NALCOR ENERGY
NEWFOUNDLAND AND LABRADOR HYDRO

Strategic Plan 2014-2016
Transparency and Accountability

March 2014

newfoundland labrador hydro
a nalcor energy company

nalcor energy

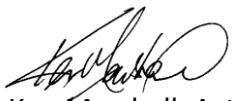
Message from the Boards of Directors

I am pleased to provide the Strategic Plan for Nalcor Energy and Newfoundland and Labrador Hydro (Hydro or NLH), on behalf of the Boards of Directors.

Nalcor Energy and Hydro are category one public bodies under the *Transparency and Accountability Act* and this Strategic Plan was prepared in accordance with the applicable guidelines.

The focus period for this Strategic Plan is 2014-2016. The Plan content addresses both entities and outlines how each will address the applicable strategic directions of the Provincial Government in relation to the energy sector as communicated by the Minister of Natural Resources.

As the Boards of Directors of Nalcor Energy and Hydro, we are accountable for the preparation of this Plan and for the achievement of the specific goals and objectives contained herein.



Ken Marshall, Acting Chair
Nalcor Energy
Newfoundland and Labrador Hydro

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1 STRATEGIC DIRECTIONS

A strategic direction is the articulation of a desired physical, social, or economic outcome that would normally require action by, or involvement of, more than one government entity.

The strategic directions of the Provincial Government in relation to the energy sector as communicated by the Minister of Natural Resources include:

- Increased exploration and development of mining and energy resources
  - Acquisition and promotion of geoscience data
  - Enhanced marketing and promotion of our natural resources
  - Competitive regulatory and policy structures that support resource development
  - Increased exploration and development activity

- Responsible resource development
  - Development of clean, renewable energy through the Lower Churchill Project
  - Activities to support Social License through adequate stakeholder consultation
  - Resource developments built on a culture of worker safety and environmental sustainability
  - Integration of advanced technological solutions that reduce environmental impacts

- Maximum benefits to the province through the strategic development of our resources
  - Increased participation in energy resource developments
  - Supporting increased local industrial and employment benefits
  - Increased participation of women and underrepresented groups in natural resource projects

- Stable and competitive energy supply for domestic use and export to market
  - Alternative energy research and development
  - Advancement of renewable energy projects and related infrastructure
  - Development of industrial electricity rates that support resource development
  - Export of surplus energy
  - Development of innovative technology solutions for existing and new energy sources

The 2014-2016 Strategic Plans for Nalcor Energy and Newfoundland and Labrador Hydro (Hydro) has been developed taking into account the strategic directions of the Provincial Government in relation to the energy sector (see Appendix 1). The missions, goals, and objectives of both Nalcor and Hydro presented in this document support the achievement of these strategic directions.

2 OVERVIEW

Nalcor Energy

Nalcor Energy (Nalcor) is Newfoundland and Labrador's energy company. The company's business includes the development, generation, transmission and sale of electricity; the exploration, development, production and sale of oil and gas; industrial fabrication site management; and energy marketing.

Focused on sustainable growth, the company is leading the development of the province's energy resources and has a corporate-wide framework that facilitates the prudent management of its assets while continuing an unwavering focus on the safety of its workers, contractors and the public.

Nalcor, a provincial Crown corporation, had ten wholly-owned subsidiaries at December 31, 2013, Newfoundland and Labrador Hydro (Hydro), Nalcor Energy – Oil and Gas, Nalcor Energy – Bull Arm Fabrication, Labrador-Island Link General Partner Corporation (LIL GP), Labrador-Island Link Holding Corporation (LIL Holdco), Muskrat Falls Corporation (MF Corp), Lower Churchill Management Corporation (LCMC), Labrador-Island Link Operating Corporation (LIL Opco), Labrador Transmission Corporation (Lab Transco) and Gull Island Power Corporation (GIPCo). Nalcor, through its subsidiary, Hydro, holds a 65.8 per cent interest in Churchill Falls (Labrador) Corporation Limited and 51 per cent of Lower Churchill Development Corporation (LCDC).[1]

Headquartered in St. John's, Nalcor's energy portfolio is located throughout the province (see Appendix 2). In 2013, Nalcor had over 1,400 employees, with nearly 70 per cent of these employees located in rural parts of the island and Labrador. The gender composition of Nalcor's employee group was 77 per cent male and 23 per cent female. Nalcor is currently implementing a multi-year action plan to support diversity and inclusion.

[1] GipCo and LCDC are inactive subsidiaries. In 2013, Nalcor created new subsidiaries as part of advancing the Muskrat Falls Project. The new subsidiaries are associated with the development, construction, financing and operation of the Muskrat Falls Project, including the Labrador-Island Link and include MF Corp, LCMC, LIL Opco and Lab Transco. These subsidiaries are in addition to those created in 2012, namely LIL GP and LIL Holdco. In 2012 Nalcor also created the Labrador-Island Link Partnership (LIL Partnership) in accordance with the Labrador-Island Link Limited Partnership Agreement to develop the Labrador-Island link. LIL Holdco holds all of LIL Partnership's 75 Class A Units and the 1 Class C Unit; LIL GP holds the 1 GP Unit; and ENL Island Link Incorporated holds all of the 25 Class B Units.

In 2013 Nalcor had revenues of $784.8 million. The majority of Nalcor's revenues are currently generated from energy sales through Hydro to utility, rural and industrial customers. Approximately 37 per cent of Nalcor's 2013 expenditures related to fuels and power purchases by Hydro with operations and administration accounting for 31 per cent of expenses, amortization and depletion totalling 13 per cent and interest and finance charges accounting for 11 per cent.

Table 1: Nalcor Energy Consolidated Revenue and Expenses 2013

For the year ended December 31 (millions of dollars)	$	%
Revenue		
Energy sales	756.0	96.3
Interest and finance income	-	-
Other revenue	28.8	3.7
	784.8	
Expenses		
Fuels	190.9	27.7
Power purchased	63.2	9.2
Operations and administration	215.4	31.2
Net finance expense	72.5	10.5
Amortization and depletion	87.7	12.7
Other income and expense	3.9	0.6
Regulatory Adjustments	55.6	8.1
	689.2	
Net Income	95.6	

Hydro

As the province's main electricity provider, Hydro is focused on providing a safe, reliable and least cost electricity supply to meet current energy needs and accommodate future growth. Hydro is involved in both regulated and non-regulated activities.

The majority of Hydro's business is regulated by the Newfoundland and Labrador Board of Commissioners of Public Utilities (PUB) and its electricity rates are set through periodic general rate applications. The regulated portion of the company includes the generation, transmission and distribution of electrical power and energy to utility, residential and commercial customers, as well as island industrial customers.

Hydro's generating assets include nine hydroelectric plants, one oil-fired plant, four gas turbines, and 25 diesel plants. These generating assets along with a network of transmission and distribution lines bring electricity to communities throughout Newfoundland and Labrador.

Under the Churchill Falls Power Contract, CF(L)Co has the right to recall 300 MW of power (recall energy). CF(L)Co sells this power to Hydro under a long-term contract expiring in 2041. Hydro purchases a portion of this power to supply residential and commercial customer requirements under regulated service.

Hydro's non-regulated activities include the sale of another portion of this power to mining operations in Labrador West and the remaining portion of recall power is exported into Canadian markets.

In 2013, Hydro directly employed 916 people. The location of these employees reflects Hydro's service area and the location of the company's electricity assets, with 72 per cent located in rural areas. The gender composition of Hydro's employee group is 83 per cent male and 17 per cent female. As the largest employer within Nalcor, Hydro will play a key role in implementing the multi-year action plan to support diversity and inclusion.

In 2013, Hydro had revenues of $688.2 million. The majority of Hydro's revenues are from energy sales to utility, rural and industrial customers with other revenues including preferred dividends from Hydro's subsidiary Churchill Falls. Consolidated energy sales also include CF(L)Co sales to Hydro Quebec as well as sales of recall power. In 2013, Hydro net income of $54.2 million consisted of $0.5 million from Hydro Regulated, $23.3 million from Churchill Falls and $30.4 million from recall power and other non-regulated activities. The following chart summarizes the consolidated 2013 revenue and expenses for Hydro.

Table 2: Hydro Consolidated Revenue and Expenses 2013

For the year ended December 31 (millions of dollars)	$	%
Revenue		
Energy sales	682.3	99.1
Interest and finance income	-	
Other revenue	5.9	0.9
	688.2	
Expenses		
Fuels	190.9	30.1
Power purchased	63.2	10.0
Operations and administration	185.0	29.1
Net finance expense	72.3	11.4
Amortization	65.9	10.4
Other income and expenses	1.1	0.2
Regulatory adjustments	55.6	8.8
	634.0	
Net Income	54.2	

3 MANDATE

Nalcor

The mandate of Nalcor, established in legislation under the *Energy Corporation Act*, is to invest in, engage in and carry out activities in all areas of the energy sector in the province and elsewhere, including:

- Developing, generating, producing, transmitting, distributing, delivering, supplying, selling, exporting, purchasing and using power from wind, water, steam, gas, coal, oil, hydrogen or other products used or useful in the production of power.
- Exploring for, developing, producing, refining, marketing and transporting hydrocarbons and products from hydrocarbons.
- Manufacturing, producing, distributing and selling energy related products and services.
- Research and development.

Hydro

The *Hydro Corporation Act* mandates Hydro to be responsible for:

- Developing and purchasing power and energy on an economic and efficient basis.
- Engaging within the province and elsewhere in the development, generation, production, transmission, distribution, delivery, supply, sale, purchase and use of power from water, steam, gas, coal, oil, wind, hydrogen and other products.
- Supplying power, at rates consistent with sound financial administration, for domestic, commercial, industrial or other uses in the province and subject to the prior approval of the Lieutenant-Governor in Council, outside of the province.

4 LINES OF BUSINESS

Nalcor has six lines of business: Newfoundland and Labrador Hydro - Regulated, Churchill Falls, Oil and Gas, Lower Churchill Project, Bull Arm Fabrication and Energy Marketing. The activities of these lines of business support the fulfillment of the strategic directions of the Provincial Government for the energy sector. A description of each of the lines of business is presented below with additional information included in the strategic issues for the 2014-2016 planning period.

Newfoundland and Labrador Hydro - Regulated

Hydro is the primary generator of electricity in Newfoundland and Labrador. The utility delivers safe, reliable, and least cost power to utility, industrial, residential and commercial customers in more than 200 communities in the province. Hydro regulated activities can be grouped as follows:

- Electricity generation involves the operations of nine hydroelectric generating stations, one oil-fired plant, four gas turbines and 25 diesel plants. This line of business also includes Hydro's involvement in forecasting electricity requirements in the province and advancing options for generation expansion.
- Transmission, distribution and customer service activities include the operation and maintenance of over 3,700 kilometres of transmission lines and more than 3,300 kilometres of distribution lines. Customer service activities address the requirements of over 36,000 residential and commercial customers, Newfoundland Power, as well as our industrial customers.

Churchill Falls

Nalcor's operation in Churchill Falls is one of the largest underground hydroelectric powerhouses in the world, with a rated capacity of 5,428 megawatts (MW). Safely operating and maintaining its electricity assets, as well as municipal and community services, drives the Churchill Falls strategy.

The Churchill Falls generating station provides clean, renewable electricity to millions of consumers throughout North America. A significant portion of that electricity is being sold to Hydro-Québec under a long-term contract. Churchill Falls sells 300 MW to Hydro for use in the province and for export sales. Churchill Falls also provides 225 MW to Twin Falls to service the mining industry in Labrador West.

Nalcor Energy – Oil and Gas

Nalcor Energy – Oil and Gas manages oil and gas interests and is currently a partner in three developments in the Newfoundland and Labrador offshore oil and gas industry: the Hebron oil field, the White Rose Growth Project, and the Hibernia Southern extension. Through its multi-year exploration strategy, Nalcor Energy – Oil and Gas also supports efforts toward further exploration and development of the province's potential offshore and onshore resources. The company also continues to pursue additional investment opportunities.

Lower Churchill Project

The lower Churchill River hydroelectric resource is one of the most attractive undeveloped hydroelectric projects in North America and is a key component of the province's energy warehouse. The project's two proposed installations at Gull Island and Muskrat Falls will have a combined capacity of over 3,000 MW. The clean, stable, renewable electricity will provide an opportunity for the province to meet its own domestic and industrial needs in an environmentally sustainable way, and also export excess electricity to other jurisdictions where the demand for clean, renewable energy continues to grow. In 2012, Phase One of the project - Muskrat Falls, Labrador transmission assets, Labrador-Island Link and the Maritime Link was sanctioned and construction has started.

Bull Arm Fabrication

Bull Arm Fabrication manages Atlantic Canada's largest fabrication site. Close to international shipping lanes and Europe, this site has unobstructed, deep water access to the Atlantic Ocean. This facility spans over 2,560 hectares and has integrated and comprehensive infrastructure to support fabrication and assembly of three key project functions, simultaneously, in three separate theatres: Topsides Fabrication and Assembly, Dry-dock Fabrication and Construction, and Deepwater Construction and Integration Site. Currently, the Bull Arm site is fully leased by ExxonMobil for the construction and commissioning phases of the Hebron Project.

Energy Marketing

Nalcor is involved in energy marketing and other energy activities including non-regulated electricity generation, wind energy, and research and development. Nalcor's current energy marketing portfolio will grow over the coming years and currently includes recall power that is not required by Hydro to meet demand in Labrador.

5 VALUES

Employees of Nalcor and its subsidiaries, including Hydro, are committed to building a bright future for Newfoundland and Labrador, unified by the following core values:

- Open Communication – fostering an environment where information moves freely in a timely manner.
- Accountability – holding ourselves responsible for our actions and performance.
- Safety – relentless commitment to protecting ourselves, our colleagues, and our community.
- Honesty and Trust – being sincere in everything we say and do.
- Teamwork – sharing our ideas in an open and supportive manner to achieve excellence.
- Respect and Dignity – appreciating the individuality of others by our words and actions.
- Leadership – empowering individuals to help guide and inspire others.

6 PRIMARY CLIENTS

In addition to the clients of its subsidiary, Hydro, Nalcor's clients include:

- Partners in oil and gas projects
- Emera Energy
- Bull Arm Fabrication site tenants
- Supply and service companies in the energy sector

The primary clients of Hydro, including its subsidiary CF(L)Co, are:

- Industrial electricity consumers
- Newfoundland Power
- Rural retail electricity customers
- Hydro-Québec
- Emera Energy
- Non-utility electricity generators (e.g. Corner Brook Pulp and Paper, wind generators)
- Government of Newfoundland and Labrador departments and agencies

7 VISION

Nalcor

To build a strong economic future for successive generations of Newfoundlanders and Labradorians.

Hydro

To be recognized as an innovative provider of quality energy services.

8 MISSION

Nalcor

Nalcor is focused on sustainable growth and is leading the development of the province's energy resources to provide maximum benefit to Newfoundland and Labrador. Over the coming years, Nalcor will continue to manage its energy holdings including oil and gas interests, Hydro and Upper Churchill assets, and the Bull Arm fabrication site, and will advance plans for the development of the Lower Churchill hydroelectric resource.

By December 31, 2016, Nalcor Energy will have further advanced its energy sector involvement in hydroelectric development, oil and gas, energy marketing and industrial site fabrication management to help build a strong economic future for Newfoundland and Labrador.

Measure: Advanced energy sector involvement

Indicators:

- Effectively managed Upper Churchill resource to:
    - Maintain assets to ensure long-term reliable service; and,
    - Pursue Power Contract adjustments.
- As an active partner in existing offshore oil developments, fulfilled all required obligations and worked to attain alignment between provincial interests and project partners.
- Advanced oil and gas exploration activity.
- Significantly advanced the Lower Churchill Development Phase I and continued efforts to progress Phase II.
- Monitored safety, asset management and environmental protection at the Bull Arm Fabrication Site and planned for long-term site utilization.
- Enhanced energy marketing capabilities toward establishing a self-contained energy marketing line of business.

Hydro

Hydro is focused on providing a safe, reliable and cost-effective electricity supply to meet current and future energy needs. Hydro's strategy is focused on managing its assets in a manner that optimizes total cost of operation and maintenance. Diligence in the area of safety of employees, contractors and the public and a commitment to environmental sustainability and energy conservation drive the company. Over the coming years, Hydro will continue to

enhance safety, asset management and environmental sustainability in order to improve the delivery of electricity to the people of the province.

By December 31, 2016, Hydro will have enhanced its safety, asset management and environmental sustainability processes to continuously improve the delivery of reliable and cost-effective electricity supply to its customers.

Measure: Enhanced safety, asset management and environmental sustainability processes
Indicators:

- Advanced efforts toward safety excellence with emphasis on employees, contractors, and the public.
- Enhanced asset management to ensure reliability of electricity assets (generation, transmission and distribution) and as well as future capacity to accommodate power from the Lower Churchill Development (Muskrat Falls).
- Advanced efforts to secure power from Muskrat Falls for use in the province.
- Advanced research on renewable/alternative power generation options for the province with environmental sustainability in mind.
- Promoted energy conservation by electricity consumers as well as internal energy efficiency.

9 ISSUES

Nalcor drives performance excellence in its lines of business and functional support areas through its planning and performance monitoring processes. Nalcor focuses on five key areas - safety leadership, environmental leadership, business excellence, people and community. These focus areas drive goals, objectives and operational activities throughout the company.

The strategic issues outlined below will be addressed by Nalcor and/or Hydro in order to realize their mandates and visions. Consistent with the underlying philosophy of the multi-year performance-based planning required under the provisions of *Transparency and Accountability Act,* these issues are at a governance level and reflect the priorities of the Nalcor and Hydro boards and support the Provincial Government's strategic directions for the energy sector. Other issues and focus areas, such as people excellence and corporate citizenship, will continue to drive operational activities of Nalcor and its lines of business and support efforts to address the issues outlined.

Issue 1: Safety leadership
Issue 2: Electricity supply
Issue 3: Upper Churchill asset management and Power Contract legal actions
Issue 4: Oil and gas interests, exploration and development
Issue 5: Lower Churchill development
Issue 6: Bull Arm Fabrication Site long-term strategy and lease management
Issue 7: Energy marketing portfolio management and long-term strategy

As detailed in Nalcor and Hydro Annual Performance Reports for the Strategic Plan 2011-2013, considerable progress has been made in advancing the goals and objectives for each of the issues presented. The issues for this planning period are consistent with the issues presented in the 2011-2013 plan. This continuity results in a plan for 2014-2016 that reflects the next phase of Nalcor's strategy execution in support of the Provincial Government's energy sector strategic directions.

10 GOALS AND OBJECTIVES

Issue 1: Safety leadership

A relentless commitment to safety drives all Nalcor lines of business. Achieving excellence in safety is Nalcor's number one priority and safety is a shared core value. For Nalcor, safety excellence is more than a way of operating it is an integral part of Nalcor's identity and strategy for the planning period and into the future. In addition to driving the company's strategy and operations in all lines of business, Nalcor's safety focus supports the Provincial Government's strategic direction toward building a culture of worker safety as part of responsible resource development.

Nalcor's pursuit of safety excellence encompasses the safety of employees, contractors and the general public. The company has established a safety framework that is built on leadership, procedures and equipment, competence, supportive culture, union management alignment, responsibility and reporting. This framework guides processes such as joint union management safety leadership discussions and planning, safe workplace reporting and the investigation of safety incidents and high-potential near misses. The safety framework is also the basis for developing multi-year safety plans for communications, work procedures and training to ensure employee competence and promote a strong safety culture.

In 2013, Nalcor's safety performance continued to improve and the company experienced its best performance in at least 16 years[2]. Many areas of Nalcor sustained excellent safety performance and the company is seeing its safety culture mature with Nalcor employees identifying and addressing unsafe conditions and behaviours and accepting personal responsibility for their safety and the safety of others.

Achieving and maintaining excellent safety performance in all areas of the company is an ongoing challenge. During the planning period, Nalcor will continue to implement initiatives to move the company forward on its journey to safety excellence. Consistent with its multi-year safety plans, these initiatives involve procedures for completing high-risk work, safety training to maintain employee competence, employee communication and public education activities.

[2] Incomplete data prior to 1998 regarding hours worked (exposure hours) - required to calculate injury frequency prior to that date.

To identify opportunities for improvement, Nalcor will also continue to complete investigations of all safety incidents and analyse safety performance to identify areas for improving the design and delivery of its safety programs over the planning period.

Unless otherwise specified, the goal, objectives, measures, and indicators outlined below apply to both Nalcor and Hydro. Nalcor's safety programs and initiatives are targeted to all its lines of business as well as support areas of the company. As a large electricity operation and the largest employer within Nalcor, Hydro safety activities and performance are a significant component of this plan.

Issue 1: Safety leadership	
Goal 1 By December 31, 2016, Nalcor and Hydro will have continued progress towards sustained safety excellence.	
Measure	Continued progress towards sustained safety excellence.
Indicator	▪ Advanced multi-year safety training plan for employees. ▪ Advanced multi-year plan for safety-related communications for employees, contractors and the general public.
Objective By December 31, 2014, Nalcor and Hydro will have implemented safety training and communication programs in support of safety excellence.	
Measure	Completed safety training and communications.

Indicators	▪ Delivered employee safety training including:
	  ▪ Completed training in the safe workplace observation program (SWOP) and incident investigation.
	  ▪ Completed planned grounding and bonding training for electricity transmission and distribution lines operations staff.
	  ▪ Completed safety training for new employees, employees taking on new roles and refresher training for existing employees including: work protection code, confined space entry, and working at heights.
	  ▪ Continued planned safety coaching training.
	▪ Advanced safe work procedures including:
	  ▪ Completed an assessment of work protection code[3] program implementation and identified opportunities for improvement.
	  ▪ Developed a grounding and bonding training program for employees involved the operation of generating plants and terminal stations.

[3] Work protection code (WPC) establishes conditions which, when combined with appropriate work practices, procedures and work methods, will provide workers with a safe work area when working on or around electrical and other energized equipment.

Issue 1: Safety leadership	
	▪ Completed employee communication activities for the 2014 injury prevention campaign. ▪ Completed public safety communication activities.
Objective By December 31, 2015, Nalcor and Hydro will have advanced safety training and communication programs to achieve long-term safety excellence.	
Objective By December 31, 2016, Nalcor and Hydro will have continued progress towards sustained safety excellence by advancing safety programs.	

Issue 2: Electricity supply

Nalcor's subsidiary, Newfoundland and Labrador Hydro, ensures there is a safe, reliable and cost-effective electricity supply available to meet current demand and future growth. These activities support fulfillment of the strategic directions of government related to a stable and competitive energy supply for domestic use and export to market. More specifically, the initiatives outlined support focus areas related to alternative energy research and development, and advancement of renewable energy projects and related infrastructure.

Asset Management/Reliability

A key challenge in the Canadian utility industry is renewal of aging electricity infrastructure. As with other utilities, many of Hydro's assets are over 40 years old and require significant investment over the planning period and beyond to ensure a continued safe and reliable supply of electricity.

Asset management is the cornerstone of Hydro's approach for managing assets over their lifecycle and making the investments required for reliable, cost-effective electricity to meet the needs of customers. Keeping Hydro's electricity systems in reliable operating condition is accomplished through a combination of routine maintenance of existing assets and replacement or rehabilitation of assets that have reached the end of their useful life with new or renewed assets that result in lower life cycle costs or improved operational characteristics.

Hydro has developed long-term asset management plans for key generation, transmission, distribution assets and supporting technology and infrastructure. These plans reflect the service required of the asset combined with information about asset condition and operating

and maintenance experience. Long-term asset management plans are the basis for developing a more detailed five-year capital plan that outlines more detailed scopes of work required and the estimated cost. The five year capital plan is a rolling plan that is refreshed annually as planned investments are completed and new information becomes available about the condition of Hydro's assets, the operating demands to be placed on them, and future load growth needs.

During 2005-2013, Hydro invested over $550 million to upgrade or replace its assets with annual capital expenditures increasing by 193 per cent to $80.6 million actual for 2013. For the 2014-2016 planning period, Hydro's capital expenditures will continue to grow as the company executes its long-term asset management plans. In addition to renewing existing assets, Hydro will complete planned upgrades and modifications to the electricity system required to support integration of Muskrat Falls energy and meet new industrial demand.

In early January 2014, the Island interconnected electricity system experienced service disruptions including rotating outages and specific system events including an equipment fire at a Hydro terminal station. During 2014, Hydro will be completing a thorough review of these disruptions as well as providing input to reviews to be completed by the Board of Commissioners of Public Utilities (PUB) and the Provincial Government. Hydro is committed to being an organization focused on continuous improvement; the implementation of lessons learned from the review processes and the ongoing identification and adoption of utility best practices will continue to support Hydro's mandate to deliver a safe, reliable and least cost electricity supply.

Hydro is taking a number of steps to ensure that sufficient generation is available to meet the forecast winter peak for each of 2014-2017. In the short term for 2014, actions will continue to be taken in the normal course to maintain and where necessary, make adjustments, to improve the reliability of existing generation. Hydro's 2012 Planning Load Forecast confirmed that by 2015 the utility will be challenged to reliably meet peak demand in the winter months. To reconfirm the magnitude and timing of the deficit, over the planning period Hydro will review forecasting and generation planning methodologies and if required, assess options to obtain additional generation.

Long-term Least-cost Supply

Hydro has a responsibility to assess electricity requirements in the province and recommend supply options to meet growing energy needs. The examination of available alternatives determined that an interconnection to Labrador via a High-Voltage direct current (HVdc)[4] link bringing power from the Muskrat Falls hydroelectric generating station was the least-cost option for electricity customers.

During the planning period, Hydro will develop a multi-year ready for operations strategy for the Muskrat Falls Project. The strategy will prepare for the timely and effective integration and transfer of all aspects of the operations of Muskrat Falls into the provincial electricity system. Key elements of the ready for operations strategy include: defining the role of permanent operations and maintenance staff in Project commissioning; developing a plan to integrate new assets into Hydro's asset management approach; establishing arrangements and operating standards for the interconnection with Nova Scotia and Quebec; and recommending the electricity operations and maintenance structure following Project completion.

Environmental Sustainability

In addition to being the long-term least-cost alternative, with Muskrat Falls the Newfoundland and Labrador electricity system will be run on 98 per cent renewable, emission-free energy.

Investigation of alternative energy sources will also continue over the 2014-2016 planning period focusing on communities that rely on diesel generation of electricity. In 2009, the Government of Newfoundland and Labrador and Hydro completed the Coastal Labrador Alternative Energy study to investigate the potential for the integration of alternative energy sources, including solar, wind and mini-hydroelectric facilities into isolated Labrador communities that rely on diesel as a primary means of electricity generation. Results of the investigation were positive and the Provincial Government subsequently announced additional funding to study small-scale hydroelectric projects and wind generation in some coastal Labrador communities. Monitoring to assess hydroelectric potential is being completed on the Gilbert River and the St. Lewis River near the communities of Charlottetown, Port Hope Simpson and Mary's Harbour. Wind monitoring is being completed at sites in Nain, Makkovik, Cartwright and L'Anse au Loup. Data collection will continue until 2015.

[4] High Voltage Direct Current (HVdc) – direct current boosted up to higher voltages for long-distance transmission. This form is normally used to carry large amounts of power over long distances and for transmission under water.

During the planning period Hydro will also advance the Ramea Wind-Hydrogen-Diesel Energy research and development project. This energy project offers an opportunity to increase renewable generation in isolated communities that rely on diesel power generation and reduce Hydro's future use of fossil fuels and its carbon footprint as well as other emissions. The first phase of this project focused on integrating the community's existing diesel generators with wind turbines and hydrogen technology. The second phase of the project will begin in 2014 and includes the installation and integration of a hydrogen fuel cell to the existing system and optimization of the current operations. Other aspects of this phase include upgrades and modifications to existing equipment and assessing the potential of marketing and commercialization activities.

Hydro's commitment to environmental sustainability also includes promoting energy conservation. Over the planning period, Hydro will create energy savings in its own facilities and will pursue initiatives to help electricity residential, commercial and industrial consumers conserve energy. Hydro will continue to partner with Newfoundland Power to deliver the takeCHARGE program which offers rebate programs to encourage residential and commercial customers to reduce their electricity usage. Residential programs include rebates for insulation upgrades, Energy Star® windows, thermostats and heat recovery ventilators. Commercial programs include discounted lighting, product rebates for thermostats, occupancy sensors and high performance shower heads. As well, free technical support is offered to help commercial customers identify electricity savings projects. Hydro's Isolated System Community Energy Efficiency Program, which helps residential and commercial customers in isolated communities save energy, will end in 2014. Early in the planning period, Hydro will also complete an evaluation of its Industrial Energy Efficiency Program and determine the appropriate approach to promote energy conservation by industrial customers.

Issue 2: Electricity supply	
Goal By December 31, 2016, Hydro will have advanced plans to ensure a reliable and cost-effective electricity supply for the province.	
Measure	Advanced plans to ensure reliable, cost-effective electricity supply.
Indicators	▪ Advanced multi-year plans for asset investments. ▪ Advanced commercial arrangements and infrastructure planning related to Muskrat Falls. ▪ Progressed environmental sustainability programs.
Objective By December 31, 2014, Hydro will have advanced electricity system investments and planning for integration of Muskrat Falls and progressed environmental sustainability initiatives.	

Issue 2: Electricity supply	
Measure 1	Advanced electricity system investments.
Indicators	▪ Completed any required updates to Hydro five-year capital plan. ▪ Completed planned investments in Hydro assets. ▪ Completed Hydro review of January 2014 supply disruptions and began implementation of priority recommendations. ▪ Completed reviews of load forecasting and generation planning methodologies and if required advanced investigation of options to obtain additional generation.
Measure 2	Advanced planning for integration of Muskrat Falls Project.
Indicators	▪ Developed strategy to drive ready for operations and completed priority initiatives related to integrating new assets and future operations and maintenance structure and staffing.
Measure 3	Progressed planned environmental sustainability initiatives.
Indicators	▪ Progressed alternative energy studies in isolated communities. ▪ Pursued initiatives to help residential and commercial electricity consumers conserve energy. ▪ Completed evaluation of Industrial Energy Efficiency Program and identified required next steps.
Objective By December 31, 2015, Hydro will have progressed electricity system investments, planning for integration of Muskrat Falls, and environmental sustainability initiatives.	
Objective By December 31, 2016, Hydro will have further advanced electricity system investments, planning for integration of Muskrat Falls, and environmental sustainability initiatives.	

Issue 3: Upper Churchill asset management and Power Contract legal actions

The Churchill Falls generating station is one of the largest underground hydroelectric powerhouses in the world with 5,428 MW of capacity used by millions of consumers in North America. Nalcor, through its subsidiary, Hydro, holds a 65.8 per cent interest in Churchill Falls (Labrador) Corporation Limited (CF(L)Co), with Hydro-Québec holding the remainder. In 2013, Churchill Falls net income was $23.3 million, representing 30 per cent of Nalcor net income.

Stewardship of the Upper Churchill asset supports the fulfillment of the strategic direction of the Provincial Government related to the export of surplus energy.

Asset Management

In 2011, Churchill Falls celebrated 40 years since first power. With the plant and related infrastructure aging, asset management is critical to keeping assets in reliable operating condition to provide reliable service to customers for the long-term and to ensure assets are fully functional well beyond the expiry of current commitments in 2041. From 2005-2013, $184.3 million was invested to upgrade or replace Churchill Falls assets with annual capital expenditures increasing during the period by 440 per cent to $49.1 million in 2013.

Taking steps to ensure the continued performance of the Churchill Falls facilities through planning and strategic investment will drive the company's strategy for the 2014-2016 planning period and beyond. A long-term asset management plan has been developed that reflects the level of service required of the plant combined with key asset information including condition assessments and operating and maintenance experience. This long-term plan is the basis for developing five-year capital plans that outline more detailed scope of the work required and the estimated cost. The Churchill Falls five-year capital plan informed the increased investment noted above and the plan will be reviewed annually and updated to reflect new information that could impact the timing or scope of future asset investments.

Churchill Falls capital requirements are expected to continue to increase as investments are made to repair or replace aging infrastructure. Currently, capital investments for 2014-2016 planning period are forecast to be in excess of $169 million.

Upper Churchill Power Contract – Legal Actions

A power contract with Hydro-Québec dated May 12, 1969, provides for the sale of almost 90 per cent of the energy from the Churchill Falls facility to Hydro-Québec. Presently, the purchase price under the Power Contract is one-quarter of one cent per kilowatt hour and the automatic renewal clause fixes the purchase price at one-fifth of one cent for a 25 year period beginning in 2016. This will mean, for the remainder of the Power Contract, power will be sold to Hydro- Québec for less than five per cent of its present commercial value.

In 2009, CF(L)Co formally requested that Hydro-Québec enter into discussions to amend the pricing terms for the remainder of the 1969 Power Contract. Hydro-Québec did not respond and therefore, in early 2010, CF(L)Co filed a motion against Hydro-Québec in Quebec Superior Court seeking to change, as of November 2009, the pricing terms for the remaining term of the Power Contract. It is the position of CF(L)Co that the circumstances since the original contract

was signed have changed in ways that could not have been anticipated by the parties, and have resulted in an inequitable distribution of the contractual benefits in favour of Hydro-Québec. This situation, combined with the obligation under the Quebec Civil Code to act in good faith throughout the term of a contract, CF(L)Co believes obliges Hydro-Québec to renegotiate the pricing terms of the contract to re-establish the equilibrium of benefits.

The trial finished on December 16, 2013. It is expected that the decision of the court will be received within six to eight months of that date. After the decision has been handed down, the unsuccessful party will have 30 days to consider whether or not it will be appealing the decision and, if so, to file a Notice of Appeal. If there is a Notice of Appeal filed there will be activity required in 2014 and the actual appeal would likely take place during the planning period.

In July of 2013 Hydro-Québec filed a Motion in Quebec Superior Court seeking a Declaratory Judgement with respect to the Power Contract. Hydro-Québec is seeking declarations with respect to i) "Continuous Energy" under the Renewed Power Contract (commencing September 1, 2016 and expiring August 31, 2041) and whether , as CF(L)Co contends, it limits Hydro-Québec's energy entitlement to a specific (and equal) amount during each month of the term of the Renewed Power Contract and ii) whether CF(L)Co can sell to a third party amounts of power beyond the 300 MW recall block provided for in the Power Contract. CF(L)Co has commenced activities with respect to defending this Motion. The trial is scheduled for the fall of 2015 and during the planning period, preparatory work will be completed.

Issue 3: Upper Churchill asset management and Power Contract adjustments	
Goal By December 31, 2016, CF(L)Co will have advanced opportunities for the Upper Churchill to make a greater economic contribution to the province.	
Measure	Pursued opportunities for the Upper Churchill to make a greater economic contribution to the province.
Indicators	▪ Advanced multi-year plan for renewal of assets. ▪ Advanced preparations for the Upper Churchill Power legal actions.
Objective By December 31, 2014, CF(L)Co will have advanced the renewal of Churchill Falls assets and completed required preparations for Upper Churchill Power Contract legal actions.	
Measure	Advanced multi-year plan for asset renewal.
Indicators	▪ Reviewed and updated five-year capital plan. ▪ Completed planned 2014 asset investments.
Measure	Prepared for Upper Churchill Power Contract legal actions.

Issue 3: Upper Churchill asset management and Power Contract adjustments	
Indicators	▪ Completed required preparations for the Upper Churchill Power Contract legal actions.
Objective By December 31, 2015, CF(L)Co will have completed planned 2015 capital investments to support long-term asset reliability and continued to advance required preparations for Upper Churchill Power Contract legal actions.	
Objective By December 31, 2016, CF(L)Co will have advanced Churchill Falls asset renewal and further advanced required preparations for Upper Churchill Power Contract legal actions.	

Issue 4: Oil and gas interests, exploration and development

The mandate of Nalcor, established under the *Energy Corporation Act (2008)* includes exploring for, developing, producing, refining, marketing and transporting hydrocarbons and products from hydrocarbons. These activities support fulfillment of the strategic direction of government related to the increased exploration and development of energy resources and realizing maximum benefits to the province through the strategic development of our resources.

Nalcor's subsidiary, Nalcor Energy – Oil and Gas, currently manages oil and gas interests in three developments offshore Newfoundland and Labrador. Nalcor holds a five per cent working interest in the White Rose Extension project. This project includes the North Amethyst field, West White Rose and South White Rose Extension. The company also has a 10 per cent working interest in the Hibernia Southern Extension (HSE) and is a co-venturer in the Hebron oil field holding a 4.9 per cent working interest in the province's fourth offshore oil project. Total production in 2013 was 657,000 barrels and net income was net income was $37.5 million, 38 per cent of Nalcor net income.

Nalcor has also developed a multi-year strategy that outlines priorities for increasing exploration interest in the province. This strategy aims to encourage more exploration and drilling by international exploration and production companies through investment in the provision of high-quality seismic data. Over the 2014-2016 planning period, Nalcor will execute planned activities in the multi-year exploration strategy.

Offshore Developments

The three offshore developments in which Nalcor is a partner will reach significant milestones over the 2014-2016 timeframe. Over the planning period, Nalcor will continue to work with its partners to advance work plans and achieve project milestones.

- White Rose Extension Project: The North Amethyst field produced first oil in May 2010 and has produced over 30 million barrels to December 2013. In 2013, the amendments to the benefits terms of the 2007 White Rose Expansion Project Framework Agreement were announced to facilitate the development of West White Rose using a wellhead platform. For the 2014-2016 period, key milestones for West White Rose include Development Plan Application approval, wellhead platform sanction decision and the start of construction on the gravity-based structure and topsides. Early in the planning period, it is also anticipated that subsea installation work for the South White Rose Extension will commence.
- Hibernia Southern Extension: Full subsea equipment installation was completed in 2013. Production will be restored and the drilling and completion of new producing wells and water injector wells to enhance production will be performed in 2014-2015. In addition with sanctioning of the development of the Ben Nevis Avalon formation amongst the partners, ongoing engineering, procurement and the required subsea installation is planned for 2014-2016 period for this new development.
- Hebron: Progress continues to be made consistent with the project target schedule for first oil to be achieved by 2017 at Hebron. Construction of the gravity-based structure and living quarters work continues at Bull Arm while the topsides construction continues to progress in Korea, with mating, hookup and commissioning planned for 2015 and 2016 at Bull Arm and offshore.

In addition to the economic value provided through equity, the ownership position provides Nalcor with a seat at the decision-making table and direct involvement in the management of the development of our resources. The knowledge, information and understanding that this participation brings, will enable Nalcor to foster relationships that help ensure better alignment between the provincial interest and the partners in the project. Over the planning period, Nalcor will continue to exercise its rights under joint venture agreements to pursue issues of interest to enhance sustainable long-term exploration and development of our resources.

Exploration

Oil and gas exploration, when successful, can lead to significant discoveries and new developments. Nalcor's exploration strategy is driven by a desire to replace reserves that have been produced, add sufficient reserves to allow for growth in production, and discover new resources that will provide the basis for a long term industry that yields significant economic benefits for the people of the province.

The availability of quality well and seismic data is a critical step to exploration. To date, the amount of geoscientific data collected and the number of exploratory wells drilled in offshore Newfoundland and Labrador are significantly lower than in areas such as offshore United Kingdom or Norway. Despite similar discovery rates and larger sedimentary basin areas in offshore Newfoundland and Labrador, historic exploration activity in our offshore has only been about five to ten per cent of the exploration activity that has taken place in the North Sea.

Nalcor is focused on leading the exploration of Newfoundland and Labrador's frontier basins. In 2013, Nalcor announced the discovery of three new offshore basins in the Labrador Sea. The discovery was a direct outcome of a partnership with global seismic companies to conduct a multi-client 2D seismic survey of offshore Newfoundland and Labrador. Strategic investment to better understand the province's resource potential is a step towards achieving increased exploration interest to advance the oil and gas industry.

Nalcor continues to systematically evaluate and assess the petroleum potential of all of Newfoundland and Labrador's basins. This process identifies critical knowledge gaps that may exist and highlights key risks holding back industry investment. Nalcor will make investments and design geoscience programs to address the key risks in a basin by basin approach.

In the 2014-2016 planning period, Nalcor will continue investments in new data programs to delineate Newfoundland and Labrador's resource potential and find new frontier areas that could contain commercial hydrocarbon deposits. These planned programs include:

- an extension of the regional seismic program (Labrador Sea to Flemish Pass) from the Flemish Pass west to the Nova Scotia border;
- a detailed infill seismic program over the emerging Flemish Pass;
- an electromagnetics survey to delineate the potential for individual prospects to contain hydrocarbons; and

- an oil slick and seabed core sampling program to look for new source rocks in the area of the Labrador Sea to the Flemish Pass.

The data and analysis resulting from these targeted programs will be used to inform future land licensing rounds administered by the Canada-Newfoundland Offshore Petroleum Board (CNLOPB). By providing pre-competitive data and insights to the global oil and gas industry in advance of the new scheduled license rounds, Nalcor will position the province to compete for and attract new exploration investment from the global industry. This information will also support the province's efforts to plan new activities that will encourage exploration and production companies to explore in Newfoundland and Labrador. During the planning period and beyond, Nalcor will continue executing its exploration strategy and invest a portion of its revenues to fund execution.

Issue 4: Oil and gas interests, exploration and development	
Goal By December 31, 2016, Nalcor Energy-Oil and Gas will have advanced opportunities to increase the exploration and development of the Province's oil and gas resources.	
Measure	Advanced oil and gas development and exploration opportunities.
Indicators	▪ Managed offshore interests. ▪ Advanced knowledge of resource potential through execution of multi-year exploration strategy.
Objective 1 By December 31, 2014, Nalcor Energy-Oil and Gas will have worked with partners to advance offshore project milestones and advanced acquisition and communication of geoscience data.	
Measure	Worked with partners to advance milestones for offshore developments.

Indicators	▪ Worked with partners in the three offshore developments toward planned project milestones:
	  ▪ White Rose Extension – Project sanction of White Rose Extension Project - Wellhead Platform.
	  ▪ Hibernia Southern Extension – First water injection to enhance existing well production and planned drilling of new producing and water injection wells.
	  ▪ Hebron – ongoing construction of gravity based structure and topsides as per target schedule.

Measure	Enhanced knowledge of oil and gas resource potential.
Indicators	▪ Acquired geoscience data: ▪ Completed regional seismic surveying infill.

Issue 4: Oil and gas interests, exploration and development	
	▪ Initiated South Coast seismic program. ▪ Advanced field slick sampling program[5]. ▪ Communicated Nalcor geoscience results to the global oil and gas industry.
Objective By December 31, 2015, Nalcor Energy-Oil and Gas will have supported partners' efforts to further advance offshore project milestones and enhanced knowledge of the province's oil and gas resource potential.	
Objective By December 31, 2016, Nalcor Energy-Oil and Gas will have continued to support partners' efforts to advance offshore project milestones and further enhanced knowledge of the province's oil and gas resource potential.	

Issue 5: Lower Churchill development

The lower Churchill River is one of the most attractive undeveloped hydroelectric sites in North America and is a key component of the province's energy warehouse. The lower Churchill development's two proposed installations at Muskrat Falls and Gull Island will have a combined capacity of over 3,000 MW.

The lower Churchill development plays a key role in supporting the fulfillment of several strategic directions of the Provincial Government. The development of clean, renewable energy through the Lower Churchill Project supports the strategic direction related to responsible resource development. The Project will also continue to support social license through adequate stakeholder consultation. As well, increased participation in energy developments supports the outcome of ensuring maximum benefits to the province through the strategic development of the province's resources, while providing a stable and competitive energy supply for domestic use and export to markets are key attributes of this development.

Muskrat Falls Project

The Muskrat Falls hydroelectric development on the lower Churchill River in Labrador includes construction of an 824 MW hydroelectric dam and more than 1,500km of associated transmission lines that will deliver electricity to homes and businesses in Newfoundland and Labrador.

[5] This program will target areas identified by the satellite oil seeps survey with a goal to sample oil on the sea surface to gain new insights on potential oil sources in frontier areas of our offshore.

The Muskrat Falls Project will provide a clean, renewable source of electricity to meet the province's growing energy demands. It will provide Newfoundland and Labrador homes and businesses with stable electricity rates well into the future, and will be a valuable power-producing asset for the province for more than 100 years.

With the sanction of the Muskrat Falls Project by the Government of Newfoundland and Labrador in late 2012, procurement and employment benefits from the project are already being realized across the province. Construction commenced in late 2012 and is expected to take approximately five years to complete. During the 2014-2016 planning period focus will continue to be on safe execution of work to ensure the delivery of power within schedule and budget.

The Muskrat Falls Project will meet the province's energy needs, provide electricity for future developments and promote jobs and benefits for the people of Newfoundland and Labrador. In addition to providing long-term stable electricity rates, the development will help Canada's efforts to reduce greenhouse gas emissions.

This development will also generate economic benefits in every corner of the province, including $1.9 billion in income to labour and business, with approximately $500 million of this to be earned by Labradorians and Labrador-based businesses. The provincial economy will also benefit from employment associated with building the Muskrat Falls hydroelectric generating facility and the transmission links, with 9,100 person-years of direct employment, including 5,800 person-years in Labrador

In 2013, employment on the Muskrat Falls Project peaked in September with 1,682 people working on all components of the project. During that month, 1,593 of the total project workforce were Newfoundland and Labrador residents accounting for 95 per cent of the total peak workforce in that month. There were 1,122 people working directly in Labrador and of these, 462 (41 per cent) were Labrador residents.

In 2013, employment of women peaked in October at 268 accounting for 16 per cent of the workforce in that month. In that same month, employment of Labrador Aboriginal people reached a peak of 216 workers and 105 of these workers were members of the Labrador Innu Nation.

Aboriginal Affairs

Following execution and ratification of the Tshash Petapen (New Dawn) Agreement , Nalcor commenced implementation of the Impact and Benefits Agreement (IBA) with the Innu Nation. All joint Nalcor-Innu Nation committees required under the IBA have been established. To date contracts with a projected value of over $300 million have been awarded to Innu businesses.

Processes and personnel have been put in place to support Innu employment and as noted above, in October 2013 105 workers at the Muskrat Falls site were members of the Labrador Innu Nation. Nalcor will continue to work with the Labrador Aboriginal Training Partnership and contractors to provide training to enable Innu to qualify for positions at Muskrat Falls construction site.

Joint Nalcor-Innu Nation environmental management initiatives are ongoing, including Innu environmental monitors working on site. Over the planning period, a joint Nalcor-Innu Nation IBA monitoring and reporting system will be implemented.

Environment

In 2013, Nalcor received release from the environmental assessment[6] for the Labrador-Island Transmission Link project from the governments of Newfoundland and Labrador and Canada. The transmission project was released from environmental assessment by the provincial and federal governments in June and November 2013 respectively. Nalcor is incorporating the terms and conditions outlined in the governments' responses into the project design and planning work.

For 2014-2016 planning period and beyond Nalcor will focus on continued effective implementation of Environmental Effects Monitoring programs for both generation and transmission, and on securing necessary permits and work authorizations in a timely manner.

Engineering, Procurement and Construction

Over the 2014-2016 planning period the Muskrat Falls Project will achieve significant engineering, procurement and construction milestones. Now that the Project is in the

[6] Environmental Assessment is a regulatory review and planning process administered by the federal and provincial governments for identifying the potential environmental and socioeconomic effects of proposed development projects and to inform project planning and decision making.

construction phase, the indicators outlined in this plan will reflect activities to progress construction of the hydroelectric dam at Muskrat Falls and related transmission.

Detailed project engineering work was significantly completed in 2013 with carry on engineering work that will support the construction effort continuing through to project completion. Also in 2013, significant procurement activities took place with many large contracts awarded[7]. All awarded contracts and purchase orders are reported in Nalcor's Monthly Benefits Reports and posted on its website.

Following the successful completion of earth works/excavation program at the Muskrat Falls hydroelectric generation site in Labrador throughout 2013, construction of the powerhouse, spillway and dams will commence in 2014 and continue in the planning period. The 2014-2016 planning period will also see significant progress on transmission lines and the other electricity infrastructure. The Strait of Belle Isle marine cable crossing program, which began in early December 2013, will also continue during this period.

Gull Island

The lower Churchill development's second proposed installation - Gull Island will have a capacity of over 2250 MW. Over the 2014-2016 planning period Nalcor will monitor and assess external market opportunities for Gull Island as well as any potential new large scale industrial requirements in the province. The pursuit of market opportunities will also require assessment of, and planning for, transmission access to deliver Gull Island energy to market. As Gull Island market opportunities progress, Nalcor will complete the required project planning, engineering, and other readiness activities. Efforts to advance Gull Island will consider the broader context of matching market opportunities with the range of potential developments in the province's entire clean electricity generation portfolio.

Issue 5: Lower Churchill development
Goal By December 31, 2016, Nalcor will have advanced development of clean, renewable energy from the lower Churchill River hydroelectric resource.

[7] Some of the major contracts awarded included, the supply of electro-mechanical equipment for the powerhouse and spillway, supply of electrical equipment for the transmission lines, right-of way clearing for the Labrador alternating current (AC) transmission line, reservoir clearing, construction of marshalling yard in Labrador, provision of drilling rig for horizontal drill program and completion of civil works for the Strait of Belle Isle marine cable crossing, major works for powerhouse, spillway and transition dams, construction of AC transmission line and camp and accommodations services.

Issue 5: Lower Churchill development	
Measure	Advanced development of lower Churchill River hydroelectric resource.
Indicator	▪ Advanced construction of the Muskrat Falls Project. ▪ Progressed Gull Island consistent with market opportunities.
Objective By December 31, 2014, Nalcor will have advanced Muskrat Falls construction and progressed Gull Island consistent with market opportunities.	
Measure	Advanced Muskrat Falls Project construction.

Indicators	▪ Established a joint Nalcor-Innu Nation Impact and Benefits Agreement (IBA) monitoring and reporting system.
	▪ Continued implementation of Environmental Effects Monitoring program.
	▪ Achieved key project milestones:
	  ▪ Muskrat Falls Hydroelectric Facility: Commenced construction of powerhouse, spillway and dams, and opened permanent camp.
	  ▪ Labrador Transmission Assets: Continued right of way clearing and commenced construction of transmission line between Muskrat Falls and Churchill Falls.
	  ▪ Strait of Belle Isle Crossing: Completed horizontal directional drilling.
	  ▪ Labrador-Island Transmission Link: Commenced construction of transmission.

Measure	Progressed Gull Island consistent with market opportunities.
Indicators	▪ Assessed and engaged potential customers on identified export and industrial market opportunities. ▪ Identified and completed required market access and project readiness activities consistent with progress of market opportunities.
Objective By December 31, 2015, Nalcor will have progressed construction of Muskrat Falls hydroelectric facility and transmission infrastructure and continue to progress Gull Island consistent with market opportunities.	
Objective By December 31, 2016, Nalcor will have further advanced Muskrat Falls construction and continued to progress Gull Island consistent with market opportunities.	

Issue 6: Bull Arm Fabrication site long-term strategy and lease management

The Bull Arm Fabrication site is an important asset for industrial development in Newfoundland and Labrador and the advancement of the province's fabrication capability. Bull Arm has capabilities for steel fabrication and concrete construction, outfitting installation, at-shore

hook-up and deep water commissioning. The site has facilitated growth of the province's fabrication capability through participation in the Hibernia, Terra Nova and White Rose oil projects.

The Bull Arm Fabrication site supports fulfillment of the strategic direction of the Provincial Government related to ensuring maximum benefits to the province through the strategic development of our resources. More specifically, increased local industrial and employment benefits are facilitated by a site that can accommodate construction and fabrication activities in the province.

During the 2014-2016 planning period, Nalcor will focus on utilization of the Bull Arm site during the short to medium-term and planning for a competitive operation with a sustained workforce in the long-term. Nalcor will align its long-term strategy for Bull Arm to position the site to maximize the benefits to the province from construction and fabrication projects in Newfoundland and Labrador and from around the world. A multi-year process guides the stakeholder engagement, research and evaluation necessary to inform this long-term strategy for the site.

Under the current operating model, Nalcor owns the Bull Arm site and site infrastructure and leases same to a tenant with the roles and responsibilities of Nalcor and the site tenant specified in a lease agreement. Nalcor is evaluating this and other operating models to identify a preferred model for operating the site in the long-term. During the planning period, Nalcor will identify the preferred model and develop a comprehensive plan to implement the model at the conclusion of the current lease.

The Bull Arm site is leased to ExxonMobil Canada Properties until 2017 for the construction and fabrication of the Hebron project. A key provision of the current lease is the management of change process. This process allows Nalcor to assess, approve and monitor all site infrastructure modifications. The intent is to meet tenant requirements to customize the site while ensuring that at the end of lease, the modifications completed by the tenant provide ongoing value or are removed. As well, the process provides Nalcor with the information about site infrastructure modifications to manage site assets in the future. Since the execution of the site lease more than $29.5 million in site upgrades and refurbishments by the tenant have been approved by Nalcor.

During 2013, both the construction of the Hebron gravity based structure and the fabrication of the living quarters module began at the site. Over the planning period and beyond, Hebron project construction will continue and Bull Arm will manage the lease relationship focusing on site safety, environmental protection and asset management.

Issue 6: Bull Arm Fabrication site long-term strategy and lease management	
Goal 1 By December 31, 2016, Nalcor will have enhanced Bull Arm Fabrication site's position as a competitive, successful fabrication site for the long-term.	
Measure	Advanced Bull Arm Fabrication site's long-term competitiveness.
Indicators	▪ Completed the analysis of alternate site operating models to inform the Bull Arm long-term strategy and initiated development of an implementation plan. ▪ Continued successful management of current lease.
Objective By December 31, 2014, Nalcor will have advanced development of the Bull Arm long-term strategy and continued successful management of current lease.	
Measure	Advanced engagement and evaluation activities to inform long-term strategy for Bull Arm Fabrication site.
Indicators	▪ Completed planned 2014 engagement activities outlined in the multi-year engagement strategy, including site visits with potential customers, discussions with external stakeholders and benchmarking visits to other fabrication facilities. ▪ Completed detailed evaluation (including market analysis, asset maintenance and capital investment requirements and financial analysis) of long-term site operating models.
Measure	Continued lease monitoring activities and acted on issues and opportunities.
Indicators	▪ Continued management of change process for approval and monitoring of all site infrastructure modifications. ▪ Continued participation in tenant safety and environment meetings to share Nalcor and tenant lessons learned and best practices. ▪ Completed annual planned review and update of Nalcor's emergency response plan and environmental management framework.
Objective By December 31, 2015, Nalcor will have progressed development of the Bull Arm long-term strategy and successfully managed the current lease.	
Objective By December 31, 2016, Nalcor will have completed the analysis of alternate site operating models to inform the Bull Arm long-term strategy, initiated development of an implementation plan and continued successful management of the current lease.	

Issue 7: Energy marketing portfolio management and long-term strategy

In 2009, Nalcor established an energy marketing team to sell energy from existing and future developments and build expertise as a participant in competitive energy markets in Canada and the United States. Nalcor's energy marketing activities support fulfillment of the strategic direction of the Provincial Government related to a stable and competitive energy supply for domestic use and export to market and more specifically the focus area related to the export of surplus energy.

The current energy marketing portfolio includes electricity available from the 300 MW recall energy block available from Churchill Falls to Hydro. This electricity is sold to markets in eastern Canada and the northeast United States as well as to the iron ore industry in Labrador. To access export markets, Nalcor, through its subsidiary, Hydro, signed a Transmission Service Agreement with Hydro-Québec TransÉnergie (HQT) under HQT's Open Access Transmission Tariff in 2009 and in 2013, Nalcor renewed that agreement for another 10 years. The agreement is for long-term power transmission capacity from Labrador through Quebec to the New York border with the ability to transmit electricity to other markets. Under this arrangement power is currently sold on the Canadian side of the border to a third-party energy marketer.

In 2013, energy marketing net income of $33.2 million accounted for 34 per cent of total Nalcor income. During the planning period Nalcor will pursue opportunities to maximize the overall value of its current portfolio.

Nalcor's energy portfolio will continue to grow over the coming years with the development of the lower Churchill River hydroelectric resource and increased production from Nalcor Energy-Oil and Gas' offshore interests. To extract maximum value from these activities, Nalcor will conclude its arrangement with the third-party energy marketer and execute its long-term implementation plan for energy marketing operations. This multi-year plan was approved in 2011 and outlines the risk management, regulatory and organizational activities required to enhance Nalcor's energy marketing capability and establish a wholly-owned energy marketing subsidiary. Nalcor's wholly owned energy marketing subsidiary will participate directly in energy markets in northeast North America.

Issue 7: Energy marketing portfolio management and long-term strategy	
Goal By December 31, 2016, Nalcor will have enhanced its energy marketing capability to extract maximum value from the energy marketing portfolio.	
Measure	Enhanced energy marketing capability.
Indicators	▪ Completed planned implementation activities for long-term energy marketing operations. ▪ Increased value from the energy marketing portfolio.
Objective By December 31, 2014, Nalcor will have advanced its long-term implementation plan for energy marketing operations and optimized value from the current portfolio.	
Measure	Completed planned implementation activities for long-term energy marketing operations.

Indicators	▪ Completed 2014 planned activities outlined in the long-term implementation plan for energy marketing operations including:
	  ▪ Creation of an energy marketing subsidiary; and,
	  ▪ Recruitment of key personnel.

Measure	Pursued opportunities to increase portfolio value.
Indicators	▪ Continued to implement measures to maximize portfolio value such as targeting higher priced markets and times to exceed the energy price benchmark.
Objective By December 31, 2015, will have continued to advance its long-term implementation plan for energy marketing operations and pursued opportunities to maximize the value of the current portfolio.	
Objective By December 31, 2016 will have further advanced its long-term implementation plan for energy marketing operations and continued to pursue opportunities to increase the value of the current portfolio.	

Appendix 1
Strategic Directions

A Strategic Direction is the articulation of a desired physical, social, or economic outcome that would normally require action by, or involvement of, more than one government entity. They are normally communicated through White Papers, or other major platform documents.

Title: Energy resource exploration and development

Outcome: Increased exploration and development of mining and energy resources

This outcome supports the policy direction of government and will require focus in the following areas.

Strategic Direction	Focus Areas of the Strategic Direction	This Direction is:		
		Addressed in strategic plan	Addressed in operational plan	Addressed in work plans
Increased exploration and development of mining and energy resources	Acquisition and promotion of geoscience data	*		
	Enhanced marketing and promotion of our natural resources	*		
	Competitive regulatory and policy structures that support resource development			*
	Increased exploration and development activity	*		

Title: Responsible resource development

Outcome: Responsible resource development

This outcome supports the policy direction of government and will require focus in the following areas.

Strategic Direction	Focus Areas of the Strategic Direction	This Direction is:		
		Addressed in strategic plan	Addressed in operational plan	Addressed in work plans
Responsible resource development	Development of clean renewable energy through the Lower Churchill Project	*		
	Activities to support Social License through adequate stakeholder consultation			*
	Resource developments built on a culture of worker safety and environmental sustainability	*		
	Integration of advanced technological solutions that reduce environmental impacts			*

Title: Strategic resource development

Outcome: Ensure maximum benefits to the province through the strategic development of our resources

This outcome supports the policy direction of government and will require focus in the following areas.

Strategic Direction	Focus Areas of the Strategic Direction	This Direction is:		
		Addressed in strategic plan	Addressed in operational plan	Addressed in work plans
Ensure maximum benefits to the province through the strategic development of our resources	Increased participation in energy developments	*		
	Supporting increased local industrial and employment benefits			*
	Increased participation of women and underrepresented groups in natural resource projects			*

Title: Energy supply

Outcome: Stable and competitive energy supply for domestic use and export to market

This outcome supports the policy direction of government and will require focus in the following areas.

Strategic Direction	Focus Areas of the Strategic Direction	This Direction is:		
		Addressed in strategic plan	Addressed in operational plan	Addressed in work plans
Stable and competitive energy supply for domestic use and export to market	Alternative energy research and development	*		
	Advancement of renewable energy projects and related infrastructure	*		
	Development of industrial electricity rates that support resource development			*
	Export of surplus energy	*		
	Development of innovative technology solutions for existing and new energy sources			*

Appendix 2
Energy Portfolio