Management	M	QA/FA	2	175	
Construction Management	H	QA/IE	2	70	
Handover to Operations and Project Closure	M	QA/IE	2		50
Operations and Maintenance	M	QA/IE	2		50
Information Management	M	QA	1		190
Project Controls Management	M	QA	2		165
Work Plans and Authorization	M	QA	2		50
Overarching Quality Management	M	IA/QA/IE	1	170	
Industrial Relations	M	IA/QA	1		100
Environment Management	M	ENV/IA	2	140	
Health and Safety Management	M	HS/IA	2	150	
Security Management	M	HS/QA	2	10	
Project Finance and Accounting	M	IA	1		220
Communications and Stakeholder Relations	M	IA/QA	1		100
Interface Management	H	QA/IE	2	60	
Risk Management	M	QA/IA	2	125	
Information Services	M	QA	1		120
<i>Subtotal</i>				2030	1045
Contingency & Followup				305	157
Total Estimated hours				2335	1202

AUDIT TYPES

1. Primary assurance Testing
2. 2nd Level Assurance Testing

Note: Lower Churchill related time estimates constant thru all alternatives

Alt # 1 Plan Detail – LCP Contracts

CP Number	Package Name	QA Audit Priority Rating	Est Hrs 2014	Est Hrs 2015
CH0007	Construction of Intake and Powerhouse, Spillway and Transition Dams	H		50
CH0024	Construction of Reservoir Clearing North Bank	H		50
PH0015	Supply of Isolated Phase Bus	H		50
SM0705	Provision of Laboratory Services	H		100
CH0003	Supply and Install Administrative Buildings	M		50
CH0005	Supply and Install Accommodations Complex Site Utilities	M		50
CH0055	Temporary Camp	M		50
PT0303	Supply of Tower Hardware - 315 kV HVac	M		50
PT0304	Supply of Optical Ground Wire (OPGW) - 315 kV HVac	M		100
PT0331	Supply of Tower Hardware - 350 kV HVdc	M		50
PT0334	Supply of Steel Wires - 350 kV HVdc	M		50
PT0335	Supply of Anchor Materials - 315 kV HVac	M		50
CH0023	Construction of Reservoir Clearing South Bank	M		50
PH0037	Supply of 25kV Switchgear	M		100
CD0503	Construction of Earthworks at Various Power Distribution Sites	M		50
CD0512	Construction of Construction Power Facilities	M		50
PD0537	Supply of Power Transformers, AC Substations at CF, MF and SP	M		50
CH0004	Construction of Southside Access Road	H	50	
CH0006	Construction of Bulk Excavation Works and Associated Works	H	50	
CH0030	Supply and Install Turbines and Generators	H	50	
CH0032	Supply and Install Powerhouse Hydro-Mechanical Equipment	H	100	
CH0033	Supply and Install Powerhouse Cranes	H	50	
PH0014	Supply of Generator Step-up Transformer	H	50	
PH0016	Supply of Generator Circuit Breakers	H	50	

Note: Lower Churchill related time estimates constant thru all alternatives

Alt # 1 Plan Detail – LCP Contracts (cont.)

CP Number	Package Name	QA Audit Priority Rating	Est Hrs 2014	Est Hrs 2015
CD0509	Construction Telecommunication Services - Phase 2	H	50	
CD0510	Supply and Install Permanent Communication Systems	H	50	
CD0535	Construction Telecommunication Services - Phase 2 Remote Camps	H	50	
CD0538	Supply and Install Accommodations Camp (CF)	H	50	
CT0319	Construction of 315 kV HVac Transmission Line (MF to CF)	H	50	
CT0327	Construction of 350 kV HVdc Transmission Line - Section 1	H	50	
CT0341	Clearing of Right-of-Way for 315 kV HVac Transmission Line (MF to CF)	H	50	
PT0307	Supply of Steel Tower Foundations - 315 kV HVac	H	50	
PT0308	Supply of Steel Tower Foundations - 350 kV HVdc	H	50	
PT0328	Supply of Transmission Line Conductors - 350 kV HVdc	H	50	
SH0020	Provision of Medical Services	L		100
PT0300	Supply of Transmission Line Conductors - 315 kV HVac	L		100
CH0002	Supply and Install Accommodations Complex Buildings	M	50	
SH0018	Provision of Catering, Housekeeping and Janitorial Services (MF)	M	50	
SH0051	Provision of Buildings Maintenance Services (MF)	M		50
PT0302	Supply of Steel Towers - 315 kV HVac	M		50
PT0330	Supply of Steel Towers - 350 kV HVdc	M		50
PT0352	Supply of Anchor Materials - 350 kV HVdc	M		50
PT0353	Supply of Optical Ground Wire (OPGW) - 350 kV HVdc	M		50
SM0704	Provision of Surveying Services	M		50
SM0713	Provision of Geotechnical Investigation Services	M		50
SH0001	Physical Hydraulic Modeling			100
	Subtotal		1000	1650
	Contingency & Followup		150	248
	Total Estimated hours		1150	1898

Note: Lower Churchill related time estimates constant thru all alternatives

Alt # 1 Plan Detail – Lower Churchill (LCP) Risk Register

ID	Risk or Audit Area	Risk Level	Audit Year 2014
LCPRR13/46	Design errors increase Muskrat construction costs	High	75
LCPRR16	Lack of transmission contractors leading to increased construction costs	High	75
LCPRR02	Design errors in SOBI Cable	Medium	75
LCPRR32/33	Uncertain outcome re LIL and ML environmental Assessment process	Medium	75
LCPRR01	Poor safety Culture	Medium	75
LCPRR15	Global demand leading to hyperinflation and increased construction costs	High	75
LCPRR11	Integration of various project components lead to schedule delays	Medium	75
LCPRR07	Loss in liquidity in debt markets	Medium	75
LCPRR25	Delay in shareholder approvals	High	75
	Subtotal		675
	Contingency & Followup		101
	Total Hours Estimated		<u>776</u>

A sample of risks per risk owner was selected as a means of assessing adherence to risk management principles.

Note: Lower Churchill related time estimates constant thru all alternatives

APPENDIX B
Plan Detail
Alternative # 2

Alt # 2 - Work Hours/Resourcing Summary

	2013	2014	2015	2016	2017	2018
NE	780	587	736	2,024	1,967	2,358
NLH	3,022	1,202	1,898	1,926	2,444	2,049
CF	635	817	840	529	587	840
O&G	130	460	368	529	437	736
BAF	40	86	230	0	0	86
SP&BD	150	0	0	69	230	0
Pre LCP Subtotal	4,757	3,151	4,071	5,077	5,664	6,069
LCP - MF/LIL/LTA Mgt Plan	0	2,335	1,202	1,167	601	601
LCP - MF/LIL/LTA Contracts	0	1,150	1,898	575	949	0
LCP - ML Mgt Plan (1/3)	0	778	401	389	200	200
LCP - ML Contracts (1/3)	0	383	633	192	316	0
LCP Risk Register	0	776	0	0	0	388
LCP Subtotal	0	5,422	4,132	2,323	2,066	1,189
GRAND TOTALS	4,757	8,573	8,203	7,400	7,730	7,258
Available Resources		4,834	4,834	4,834	4,834	4,834
Shortfall		3,740	3,370	2,567	2,896	2,424
FTE		3.3	3.0	2.3	2.6	2.1

NOTES:

1. LCP MF/LIL/LTA hours for 2016 & 2017 assume some reliance on work performed in 2014 & 2015 and hence hours cut in half. 2018 assumes time allotment to ongoing audit oversight of new LCP companies.
2. Maritime Link (ML) hours based on 1/3 of MF/LIL/LTA hours.
3. LCP Risk Register hours based on an initial review of risk management practices in key functional areas.
4. Plan assumes transition in 3 years to oversight of environmental assurance function rather than direct audit involvement as is the case presently.
5. Contingency allowance of 10% integrated into all estimates.
6. Allowance of 5% for audit follow-up on corrective actions.

*5 people
need 3 more.*

Alt # 2 – Audit Time Allocation

	2013 % Allocation	2014 % Allocation	5 Yr % Allocation Grand
NE	16%	7%	20%
NLH	64%	14%	24%
CF	13%	10%	9%
O&G	3%	5%	6%
BAF	1%	1%	1%
SP&BD	3%	0%	1%
Pre LCP Subtotal	100%	37%	61%
LCP - MF/LIL/LTA Mgt Plan	0%	27%	15%
LCP - MF/LIL/LTA Contracts	0%	13%	12%
LCP - ML Mgt Plan (1/3)	0%	9%	5%
LCP - ML Contracts (1/3)	0%	4%	4%
LCP Risk Register	0%	9%	3%
LCP Subtotal	0%	63%	39%
GRAND TOTALS	100%	100%	100%

Pages 258-264
have been redacted

APPENDIX C

Plan Detail

Alternative # 3

Alt # 3 - Work Hours/Resourcing Summary

	2013	2014	2015	2016	2017	2018
NE	780	2,018	2,174	1,909	1,829	2,358
NLH	3,022	1,478	1,771	2,745	3,628	3,439
CF	635	886	1,553	1,150	978	1,300
O&G	130	529	667	529	437	736
BAF	40	173	316	86	86	86
SP&BD	150	69	299	230	230	0
Pre LCP Subtotal	4,757	5,152	6,779	6,649	7,188	7,918
LCP - MF/LIL/LTA Mgt Plan	0	2,335	1,202	1,167	601	601
LCP - MF/LIL/LTA Contracts	0	1,150	1,898	575	949	0
LCP - ML Mgt Plan (1/3)	0	778	401	389	200	200
LCP - ML Contracts (1/3)	0	383	633	192	316	0
LCP Risk Register	0	776	0	0	0	388
LCP Subtotal	0	5,422	4,132	2,323	2,066	1,189
GRAND TOTALS	4,757	10,574	10,912	8,972	9,254	9,107
Available Resources		4,834	4,834	4,834	4,834	4,834
Shortfall		5,741	6,078	4,139	4,420	4,273
FTE		5.1	5.4	3.7	3.9	3.8

NOTES:

1. LCP MF/LIL/LTA hours for 2016 & 2017 assume some reliance on work performed in 2014 & 2015 and hence hours cut in half. 2018 assumes time allotment to ongoing audit oversight of new LCP companies.
2. Maritime Link (ML) hours based on 1/3 of MF/LIL/LTA hours.
3. LCP Risk Register hours based on an initial review of risk management practices in key functional areas.
4. Plan assumes transition in 3 years to oversight of environmental assurance function rather than direct audit involvement as is the case presently.
5. Contingency allowance of 10% integrated into all estimates.
6. Allowance of 5% for audit follow-up on corrective actions.

Alt # 3 – Audit Time Allocation

	2013 % Allocation - In Scope	2014 % Allocation - In Scope	5 Yr % Allocation Grand
NE	16%	19%	21%
NLH	64%	14%	27%
CF	13%	8%	12%
O&G	3%	5%	6%
BAF	1%	2%	2%
SP&BD	3%	1%	2%
Pre LCP Subtotal	100%	49%	69%
LCP - MF/LIL/LTA Mgt Plan	0%	22%	12%
LCP - MF/LIL/LTA Contracts	0%	11%	9%
LCP - ML Mgt Plan (1/3)	0%	7%	4%
LCP - ML Contracts (1/3)	0%	4%	3%
LCP Risk Register	0%	7%	2%
LCP Subtotal	0%	51%	31%
GRAND TOTALS	100%	100%	100%

Pages 268-274
have been redacted

APPENDIX D

ERM TOOLSET

Likelihood Measurement Tool

Likelihood Levels	% Chance of Occurrence	Description
Almost Certain 5	> 90%	Almost inevitable that this event will occur unless circumstances change
Likely 4	> 50% to 90%	Highly likely to occur in most circumstances
Possible 3	> 1% - 50%	Might occur under certain circumstances
Unlikely 2	0.01% to 1%	Remote possibility of occurrence
Rare 1	< 0.01%	Rare or Extremely Improbable – An unusual combination of factors would be required for the event to occur

Impact Measurement Tool

SUMMARY STATEMENT: An event that has virtually no impact.					
Impact Levels	Safety	Environment	Business Excellence	People	Community
Insignificant 1	<ul style="list-style-type: none"> (a) Minor impact on personnel. First aid only (b) No lost time 	<ul style="list-style-type: none"> (a) Environmental impact that does not attract press coverage and is not reportable (b) Very minor, non-permanent environmental damage requiring no clean-up measures (c) No assistance from other entities required (d) No regulatory compliance concern 	<ul style="list-style-type: none"> (a) Asset damage or loss with insignificant financial impact (b) Inability to complete > 95% of scheduled work plan (c) Repair time < ¼ Maximum Acceptable Downtime as established per Business Continuity Planning Process (d) Conditions leading to loss of generating efficiency having insignificant impact (e) An event that reduces net income less than 1% of the average net income of the business unit for the last three years (f) A loss of assets valued at less than 0.1% of total LOB assets. (g) A loss of assets less than 0.1% of shareholders' equity. (h) Liquidity not impacted to any significant degree (i) Insignificant losses on funds invested (j) Execution of a growth strategy that results in insignificant financial losses (k) Very minor loss of corporate data (l) Non-compliance with applicable legislation, environmental regulations, Public Utilities Board Directive contractual obligations, corporate policy or procedure that results in some impact that can be considered as insignificant (m) no need to notify financiers of event (n) Delay of 6 months or less beyond established contractual lead times for major industrial or wholesale load. (o) Very limited exposure of sensitive information (p) An impact on anticipated NPV of a project that is insignificant (q) Up to 1 week project delay (LCP) 	<ul style="list-style-type: none"> (a) Difficulty in attracting/retaining employees for a particular position with-in the company (b) Greater than 90% of employees agree with corporate strategic direction (c) Virtually no instances of internal reprimands/discipline 	<ul style="list-style-type: none"> (a) No or very minor media attention (b) Insignificant damage to public property that does not result in any disruption of service (c) An incident having minor impact on the public. First aid only. (d) Little or no loss in stakeholder trust/commitment

SUMMARY STATEMENT: An event that could be considered as minor and of no lasting consequence.					
Impact Levels	Safety	Environment	Business Excellence	People	Community
Minor 2	<ul style="list-style-type: none"> (a) Medical treatment for personnel (b) Lost time incident 	<ul style="list-style-type: none"> (a) Environmental impact that does not attract press coverage and is reportable (b) Minor, non-permanent environmental damage requiring very limited clean-up efforts (c) Little or no assistance from other entities required (d) Regulatory non-compliance addressed by internal improvements initiative 	<ul style="list-style-type: none"> (a) Loss of large physical asset that is replaceable in a short period of time without disruption to service or compromises ability to achieve one or more corporate goals (b) Inability to complete > 90% of scheduled work plan (c) Repair time $\geq \frac{1}{4}$ and $\leq \frac{1}{2}$ Maximum Acceptable Downtime as established per Business Continuity Planning Process (d) Conditions leading to loss of generating efficiency resulting in some financial or reputational impact (e) An event that reduces net income not more than 20% of the average net income of the business unit for the last three years (f) A loss of assets valued at not more than 1% of total LOB assets. (g) A loss of assets equal to not more than 2% of shareholders' equity (h) Corporate lines of credit constricted but operations not significantly impacted. (i) Minor losses on funds invested (j) Execution of a growth strategy that results in minor financial losses (k) Limited loss of corporate data (l) Non-compliance with applicable legislation, environmental regulations, Public Utilities Board Directive contractual obligations, corporate policy or procedure that results in some impact that can be considered as minor and of no lasting impact (m) Financiers notified of impact but virtually no impact on available lines of financing (n) Delay of between 6 – 12 months beyond established contractual lead times for major industrial or wholesale load (o) Limited exposure of sensitive information (p) An impact on anticipated NPV of a project that is minor (q) 1 week to 1 month project delay (LCP) 	<ul style="list-style-type: none"> (a) Difficulty in attracting/retaining a specific discipline of skilled employees at a particular geographic location (b) Between 80% and 90% of employees agree with corporate strategic direction (c) Some instances of internal reprimands/discipline 	<ul style="list-style-type: none"> (a) Some unfavourable media attention (b) Some damage to public property that does not inconvenience the public (c) An incident necessitating medical treatment for members of the public (d) Some loss in stakeholder trust/commitment that is easily rebuilt

SUMMARY STATEMENT: An event that causes a disruption in performance levels without suspending operations					
Impact Levels	Safety	Environment	Business Excellence	People	Community
Moderate 3	<ul style="list-style-type: none"> (a) Injuries to employees that do not result in some permanent disability (b) Multiple lost time incidents outside established targets 	<ul style="list-style-type: none"> (a) Environmental impact that garners local press (b) Temporary environmental damage requiring some clean up effort (c) Assistance from previously contracted entities may be required (d) Regulatory non-compliance identified by government inspector resulting in administrative penalty 	<ul style="list-style-type: none"> (a) Loss of a physical asset that causes a disruption in performance without suspending operations (b) Inability to complete > 70% of scheduled work plan (c) Repair time > ½ and ≤ Maximum Acceptable Downtime as established per Business Continuity Planning Process (d) Loss of generating efficiency resulting in moderate financial impact (e) An event that reduces net income not more than 100% of the average net income of the business unit for the last three years (f) A loss of assets equal to not more than 3% of total LOB assets. (g) A loss of assets equal to not more than 10% of shareholders' equity. (h) A default on a corporate debt obligation is quickly remedied, but liquidity issues remain. (i) Moderate losses on funds invested (j) Execution of a growth strategy that results in moderate financial losses (k) Some loss of corporate data (l) Non-compliance with applicable legislation, environmental regulations, Public Utilities Board Directive contractual obligations, corporate policy or procedure that results in a disruption in performance levels without suspending operations. (m) Financing for growth activities restricted (n) Delay of one year beyond established contractual lead times for major industrial or wholesale load (o) Exposure of sensitive information that garners some local media attention or with moderate financial consequences (p) An impact on anticipated NPV of a project that is moderate (q) 1 to 3 months project delay (LCP) 	<ul style="list-style-type: none"> (a) Unable to attract/retain multiple disciplines of skilled employees at a specific geographic location (b) Between 70% and 80% of employees agree with corporate strategic direction (c) Instances of internal reprimands/discipline that are above normal in terms of frequency 	<ul style="list-style-type: none"> (a) Local media coverage only (b) Damage to public property that causes inconvenience in a localized area (c) Injuries to the public that do not result in some permanent disability (d) Some loss in stakeholder trust/commitment that will require a committed effort to rebuild

SUMMARY STATEMENT: An event that results in substantial losses and that forces a suspension of certain operations for a period of time, or that permanently compromises the ability to realize one or more Corporate goals.					
Impact Levels	Safety	Environment	Business Excellence	People	Community
Major 4	<ul style="list-style-type: none"> (a) Serious personal injury to employees resulting in permanent disability (b) Total lost time well outside established targets to the point where operations are temporarily suspended 	<ul style="list-style-type: none"> (a) Environmental impact that garners national press (b) Extended clean-up effort required (c) Requires assistance of previously contracted entities (d) Regulatory non-compliance with stop work order issued 	<ul style="list-style-type: none"> (a) Loss of a physical asset that causes a significant disruption in delivery of essential services (b) Inability to complete > 50% of scheduled work plan (c) Repair time > Maximum Acceptable Downtime as established per Business Continuity Planning Process for a significant asset. (d) Loss of generating efficiency resulting in major financial impact (e) An event that eliminates not more than three years worth of net income (f) A loss of assets equal to not more than 10% of total LOB assets. (g) A loss of assets equal to not more than 30% of shareholders' equity (h) Liquidity problems lead to temporary suspension of operations and significant reputational damage. (i) Major losses on funds invested (j) Execution of a growth strategy that results in major financial losses (k) A loss of a significant amount of corporate data (l) Non-compliance with applicable legislation, environmental regulations, Public Utilities Board Directive contractual obligations, corporate policy or procedure that results in temporary suspension of operations or permanently compromises ability to achieve one or more corporate goals (m) Sources of financing severely restricted with no financing available for growth activities (n) Delay of two years beyond established contractual lead times for major industrial or wholesale load (o) Exposure of sensitive information that garners National media attention or with major financial impact (p) An impact on anticipated NPV of a project that is major (q) 3 to 12 month project delay (LCP) 	<ul style="list-style-type: none"> (a) Unable to attract/retain multiple disciplines of skilled employees at many geographic locations (b) Between 50% and 70% of employees agree with corporate strategic direction (c) Numerous instances of internal reprimands/discipline that are well above historical levels 	<ul style="list-style-type: none"> (a) Local and possibly national media coverage (b) Significant damage to public property that entails hardship in a localized area (c) Serious personal injury to the public resulting in permanent disability (d) A loss in stakeholder trust/commitment that is doubtful whether it can be rebuilt

SUMMARY STATEMENT: A catastrophic event that forces the suspension of all operations over a sustained time frame, perhaps permanently.					
Impact Levels	Safety	Environment	Business Excellence	People	Community
Extreme 5	<ul style="list-style-type: none"> (a) Employee fatalities resulting from gross negligence on the part of the LOB (b) Total Lost time far outside established targets to the point where operations suspended for extended period 	<ul style="list-style-type: none"> (a) Environmental disaster that garners international press (b) Major impact of extended duration requiring full scale response (c) Requires assistance of other corporate and governmental entities not previously contracted (d) Regulatory non-compliance resulting in a shut down of all operations for extended period 	<ul style="list-style-type: none"> (a) Loss of key physical assets that cause longer term shut down of operations (b) Inability to complete > 25% of scheduled work plan (c) Repair time > Maximum Acceptable Downtime as established per Business Continuity Planning Process for a number of significant assets. Unable to perform essential services for extended period as a result. (d) Loss of generating efficiency resulting in extreme financial impact (e) An event that eliminates three year's worth of net income (f) A loss of assets equal to more than 10% of total LOB assets. (g) A loss of assets equal to greater than 30% of shareholders' equity (h) Inadequate lines of credit force a liquidity crisis that leads to a permanent suspension of operations. (i) Extreme losses on funds invested (j) Execution of a growth strategy that results in extreme financial losses (k) A total loss of corporate data (l) Non-compliance with applicable legislation or contractual obligations that results in extreme impact (m) All sources of financing cut off (n) Delay of over three years beyond established contractual lead times for major industrial or wholesale load (o) Exposure of sensitive information that garners national and/or international media attention or with extreme financial impact (p) An impact on anticipated NPV of a project that is extreme (q) Greater than 12 month project delay (LCP) 	<ul style="list-style-type: none"> (a) Unable to attract/retain multiple disciplines of skilled employees at most geographic locations (b) Less than 50% of employees agree with corporate strategic direction (c) Widespread instances of internal reprimands/discipline that are far above historical levels 	<ul style="list-style-type: none"> (a) National and international media coverage (b) Serious damage to public property that results in widespread hardship (c) External fatalities resulting from gross negligence on the part of the LOB (d) An irreparable loss in stakeholder trust/commitment

Financial Impact Matrix

NALCOR ENERGY Financial Impact Matrix \$ millions \$

	Insignificant		Minor		Moderate		Major		Extreme	
	Lo	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo	Hi
Nalcor Energy	[Redacted]									
Newfoundland and Labrador Hydro - Regulated										
Churchill Falls (Labrador) Corporation Ltd										
Energy Marketing										
Oil and Gas Inc.										
Bull Arm Fabrication Inc.										
Lower Churchill Project	0.0	0.1	0.1	1.0	1.0	10.0	10.0	100.0	100.0	Unlimited

NOTE: This Matrix is to be used as a guide to the severity of the risk from a financial perspective only. The final assessment of risk impact must also take into consideration impacts of a non-financial nature such as harm to people, the environment or reputation.

Risk Rating Matrix

NALCOR ENERGY

Risk Rating Matrix

					IMPACT*				
					Insignificant 1	Minor 2	Moderate 3	Major 4	Extreme 5
					An event that has virtually no impact.	An event that could be considered as minor and of no lasting consequence.	An event that causes a disruption in performance levels without suspending operations	An event that results in substantial losses and that forces a suspension of certain operations for a period of time, or that permanently compromises the ability to realize one or more Corporate goals.	A catastrophic event that forces the suspension of all operations over a sustained time frame, perhaps permanently.
LIKELIHOOD	Almost Certain	5	>90%	Almost inevitable that this event will occur unless circumstances change	Low	Medium	High	High	High
	Likely	4	>50% to 90%	Likely to occur in most circumstances	Low	Medium	Medium	High	High
	Possible	3	1% to 50%	Might occur under certain circumstances	Low	Low	Medium	Medium	High
	Unlikely	2	0.01% to < 1%	Remote possibility of occurrence	Low	Low	Medium	Medium	Medium
	Rare	1	< 0.01%	Rare or Extremely Improbable - An unusual combination of factors would be required for the event to occur	Low	Low	Low	Low	Medium

* For further guidance in the assessment of impact, refer to the Impact Measurement Tool and also the Financial Impact Matrix.

APPENDIX E

COSO INTERNAL CONTROL FRAMEWORK

COSO Internal Control Framework

- Objectives – The Framework provides for three categories of objectives which allow organizations to focus on differing aspects of internal control
- Components – Internal Control consists of five integrated components
- Principles – The Framework sets out seventeen principles representing the fundamental concepts associated with each component

COSO Internal Control Framework - Objectives

- Operations Objectives – Effectiveness and efficiency of operations
- Reporting Objectives – Internal and external financial and non-financial reporting
- Compliance Objectives – Adherence to laws and regulations (we have also included contract compliance in this category)

COSO Internal Control Framework - Components

- Control Environment
 - Integrity and ethical values
 - Governance
 - Org structure and assignment of authority and responsibility
 - Staffing
 - Performance measurement & incentives

- Risk Assessment – Identifying and assessing risks to the achievement of objectives

- Control Activities - Policies and procedures to mitigate risks to objectives

- Information & Communication - Relevant, quality information to support the functioning of internal control.

- Monitoring Activities - Evaluations to ascertain whether the components of internal control are present and functioning.

COSO Internal Control Framework - Principles

- **Control Environment**
 1. Commitment to integrity & values
 2. Board independence and internal control oversight
 3. Management design of reporting lines, structures, authorities and responsibilities
 4. Commitment to attract, develop & retain competent individuals
 5. Accountability

- **Risk Assessment**
 6. Specific objectives enabling risk identification & assessment
 7. Risk identification & management
 8. Potential for fraud
 9. Change management

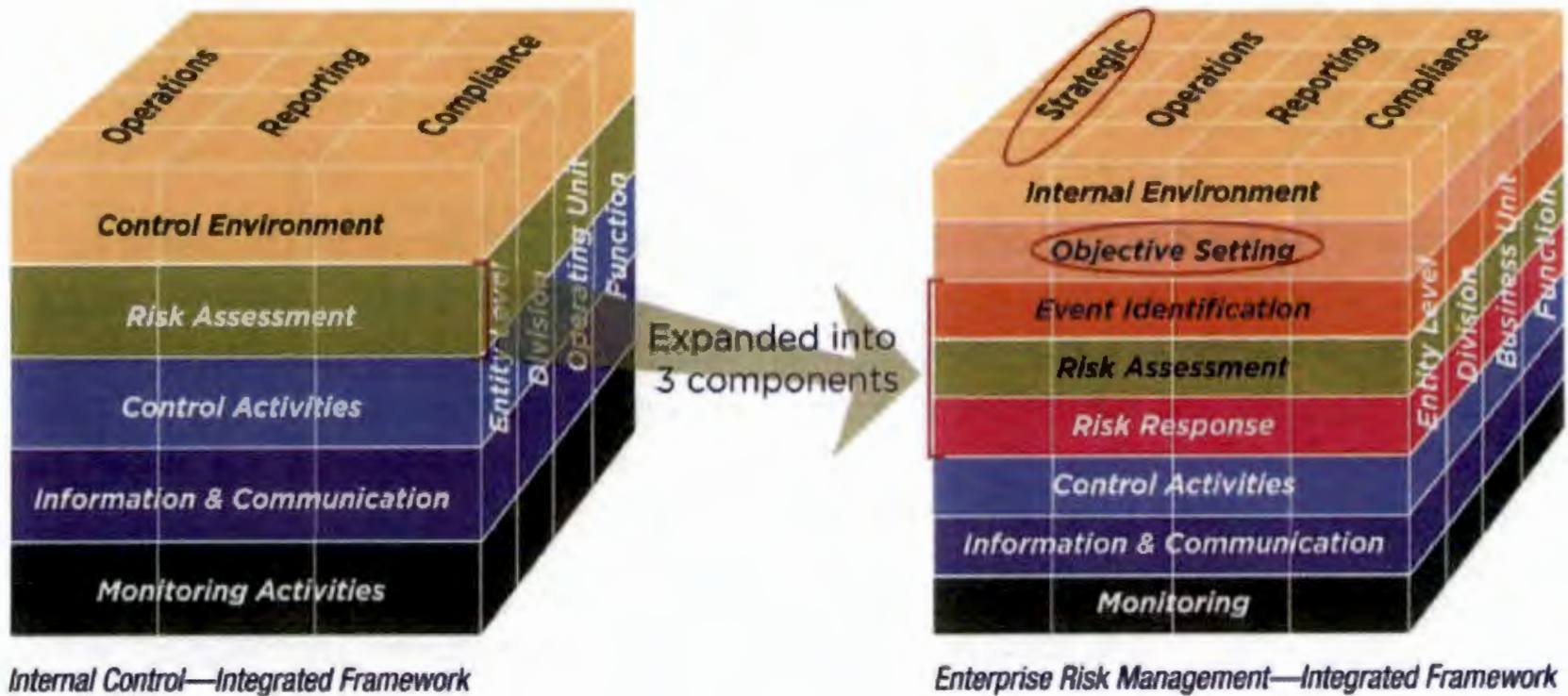
- **Control Activities**
 10. Controls to mitigate risks to objectives
 11. Controls over technology
 12. Policy formulation and execution

COSO Internal Control Framework - Principles

- Information & Communication
 13. Quality information to support internal control
 14. Internal communication of objectives and internal control responsibility
 15. Communication with external parties regarding internal control

- Monitoring Activities
 16. Ongoing evaluation of internal control
 17. Timely communication of deficiencies

Linkages Internal Control and ERM Frameworks



From COSO Internal Control – Integrated Framework - May 2013

A proud, diverse energy company, whose people are committed to building a bright future for Newfoundland and Labrador, unified by our core values.

Teamwork

Sharing our ideas in an open and supportive manner to achieve excellence.

Honesty and Trust

Being sincere in everything we say and do.

Open Communication

Fostering an environment where information moves freely in a timely manner.

Safety

Relentless commitment to protecting ourselves, our colleagues, and our community.

Respect and Dignity

Appreciating the individuality of others by our words and actions.

Leadership

Empowering individuals to help, guide and inspire others.

Accountability

Holding ourselves responsible for our actions and performance.

Project Update

18-Dec-2013

Boundless Energy



Confidential and Commercially Sensitive

Agenda

- Safety Moment
- Background Information
- Value Update
 - Cost
 - Revenue
 - Quality
 - Status update from DG3

Take a
MOMENT
for Safety



IF ONLY ALL HAZARDS WERE THIS OBVIOUS

Whether it's skinning wires or opening a new box of office paper, protect your hands by using the right tool in the right way. And always wear protective gloves.

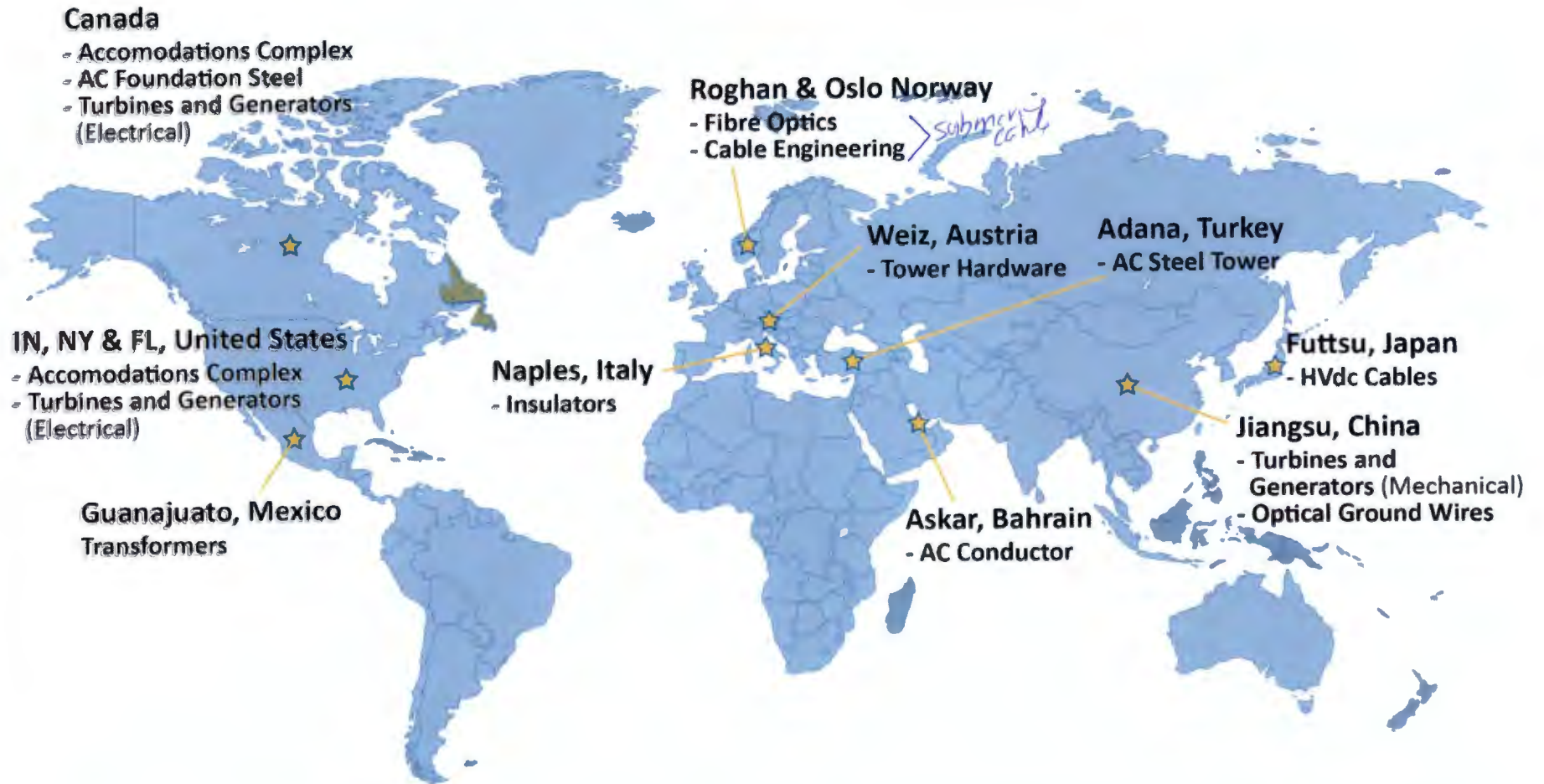
Take a
MOMENT
for Safety



Background Information

- Project Engineering >90% complete
 - Detailed engineering completed by year end
- Procurement
 - ~2/3 of total value awarded/ready to be awarded
 - LNTP issued for both major MF civil works and hydro mechanical equipment
 - Award of AC transmission line construction imminent
- Construction
 - Productivity generally aligned with expectations
 - Bulk excavation critical milestone achieved

LCP Global Reach



CH0006

Bulk Excavation

Contract Award:	09-Nov-2012
Cofferdams Complete:	01-Nov-2013
Spillway Excavation Completed:	02-Sept-2013
Powerhouse Excavation Completed:	25-Oct 2013
Substantial Completion;	31-Dec-2013

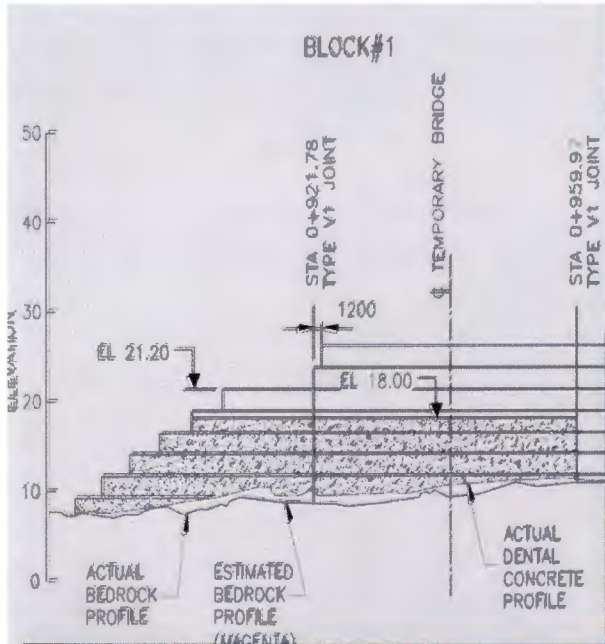


Power house Excavation- General View
Looking Downstream

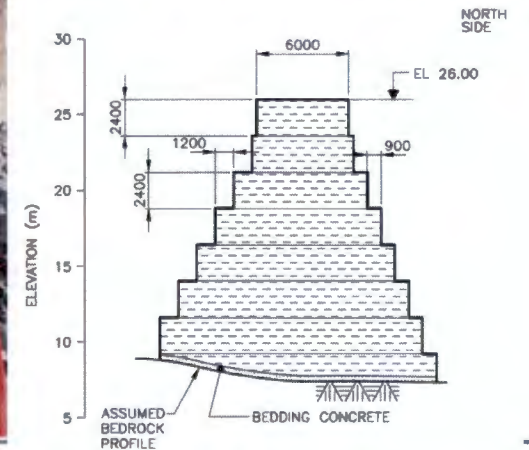


Powerhouse Excavation September 2013





RCC COFFERDAM



Critical Milestone Achieved

Riverside RCC Cofferdam Completion 31-Oct-2013



Muskrat Falls – Switchyard & Converter Earthworks (Site Grading)



MF Infrastructure



Churchill Falls - Switchyard Earthworks (Site Clearing)



SOBI Cable Manufacture

Stranding



Paper Lapping



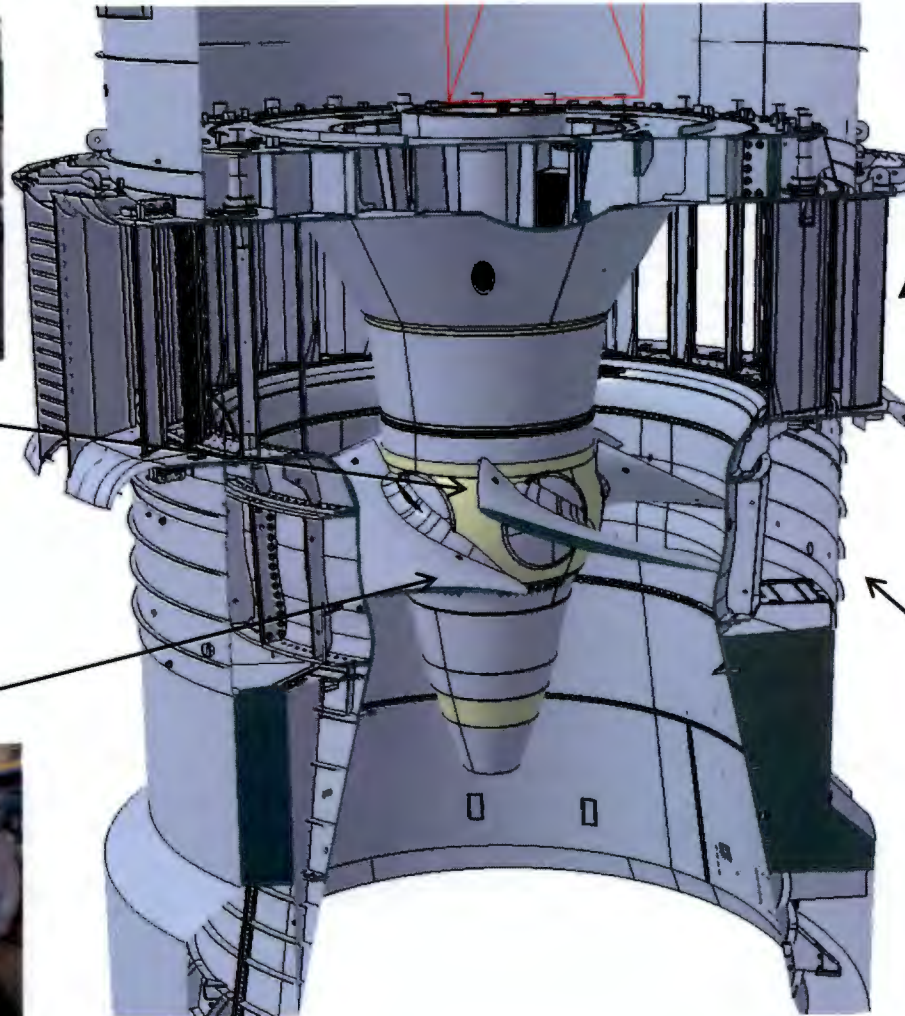
Drying and Impregnation Vessel



Turbine Fabrication



Runner Hub



Stay Ring



Circular Passage Liner



Runner Blades



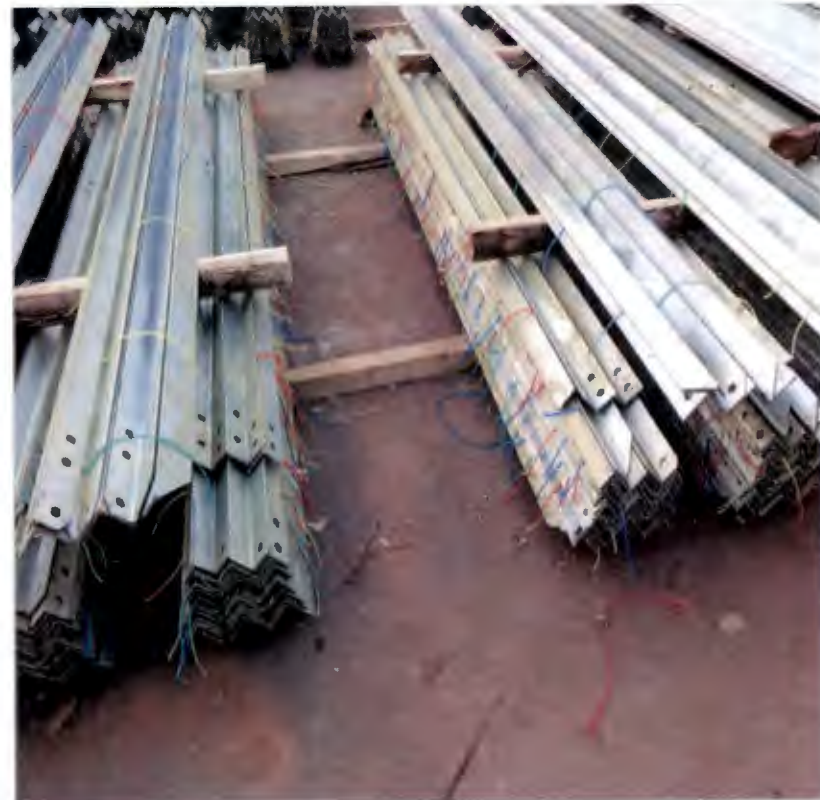
AC Right of Way Clearing



1st Batch of TL Towers Arriving *Goose Bay Port*



2nd Batch of AC Towers being Bundled *SARA, Turkey*



Background Information

- Safety
 - Relentless commitment to safety
 - Positive safety culture emerging at work sites
 - ~4.0 million person hours worked, 1 LTI
- Quality
 - Positive geotechnical conditions combined with prudent execution resulting in high quality excavated surfaces
 - Design progression has resulting in selective enhancements to improve overall reliability
 - Infrastructure enhancements implemented to drive labour productivity

Background Information

- Labour
 - Collective agreements negotiated and implemented
 - Project workforce = 1,500. No issues with recruitment
- Aboriginal
 - IBA procurement commitments exceeded
 - >100 Innu working on site
 - 20% of Labrador workforce = aboriginal
- NL and Canadian Benefits
 - NL engineering commitments satisfied
 - 76% of project workforce = NL residents
 - 20% NL workforce = female

Components of Project Value

- Overall project value is a function of revenue, cost, quality/reliability, schedule
- Costs are comprised of three main categories:
 - Facilities capital (incl. in CPW analysis)
 - Operating costs (incl. in CPW analysis)
 - Financing costs (incl. in CPW analysis)
- Revenue comprised of:
 - PPA revenue (incl. in CPW analysis, a function of revenue requirement)
 - value from excess power sales and other storage/transmission opportunities (not incl. in CPW analysis)

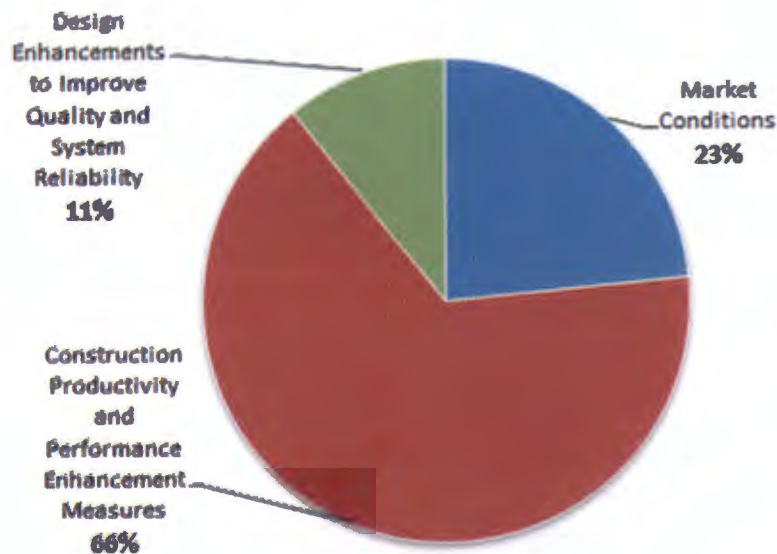
Key Changes from DG3

- Facilities Capital Cost (+5%) ↑ ~ \$300mm
- Financing Costs (NPV) ↓ ~ \$300mm
- Excess Sales/Other Value ↑ ~ \$100mm
- Quality/Reliability
 - enhanced from DG3
- Schedule
 - 2017 power achievable
 - Focus continues on optimization for resource leveling and execution effectiveness

Capital Cost Update

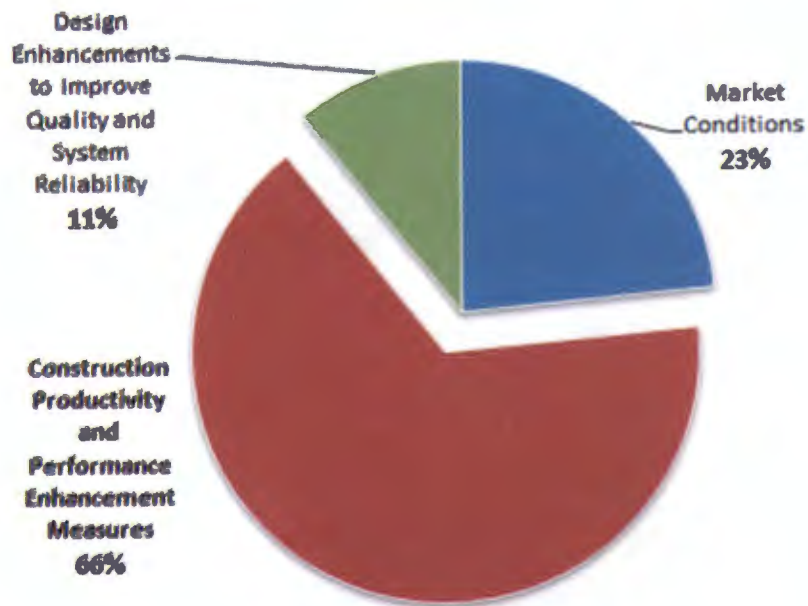


Cost Growth – 3 Categories



- >2/3 of total cost growth used in investments related to Construction Productivity and Performance Enhancement in order to mitigate construction execution challenges
- Significant investment in design enhancements to improve system reliability
- Market Conditions reflective of current buoyant local / national market.

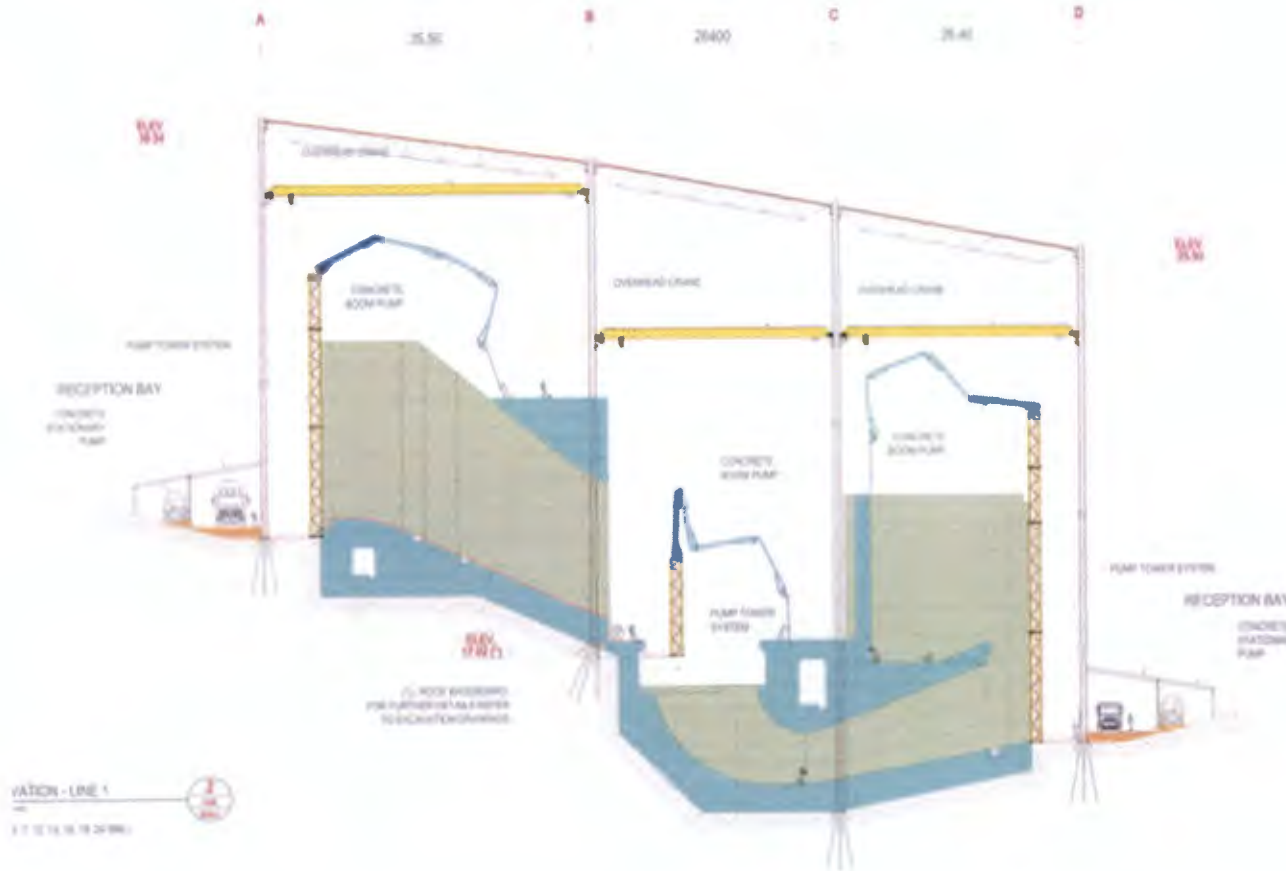
Category 1: Construction Productivity and Performance Enhancement Measures



Strategic Investments Include:

- Enclosure of Powerhouse to provide safer working conditions, increased productivity, longer continued employment opportunities for workforce
- Enhanced camp and recreational complex as well as catering to increase worker attraction and retention
- Starter camp to support Bulk Excavation
- Change diversion window from 2015 to 2016 to reduce weather window risk on spillway construction
- Significant site infrastructure upgrades – e.g. laydown area expansion to increase overall efficiencies and productivities
- Extensive investment in environmental mitigations to reduce risk of construction delays
 - Site Water Controls
 - Historical Resource Recovery

Astaldi's Integrated All-Weather Cover System





MF Laydown Area Expansion



MF Accommodations / Administration Complex



New Accommodations Camp - Churchill Falls



TL Material Marshalling Yard



Site Water Controls



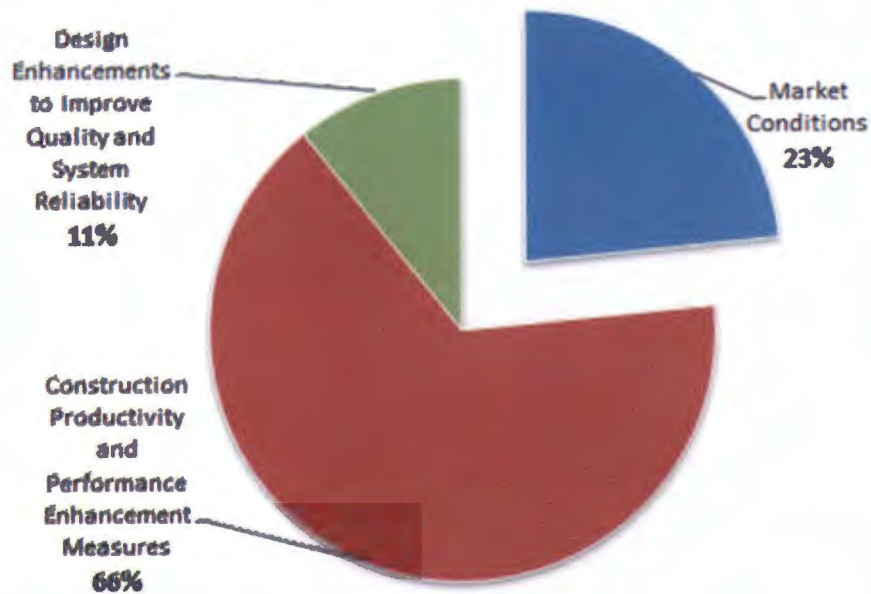
Historic Resources Recovery



Churchill River 25kV Line Crossing

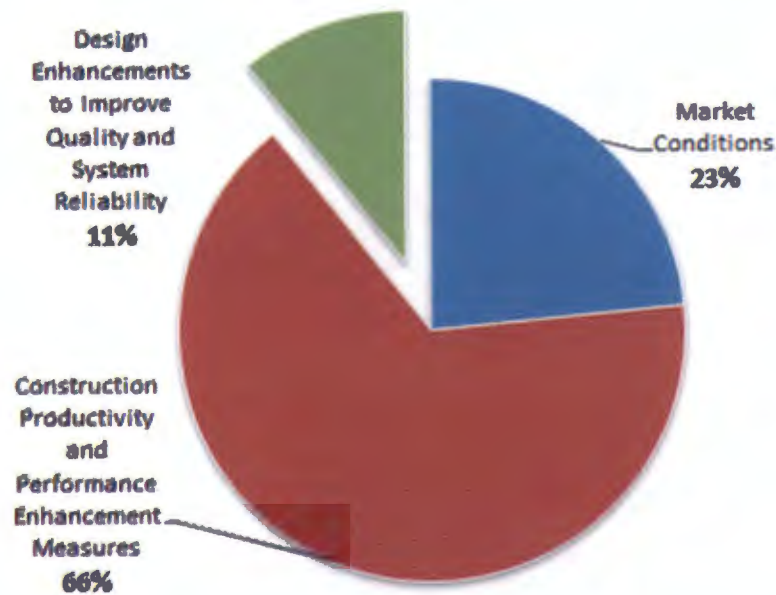


Category 2: Market Conditions



- Increased contractor margins and risk premiums driven in-part due to contractor’s negative views on labor productivity and performance
 - Influenced by the Vale Long Harbour experience
 - Industry trends due to departure of experienced workers
 - We are actively managing this perception
- Permanent plant equipment and material supply cost have been either better or comparable than DG3 estimate, including:
 - SOBI Cable
 - Turbine and Generators
 - Transmission Hardware & Steel
 - Powerhouse Crane

Category 3: Design Enhancements to Improve Quality and System Reliability



Substantiate Design Enhancements:

- Use of 5 low-level vertical gates in spillway to improve winter operation reliability
- Spillway discharge channel concrete liner to remove risk of potential erosion
- North Spur cut-off wall extension
- Procurement of additional critical operational spares
- Addition of 2nd service bay on North Side of Powerhouse to provide operational flexibility
- Increased reliability in TL beyond initial design return period expectations
 - Use of low temperature steel for HVdc TL
 - Additional foundation corrosion protection
 - Higher utilization factor for AC TL towers

315kV Tower Type "D" Prototype Testing



Protecting Our Investment

- Lump sum or unit price contracts
 - Contractor holds performance accountability
- Category 1 investments to reduce execution risk (Schedule, labor, infrastructure)
- Capped labor exposure with Astaldi using Lmax
- Framework negotiated with Astaldi to expand scope to include N. Spur and Dams
 - Target Price reduces by \$40 million
 - Home overhead, Indirect and equipment cost covered within CH0007
 - Fixed Profit
- Expanding the traditionally local civil subcontractor marketplace for EPC contractors to avail of during preparation of their RFP responses

Construction Management Update

- H&S Management
 - Maintaining relentless commitment to Zero Harm – Nobody Gets Hurt
 - New initiatives including rollout of Nalcor’s “Take a Moment for Safety” program
- Contractor Performance Management
 - Tier 1 contractors, with “A Execution Teams” identified through comprehensive prequalification and bid evaluation
 - Performance accountability of contractors maintained through fixed and firm or unit price arrangements
- Labor Management
 - Positive experience to-date – good productivity, minimal grievances
- Interface and Integration Management
 - Strong Project Delivery Team in-place actively managing key interfaces

workhealthlife 

by Shepell-fgi (<http://www.shepellfgi.com/>)

Holiday stress blasters

The holidays should be a time for fun with friends and family. But for those trying to juggle work and home with presents and parties; it can be one of the most taxing times of the year. Avoid feeling snowed in by the season, and clear some time from the hectic holiday schedule to take in the tips below.



Be realistic. A romanticized vision of the "perfect" holiday with your "perfect" family is sure to disappoint. Embrace the fact that stress and minor conflict go hand-in-hand with the joy and fun of the season. Relax and accept the imperfections in yourself and your family.

Start sooner rather than later. Set aside a little time every day to prepare for the holidays. Spacing out errands will help ease the pressure and reduce the likelihood of last-minute panic situations.

Just say "no." During the holidays, work, personal and family obligations can wreak havoc on your daily routine, cut into your free time and leave you feeling overwhelmed. Be selective and say "yes" only to invitations you really want to attend. Send a card to those you decline and if you're concerned about offending the host, a small gift for guests to enjoy such as flowers, wine or food.

Ask and you will receive. Recruit the support of other family members. Just because they're not

volunteering, doesn't mean they don't want to help. Children especially enjoy being part of the action. Younger kids can make cards, decorate or tidy up while older children can help with gift-wrapping, food preparation and other errands.

Stick to your budget. It's not hard to get caught up in the flurry of holiday spending, but once the sparkle of the holidays is over, you could be left with a very real bill. Avoid starting the New Year in the red. Draw up a realistic budget for the season and honour it.

Stay healthy. It's easy to let healthy eating and exercise fall to the wayside during this indulgent time. Make an effort to get enough sleep, limit consumption of alcohol and fatty foods and squeeze in physical activity whenever possible. Being well rested and healthy will help you cope better with stress.

Enjoy the ride. Concentrating on "the big day" can take away from the fun of getting there. Take pleasure in the here and now of planning, preparation and time spent with family and friends on the way to the holiday.

Be careful not to let the true spirit of joy and togetherness of the holidays get lost in the shuffle of a busy schedule. Relax and take care of yourself and the season will be a more festive one for everyone.
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73rd Meeting of the Board of Directors of Malcor Energy held in
the Boardroom, Level 6, Hydro Place, St. John's, Newfoundland & Labrador
on Wednesday, December 18, 2013 at ~~10~~ 11:00am

T. Styles *T. Styles*

E. Martin *E. Martin*

J. Abbass *J. Abbass*

A. Hawkins *A. Hawkins*

E. Breen *E. Breen*

K. Marshall / Absent

T. Clift *T. Clift*

G. Shortall *G. Shortall*

Wayne Schindler
Dec. 18/13

NALCOR ENERGY
SEVENTY-THIRD MEETING OF BOARD OF DIRECTORS

Hydro Place
Boardroom Level 6
St. John's, NL

WEDNESDAY
December 18, 2013
at 10:30 am

AGENDA

TAB

1. Constitution of the Meeting:
 - * Chairperson – Terry Styles
 - * Secretary – Wayne Chamberlain
 - * Notice of meeting sent out on November 19, 2013
2. Safety Moment
3. Verification of the Minutes of the 68th, 69th, 70th and 71st meetings of the Board held on September 27th, October 28th, November 14th and November 15th, 2013 respectively (RESOLUTION) 1
4. Business Arising
5. Board Committee Reports
 - Audit
 - Governance
 - Safety, Health and Environment
6. President's Report
 - 2013 Corporate Performance Review 2
 - 2014 Corporate Plan 3
7. Financial Report
 - Financial Summary 4
 - 2014 Financing Plan 5
 - Approval of 2014 Operating and Capital Budgets/Financing Plan (RESOLUTION) 6
 - Approval of 2014 Financial Risk Management Strategy (to follow) (RESOLUTION) 7
 - ~~Compliance Certificate~~ 8
8. Ratification of Resolutions (RESOLUTIONS) 9
9. ~~Nalcor Board Annual Work Plan~~ 10
10. 2014 Meeting Schedule 11
11. Other Business
12. Date for next meeting
 - * Friday, March 14, 2014
13. In Camera Session
14. Termination
15. Lunch

**Resolution for Approval ASAP**

Peter Hickman to: Ed Martin, tclift, ken.marshall, g.shortall,
ebreen, labbass, mayor, appalachi

11/26/2013 05:30 PM

Cc: Wayne Chamberlain, Derrick Sturge
Bcc: Audrey Brophy

Good evening. People are working feverishly to put the documentation in place for the Financing. One item that has been noted as a need and which requires Nalcor Board approval, is an authorization of Nalcor's subsidiaries to borrow the money for the Project; this is a requirement of the Energy Corporation Act. Attached is a resolution for your consideration and approval whereby Nalcor authorizes the three subsidiaries to borrow money for the project and to carry out any related activities.

Please review the resolution and let me know if you approve it by sending me an email as soon as possible. If you have any questions please do not hesitate to contact me .

Regards,
Peter



BoD Res Nalcor Energy - Borrowing of Subsidiaries (Nov. 26, 2013).DOC

Peter A. Hickman
Assistant Corporate Secretary &
Sr. Legal Counsel
Phone - (709) 737-1462
Fax - (709) 737-1782
Cell - (709) 697-3161

*Nalcor
Ratification*

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Resolution - Incorporation of Subsidiaries /Appointment of Directors

Peter Hickman to: Ed Martin, tclift, ken.marshall, g.shortall,
ebreen, labbass, mayor, appalachi

11/12/2013 03:08 PM

Cc: Wayne Chamberlain
Bcc: Audrey Brophy

Attached for your review and approval is a resolution approving the incorporation of 4 LCP subsidiaries of Nalcor and appointing individuals as directors of these companies . If you approve of this resolution please send me an email to that effect **as soon as possible**.

Thank you,
Peter



Resolution Approving Incorporation - Appointing Directors - LCP Subsidiaries.docx

*Maker
Ratification*

Fwd: Prepaid rent
Peter Hickman
to:
Audrey Brophy
12/09/2013 04:24 PM
Show Details

Please add item to Nalcor agenda as per below....pre-paid rent

Sent from my iPad

Begin forwarded message:

From: "Rob Hull" <RobHull@nalcorenergy.com>
Date: December 9, 2013 at 1:53:59 PM EST
To: "Kent Legge" <KentLegge@nalcorenergy.com>
Cc: "Peter Hickman" <PHickman@nalcorenergy.com>, "Jeannine Fitzgerald" <JeannineFitzgerald@nalcorenergy.com>, "Derrick Sturge" <DSturge@nalcorenergy.com>
Subject: Re: Prepaid rent

Hi Kent

Just conferred with Derrick, Peter and Jeannine. Given the timing requirements to fund the prepaid rent, we are proceeding with preparing a cover memo and resolutions for each of the Nalcor and LIL Opco boards...Jeannine is working that. Peter is also going to add to the agenda for Nalcor Board and will arrange LIL Opco meeting subsequent to Nalcor Board.

Rob
Robert L. Hull, CA, CIRP
General Manager (Treasury and Risk Management) and Chief Risk Officer
Nalcor Energy

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From: Kent Legge
Sent: 12/09/2013 03:19 PM NST
To: Rob Hull
Subject: Re: Prepaid rent

Rob- just saw your call...i'm on a conference call (Safety mtg for Derrick). anything urgent?

Kind regards,

Kent

From: Kent Legge
Sent: Monday, December 9, 2013 12:36 PM
To: Rob Hull
Subject: Fw: Prepaid rent

Hi Rob- please see below. When I get back in the office on Friday, i'll regroup with Jeannine, map out a more detailed plan, and circle back with yourself and Derrick. We may have a more definitive range on the number at that point also.

Board meeting is Wednesday the 18th.

Kent

From: Jeannine Fitzgerald
Sent: Monday, December 9, 2013 12:24 PM
To: Kent Legge
Subject: Re: Fw:

The plan as it stood last week was to add "prepaid rent" to the list of other topics in the board meeting and to have a detailed discussion on the nature of it, what it's needed and the \$\$\$ involved at that time. Originally we were going to include something in the board package but on the call we had last week you and Derrick decided that it was best to just table this at the meeting and bring it forth then.

Until financial close occurs we will not know what the magic number is going to be so I don't have any further info on this than what we discussed on the call.



Jeannine Fitzgerald
Taxation Manager
Finance and Corporate Services
Nalcor Energy
t. 709 737-4924 c. 709 330-5241
e. JeannineFitzgerald@nalcorenergy.com
w. nalcorenergy.com

Kent Legge---12/09/2013 02:44:50 PM---Hi Jeannine- please see below. Can you provide me an update?
Thanks

From: Kent Legge/NLHydro
To: Jeannine Fitzgerald/NLHydro@nlhydro
Date: 12/09/2013 02:44 PM
Subject: Fw:

Hi Jeannine- please see below. Can you provide me an update?

Thanks

Kent

From: Rob Hull
Sent: Monday, December 9, 2013 12:12 PM
To: Kent Legge
Subject:

Hi Kent

What is the plan to bring the prepaid rent to the Board...next week?

Rob



Robert L. Hull, CA, CIRP

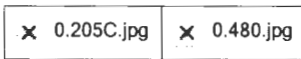
General Manager (Commercial, Treasury and Risk) and Chief Risk Officer

Nalcor Energy

t. 709 737-1325 c. 709 691-3864

e. RobHull@nalcorenergy.com

w. nalcorenergy.com



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