#### Page 1 of 1

1	Q.	Governance
2		Provide Hydro's most recent corporate one and five year plans for the period 2010
3		to 2014 inclusive.
4		
5		
6	Δ	Please see PLIR-NLH-412 Attachments 1 to 5

# 2010-2014 Plan PUB-NLH-412, Attachment 1

# Newfoundland and Labrador Hydro **Planning Priorities**

FINAL, 2010 03 01





## **2010 Plan Highlights**

### PUB-NLH-412, Attachment 1 Page 2 of 73, Isl Int System Power Outages

Goal	Hydro					
1. Safety	<ul> <li>Lead/Lag Ratio 350:1 All Injury Frequency (AIF) ≤ 1.00 Lost Time Injury Frequency (LTIR) ≤ 0.50</li> <li>Complete all Work Permit Code (WPC) training and have full implementation across Hydro</li> <li>Have work methods initiatives organized across all departments of Regulated Operations and operating to standardized Work Methods including ranking, review, testing, documentation and filing.</li> </ul>					
2. Environment	<ul> <li>Reduce emissions per unit of energy delivered by achieving not more than 14% variance from ideal production schedule at Holyrood Generating Station</li> <li>Achieve ≥ 95% accomplishment of Leadership Team approved EMS targets</li> <li>Achieve 4 GWh of energy savings through Newfoundland and Labrador Hydro managed conservation and demand management programs</li> <li>Achieve 1.8 GWh of energy savings through internal energy efficiency programs</li> <li>Complete a waste scoping study and identify potential areas for waste reduction</li> </ul>					
3. Business Excellence	<ul> <li>•Maintain annual controllable costs to within 2% variance of the approved budget</li> <li>•Contribute \$6.0M to Nalcor net revenue</li> <li>•Achieve ROCE of 6.0% for Regulated Hydro</li> <li>•Winter availability ≥94.6%</li> <li>•Complete Phase II activities of Asset Management System (AMS) which includes filling roles, completing alignment activities gaps analysis, closure plan and plan on schedule</li> <li>•File a General Rate Application for new rates effective January 1, 2011 (TBD)</li> </ul>					
4. People	<ul> <li>Achieve an Employee Opinion Survey score of 3.65.</li> <li>Workplace improvement plans in place and plan execution on schedule.</li> <li>Apprenticeship and other developmental programs reviewed for greater flexibility and business alignment.</li> <li>Recruitment and retention plan specific to rural/remote locations in place.</li> </ul>					
5. Community	•To increase the Public Reputation Index for Hydro to 76.5/100 in 2011.					



# Goals 1: To be a safety leader





## Framework

Clear Vision Goals and Objectives Technically Sound Best In Class Procedures Safety First Decision Making Culture

Timely And Effective Training Culture of Open Reporting

Active Union Involvement In All Key Strategies

Leading Lagging Ratio

### **Success Factors**

Build, Operate and Maintain Facilities
To Generate / Produce, Transmit &
Distribute Energy

Successful Execution =

- Employee Confidence
- Safety Performance
- Valued Employees

	Building Blocks								
Leadership	Procedu and Equipm		Competence	Supportive Culture	Mana	nion agement Jnment	Respons	sibility	Reporting
Capability			Focus	Disciplin	e	Relatio	nships	Com	munication



## Safety Excellence Frame Vage 5 of 73, Isl Int System Power Outages

#### **LEADERSHIP**

- Clear vision, goals and objectives
- Safety champions who model expected behaviors

## PROCEDURES & EQUIPMENT

- Documented methods for all safety-sensitive tasks
- Technically sound, best-inclass procedures
- Safe equipment and physical work environment

#### **COMPETENCE**

- Clear standards & qualification requirements
- Effective recruitment
- Competence assurance
- Timely and effective training
- Safety organization & specialists

## SUPPORTIVE CULTURE

- "Safety first" mindset
- Safety is everyone's responsibility
- We take care of each other
- All incidents are preventable
- Risk-free reporting

#### UNION-MGT ALIGNMENT

- Active union involvement in all key strategies
- Working as one, activities and initiatives based on alignment and mutual agreement
- Safety is not negotiable

#### **RESPONSIBILITY**

- All employees have a personal responsibility for their safety and the safety of others
- Clear system of internal responsibilities

### Reporting, Analysis and Continuous Improvement

#### **LEADING INDICATORS**

Hazards, Near Misses, Safe and Unsafe Observations, First Aids, Inspections, Audits

#### **LAGGING INDICATORS**

Medical Aids, Disabling Injuries, Severity, analyzed by injury type, part of body, location, etc.



# Safety Culture Model

PUB-NLH-412, Attachment 1
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#### Independent

#### "Zero is attainable"

- Well understood process and operation
- Personal commitment
- Supervision/resource comfortable leading or allowing others to lead
- Ownership for procedures at team level
- Trust allowing for shared logic and ideas

### Interdependent

#### "Zero is sustainable"

- Co-operation within and across teams
- Organizational pride
- We take care of each other
- Self-managed teams
- Team fully engaged in the goal

#### **Dependent**

#### "Zero is difficult"

- Management commitment
- Governed by rules and regulations
- Management centered activities
- Selective communication of objectives
- Discipline as a development tool
- Turf-type atmosphere

#### Reactive

#### "Zero is unrealistic"

- Goal of compliance
- Discipline is reactive to incidents
- Performance driven by management
- Management provided resource but lack of management involvement



## **Goal 1: Safety**

### **OBJECTIVES - Safety**

- By 2014, improve safety performance to world class standards with a AIFR ≤ 0.50, LTIFR ≤ 0.15 and a Lead/Lag ratio of ≥ 1000:1 and sustain thereafter.
- Interdependent Safety Culture where employees demonstrate best in class safety leadership behaviours.
- A functioning Internal Responsibility System where employees actively demonstrate personal ownership for safety.

### **TARGETS - Safety**

2010	2011	2012	2013	2014
Achieve safety lead/lag ratio ≥ 350:1 or 0 events	Achieve safety lead/lag ratio ≥ 450:1 or 0 events	Achieve safety lead/lag ratio ≥ 600:1 or 0 events	Achieve safety lead/lag ratio ≥ 750:1 or 0 events	Achieve safety lead/lag ratio ≥ 1000:1 sustained or 0 events sustained
All injury frequency rate (AIFR) ≤ 1.00	All injury frequency rate (AIFR) ≤ 0.80	All injury frequency rate (AIFR) ≤ 0.60	All injury frequency rate (AIFR) ≤ 0.5	All injury frequency rate (AIFR) ≤ 0.5 sustained.
Lost time injury frequency rate (LTIFR) ≤ 0.50	Lost time injury frequency rate (LTIFR) ≤ 0.30	Lost time injury frequency rate (LTIFR) ≤ 0.2	Lost time injury frequency rate (LTIFR) ≤ 0.15	Lost time injury frequency rate (LTIFR) ≤ 0.15 sustained.



## **Goal 1: Safety**

INITIATIVES – Procedures and Equipment / Competence						
2010	2011	2012	2013	2014		
<ul> <li>Work Methods</li> <li>Establish work methods committees by Department</li> <li>Deliver hazard recognition and Task Based Risk Assessment (TBRA) training to work method committee members, and high risk employees.</li> <li>Create/review critical task inventory lists.</li> <li>Complete TBRA and related work methods for each task identified</li> <li>Develop and verify 30 % of high risk work methods.</li> <li>Implement work methods database and train in use.</li> <li>Investigate ways to improve delivery of work methods through use of innovative technologies.</li> </ul>	<ul> <li>Work Methods</li> <li>Continue development and verification and have 80 % of high risk work methods previously identified completed.</li> <li>Deliver hazard recognition and Task Based Risk Assessment training to new work method committee members, and high risk employees.</li> <li>Develop an audit system/protocol to ensure that work methods are used and followed.</li> <li>Review merits of expanding Hazard Recognition and Task Based Risk Assessment training to non-high risk employees.</li> </ul>	<ul> <li>Work Methods         <ul> <li>Complete the remaining work methods</li> <li>Create/review critical task inventory lists.</li> <li>Develop and verify new high risk work methods.</li> </ul> </li> <li>Develop and verify 20% of identified non-high risk work methods.</li> <li>Audit work methods process (TBRA process and work methods)</li> <li>Deliver hazard recognition and Task Based Risk Assessments to selected non-high risk employees</li> </ul>	Develop and verify 20% of identified nonhigh risk work methods.	Develop and verify 20% of identified non-high risk work methods.		



## **Goal 1: Safety**

INITIATIVES – Procedures and Equipment/ Competence							
2010	2011	2012	2013	2014			
<ul> <li>Work Protection Code</li> <li>Implement consolidated Work         Protection Code     </li> <li>Complete training in Work</li> </ul>	Work Protection Code Continue training	Work Protection Code	Work Protection Code	Work Protection Code			
Protection Code for all employees who work under permit system.  • Determine the approach and	new relevant employees Complete Corporate and						
budget to enhance control and storage of Work Protection Code documents through an Electronic Management System that can be applied in ECC and possibly across the system (WPCEMS).  • Submit consolidated Work Protection Code with Provincial Regulator in Q2 for registration	Local Live Audits • Seek funding approval for WPEMS.	<ul> <li>If funding approved, implement in ECC</li> <li>Review applicability of WPCEMS to other areas/</li> </ul>	•If deemed practical continue expansion of WPCEMS				
as a complex lockout / tag out system.		plants/regions					



PUB-NLH-412, Attachment 1
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	INITIATIVES - Leadership/ Supportive Culture							
2010	2011	2012	2013	2014				
<ul> <li>Safety (FELT) Leadership</li> <li>Communicate and implement Corporate Safety Interactions initiative.</li> <li>Coach Safety Interactions.</li> </ul>	Safety (FELT) Leadership Review value and possible process for tracking safety interactions.	Safety (FELT) Leadership  If deemed of value  record Safety Interactions via Corporate process  Aid Corporate in the analysis of Safety Interactions.	Safety (FELT) Leadership	Safety (FELT) Leadership				
Broaden attendance to "formal leaders" at annual Safety Summit.	Review value of departmental or divisional safety summits	Initiate annual dept/Divisional Safety Summits						

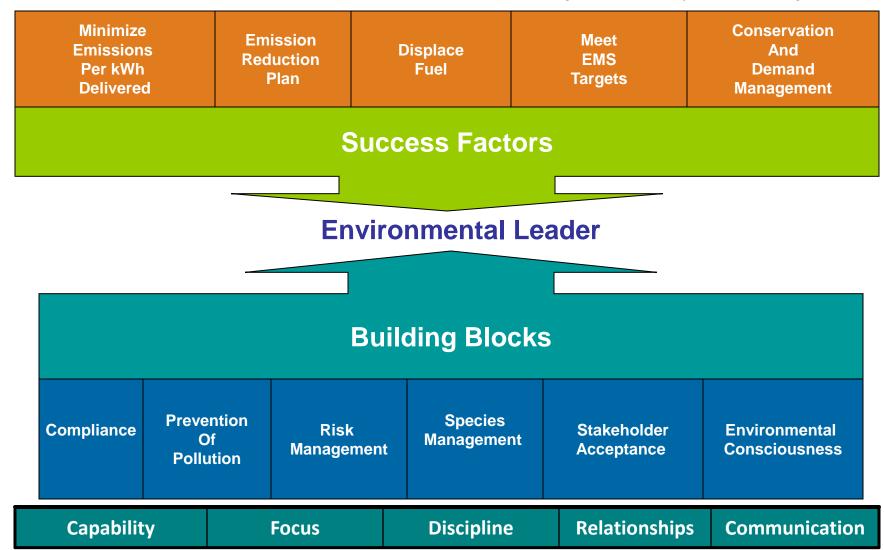


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## Goal 2: To be an environmental leader.









### **Goal 2: Environment**

#### **OBJECTIVE Environment**

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- Reduce emissions per unit of energy delivered by achieving not more than 10% variance from ideal production schedule at Holyrood Generating Station by 2014 maintain at 10% through 2014.
- Achieve <u>></u> 95% accomplishment of Leadership Team approved EMS targets
- Achieve 4 GWh of energy savings through Newfoundland and Labrador Hydro managed conservation and demand management programs
- Achieve 1.8 GWh of energy savings through internal energy efficiency programs
- Achieve reduction in the 5 year rolling average number of reportable hydrocarbon spill events.

TARGETS - Environment						
2010	2011	2012	2013	2014		
Emission variance from ideal at Holyrood < to 14%	12.5%	11%	10%	10%		
Number of approved Environmental						
Management System (EMS) targets accomplished within Hydro maintained at 95%.						

2010	2011	2012	2013	2014
Energy savings through CDM program > to 4				
GWh	22.7 GWh	48.8 GWh	50 GWh	51.2 GWh
Achieve internal energy				
savings >= to1.8 GWh	1.95 GWh	2.1 GWh	2.25 GWh	2.4 GWh
•Achieve <u>&gt;</u> than 20% reduction in the 5 year rolling average number of reportable spills <sup>1</sup> .	•Achieve > than TBD% reduction in the 5 year rolling average number of reportable spills 1.	•Achieve ≥ than TBD % reduction in the 5 year rolling average number of reportable spills ¹	•Achieve ≥ than TBD % reduction in the 5 year rolling average number of reportable spills ¹	•Achieve ≥ than TBD % reduction in the 5 year rolling average number of reportable spills ¹
•Reduction in the volume of selected waste streams to be identified following study	Achieve TBD > % reduction in selected waste streams per 2010 study	Achieve > TBD % reduction in selected waste streams per 2010 study	Achieve > TBD % reduction in selected waste streams per 2010 study	Achieve > TBD % reduction in selected waste streams per 2010 study

Note 1 Excluding those involving fires, vehicle accidents and variable natural events such as ice storms  $\frac{14}{14}$ 



## **Goal 2: Environment**

<b>INITIATIVES - Envir</b>	onment	PUB-NLH-412, Page 15 of 73, Isl Int System F	Attachment 1 Power Outages	
2010	2011	2012	2013	2014
<ul> <li>Continue on plan to improve scheduling decision making through improved monitoring and calibration of short term load forecasting program</li> </ul>	<ul> <li>Complete a review of the operations and maintenance of HTGS condensers and compare with industry best practice.</li> </ul>	Complete a post- mortem review of turbine control valve spindle design at HTGS.		
Through consultation with NP, identify and recommend and implement new residential and commercial programs.	Through consultation with NP, identify and recommend and implement new residential and commercial programs.	<ul> <li>Through consultation with NP, identify and recommend and implement new residential and commercial programs.</li> <li>Update CDM potential study.</li> </ul>	•Through consultation with NP, identify and recommend and implement new residential and commercial programs.	(TDB)

## **Goal 2: Environment**

PUB-NLH-412, Attachment 1

Page 16 of 73, Isl Int System Power Outages  INITIATIVES - Environment						
2010	2011	2012	2013	2014		
Evaluate spill events and reduction programs in respect to spill reduction target performance.						



INITIATIVES - Environment						
2010	2011	2012	2013	2014		
<ul> <li>Complete waste scoping study.</li> <li>Review implementation of new oil change cycle program for gensets at TRO diesel plants 2010.</li> </ul>						

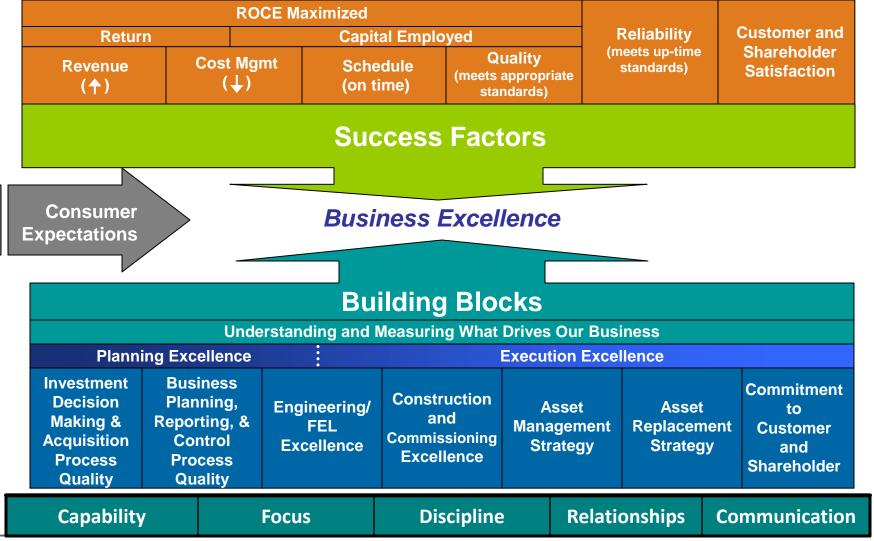
PUB-NLH-412, Attachment 1

# Goal 3: Through business excellence to provide exceptional value to all consumers of our energy.





## Framework



### **Goal 3: Business Excellence**

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### **OBJECTIVES – Financial Performance**

- Net Income: Meet or exceed Hydro's allocation of the annual corporate net income targets<sup>1</sup>.
- <u>Profitability:</u> Achieve a three-year rolling average ROCE of 8.0% by 2013<sup>1</sup>.
- Operating Costs: Maintain annual controllable costs at or below the approved budget by 2011.
- <u>Capital Schedule:</u> Achieve capital project scheduled completion rate by year end of 95% and future years as determined by Project Execution review.
- <u>Capital Costs:</u> Achieve 90% of completed projects within 10% of budget and all-project variance of 5% or less within original cost budget by 2012.

IARGE IS — Financial Performance							
2010	2011	2012	2013	2014			
Achieve HYDRO net income of \$6.0M	Net income of \$32.8M with increased ROE from GRA <sup>1</sup>	Net income of \$35.7M	Net income of \$37.9M	Net income of \$40.0M			

1 2011 and beyond dependent on a GRA and outcome.



### Goal 3: Business Excellence Page 21 of 73, Isl Int System Power Outages

PUB-NLH-412, Attachment 1

TARGETS – Financial Performance							
2010	2011	2012	2013	2014			
Profitability <sup>1</sup> Return on Capital Employed of 6.0%	ROCE of 8.1%	ROCE of 8.0%	ROCE of 8.0%	ROCE of 7.8%			
Operating Costs  Maintain controllable costs to within 2% variance of the approved budget.	Maintain controllable costs to within 1% of the approved budget.	Maintain controllable costs at or below the approved budget.					
Capital Budget Schedule² Completion rate of capital projects by year end, per budget schedule ≥ than 95%	Metrics and targets to be set pending project execution review						
Operating Projects <sup>2</sup> Completion rate of selected operating projects /studies by year end, per budget schedule ≥ 95%	Metrics and targets to be set pending project execution review						

<sup>1</sup> 2011 and beyond dependent on a GRA and outcome if undertaken.

Long term target and metric to be reviewed in context of project execution review.



#### **TARGETS – Financial Performance** 2010 2012 2013 2011 2014 Capital Budget Costs<sup>1</sup> Metrics and Achieve 50% of targets to be set completed projects pending project within 10% of budget execution review and all-project variance of 8% or less within original budget. Rate of Return If required obtain If required file a approval for General Rate revised rates for Application to PUB 2013 with targeted ROE for implementation, new rates effective if needed. Jan 1, 2011.

<sup>1</sup> Long term target and metric to be reviewed in context of project execution review.

# Goal 3: Business Excellence PUB-NLH-412, Attachment 1 Page 23 of 73, Isl Int System Power Outages

### **OBJECTIVES – Reliability – Asset Management**

- Achieve by 2012, 98% major generating availability during the winter (Jan-Mar, Dec) period.
- Achieve by 2014 top quartile (when compared to similar CEA utilities) transmission delivery point performance.
- By 2011, have a well documented and comprehensive Asset Management System (AMS) framework, an organization design that drives this AMS, and alignment throughout the organization to ensure that we drive long-term excellence in asset operation, maintenance, utilization and replacement.

### TARGETS – Reliability

2010	2011	2012	2013	2014
NLH Weighted Winter Availability ≥94.6 •Thermal -85.0 • Hydro -99.5	NLH Weighted Winter Availability ≥ 96.3 •Thermal -90.0 • Hydro -99.5	NLH Weighted Winter Availability ≥ 98% •Thermal -95.0 • Hydro -99.5	NLH Weighted Winter Availability ≥ 98% •Thermal -95.0 • Hydro -99.5	NLH Weighted Winter Availability ≥ 98% •Thermal -95.0 •Hydro -99.5
Delivery Point Unreliability Index <12.17 System- minutes (16,750 MW-min)	DPUI <11.79 System- minutes (16,500 MW-min)	DPUI <11.37 System- minutes (16,250 MW-min)	DPUI<10.70 System- minutes (16,000 MW-min)	DPUI<10.44 System- minutes (16,000 MW-min)



## Goal 3: Business Excellence Page 24 of 73, Isl Int System Power Outages

TARGETS – Reliability				
2010	2011	2012	2013	2014
Transmission Interruption Frequency (T-SAIFI) 0.85 int./DP	0.81 int./DP	0.76 int./DP	0.70 int./DP	0.67 int./DP
Transmission Interruption Duration (T-SAIDI) 55.0 min/DP	52.0 min/DP	49.0 min/DP	46.0 min/DP	42.5 min/DP



# Goal 3: Business Excellence PUB-NLH-412, Attachment 1 Page 25 of 73, Isl Int System Power Outages

TARGETS – Asset Management						
2010	2011	2012	2013	2014		
Organization design adjusted and positions filled to enable the established AMS framework.     Through the Office of Asset Management provide a consistent oversight and direction to ensure all AMS personnel follow same philosophy and practices for like assets, through alignment with AMS philosophy,     Finalize current state and map with timeline to to future state (Gap analysis and closure plan)     Execute high priority items from plan	•AMS framework fully utilized per plan and execution on schedule	•AMS framework fully utilized per plan and execution on schedule      •Review / refresh AMS framework and plan	•AMS framework fully utilized per plan and execution on schedule	•AMS framework fully utilized per plan and execution on schedule		
		25		newfoundland labrador		

# Goal 3: Business Excellence PUB-NLH-412, Attachment 1 Page 26 of 73, Isl Int System Power Outages

2010	2011	2012	2013	2014
Review and confirm accurate asset registry and establish single point of accountability	Maintain accurate asset registry	Review and confirm accurate asset registry	Maintain accurate asset registry	Review and confirm accurate asset registry
Monitor and update 20-year plan consistent with				
overall AMS progress for each asset group				



## **Goal 3: Business Excellence**

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INITIATIVES – Reliability	INITIATIVES – Reliability - Asset Management								
2010	2011	2012	2013	2014					
<ul> <li>Investigate tool and or methods to capture data (asset maintenance history, operation, condition and performance) required to support and drive asset management</li> <li>Seek funding, operating or capital as required to implement the tool set required</li> </ul>	Implement tool if not done from available funding in 2011 or seek capital funding is necessary for 2012 implementation	Implement tool capital funding sought in 2011							
Develop team and processes to review disturbance events, protection operations and impact on power systems and customers.									
Establish critical spares listings for all areas	Review Critical spares and prepare 2011 budgets to acquire necessary capital or operating spares								
Succession planning to ensure staff knowledge and experiences retained (Goal 4)			nev	rfoundland labrador					

### **OBJECTIVES – Customer Satisfaction**

• <u>Rural Residential Customer Satisfaction</u> – Achieve greater than 90% of rural residential customers satisfied with Hydro by 2014.

#### **TARGET – Customer Satisfaction**

2010	2011	2012	2013	2014
Percentage of Rural Residential Customers	Maintain a Rural Residential Customer			
Satisfied with Hydro. <u>&gt;90</u> %	Satisfaction rate of >90%			



Goal 4: To ensure a highly skilled and property of employees who are strongly committed to Nalcor's success and future direction.





## Framework

Respect & Dignity	Informed & Involved	Feedback & Recognition	Skilled People with Required Tools	Union as Trusted Partner	Committed To Excellence	
Success Factors						

# NALCOR TEAM Skilled, Motivated and Committed

Building Blocks								
Employees Are VALUED	Employees Employees Strong Are Are LEADERSHIP CAN				SKILLED & CAPABLE Employees		Inion-Company DLLABORATION	Focus on PERFORMANCE & ACCOUNTABILITY
Capabili	ty		Focus		Discipline		Relationships	Communication

## **Goal 4: People**

### **OBECTIVE - People**

By 2013, improve all elements of employee engagement to a level where Hydro would qualify for recognition as one of Canada's best employers in reference to an acceptable external benchmark, and maintain each subsequent year.

<b>TARGETS</b>	- People
----------------	----------

2010	2011	2012	2013	2014
Achieve employee opinion score of 3.65		Achieve employee opinion score of 3.75 (top employer status)		Maintain employee opinion score of 4.0
Attain employee survey participation rate at 85%		Maintain employee survey participation rate at 85%		Maintain employee survey participation rate at 85%



# **Goal 4: People**

INITIATIVES				
2010	2011	2012	2013	2014
Skilled and Capable Employees  Further review recruitment and retention plan for rural and remote locations and seek approval and resources to implement	Skilled and Capable Employees Implement further approved initiatives to rural recruitment and evaluate effectiveness	Skilled and Capable Employees		
<ul> <li>Performance and Accountability         &amp; Skilled and Capable         Employees     </li> <li>Career Development. Ensure succession planning efforts target appropriate areas.</li> <li>Review administration of the Apprenticeship Programs including oversight of the program, the number and type of apprentice positions required, training needs, and methods of selection and deployment.</li> </ul>	Performance and Accountability  •High performance teams. Develop a a teambased culture supporting Hydro's mission, vision, values and goals.  •Review apprentice allocation by trade given pending retirements/needs			



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# **Goal 4: People**

INITIATIVES				
2010	2011	2012	2013	2014
<ul> <li>Skilled &amp; Capable         Employees     </li> <li>Implement an agreed upon front-line process for coaching and assessment of training needs of our in-scope employees including apprentices.</li> <li>Review and document formal apprentice training plans for all trade areas.</li> </ul>	• Ambassadors for change utilized to help people transition and to measure the success of our change culture (diagnosis of change strength).	• Alignment review of major project contractors and business partners Assess our Project contractors and new business partners to determine the extent to which their organizational values and people practices are aligned with Hydro's expectations and minimum standards.		
		33		newfoundland labrador

# **Goal 4: People**

INITIATIVES				
2010	2011	2012	2013	2014
<ul> <li>Employees are valued</li> <li>Develop a diversity strategy in line with the Energy Plan and seek approval.</li> <li>Identify gaps in plan and implement actions to close gaps</li> </ul>	Employees are Valued  • Complete study of work-life balance, with consideration and evaluation of flex-time, time shares, etc.		Employees are Valued  Complete study of Standards of Care for employees at various work locations.	



# Goal 4: People — Targets Page 35 of 73, 1sl Int System Power Outages

Initiatives				
2010	2011	2012	2013	2014
75% of workplace improvement plans identified from previous survey year implemented	75% of workplace improvement plans identified in 2010 survey year implemented	Remaining 25% of workplace improvement plans identified in previous survey year implemented	75% of workplace improvement plans identified in 2012 survey year implemented	Remaining 25% of workplace improvement plans identified in previous survey year implemented
100% of new hires enrolled in safety culture session				
within 9 months of hire				



PUB-NLH-412, Attachment 1

# Goal 5: To be a valued corporate citizen in **Newfoundland and Labrador**





### Framework

PUB-NLH-412, Attachment 1
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Brand Equity	Strong stakeholder relationships	Employee Engagement	Strong/ Targeted Media Reputation	Alignment Shareholder Board Leadership	Awards & Recognition	
Success Factors						

<u>Principles</u>: Visibility, Transparency, Distinctiveness, Consistency, Authenticity **Good Corporate Reputation =** 

- Powerful corporate asset
- Insurance policy
- Stakeholder support

	Building Blocks						
	Corporate Values						
Emotional Appeal	Products & Services, Operational Excellence	Visio & Leade		Workplace Environment	Financial & Business Performance	Corporate Citizenship Safety, Env. Energy Cons. Comm.Invest	
Capability Focus			Discipline	Relationships	Communication		



#### **OBJECTIVES - Community**

By 2011 to achieve 76.5 on the Public Reputation index.

#### **TARGETS - Community**

2010	2011	2012	2013	2014
	Public Reputation Index* - increase performance to 76.5 (out of 100)		Public Reputation Index* - increase performance to 77 (out of 100)	

<sup>\*</sup>Public Reputation Index ranges between 1 and 100. A score of 75 or higher is considered the benchmark of a strong and positive reputation.



### PUB-NLH-412, Attachment 1 Page 39 of 73, Isl Int System Power Outages

		INITIATIVES			
Framework Element	2010	2011	2012	2013	2014
1. Emotional appeal - focus	Workplace safety - Promote Hydro's safety initiatives and successes/	Safety & Environment – Promote Hydro's efforts and successes			
2.Products & Services/Op Excellence	Consumer Education – Value of Power				
3. Vision & Leadership	Regional managers to meet with 3 significant local stakeholders Identify and execute 4 key executive speaking opportunities in rural areas focused on Hydro	Stakeholder Relationship/ Engagement Plan			
4. Workplace environment	Complete new signage & vehicle upgrades with new brand Recruitment/employer marketing campaign	Review & plan for external facility & infrastructure upgrades/cosmetic	External facility enhancements		
5. Financial & Business Performance	Capital program promotion	Increased promotion of business results and annual report with key stakeholders			
6. Corporate Citizenship	Region supported safety community initiative with employee involvement and external promotion Plan to increase, support and track employee volunteerism  Execution of promotional plan —	Region supported safety community initiative with employee involvement and external promotion	Employee Giving Program		
	track employee volunteerism  Execution of promotional plan – promoting our philanthropy				



	INITIATIVES							
2010	2011	2012	2013	2014				
1. Emotional Appeal Employees & workplace environment: Campaign promoting Hydro as a "great place to work" focusing on employees	Emotional Appeal Safety Continue awareness campaign on workplace safety leadership	Emotional Appeal Safety and Environment: Develop and implement an awareness campaign on safety and environmental leadership, responsibility and sustainability. Focused on our steps to reduce air emissions and integrate alternative energy and energy conservation steps – build on takeCharge.						
2. Financial & Business Performance Capital Program Communications — increased promotion of capital work to various stakeholders	Financial & Business Performance Increased promotion of business results and annual report with key stakeholders							

#### 3. Products & Services

**Consumer Education -Value of Power:** Develop and deliver information for electricity consumers on the value of power in NL. Including price for product, reliability of service.



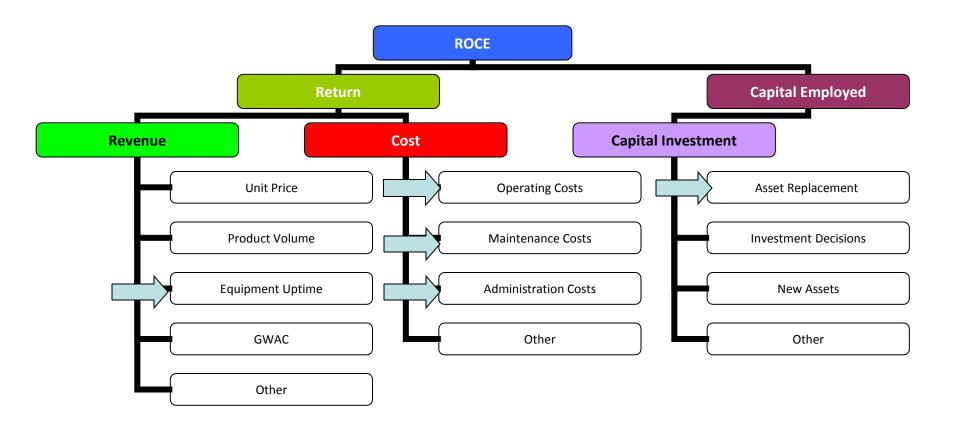
### PUB-NLH-412, Attachment 1 Page 41 of 73, Isl Int System Power Outages

INITIATIVES						
2011	2012	2013	2014			
Vision & Leadership Stakeholder Relationship/Engagement Plan – determine how we incorporate best practices in stakeholder and community engagement in key decisions and projects and measure results.						
Workplace Environment Review external facilities & infrastructure and develop plan for upgrades and improvements	Workplace Environment  Make necessary enhancements to external facilities and infrastructure					
Corporate Citizenship Employee Volunteerism: Region supported safety community initiative with employee involvement and external promotion	Corporate Citizenship  Employee Giving Campaign – work with employees to develop a donation and matchin community giving program (perhaps external – i.e., United Way)		n and matching			
	Vision & Leadership Stakeholder Relationship/Engagement Plan – determine how we incorporate best practices in stakeholder and community engagement in key decisions and projects and measure results.  Workplace Environment Review external facilities & infrastructure and develop plan for upgrades and improvements  Corporate Citizenship Employee Volunteerism: Region supported safety community initiative with employee involvement and	Vision & Leadership Stakeholder Relationship/Engagement Plan — determine how we incorporate best practices in stakeholder and community engagement in key decisions and projects and measure results.  Workplace Environment Review external facilities & infrastructure and develop plan for upgrades and improvements  Workplace Environment And develop plan for upgrades and improvements  Corporate Citizenship Employee Volunteerism: Region supported safety community initiative with employee involvement and	Vision & Leadership Stakeholder Relationship/Engagement Plan – determine how we incorporate best practices in stakeholder and community engagement in key decisions and projects and measure results.  Workplace Environment Review external facilities & infrastructure and develop plan for upgrades and improvements  Workplace Environment Analysis infrastructure and develop plan for upgrades and improvements  Corporate Citizenship Employee Volunteerism: Region supported safety community initiative with employee involvement and			



Additional items identified in goal groups that may and in some cases, should find their way into departmental plans These were not updated to reflect changes in high level Corporate plan

# Newfoundland and Labrador Hydro Power Outages







	INITIATIVES – Procedures and Equipment							
2010	2011	2012	2013	2014				
Management System Compliant  Identify key individuals and train them in OHSAS 18001.  Establish safety management system working group to provide assistance in development and alignment of Corporate Safety Management System to OHSAS 18001 standard.	Management System Compliant  Conduct Regional gap analysis.  Revise 50% of Regional safety standards/ procedures to reflect gap analysis findings.	Management System Compliant Revise Remaining Regional safety standards/ procedures to reflect gap analysis findings.	OHSAS 18001 – Safety Management System Compliant • Participate in self audit for compliance to Corporate Safety Management System. • Develop action plan to correct audit nonconformities.	OHSAS 18001 – Safety Management System Compliant.  (TBD)				

INITIATIVES – Procedures and Equipment							
2010	2011	2012	2013	2014			
<ul> <li>Emergency Response</li> <li>Conduct Gap analysis by Division.</li> <li>Develop and Implement Gap Closure Plan by Division.</li> <li>Identify Corporate Database concept and design</li> <li>Establish frequency and</li> </ul>	<ul> <li>Emergency Response</li> <li>Complete gap closure plan by Division.</li> <li>Seek funding for database development</li> </ul>	Emergency Response  Review gap closure plan and make recommendations for improvement/ enhancement by Division.  Build and populate database Audit emergency response plans.	Emergency Response	Emergency Response			
conduct mock drills.	Conduct drills	response plans.					

INITIATIVES – Responsibility/Union Management Alignment						
2010	2011	2012	2013	2014		
IRS – Internal Responsibility System Develop and deliver Divisional initiatives around promoting internal responsibility. Regions identify internal responsibility system as a critical topic for safety meetings. Communicate and	IRS – Internal Responsibility System					
educate new employees on internal responsibility.			TBD)	(TBD)		

INITIATIVES – Procedures and Equipment /Competence						
2010	2011	2012	2013	2014		
Contractor Education/ Safety Management  Support Prequalification of Primary Contractors (In conjunction with Engineering)  Establish and implement a program whereby contractor work is monitored/ controlled from safety perspective.  Monitor contractors to ensure compliance with safety standards.	Contractor Education/ Safety Management  Review value of expanding scope of contractors included in prequalification process  Expand scope of contractors who are monitored to ensure compliance with safety standards.	Contractor Education/ Safety Management • Monitor smaller contractor companies to ensure compliance with safety standards.	Contractor Education/ Safety Management (TBD)	Contractor Education/ Safety Management  (TBD)		

INITIATIVES – Supportive Culture / Union Management Alignment							
2010	2011	2012	2013	2014			
<ul> <li>Safety Culture</li> <li>Complete participation in safety culture workshops.</li> <li>Promote guest speakers from previous sessions to speak on personal safety cultural changes.</li> <li>Participate in Safety Culture Survey.</li> <li>Introduce Safety Culture concepts at</li> </ul>	• Develop and deliver one (1) Safety Culture Summit for Regional Safety Champions. (Division to be determined)	Safety Culture  • Develop and deliver one (1) Safety Culture Summit for Regional Safety Champions. (Division TBD)	Safety Culture	Safety Culture			
the annual Safety Summit to assist Safety Leaders in the promotion of Safety Culture in the field.	<ul> <li>Deliver Safety         <ul> <li>Culture workshop</li> <li>new employees.</li> </ul> </li> </ul>						

INITIATIVES – Supportive Culture/ Procedures & Equipment						
2010	2011	2012	2013	2014		
<ul> <li>Employee Wellness Program</li> <li>Communicate Corporate         <ul> <li>Employee Wellness</li> <li>Program.</li> </ul> </li> <li>Review capacity for and if achievable develop and implement regional/local         Wellness initiatives that align with Corporate         <ul> <li>Employee Wellness</li> </ul> </li> </ul>	•Develop and implement regional/local Wellness initiatives that align with Corporate Employee Wellness Program.	Employee Wellness Program	Employee Wellness Program	Employee Wellness Program		
Program.			(TBD)	(TBD)		

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OBJECTIVE 1 INITIATIVES (CONT.)  Page 50 of 73, Isl Int System Power Outages						
2010	2011	2012	2013	2014		
<ul> <li>Implement process to check accuracy of weather input data.</li> <li>Complete a Level 1 (EPRI) condition assessment and life expectancy study of the HTGS.</li> <li>Complete a review of the operation and maintenance of heavy fuel oil burners at HTGS.</li> <li>Initiate condition assessment of the HTGS.</li> </ul>	<ul> <li>Prepare and submit a Capital Budget Proposal for the generation of H2 at the HTGS.</li> <li>Initiate a process to study the feasibility of incorporating an additional 25 MW of wind energy into Island system.</li> </ul>					

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OBJECTIVE 1 - INITIATIVES (CONT.)							
2010	2011	2012	2013	2014			
• Review 2009 conversion of HTGS Unit 3 to synchronous condenser and determine an action plan to mitigate future conversion delays.							

ADDITIONAL INITIATIVES IDENTIFIED - Environmentage 52 of 73, Isl Int System Power Outages						
2010	2011	2012	2013	2014		
Evaluate raptor management programs.	Investigate purchase of hybrid boom and aerial vehicles in 2011.					
Evaluate compatible species potential for transmission lines.						
Collect information to be used in evaluation wind / solar / hydro potential in selected rural communities in 2010.						
Implement fuel efficiency recommendations arising from vehicle fuel tracking system.						

#### **NEW OBJECTIVE 1: Environment**

NLH will put in place mechanisms to document and report on emissions of greenhouse gases
associated with Corporate operations and activities consistent with the latest version of the Climate
Registry Electricity Power Sector Protocol by the end of 2011.

#### **TARGETS - Environment**

2010	2011	2012	2013	2014
Identify geographic, organizational and operational boundaries for GHG quantification; determine suitable quantification methods; identify data / information sources and data capture mechanisms.	Collect data from sources identified and compile in a format compatible with the Climate Registry's voluntary reporting mechanism.	Review the 2011 GHG quantification program for issue, problems or areas for improvement.	Continue NLH GHG Quantification Program.	Continue NLH GHG Quantification Program.

NEW OBJECTIVE 1 - INITIATIVES						
2010	2011	2012	2013	2014		
• Establish a GHG quantification working group to coordinate the development and implementation of the program through Divisions / Departments and Regions.						

#### **NEW OBJECTIVE 2: Environment**

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• To Develop and implement a green procurement program for NLH by 2013.

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TAD	CLTS -	<b>Environr</b>	mont
IAN	<b>GLI3</b> -	LIIVIIUIII	HEHL

2010	2011	2012	2013	2014
Submission of proposed Energy Efficiency procurement policies for implementation.	Submission of environmental performance standard criteria for implementation in goods procurement policies.	Submission of environmental performance standard criteria for implementation in services procurement policies.		
INITIATIVES - Enviro	onment			
2010	2011	2012	2013	2014
<ul> <li>Development of proposed Energy Efficiency procurement policies.</li> <li>Review procedure for development of capital and operating budget proposals to strengthen energy efficiency assessments</li> </ul>	Development of environmental performance standard criteria for implementation in goods procurement policies.	<ul> <li>Development of environmental performance standard criteria for implementation in services procurement policies.</li> </ul>		

#### **NEW OBJECTIVE 3: Environment**

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• Customers identify Hydro as an environmentally responsible organization as indicated by the customer survey by 2012.

#### **TARGET - Environment**

• 2012 - Close the gap in customer satisfaction survey gap on "operates in an environmentally responsible manner" by 2013.

#### **INITIATIVES - Environment**

2010	2011	2012	2013	2014
<ul> <li>Create a plan for employee and stakeholder awareness on Hydro's environmental commitment.</li> <li>(Development led by Environmental Services, with significant support from depts./regions and communications.</li> </ul>	Implement plan – targets TBD.	<ul> <li>Investigate partnerships with agencies with like goals to undertake seedling planting for community environmental engagement.</li> <li>Work with Communications on producing a Corporate Responsibility / Sustainability Report</li> </ul>		

#### **NEW OBJECTIVE 4: Environment**

• Provide consistent, accurate and verifiable data for Environmental reports.

#### **TARGETS - Environment**

2010	2011	2012	2013	2014
<ul> <li>Identify Environmental data currently being reported.</li> <li>Identify the owners / people responsible for the data and all the stakeholders.</li> <li>Initiate discussions with IS on developing a database to store and manage the environmental data.</li> </ul>	<ul> <li>Initiate the development of the environmental database.</li> <li>Develop methods and standards with data owners to ensure data is verifiable.</li> <li>Identify potential future reporting requirements (GHG, PCB, Sustainability, etc.)</li> </ul>	<ul> <li>Finalize and test environmental database.</li> <li>Develop and deliver training package for database stakeholders.</li> </ul>		

NEW OBJECTIVE 4 - INITIATIVES - Environment						
2010	2011	2012	2013	2014		
Establish a working group with data owners and stakeholders to initiate discussions and outline a strategy for project execution.						

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NEW ADDITIONAL INITIATIVES IDENTIFIED - Environment						
2010	2011	2012	2013	2014		
<ul> <li>Design a sustainability indicator monitoring and reporting program for submission to NLH Leadership Team for approval. This will be based on a review of the CEA's Sustainable Electricity Program and other sustainability indicator standards.</li> <li>Implement a thorough review of particulate issues at Diesel Plants and recommend areas to reduce emissions.</li> </ul>	Finalize a plan of action and implement recommendations to deal with the potential risk of increased emissions at HTGS if the HVDC line does not proceed.					

NEW ADDITIONAL INITIATIVES IDENTIFIED (CONT.) – Environment						
2010	2011	2012	2013	2014		
<ul> <li>Initiate a plan of action and identify critical paths to deal with the potential risk of increased emissions at HTGS if the HVDC line does not proceed.</li> </ul>						

### Possible other initatives

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Goal	
1. Safety	
2. Environment	<ul> <li>Achieve reduction in the 5 year rolling average number of reportable hydrocarbon spill events</li> <li>Identify mechanisms and resources required to document and report on GHG emissions associated with Corporate operations</li> <li>Develop a proposal for energy efficiency procurement policies</li> <li>Create a plan for employee and community engagement on environment</li> </ul>
3. Business Excellence	
4. People	
5. Community	



# Goal 3: Business Excellence PUB-NLH-412, Attachment 1 PUB-NLH-412, Attachment 1 PUB-NLH-412, Attachment 1

INITIATIVES – Financial Performance				
2010	2011	2012	2013	2014
Business Planning Implement Clarity for operations finance planning and reporting and KPI Executive dashboards.	Integrate capital and operating budgets. Make consistent capital and operating project methodologies.			
Improve the process to better manage operating and capital project planning, ensuring alignment and agreement from stakeholders.	Expand process to include other work that requires internal resources.			

# Goal 3: Business Excellence PUB-NLH-412, Attachment 1 PUB-NLH-412, Att

INITIATIVES – Financial Performance				
2010	2011	2012	2013	2014
Establish benchmark measurement for quality results and set objective and targets showing improvement against the benchmark from 2011 to 2014 for capital projects.				

# Goal 3: Business Excellence PUB-NLH-412, Attachment 1 PUB-NLH-412, Attachment 1 PUB-NLH-412, Attachment 1

INITIATIVES – Financial Performance				
2010	2011	2012	2013	2014
External Stakeholders Review accounting policies in relation to rules set forth by the IFRS board and assess their impact to Hydro and implement appropriate change.	Implement accounting policies commensurate with the IFRS rules.			
Third-party billing process expedited for work performed by Hydro for non-Nalcor entities.				
Present to Government industry representatives an overview of the Cost of Service methodology used by Hydro in the rate setting process.				

Goal 3: Business Excellence Page 65 of 73, Isl Int System Power Outages

TARGETS – Reliability						
2010	2011	2012	2013	2014		
Distribution Interruption Frequency (SAIFI) 4.27 int/cust	3.84 int/cust	3.65 int/cust	3.47 int/cust	3.29 int/cust		
Distribution Interruption Duration (SAIDI) 6.90 hrs/cust.	6.21 hrs/cust.	5.90 hrs/cust.	5.61 hrs/cust.	5.33 hrs/cust.		

## Goal 3: Business Excellence Page 66 of 73, Isl Int System Power Outages

INITIATIVES – Reliability – Asset Management						
2010	2011	2012	2013	2014		
	Conduct an Electricity System Outlook Forum to provide an opportunity to establish key areas where operating improvement, capital enhancements and further study may be directed to improve system reliability	Generation Improvement Investigate the use of NERC reliability standards as potential objectives / targets to better reflect the manner in which the generation fleet is managed (n-1 criteria).				
Transmission & Distribution Improvement Establish a process for developing and tracking actual planned delivery point outage performance versus forecast.						

### **Goal 3: Business Excellence**

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INITIATIVES – Reliability - Asset Management				
2010	2011	2012	2013	2014
Phase 1 condition assessment complete for Holyrood	Phase 2 condition assessment complete for Holyrood	Capital plan execution in light of DC infeed status and timing		

### **Goal 3: Business Excellence**

PUB-NLH-412, Attachment 1
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INITIATIVES – Reliability - Asset Management					
2010	2011	2012	2013	2014	
Gap review of all facility fire protection needs and develop plan to correct deficiencies, priority on isolated diesels, then Bay d'Espoir and Holyrood			<other risks=""></other>		
Capital Budget submission to address Hydrogen supply risk at Holyrood	Execute capital project to address Hydrogen supply risk at Holyrood.				
Update emergency response and business continuity plans to address fire protection and hydrogen supply gaps noted	Review and update emergency response and business continuity plans				

### Goal 3: Business Excellence Page 69 of 73, Isl Int System Power Outages

#### **INITIATIVES – Asset Management System**

#### 2009 Deliverables

- Clearly defined Asset Management System (AMS) framework
- Organization design adjusted to enable this AMS
- Verification that 100% of assets are identified/documented by asset class
- Clear, single point accountability for AMS in each asset class
- Operations and engineering alignment on which systems/part of systems have adequate asset management plans in place
- Identification of higher risk systems/parts of systems that do not have adequate asset management plans
- Complete review of high-risk systems/parts
- Company-wide critical spares program complete
- Plan to update/refresh AMS

## **Goal 3: Business Excellence**

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INITIATIVES – Custo	,			
2010	2011	2012	2013	2014
Customer Expectations Assess appropriate timing of customer satisfaction survey to align with Corporate Planning process.	Develop and start strategy implementation to communicate to stakeholders customer survey results and actions to close gaps	Complete implementation of communications strategy for customer communications related to customer satisfaction		
Customer Relationship Improvement Program Implement a Key Customer Relationship Pilot in Labrador.		Assess Key Customer Relationship pilot, adjust and expand to all areas.		
Customer Service Improvement Program Develop a customer service improvement plan.	Implement customer service enhancements as per improvement plan.	Assess enhancements, adjust and implement more.		

Goal 4: To ensure a highly skilled and motivated team of employees who are strongly committed to Nalsonhi System Foresting and future direction.



# Goal 4: People — Targets Page 72 of 73, 1sl Int System Power Outages

#### **OBECTIVE - People**

By 2013, improve all elements of employee engagement to a level where Hydro would qualify for recognition as one of Canada's best employers in reference to an acceptable external benchmark, and maintain each subsequent year.

TARGETS - People						
2010	2011	2012	2013	2014		
Leadership Effectiveness: One third of VPs and Managers group complete the Management Development Program						

# **Goal 4: People**

INITIATIVES						
2010	2011	2012	2013	2014		
Diversity Strategy	Work-Life Balance	Alignment Review	Standards of Care	Technology Strategy for Mobile Crews		
In-Scope Coaching/Feedback	Ambassadors 4 Change					
Recruitment Strategy	High Performance Teams					
Career Development/ Succession Planning						

### Nalcor Energy PUB-NLH-412, Attachment 2 2011-2015 Plan – Hydro





### **Presentation structure**

- Plan Highlights
- Hydro High level plan detail
- Hydro & Division/Departmental additional level of data and must do's
- Hydro Other desirable items that could be considered for Divisional/Departmental inclusion if sufficient resources are available
- Graphics For Various Goals



# **Hydro - Plan Highlights**

PUB-NLH-412, Attachment 2 Page 3 of 110, Isl Int System Power Outages



# **2011 Plan Highlights**

GOAL	PUB-NLH-412, Attachment 2
1. SAFETY	Achieve safety lead/lag ratio >= 450:1 or 0 events  All injury frequency rate (AIF) ≤ 1.00 and Lost time injury frequency rate (LTIF) ≤ 0.30  Continue progressing Work Methods for high risk tasks and integration of Work Permit Code
2. ENVIRONMENT	Complete a minimum of 95% of approved Environmental Management System Targets Reduce emissions per unit of energy delivered by achieving not more than 12.5% variance from ideal production schedule at Holyrood Generating Station Achieve 11.85 GWh of energy savings through Newfoundland and Labrador Hydro managed conservation and demand management programs(9.9) GWh and internal energy efficiency programs (1.95 GWh) Acquire production data from all diesel plants for automating monthly production reports
<b>3a. BUSINESSEXCELLENCE</b> Finance	Achieve HYDRO net income of \$23.2M, Return on Capital Employed of 8.0% Maintain costs variance no more than 1% of the approved budget.
<b>3b. BUSINESSEXCELLENCE</b> Project Execution	Completion rate of capital projects by year end per original schedule ≥ 95% Achieve all-project variance of 8% or less within original budget. Project/Program management implemented in PETS
<b>3c. BUSINESSEXCELLENCE</b> Asset Management/Reliability	Winter Availability ≥ to 96.3% Office of Asset Management (OAM) established and functional
3d. BUSINESSEXCELLENCE Customer Service	Maintain a Rural Residential Customer Satisfaction rate of >90%
BUSINESSEXCELLENCE General	In collaboration with Business development and other departments, finalize likely integration of Exploits assets and operations into Hydro's Regulated Operations Division and plan for Menihek transition to Hydro Regulated Operations Division
4. PEOPLE	EOS Workplace improvement plans in place and plan execution on schedule.  Recruitment and retention plan specific to rural/remote locations executed.
5. COMMUNITY	To achieve a corporate citizenship reputation index of 78.0



# Hydro – High level plan dages of 120, Isl Int System Power Outages



#### PUB-NLH-412, Attachment 2

# **Goal 1: Safety**

#### **OBJECTIVES - Safety**

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- By 2014, improve safety performance to world class standards and sustain this performance
  - -Lead/Lag ratio of ≥ 1000:1,
  - -All Injury frequency rate (AIF) ≤ 0.50 sustained
  - -Lost Time Injury frequency rate (LTIF) ≤ 0.15 sustained
- Interdependent Safety Culture where employees demonstrate best in class safety leadership behaviours.
- A functioning Internal Responsibility System where employees actively demonstrate personal ownership for safety.

#### **TARGETS - Safety**

2011	2012	2013	2014	2015
Achieve safety lead/lag ratio >= 450:1 or 0 events	Achieve safety lead/lag ratio >= 600:1 or 0 events	Achieve safety lead/lag ratio >= 750:1 or 0 events	Achieve safety lead/lag ratio >= 1000:1 or 0 events	Achieve safety lead/lag ratio >= 1000:1 sustained or 0 events sustained
All injury frequency rate (AIF) ≤ 1.00	All injury frequency rate (AIF) ≤ 0.80	All injury frequency rate (AIF) ≤ 0.60	All injury frequency rate (AIF) ≤ 0.50 sustained.	All injury frequency rate (AIF) ≤ 0.50 sustained.
Lost time injury frequency rate (LTIF) ≤ 0.30	Lost time injury frequency rate (LTIF) ≤ 0.20	Lost time injury frequency rate (LTIF) ≤ 0.15	Lost time injury frequency rate (LTIF) ≤ 0.15 sustained.	Lost time injury frequency rate (LTIF) ≤ 0.15 sustained.



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INITIATIVES – Procedures and Equipment / Competence						
2011	2012	2013	2014	2015		
<ul> <li>Work Methods <sup>5</sup></li> <li>Develop Terms of Reference for all Work Methods Committees.</li> <li>Finalize all Critical Task Inventories.</li> <li>Develop TBRA's for all critical tasks performed in 2011.</li> <li>Develop Work Method (Reviewed AND Verified Status¹) for each critical task performed in 2011.</li> <li>Ensure TBRA's are completed for at least 50 % of all critical task identified.</li> <li>Develop Work Methods (Reviewed NOT Verified Status²) for at least 50 % of all critical tasks identified.</li> <li>Investigate ways to improve electronic delivery of work methods to field staff.</li> <li>Deliver HREC³ and TBRA⁴ training to new work method committee members, and employees involved in complex and critical tasks.</li> <li>Review merits of expanding HREC and TBRA training to all other employees.</li> <li>Develop an audit system/protocol to ensure that work methods have been developed, and are being followed.</li> </ul>	<ul> <li>Work Methods</li> <li>Assess Critical Task Inventories for additions or revisions.</li> <li>Develop TBRA's for any new or revised critical tasks performed in 2012.</li> <li>Develop Work Method (Reviewed AND Verified Status) for each critical task performed in 2012.</li> <li>Ensure TBRA's are completed for at least 85% of all critical tasks identified.</li> <li>Develop Work Methods (Reviewed NOT Verified Status) for at least 85% of total critical tasks indentified.</li> <li>Deliver HREC and TBRA training to employees as identified in 2011.</li> <li>Conduct audit of TBRA and Work Method Process.</li> </ul>	<ul> <li>Work Methods</li> <li>Assess Critical Task Inventories for additions or revisions.</li> <li>Develop TBRA's for all remaining critical tasks.</li> <li>Develop Work Method (Reviewed AND Verified Status) for each critical task actually performed in 2013.</li> <li>Develop Work Methods (Reviewed NOT Verified Status) for all remaining critical tasks.</li> <li>Continue auditing work methods process (TBRA and work methods)</li> </ul>	<ul> <li>Work Methods</li> <li>Assess Critical Task Inventories for additions or revisions.</li> <li>Develop TBRA's for any new or revised critical tasks.</li> <li>Develop Work Method (Reviewed AND Verified Status) for each critical task performed in 2014.</li> <li>Develop Work Methods (Reviewed NOT Verified Status) for all remaining critical tasks.</li> <li>Assess Critical Task Inventories to consider reduction of critical task criteria to include lower risk tasks</li> </ul>	<ul> <li>Work Methods</li> <li>Assess Critical         Task         Inventories for         additions or         revisions         (considering         any new         criteria)</li> <li>Develop         TBRA's for all         critical tasks.</li> <li>Develop action         plan for         development         and         verification of         Work Methods         for Lower Risk         Tasks meeting         new Critical         Task criteria.</li> </ul>		



#### **Footnotes**

PUB-NLH-412, Attachment 2
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- 1. Work method has been reviewed and field verified.
- <sup>2.</sup> Work Method is reviewed but has not been field verified.
- <sup>3.</sup> Hazard Recognition, Evaluation and Control.
- <sup>4.</sup> Task-Based Risk Assessment.

#### <sup>5</sup> Example:

An area has identified 1000 critical tasks (planned as well as unplanned). In 2011, the area will perform 300 of the 1000 critical tasks identified.

TBRA's required in 2011 as a result of the work to be performed	300
Work Methods (R&V)1 required as a result of the work to be performed	300

In addition,

The TBRA target for 2011 is 50% (cumulative) of critical tasks
The Work Method target for 2011 is 50% (cumulative) of critical tasks

Therefore,

Additional TBRA's required for 2011	200 (includes 2010 numbers)
Additional Work Methods (RNV) required for 2011	200 (includes 2010 numbers)

Therefore the <u>total requirements</u> for 2011 are as follows:

TBRA's required	500
Work Methods (R&V)[1] required	300
Work Methods (RNV)[2] required	200

In short, a TBRA and a field verified Work Method must be conducted for each critical task performed each year. Additional TBRA's and Work Methods must also be completed to bring the cumulative total up to the target number established for that year. However, work methods developed for tasks not performed during that year need not be field verified.

The same methodology holds true for subsequent years, keeping in mind that all targets refer to cumulative numbers.

- [1] Refers to Work Methods that have been reviewed AND field verified (Reviewed and Verified)
- [2] Refers to Work Methods that have been reviewed but have NOT received field verification (Reviewed and NOT Verified)



INITIATIVES – Procedures and Equipment / Competence					
2011	2012	2013	2014	2015	
<ul> <li>Work Protection Code</li> <li>Software - Seek funding and approvals to develop and implement a software application for deployment in ECC and Hydro.</li> <li>Training - Roll-out online training modules to keep workers competent and</li> </ul>	Work Protection Code • Software - If software application approved implement in ECC and Hydro Plants.	Work Protection Code Software - Review the suitability of using the software application in distribution sites.	Work Protection Code •Training - Continue with online training and evaluate effectiveness.	Work Protection Code •Training – continue	
maintain their certification.  • Support - Develop Corporate and Local Committee support structure with Terms of Reference, mandate and defined roles.  • Feedback - Complete corporate and local process and paper audits.	Training - Continue with online training and evaluate its effectiveness.	•Training - Implement improvements from assessment and continue with online training.	•Support – shape the supervisor as a performance coach	•Support – continue	
Regulatory- Review the Work Protection Code document to ensure compliance to national standards (CSA Z460 Control of hazardous energy – Lockout and other methods, CAN/ULC S-801-10 Standard	Support -     Strengthen local     code committee     support.	•Support - Implement support focusing on role of the supervisor.	•Feedback – review audit process to reflect the impact of the software application	•Feedback – focus on process auditing	
On Electric Utility Workplace Electrical Safety For Generation Transmission and Distribution) and ability to serve all of Hydro's business needs.	Feedback -     Complete corporate     and local process     and paper audits.	•Feedback - Complete corporate and local process and paper audits.			



PUB-NLH-412, Attachment 2
Page 10 of 110, Isl Int System Power Outages

#### **OBJECTIVES - Environment**

• Maintain the number of environmental leadership\* targets accomplished at 95%.

TARGETS - Environment						
2011	2012	2013	2014	2015		
Number of environmental leadership targets accomplished within Nalcor Energy at 95%						

<sup>\*</sup>Includes Environmental Management System targets for lines of business that use EMS and line of business targets for goal 2 for other lines of business.



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#### **OBJECTIVES - Environment**

 Minimize production requirements and associated air emissions from the Holyrood Thermal Generating Station

2011	2012			
		2013	2014	2015
number of operating hours at the Holyrood Plant by 6.5%	Reduce the minimum number of operating hours at the Holyrood Plant by 14%			
energy savings through Newfoundland and Labrador Hydro managed conservation and demand management programs	Achieve 21.6 GWh of energy savings through Newfoundland and Labrador Hydro managed conservation and demand management programs	Achieve 35.2 GWh of energy savings through Newfoundland and Labrador Hydro managed conservation and demand management programs	Achieve 47.5 GWh of energy savings through Newfoundland and Labrador Hydro managed conservation and demand management programs	Achieve 49.3 GWh of energy savings through Newfoundland and Labrador Hydro managed conservation and demand management programs

## **Goal 2: Environment**

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#### **OBJECTIVES - Environment**

 Minimize production requirements and associated air emissions from the Holyrood Thermal Generating Station (Continued)

TARGETS - Environment						
2011	2012	2013	2014	2015		
Achieve 1.95 GWh of energy savings throug internal energy efficiency programs by the end of 2015	through internal	Achieve 2.25 GWh of energy savings through internal energy efficiency programs by the end of 2015	Achieve 2.4 GWh of energy savings through internal energy efficiency programs by the end of 2015	Achieve 2.55 GWh of energy savings through internal energy efficiency programs by the end of 2015		
*						
				1 poleor		

#### PUB-NLH-412, Attachment 2 Page 13 of 110, Isl Int System Power Outages

INITIATIVES – Environment				
2011	2012	2013	2014	2015
Reduce the minimum required hours of operation at Holyrood for power system reliability purposes by utilizing switched capacitor banks at the Come By Chance Terminal Station to provide improved voltage control on the Avalon Peninsula.				
Implement new residential and commercial rebate programs in partnership with NP.	Implement new residential and commercial rebate programs in partnership with NP.	Implement new residential and commercial rebate programs in partnership with NP.	Implement new residential and commercial rebate programs in partnership with NP.	Implement new residential and commercial rebate programs in partnership with NP.
Implement new community based energy efficiency program for Hydro customers.	Implement new energy efficiency program for Hydro customers.	Implement new energy efficiency program for Hydro customers.	Implement new energy efficiency program for Hydro customers.	Implement new energy efficiency program for Hydro customers.



### PUB-NLH-412, Attachment 2 Page 14 of 110, Isl Int System Power Outages

INITIATIVES – Environment				
2011	2012	2013	2014	2015
	Conduct evaluation of Industrial Energy Efficiency Program and provide recommendations for next steps.	Update CDM Potential Study.		
Implement no cost/low cost recommendations from Hydro facility walk through audits.	Regulated Operations to identify energy savings opportunities through review of facility operations and implement actions.	Regulated Operations to identify energy savings opportunities through review of facility operations and implement actions.	Regulated Operations to identify energy savings opportunities through review of facility operations and implement actions.	Regulated Operations to identify energy savings opportunities through review of facility operations and implement actions.



### **Goal 2: Environment**

INITIATIVE	DELIVERABLE	RESPONSIBLE	TIMING
Reduce the minimum required hours of operation at Holyrood for power system reliability purposes by utilizing switched capacitor banks at the Come By Chance Terminal Station to provide improved voltage control on the Avalon Peninsula.	Site work Complete     Capacitor Banks     Received     Capacitor Banks     Commissioned     Capacitor Banks Installed and Operating	Project Execution and Technical Services	<ul><li>June 2011</li><li>August 2011</li><li>September</li><li>October 2011</li></ul>
Implement new residential and commercial rebate program in partnership with NP.	GWhs of energy efficiency savings.	System Operations and Customer Services	Throughout 2011
Implement new community based energy efficiency program for Hydro customers.	GWhs of energy efficiency savings.	System Operations and Customer Services	Throughout 2011



### **Goal 2: Environment**

2011 INITIATIVES - Environment			
INITIATIVE	DELIVERABLE	RESPONSIBLE	TIMING
Implement no cost/low cost recommendations from Hydro facility walk through audits.	In addition to the savings from previous year's actions, in 2011 achieve 150MWH of new energy savings initiatives as follows:  • 25MWh – HTGS  • 50MWh – TROC  • 25 MWh – TRON  • 25MWh – TROL  •25 MWh – Hydro Generation	System Operations and Customer Services, HTGS, TROC, TRON, TROL, Hydro Generation	Throughout 2011



PUB-NLH-412, Attachment 2
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#### **OBJECTIVES - Environment**

• Reduce or minimize environmental risks and emissions from diesel generation systems

#### **TARGETS - Environment**

IANGLIS - LIIVIIO	TARGETS - LITVITOTIMENT					
2011	2012	2013	2014	2015		
Acquire production data (plant output, station service and unit metering) from all Diesel Plants and format data for automating production monthly reporting.	Analyze data and identify opportunities for efficiency improvements and emission reduction potential	Analyze data and identify opportunities for efficiency improvements and emission reduction potential	Analyze data and identify opportunities for efficiency improvements and emission reduction potential	Analyze data and identify opportunities for efficiency improvements and emission reduction potential		



#### PUB-NLH-412, Attachment 2 Page 18 of 110, Isl Int System Power Outages

ment			
2012	2013	2014	2015
Monitor data and analyze for plant efficiency and emission reduction potential.	Monitor data and analyze for plant efficiency and emission reduction potential.	Monitor data and analyze for plant efficiency and emission reduction potential.	Monitor data and analyze for plant efficiency and emission reduction potential.
	2012  Monitor data and analyze for plant efficiency and emission	2012 2013  Monitor data and analyze for plant efficiency and emission efficiency and emission	2012  Monitor data and analyze for plant efficiency and emission reduction potential.  2013  Monitor data and analyze for plant efficiency and emission reduction potential.



## **Goal 2: Environment**

Work plan template for year 1 initiatives
PUB-NLH-412, Attachment 2
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2011 INITIATIVES - Environment					
INITIATIVE	DELIVERABLE	RESPONSIBLE	TIMING		
Establishing data acquisition and recording systems for diesel plant production data	Database for diesel plant production data	Information Systems and TRO Operations	December 2011		



# Goal 3: Business Excellence- Operating Page 20 of 110, Isl Int System Power Outages

**Finance** 



PUB-NLH-412, Attachment 2

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#### **OBJECTIVES – Financial Performance**

- Net Income: Meet or exceed Hydro's allocation of the annual corporate net income targets<sup>1</sup>.
- Profitability: Achieve a three-year rolling average ROCE of X% by 2013<sup>1</sup>.
- Operating Costs: Maintain annual controllable costs at or below the approved budget by 2012.
- Forecasting: Update all O&M costs with YTD actual costs for fiscal forecasting.
- <u>GRA</u>: Establish, monitor and take appropriate action to obtain return on equity within prescribed range.
- <u>Cost Control</u>: Monitor and report on a regular/consistent monthly basis material Income Statement cost variances with summary commentary.
- <u>Cash</u>: Increase frequency and accuracy of short-term cash flow forecasts provided to Treasury

#### **TARGETS – Financial Performance**

2011	2012	2013	2014	2015
Achieve HYDRO net income of \$23.2.0M	Net income of \$tbdM with increased ROE from GRA <sup>1</sup>	Net income of \$tbdM	Net income of \$tbdM	Net income of \$tbdM

1 2011 and beyond dependent on a GRA and outcome.



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TARGETS – Fina	ncial Performan	ce		
2011	2012	2013	2014	2015
Profitability <sup>1</sup> Return on Capital Employed of 8.0%	ROCE of tbd%	ROCE of tbd%	ROCE of tbd%	ROCE of tbd%
Operating Costs  Maintain controllable costs variance no more than 1% of the approved budget.	Maintain controllable costs at or below the approved budget.			
Forecasting Update on a Quarterly basis, all O&M costs with YTD actual and remaining monthly forecast values, ensuring a reasonable monthly cost projection to fiscal year-end.				
GRA Rate of Return  If required file a General Rate Application to PUB with targeted ROE for new rates effective X , 2012	If required obtain approval for revised rates for 2013 implementation, if needed.	If required obtain approval for revised rates for 2014 implementation, if needed.	If required obtain approval for revised rates for 2015 implementation, if needed.	If required obtain approval for revised rates for 2016 implementation, if needed.



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TARGETS – Financial Performance						
2011	2012	2013	2014	2015		
Cost Control  Monthly identification of budget variances >\$100K by BU and cost object so that managers can mitigate as appropriate to remain within budget.						



# Goal 3: Business Excellence- Capital— Page 24 of 110, Isl Int System Power Outages Finance/Execution



PUB-NLH-412, Attachment 2
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#### **OBJECTIVES – Project Execution**

- <u>Capital Schedule:</u> Achieve capital project scheduled completion rate by year end of 95% and future years as determined by Project Execution review.
- <u>Capital Costs:</u> Achieve 90% of completed projects within 10% of budget and all-project variance of 5% or less within original cost budget by 2012.

TARGETS— Project Execution					
2011	2012	2013	2014	2015	
Capital Budget Schedule Completion rate of capital projects by year end per original schedule ≥ 95%	Completion rate of capital projects by year end, per original schedule $\geq$ 95%, pending completion of Project Execution review.	Completion rate of capital projects by year end, per original schedule > 95%, pending completion of Project Execution review.	Completion rate of capital projects by year end, per original schedule > 95%, pending completion of Project Execution review.	Completion rate of capital projects by year end, per original schedule > than 95%, pending completion of Project Execution review.	
Capital Budget Schedule 100% of carryovers completed by revised project schedule date	100% of carryovers completed by revised project schedule date, pending completion of Project Execution review.	100% of carryovers completed by revised project schedule date, pending completion of Project Execution review.	100% of carryovers completed by revised project schedule date, pending completion of Project Execution review.	100% of carryovers completed by revised project schedule date, pending completion of Project Execution review.	



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2011	2012	2013	2014	2015
Capital Budget Costs Achieve 60% of completed projects within 10% of original budget	Achieve 90% of completed projects within 10% of original budget, pending completion of Project Execution review.	Achieve 90% of completed projects within 10% of original budget, pending completion of Project Execution review.	Achieve 90% of completed projects within 10% of original budget, pending completion of Project Execution review.	Achieve 90% of completed projects within 10% of original budget, pending completion of Project Execution review.
Capital Budget Costs Achieve all-project variance of 8% or less within original budget.	Achieve all-project variance of 5% or less within original budget, pending completion of Project Execution review.	Achieve all-project variance of 5% or less within original budget, pending completion of Project Execution review.	Achieve all-project variance of 5% or less within original budget, pending completion of Project Execution review.	Achieve all-project variance of 5% or less within original budget, pending completion of Project Execution review.



Work plan template for year 1 initiatives
PUB-NLH-412, Attachment 2
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2011 INITIATIVES – Project Execution				
INITIATIVE	DELIVERABLE	RESPONSIBLE	TIMING	
Participate in implementation of changed Project Execution processes.  As determined by specific initiatives undertaken by PETS		TBD	TBD	



# Goal 3: Business Excellence- Asset PUB-NLH-412, Attachment 2 Page 28 of 110, Isl Int System Power Outages Management/Reliability



#### **OBJECTIVES – Reliability – Asset Management**

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- By 2012, achieve 98% major generating availability during the winter (Jan-Mar, Dec) period.
- Sustained best in class hydro generation plants' winter availability between 2011 and 2015. Sustained top quartile Holyrood winter availability between 2012 and 2015.
- Continuously improving within top quartile Transmission delivery point performance, 2011-15.
- Sustainable implementation of the Asset Management Strategy framework and key processes, consistently entrenched across all functions by 2013, built upon best practices, and continuously improving to required process maturity by 2015
- Sustainable asset performance to required levels to support business plan and yielding planned value
- Assets are able to do what is required, when it is required, for as long as required, then upgraded/refurbished/replaced at optimal time
- Work packages are executed on time, on budget, and with required quality, financial measures are within spec
- Assets are operated within designed parameters, production targets are consistently met.

#### TARGETS – Reliability

2011	2012	2013	2014	2015
NLH Weighted Winter Availability ≥96.3% •Thermal -90.0 • Hydro -99.5	NLH Weighted Winter Availability ≥ 98% •Thermal -95.0 • Hydro -99.5	NLH Weighted Winter Availability ≥ 98% •Thermal -95.0 • Hydro -99.5	NLH Weighted Winter Availability ≥ 98% •Thermal -95.0 • Hydro -99.5	NLH Weighted Winter Availability ≥ 98% •Thermal -95.0 •Hydro -99.5
Delivery Point Unreliability Index <11.79 System-minutes (16,000 MW-min)	Delivery Point Unreliability Index <11.37 System-minutes (16,000 MW-min)	Delivery Point Unreliability Index <10.70 System-minutes (16,000 MW-min)	Delivery Point Unreliability Index <10.44 System-minutes (16,000 MW-min)	Delivery Point Unreliability Index <10.40 System-minutes (16,000 MW-min)
	<u> </u>		İ	_



## Goal 3: Business Excellence age 30 of 110, Isl Int System Power Outages

TARGETS – Reliability					
2011	2012	2013	2014	2015	
T-SAIFI 0.85 int./DP	0.81 int./DP	0.76 int./DP	0.70 int./DP	0.67 int./DP	
T-SAIDI 52.50 min/DP	49.00 min/DP	46.00 min/DP	42.50 min/DP	40.00 min/DP	
SAIFI 3.84 int/cust	3.65 int/cust	3.47 int/cust	3.29 int/cust	3.13 int/cust	
SAIDI 6.21 hrs/cust.	5.90 hrs/cust.	5.61 hrs/cust.	5.33 hrs/cust.	5.06 hrs/cust.	

These targets were based on actual experience from 2005 – 2009. There is potential to improve these targets if we revisit January 31, 2011, after the outcome of 2010 is known.



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TARGETS – Asset Management  Page 31 of 110, Isl Int System Power Outages				
2011	2012	2013	2014	2015
<ul> <li>Office of Asset Management (OAM) established and functional</li> </ul>	•AMS framework fully implemented and functioning consistently	•AMS framework and key processes fully functional with high levels of maturity	<ul> <li>Long term asset plans have necessary quality</li> </ul>	•AMS key processes have high levels of maturity
•Participants and stakeholders are engaged and knowledgeable	•Asset management key processes established and under development	•Work plans are being executed on time and on budget with desired quality	•Assess AM effectiveness	•Improve AM approach based on assessment resullts
•PM completion baseline current state (consider AMR impact)	•PM Completion rates 85%	•PM Completion rates 90%		
•Operating Projects (over \$50k), 95% complete	•Operating Projects (over \$50k), 97% complete	•Operating Projects (over \$50k), 100% complete		

Note: Project completion targets are firm unless reprioritized by VP to address unforeseen budget issues.



Initiatives – Reliability and Asset Management			PUB-NLH-412, Attachment 2 Page 32 of 110, Isl Int System Power Outages	
2011	2012	2013	2014	2015
•OAM facilitate development of the Asset Management roadmap to excellence (i.e. gap analysis and closure plan) with areas •Baseline and track AM framework and process implementation and maturity •Develop strategy for two year annual work planning. Includes PM, CM, NM, Op Projects, Capital Projects, resource allocation, schedule (including outages) and budget •Prepare annual and five year master outage schedule •Update the 20-year plan and develop a strategy to improve overall quality of first five years.	•Execute gap closure plan, include mapping into strategic objectives			
	•Implement two year annual work planning.	•Assess quality of two year work planning process and make required process changes	•Two year annual work planning.	•Two year annual work planning.
	<ul> <li>Update the 20- year plan and execute quality strategy</li> </ul>	•Review and confirm quality of 20-year plan	•Update the 20-year plan	•Update the 20-year plan
		32		nalcor

# Goal 3: Business Excellence- Customer Page 33 of 110, Isl Int System Power Outages Service



PUB-NLH-412, Attachment 2

#### **OBJECTIVES – Customer Satisfaction**

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 <u>Rural Residential Customer Satisfaction</u> – Maintain greater than 90% of rural residential customers satisfied with Hydro

TARGET – Customer Satisfaction					
2011	2012	2013	2014	2015	
Maintain a Rural Residential Customer Satisfaction rate of  >90%				-	



# **Goal 3: Business Excellence**

INITIATIVES – Customer Satisfaction		Pag	PUB-NLH-412, e 35 of 110, Isl Int System P	Attachment 2 Power Outages
2011	2012	2013	2014	2015
Formalize a Customer Service (Internal) Improvement Committee with representation from Regulated Operations and each of the service groups				
Formalize a strategic plan for improving and benchmarking internal customer services provided to Regulated Operations based on a four year plan	<ul> <li>Implement all initiatives indentified for year</li> <li>1 of the four year plan</li> <li>Measure results and adjust for variations</li> </ul>	<ul> <li>Implement all initiatives indentified for year 2 of the four year plan</li> <li>Measure results and adjust for variations</li> </ul>	<ul> <li>Implement all initiatives indentified for year 3 of the four year plan</li> <li>Measure results and adjust for variations</li> </ul>	•Implement all initiatives indentified for year 4 of the four year plan •Measure results and adjust for variations



# People: Lines of business and fage 180 ct to 1811 Ht System Power Outages

### **OBJECTIVE - People**

 By 2013, improve all elements of employee engagement to a level where Nalcor Energy would qualify for recognition as one of Canada's best employers in reference to an acceptable external benchmark, and maintain each subsequent year.

TARGETS - People				
2011	2012	2013	2014	2015
	Achieve EOS score 3.85*			
100% of new hires enrolled in safety culture session within 9 months of hire	100% of new hires enrolled in safety culture session within 9 months of hire	100% of new hires enrolled in safety culture session within 9 months of hire	100% of new hires enrolled in safety culture session within 9 months of hire	100% of new hires enrolled in safety culture session within 9 months of hire

<sup>\*</sup> This is based on achieving at score of at least 3.75 in 2010



# People: Lines of business and frage 37 6 110, 131 Int System 20 Wer Outages

INITIATIVES - People				
2011	2012	2013	2014	2015
Engagement Engage employees on 2010 EOS results and complete 75% of workplace improvement plans identified	Engagement Complete 100% of the items documented in Action Plans and monitor results  Achieve >= 80% participation in 2012 EOS	Engagement Revise Action Plan based on 2012 EOS results  Participate in External Benchmarking process and Achieve >= 80% participation	Engagement Achieve top employer recognition	Engagement Another EOS, participation of >80% and 4.0
Performance/Accountability Evaluate success of Apprenticeship Performance Review process with recommendations for in- scope employees	Performance /Accountability Execute recommendations stemming from 2011 review			



# People: Lines of business and fregets of til, Slift System Power Outages

INITIATIVES – People (Cont'd)				
2011	2012	2013	2014	2015
Employees Valued Execute Phase IV of the Corporate Diversity Strategy	Employees Valued Execute diversity action plan, monitor results	Employees Valued Execute diversity action plan, monitor results	Employees Valued Execute diversity action plan, monitor results	Employees Valued Execute diversity action plan, monitor results
Skilled/Capable People Finalize and Execute Recruitment & Retention Strategy for Rural Areas	Employees Engaged Alignment Review	Employees Valued Standards of Care	Skilled & Capable Technology Strategy for Mobile Crews	
Employees are Valued Participate in Work/Life Balance Initiative with Recommendations for 2012	Employees Valued Pilot W/L Balance Initiative			
Skilled/Capable People Implement gap closure plan for mandatory safety and technical skills training				
Skilled/Capable People Participation in CFP RACI sessions				



# **Goal 5: Community: Hydro**

PUB-NLH-412, Attachment 2
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# **Objectives/Targets**

### **OBJECTIVES - Community**

To achieve a corporate citizenship reputation index of 78.5 by 2015

### **TARGETS - Community**

2011	2012	2013	2014	2015
To achieve a corporate citizenship reputation index of 78.0		To achieve a corporate citizenship reputation index of 78.2.		To achieve a corporate citizenship reputation index of 78.5.



# Goal 5: Community: Hydro Initiatives

### For each region/plant

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INITIATIVES - Community					
2011	2012	2013	2014	2015	
Emotional Appeal/Corporate Citizenship Complete two speaking engagements in local area (schools or community), presentations and information will be provided by CCSR. Topics include: a) how the provincial electrical system works/Electricity Consumer Campaign &/or b) safety presentations e.g., Back it Up and/or c) energy efficiency	Emotional Appeal/Corporate Citizenship Complete two speaking engagements in local area (schools or community), presentations will be provided by CCSR. Topics include: a) Electricity Consumer Campaign and/or b) safety related presentations and/or c) energy efficiency	Emotional Appeal/Corporate Citizenship Complete two speaking engagements in local area (schools or community), presentations will be provided by CCSR Topics to be determined.	Emotional Appeal/Corporate Citizenship Complete two speaking engagements in local area (schools or community), presentations will be provided by CCSR Topics to be determined.	Emotional Appeal/Corporat e Citizenship Complete two speaking engagements in local area (schools or community), presentations will be provided by CCSR Topics to be determined.	



# Goal 5: Community: Hydro Initiatives

### For each region/plant

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INITIATIVES - Community					
2011	2012	2013	2014	2015	
Vision and Leadership Identify and hold interactions with 2 key local stakeholders. Focus is to interact with stakeholders that pose a significant risk or opportunity to build relationships/reputation. Examples include/involve: 1) participating in a public meeting 2) holding a meeting to discuss planned capital work/upgrades/outages, 3) discussing potential community/customer concerns (i.e., frequent power outages, electricity rates), 4) environmental projects and initiatives				•	



# Goal 5: Community: Hydro Initiatives

### For each region/plant

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INITIATIVES - Community					
2011	2012	2013	2014	2015	
Vision and Leadership Participate/attend minimum 2 regular community/ business based events/ luncheons such as local Chambers, economic boards, local/regional trade shows.				•	
Workplace Environment /Corporate Citizenship With a committee of your employees and assistance from CCSR, organize a community activity or event that engages employees and members of the community and is promoted both internally and externally (call to local radio, TV or newspaper or submit a photo). Notify CCSR of event and outcome.	Workplace Environment /Corporate Citizenship Build on 2011 community activity or event or establish new community initiative.			•	



# Goal 5: Community: Hydro Initiatives PUB-NLH-412, Attachment 2

### For each region/plant

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INITIATIVES - Community					
2011	2012	2013	2014	2015	
Corporate Citizenship/Employee engagement Promote employee volunteerism/matching funds program to employees and achieve a 10% participation rate in the program among Hydro employees. CCSR to promote program and eligibility.	Corporate Citizenship/ Employee engagement Achieve a 11% participation rate in the program among Hydro employees.	Corporate Citizenship/ Employee engagement Achieve a 12% participation rate in the program among Hydro employees.	Corporate Citizenship/ Employee engagement Achieve a 13% participation rate in the program among Hydro employees.	Corporate Citizenship/ Employee engagement Achieve a 14% participation rate in the program among Hydro employees.	



# Hydro & Division/Departmental PUB-NLH-412, Attachment 2 Page 44 of 110, Isl Int System Power Outages additional level of data and must do's



### 2011 Plan Highlights Additional Divisional/Departmental items

GOAL	PUB-NLH-412, Attachment 2 Page 45 of 110, Isl Int System Power Outages
1. SAFETY	
2. ENVIRONMENT	
<b>3a. BUSINESSEXCELLENCE</b> Finance	
<b>3b. BUSINESSEXCELLENCE</b> Project Execution	100% of carryovers completed by revised project schedule date
<b>3c. BUSINESSEXCELLENCE</b> Asset Management/Reliability	Operating projects over \$50,000 ≥ to 95% complete  T-SAIDI forced ≤ 52.5 minutes and SAIDI ≤ 6.21 hrs/customer
<b>3d. BUSINESSEXCELLENCE</b> Customer Service	Formalize a Customer Service (Internal) Improvement Committee with representation from Regulated Operations and each of the service groups
4. PEOPLE	Implement gap closure plan for mandatory safety and technical skills training
5. COMMUNITY	



# **Goal 1: Safety**

PUB-NLH-412, Attachment 2

INITIAT	IVES – Procedures ar	Page 46 of nd Equipment / (	110, Isl Int System Powe Competence	r Outages
2011	2012	2013	2014	2015
<ul> <li>Develop Terms of Reference for Grounding and Bonding Committee.</li> <li>Develop standard guide for Temporary Protective Grounding and Bonding Practices for Generation, Transmission and Distribution maintenance work starting with Equipotential Zone (EPZ) Grounding for Line Operations. Guide to be consistent with newly published CAN/ULC S-801-10 Standard On Electric Utility Workplace Electrical Safety For Generation Transmission and Distribution.</li> <li>Identify and purchase equipment and material requirements to implement Equipotential Zone Grounding and Bonding Practices for line operations.</li> <li>Develop and deliver EPZ training program for line operations.</li> <li>Budget for additional equipment and material requirements to implement temporary Protective Grounding and Bonding Practices in other applications, (generation, terminals, etc.)</li> </ul>	<ul> <li>Purchase equipment and material required to implement remaining temporary Protective Grounding and Bonding Practices.</li> <li>Develop and deliver Protective Grounding and Bonding Practices training package for Generation, Transmission and Distribution maintenance Operations.</li> <li>Develop audit protocol to assess compliance with temporary Protective Grounding and Bonding Standard Practices for Generation, Transmission and Distribution maintenance work.</li> </ul>	Grounding and Bonding Expand Grounding and Bonding Committee mandate to consider standards for permanent grounding applications including plant and terminal station grounding.  Develop/revise standards where necessary for plant and terminal station grounding.	Grounding and Bonding  Budget additional cost of equipment and material requirements to implement permanent Grounding applications.	Grounding and Bonding Purchase equipment and material requirements to implement permanent Grounding applications.



# **Goal 1: Safety**

PUB-NLH-412, Attachment 2

	INITIATIVES – Leadership/ Supportive Culture				
2011	2012	2013	2014	2015	
<ul> <li>Safety (Felt) Leadership</li> <li>Encourage all employees to develop a Personal Safety Plan</li> <li>Deliver a safety interaction coaching workshop to promote CREDO/IRS</li> <li>Management strategy development and implementation to communicate and demonstrate safety and health support</li> <li>Review value of departmental or divisional safety summits</li> <li>Review value and possible process for tracking safety interactions.</li> </ul>	Summits  If deemed of value	Safety (Felt) Leadership	Safety (Felt) Leadership	Safety (Felt) Leadership	



PUB-NLH-412, Attachment 2
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#### **OBJECTIVES - Environment**

 Minimize production requirements and associated air emissions from the Holyrood Thermal Generating Station

TARGETS - Environment					
2011	2012	2013	2014	2015	
Reduce the minimum number of operating hours at the Holyrood Plant by 6.5%	Reduce the minimum number of operating hours at the Holyrood Plant by 14%				
Achieve 17.2GWh of energy savings through Newfoundland and Labrador Hydro managed conservation and demand management programs	Achieve 28.3 GWh of energy savings through Newfoundland and Labrador Hydro managed conservation and demand management programs	Achieve 54.5 GWh of energy savings through Newfoundland and Labrador Hydro managed conservation and demand management programs	Achieve 55.7 GWh of energy savings through Newfoundland and Labrador Hydro managed conservation and demand management programs	Achieve 56.9 GWh of energy savings through Newfoundland and Labrador Hydro managed conservation and demand management programs	

# **Goal 2: Environment**

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#### **OBJECTIVES - Environment**

 Minimize production requirements and associated air emissions from the Holyrood Thermal Generating Station (Continued)

TARGETS - Environr	ment			
2011	2012	2013	2014	2015
Achieve 1.95 GWh of energy savings through internal energy efficiency programs by the end of 2015	Achieve 2.1 GWh of energy savings through internal energy efficiency programs by the end of 2015	Achieve 2.25 GWh of energy savings through internal energy efficiency programs by the end of 2015	Achieve 2.4 GWh of energy savings through internal energy efficiency programs by the end of 2015	Achieve 2.55 GWh of energy savings through internal energy efficiency programs by the end of 2015
*				
				1) poleor

INITIATIVES – Environment				
2011	2012	2013	2014	2015
Reduce the minimum required hours of operation at Holyrood for power system reliability purposes by installing switched capacitor banks at the Come By Chance Terminal Station to provide improved voltage control on the Avalon Peninsula.				
Implement new residential and commercial rebate programs in partnership with NP.	Implement new residential and commercial rebate programs in partnership with NP.	Implement new residential and commercial rebate programs in partnership with NP.	Implement new residential and commercial rebate programs in partnership with NP.	Implement new residential and commercial rebate programs in partnership with NP.
Implement new community based energy efficiency program for Hydro customers.	Implement new energy efficiency program for Hydro customers.	Implement new energy efficiency program for Hydro customers.	Implement new energy efficiency program for Hydro customers.	Implement new energy efficiency program for Hydro customers.



# PUB-NLH-412, Attachment 2 Page 51 of 110, Isl Int System Power Outages

INITIATIVES – Environment				
2011	2012	2013	2014	2015
	Conduct evaluation of Industrial Energy Efficiency Program and provide recommendations for next steps.	Update CDM Potential Study.		
Implement no cost/low cost recommendations from Hydro facility walk through audits.	Regulated Operations to identify energy savings opportunities through review of facility operations and implement actions.	Regulated Operations to identify energy savings opportunities through review of facility operations and implement actions.	Regulated Operations to identify energy savings opportunities through review of facility operations and implement actions.	Regulated Operations to identify energy savings opportunities through review of facility operations and implement actions.



# **Goal 2: Environment**

INITIATIVE	DELIVERABLE	RESPONSIBLE	TIMING
Reduce the minimum required hours of operation at Holyrood for power system reliability purposes by installing switched capacitor banks at the Come By Chance Terminal Station to provide improved voltage control on the Avalon Peninsula.	<ul> <li>Site work Complete</li> <li>Capacitor Banks</li> <li>Received</li> <li>Capacitor Banks</li> <li>Commissioned</li> <li>Capacitor Banks Installed</li> <li>and Operating</li> </ul>	Project Execution and Technical Services	•June 2011 •August 2011 •September •October 2011
Implement new residential and commercial rebate program in partnership with NP.	GWhs of energy efficiency savings.	System Operations and Customer Services	Throughout 2011
Implement new community based energy efficiency program for Hydro customers.	GWhs of energy efficiency savings.	System Operations and Customer Services	Throughout 2011



# **Goal 2: Environment**

2011 INITIATIVES - Environment			
INITIATIVE	DELIVERABLE	RESPONSIBLE	TIMING
Implement no cost/low cost recommendations from Hydro facility walk through audits.	In addition to the savings from previous year's actions, in 2011 achieve 150MWH of new energy savings initiatives as follows:  • 25MWh – HTGS  • 50MWh – TROC  • 25 MWh – TRON  • 25MWh – TROL  • 25 MWh – Hydro Generation	System Operations and Customer Services, HTGS, TROC, TRON, TROL, Hydro Generation	Throughout 2011



#### **OBJECTIVES - Environment**

• Reduce or minimize environmental risks and emissions from diesel generation systems

#### **TARGETS - Environment**

2011	2012	2013	2014	2015
Acquire production data (plant output, station service and unit metering) from all Diesel Plants and format data for automating production monthly reporting.	Analyze data and identify opportunities for efficiency improvements and emission reduction potential	Analyze data and identify opportunities for efficiency improvements and emission reduction potential	Analyze data and identify opportunities for efficiency improvements and emission reduction potential	Analyze data and identify opportunities for efficiency improvements and emission reduction potential



### PUB-NLH-412, Attachment 2 Page 55 of 110, Isl Int System Power Outages

INITIATIVES – Environ	ment			
2011	2012	2013	2014	2015
Establish data acquisition and recording systems for diesel plant production data	Monitor data and analyze for plant efficiency and emission reduction potential.	Monitor data and analyze for plant efficiency and emission reduction potential.	Monitor data and analyze for plant efficiency and emission reduction potential.	Monitor data and analyze for plant efficiency and emission reduction potential.



# **Goal 2: Environment**

Work plan template for year 1 initiatives
PUB-NLH-412, Attachment 2
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2011 INITIATIVES - Environment					
INITIATIVE	DELIVERABLE	RESPONSIBLE	TIMING		
Establishing data acquisition and recording systems for diesel plant production data	Database for diesel plant production data	Information Systems and TRO Operations	December 2011		



Objectives, Targets and Initials NL40 Attachment 2 Page 57 of 110, Isl Int System Power Outages recommended for inclusion in NLH or Functional Divisional and Departmental Plans



# **Goal 2: Environment**

PUB-NLH-412, Attachment 2
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#### **OBJECTIVES - Environment**

 Minimize production requirements and associated air emissions from the Holyrood Thermal Generating Station

TARGETS - Environment				
2011	2012	2013	2014	2015
Complete an update of previous studies on the impact to future emissions, costs and reliability of the introduction of additional wind generation on the Island Interconnected System within a 2012 – 2016 time frame.	Implementation of wind generation recommendation from the 2011 study.			
Develop a policy on Independent Distributed Generation	Subject to external policy approval requirements, Implement internal action to support an approved Independent Distributed Generation Policy			



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INITIATIVES – Environment				
2011	2012	2013	2014	2015
Undertake a study using available data from Hydro's experience with the 2 existing wind generation plants, simulation tools for energy production analysis, simulation tools for electric system operation and reference the experience of other similar electrical systems with large penetrations of wind energy.				
Establish internal working groups and draft policy on Independent Distributed generation for review with stakeholders and approval by the PUB				



# Work plan template for year 1 initiatives PUB-NLH-412, Attachment 2 Page 60 of 110, Isl Int System Power Outages

2011 INITIATIVES - Environment			
INITIATIVE	DELIVERABLE	RESPONSIBLE	TIMING
Undertake a study using available data from Hydro's experience with the 2 existing wind generation plants, simulation tools for energy production analysis, simulation tools for electric system operation and reference the experience of other similar electrical systems with large penetrations of wind energy.	Final Report	Lead by System Planning with inputs from Business Development and System Operations.	December 2011
Establish internal working groups and draft policy on Independent Distributed generation for review with stakeholders and approval by the PUB	Draft distributed generation policy	System Planning	December 2011



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#### **OBJECTIVES - Environment**

 Reduce emissions per unit of energy delivered by achieving not more than 10% variance from ideal production schedule at Holyrood Generating Station by 2014 – maintain at 10% through 2015.

TARGETS - Environment					
2011	2012	2013	2014	2015	
Emission variance from ideal at Holyrood < to 12.5%	11%*	10%	10%	10%	

<sup>\*2012 – 2015</sup> variance targets will be reviewed based on experience with operation of the new capacitor bank at Come-by-Chance



INITIATIVES – Environment				
2011	2012	2013	2014	2015
Evaluate improvements made in System load forecasting over the last couple of years.				
Complete a review of the operation and maintenance of the HTGS condensers and compare with industry best practices				
Initiate capital project to upgrade the hydrogen system at the HTGS.	Complete capital project to upgrade the hydrogen system at the HTGS			
Complete a review of the operation and maintenance of heavy fuel oil burners at the HTGS				
Submit a capital budget proposal to install thrust bearings on Unit 3 to mitigate delays in converting the unit to synchronous condenser operation.				

Work plan template for year 1 initiatives
PUB-NLH-412, Attachment 2
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2011 INITIATIVES - Environment					
INITIATIVE	DELIVERABLE	RESPONSIBLE	TIMING		
Evaluate improvements made in System load forecasting over the last couple of years.	Determination of effectiveness of recent improvements and potential additional initiatives	System Operations and Customer Services	Fourth quarter 2011		
Complete a review of the operation and maintenance of the HTGS condensers and compare with industry best practices	Determination potential operational improvements to the HTGS condenser operations	HTGS	Fourth quarter 2011		
Initiate capital project to upgrade the hydrogen system at the HTGS.	Contract development and award for upgrade to the HTGS hydrogen system	HTGS	Throughout 2011		
Complete a review of the operation and maintenance of heavy fuel oil burners at the HTGS	Determination of improvement potential for the operation and maintenance of heavy fuel oil burners at the HTGS	HTGS	Fourth quarter 2011		
Submit a capital budget proposal to install thrust bearings on Unit 3 to mitigate delays in converting the unit to synchronous condenser operation.	Capital budget proposal to install thrust bearings on Unit 3	HTGS	First quarter 2011		



PUB-NLH-412, Attachment 2
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#### **OBJECTIVES - Environment**

• Achieve reduction in the 5 year rolling average number of reportable hydrocarbon spill events.

TARGETS - Environment					
2011	2012	2013	2014	2015	
Achieve $\geq$ 10% reduction in the 5 year rolling average number of reportable spills.	Achieve > 5% reduction in the 5 year rolling average number of reportable spills.	Achieve > 5% reduction in the 5 year rolling average number of reportable spills.	Achieve > 5% reduction in the 5 year rolling average number of reportable spills.	Achieve > 5% reduction in the 5 year rolling average number of reportable spills.	



### PUB-NLH-412, Attachment 2 Page 65 of 110, Isl Int System Power Outages

INITIATIVES – Environment					
2011	2012	2013	2014	2015	
Evaluate spill events and reduction programs in respect to spill reduction target performance	Evaluate spill events and reduction programs in respect to spill reduction target performance	Evaluate spill events and reduction programs in respect to spill reduction target performance	Evaluate spill events and reduction programs in respect to spill reduction target performance	Evaluate spill events and reduction programs in respect to spill reduction target performance	



### **Goal 2: Environment**

# Work plan template for year 1 initiatives PUB-NLH-412, Attachment 2 Page 66 of 110, Isl Int System Power Outages

2011 INITIATIVES - Environment					
INITIATIVE	DELIVERABLE	RESPONSIBLE	TIMING		
Evaluate spill events and reduction programs in respect to spill reduction target performance	% reduction in 5 year rolling average of number of reportable spill events	Environmental Services Department in conjunction with all Operating Managers	Throughout 2011		



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#### **OBJECTIVES - Environment**

• Reduction in the amount of selected waste types entering municipal landfills

TARGETS - Environment					
2011	2012	2013	2014	2015	
Reduce the amount of re-chargeable batteries and cell phones entering landfills	Reduce amount of disposable batteries and scrap metal entering landfills.	Reduce amount of CFLs and fluorescent lighting tubes entering landfills	Reduce amount of used oil filters and oily rags entering landfills		
Determine waste volumes and categories produced as a result of activities and operations at Hydro Place	Determine waste volumes and categories produced as a result of activities and operations at Bay d'Espoir Generating Station	Determine waste volumes and categories produced as a result of activities and operations at Port Saunders Regional Office			



INITIATIVES – Environment				
2011	2012	2013	2014	2015
Promote Call2Recycle program at Bay d'Espoir, Holyrood and Bishop's Falls.	Confirm and implement opportunities in selected locations for diversion of disposable batteries and scrap metal from landfills	Confirm and implement opportunities in selected locations for diversion of CFLs and fluorescent lighting tubes from landfills	Confirm and implement opportunities in selected locations for diversion of used oil filters and oily rags from landfills	
Complete waste audit at Hydro Place, subject to approval of budget item in 2011 budget	Implement, or budget for, waste reduction initiatives resulting from Hydro Place waste audit	Implement, or budget for, waste reduction initiatives resulting from Bay dÈspoir Generating Station waste audit.	Implement, or budget for, waste reduction initiatives resulting from Port Saunders Regional Office waste audit.	
Budget and determine resource requirements for waste audit at the Bay dÈspoir Generating Station	Complete Bay dÈspoir Generating Station waste audit, subject to budgetary approval	Complete Port Saunders Regional Office waste audit, subject to budgetary approval		
	Budget and determine resource requirements for waste audit at the Port Saunders Regional Office			



# Work plan template for year 1 initiatives PUB-NLH-412, Attachment 2 Page 69 of 110, Isl Int System Power Outages

2011 INITIATIVES - Environment					
INITIATIVE	DELIVERABLE	RESPONSIBLE	TIMING		
Promote Call2Recycle program at Bay d'Espoir, Holyrood and Bishop's Falls.	Introduction of materials to promote recycling of re-chargable batteries and cell phones at selected locations	Environmental Services and Facility Managers	Throughout 2011		
Complete waste audit at Hydro Place, subject to approval of budget item in 2011 budget	Hydro Place waste audit report	Hydro Place Administration and Environmental Services	January 2012		
Budget and determine resource requirements for waste audit at the Bay dèspoir Generating Station	Operating budget proposal	Hydro Generation and Environmental Services	First quarter 2011		



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#### **OBJECTIVES - Environment**

 Remove all sealed equipment that contains, or could potentially contains, greater than or equal to 50 mg/kg (ppm) of PCBs from service by 2025\*

TARGETS - Environment					
2011	2012	2013	2014	2015	
Remove 3% of sealed equipment from service	Remove 6.5% of sealed equipment from service				

<sup>\*</sup>This objective assumes that Environment Canada will formally agree to proposals made by the Canadian Electricity Association to extend the requirement for removal of sealed equipment that may contain PCBs from 2014 to 2025.



INITIATIVES – Environment					
2011	2012	2013	2014	2015	
Update instrument transformer capital budget proposal to reflect plan for next 5 years	Execute instrument transformer and bushing replacement plan as submitted to Environment Canada	Execute instrument transformer and bushing replacement plan as submitted to Environment Canada	Execute instrument transformer and bushing replacement plan as submitted to Environment Canada	Execute instrument transformer and bushing replacement plan as submitted to Environment Canada	
Execute instrument transformer replacement plan for 2011 as submitted to Environment Canada					
Update transformer upgrading capital budget proposal to reflect bushing replacements for the next 5 years	Update capital budget proposals for instrument transformers, (transformer upgrading includes bushing replacement and breaker replacements)				
Execute bushing replacement plan for 2011 as submitted to Environment Canada					
Prepare capital budget proposals for breaker replacements to include replacement of oil circuit breakers				nalcor	

Work plan template for year 1 initiatives
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2011 INITIATIVES - Environment					
INITIATIVE	DELIVERABLE	RESPONSIBLE	TIMING		
Develop capital budget proposals to support PCB reduction targets	Capital budget proposal for sealed equipment replacement	TRO Operations, and Project Execution and Technical Services	First quarter of 2011		
Execute instrument transformer and bushings replacement plans for 2011 as submitted to Environment Canada	Replaement of instrument transformers and bushings	TRO Operations, and project Execution and Technical Services	Throughout 2011		



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TARGETS – Financial Performance						
2011	2012	2013	2014	2015		
Cash 1 Timing: Treasury to prepare three-month rolling cash flow forecast updated quarterly Accuracy: Three-month rolling cash flow forecasts within +/-20% of budget	Timing: Treasury to prepare tThree-month rolling cash flow forecast updated quarterly  Accuracy: Three-month rolling cash flow forecasts within +/-15% of budget	Timing: Three-month rolling cash flow forecast updated quarterly  Accuracy: Three-month rolling cash flow forecasts within +/-10% of budget	Timing: Three-month rolling cash flow forecast updated quarterly  Accuracy: Three-month rolling cash flow forecasts within +/-5% of budget	Timing: Three-month rolling cash flow forecast updated quarterly  Accuracy: Three-month rolling cash flow forecasts within +/-2.5% of budget		

1 Long term target and metric to be reviewed



INITIATIVES – Financial Perf	PUB-NLH-412, Attachment 2 Page 74 of 110, Isl Int System Power Outages			
2011	2012	2013	2014	2015
Forecasting:				
Revise ACC 17, BUDGETING AND FORECASTING OF OPERATING EXPENSES, to include the frequency (Quarterly).  Add a statement, "additional forecasting may be requested if deemed necessary".  Communicate and implement change in policy.  Develop Clarity as a tool to assist in forecasting by Business Unit owners.  Provide Clarity training to Power				
Users.				



## Goal 3: Business Excelepage 75 of 110, Isl Int System Power Outages

INITIATIVES – Financial Performance						
2011	2012	2013	2014	2015		
Cost Control:						
Develop a reporting method in Clarity to support monthly variance analysis.						
Provide Clarity training to all concerned.						
Complete variance review and update report by the 7 <sup>th</sup> working day of the following month.						
Complete visit to plants and area offices to deliver an educational session for managers and other selected supervisor personnel on ROCE and other financial items to aid understanding and commitment to Hydro Financial goals.						



PUB-NLH-412, Attachment 2 Page 76 of 110, Isl Int System Power Outages **INITIATIVES – Financial Performance** 2011 2012 2013 2014 2015 Regulatory: Establish broad-based internal regulatory group \* that will provide on-going monitoring of Hydro Regulated financial performance, PUB filings and future readiness to file GRA. Establish Hydro's targeted ROE Monitor Performance Monitor Performance and take Monitor and take appropriate Performance earnings band appropriate action • Monitor ROE performance and take action and take appropriate action to perform within appropriate the established range action Maintain regulatory data and models in state of readiness for filing GRA within six months of receiving go.



<sup>\*</sup> Including finance, rates and regulatory, legal, asset management, operations and customer service personnel.

INITIATIVES – Financial	ial Performance Page 77 of		PUB-NLH-412, Attachm f 110, Isl Int System Power Ou	
2011	2011 2012		2014	2015
Capital Assets System and Process:				
Document capital assets system current state and develop future state (Gap analysis and closure plan with focus on process, technology and people ensuring current and future financial reporting and AMS requirements are met)				
Investigate technology requirements and identify funding, operating and capital, that will potentially be required and include in 2012 budgets	Implement new capital assets system and processes	Implement new capital assets system and processes		



PUB-NLH-412, Attachment 2 Page 78 of 110, Isl Int System Power Outages **INITIATIVES – Reliability - Asset Management** 2011 2012 2013 2014 2015 Cash: Revision of Procedure ACC 17, BUDGETING AND FORECASTING OF OPERATING EXPENSES, to include the suggested frequency (Quarterly) Develop interface between Treasury and business units to facilitate continual reporting of revised O&M forecasts - likely by having Treasury receive training and required permissions in order to access field-level operating budgets in Clarity Develop interface between Treasury and Risk Management and Capital Assets group to facilitate continual reporting of revised CAPEX forecasts



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Initiatives – Reliability and Asset Management					
2011	2012	2013	2014	2015	
•Quality checks on asset registry	Maintain accurate asset registry (process)	<ul> <li>Review and confirm accurate asset registry</li> <li>Expand registry to include detailed information on each asset such as nameplate data, drawings, design info etc.</li> </ul>	Maintain accurate asset registry	•Review and confirm accurate asset registry	
<ul> <li>Develop strategy to establish critical spares for all areas</li> <li>Develop five year plan to connect all critical spares to assets</li> </ul>	<ul> <li>Establish critical spares listing for 25% of all assets</li> <li>Connect 20% of critical spare inventory to assets</li> </ul>	<ul> <li>Establish critical spares listing for 25% of all assets</li> <li>Acquire/dispose of critical spares as appropriate</li> </ul>	•Establish critical spares listing for 25% of all assets	•Establish critical spares listing for 25% of all assets	



PUB-NLH-412, Attachment 2  NITIATIVES — Reliability and Asset Management  Page 80 of 110, Isl Int System Power Outages					
2011	2012	2013	2014	201	
	<ul> <li>Investigate asset management software tool for asset maintenance, asset health monitoring, asset registry, inventory, purchasing, scheduling, OEM manuals and other technical data required to support and drive asset management</li> <li>Initiate capital budget proposal to implement the software tool</li> </ul>	•Firm up details of requirements, complete capital budget proposal and submit as part of the 2013 capital submission	•Implement new asset management toolset as part of the JDE replacement / upgrade		
	Develop asset health monitoring and condition assessment strategy for major asset groups to support Long Term Asset Planning	•Execute Strategy			
	•Establish Technical Councils to perform Root Cause Analysis of significant disturbance events on power system and customers				



PUB-NLH-412, Attachment 2  INITIATIVES - Reliability and Asset Management  Page 81 of 110, Isl Int System Power Outages						
INITIATIVES – Reliability	y and Asset Ivianageme		. System i Swei Sut	<u></u>		
2011	2012	2013	2014	2015		
•Participate as required in the PUB technical review process as per the schedule agreed to with the PUB		•Initiate internal discuss: engage PUB to establish annual quality of service targets for NLH that drive cost of service				
•Re-new focus on Work Execution Metrics - emphasis on Weekly Schedule and Annual Work Plan compliance & resource leveling  •Update PM program as per the Asset Maintenance Review	•Analyze metrics and solidify annual plans					
•Review and revise the Risk Registry and Business Continuity Plan prior to the 5 year corporate planning sessions to ensure necessary targets and initiatives are incorporated into the five year plan						



INITIATIVES – Reliabil	ity and Asset Manageme		B-NLH-412, Attachme nt System Power Outa	
2011	2012	2013	2014	2015
Continue to develop the interface between Operations and Project Execution & Technical Services – establish expectations with respect to projects and technical support.				
•Capture significant, unexpected equipment failures and analyze towards potential improvements in maintenance tactics, design,	Establish AM function/process and technical councils			<b>→</b>
operating practices, storage, installation practices				
	•Develop core training/knowledge areas by AMS function	•Implement training strategy		
operating parameters in use are within design specifications			3) -	

PUB-NLH-412, Attachment 2

#### **OBJECTIVES – Customer Satisfaction**

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• <u>Internal Customer Satisfaction (Hydro Group)</u> – Achieve an overall customer satisfaction rating of 90% and a minimum 70% rating for each individual service group by 2015

TARGET – Customer Satisfaction						
2011	2012	2013	2014	2015		
Establish current satisfaction rating	25% improvement towa <del>rd to 2015</del> target	50% improvement toward to 2015 target	75% improvement toward to 2015 target	•Achieve an overall customer satisfaction rating of 90% and a minimum 70% rating for each individual service group		



INITIATIVES – Custo	omer Satisfaction	Pag	PUB-NLH-412, e 84 of 110, Isl Int System P	Attachment 2 ower Outages
2011	2011 2012		2014	2015
Formalize a Customer Service (Internal) Improvement Committee with representation from Regulated Operations and each of the service groups				
Formalize a strategic plan for improving and benchmarking internal customer services provided to Regulated Operations based on a four year plan	<ul> <li>Implement all initiatives indentified for year</li> <li>1 of the four year plan</li> <li>Measure results and adjust for variations</li> </ul>	<ul> <li>Implement all initiatives indentified for year 2 of the four year plan</li> <li>Measure results and adjust for variations</li> </ul>	<ul> <li>Implement all initiatives indentified for year 3 of the four year plan</li> <li>Measure results and adjust for variations</li> </ul>	<ul> <li>Implement all initiatives indentified for year 4 of the four year plan</li> <li>Measure results and adjust for variations</li> </ul>



Hydro – Other desirable intermediate inclusion if they can be delivered



## PUB-NLH-412, Attachment 2 Page 86 of 110, Isl Int System Power Outages

INITIATIVES – Environment				
2011	2012	2013	2014	2015
Environmental Management System targets identified and Program Leaders established	Environmental Management System targets identified and Program Leaders established	Environmental Management System targets identified and Program Leaders established	Environmental Management System targets identified and Program Leaders established	Environmental Management System targets identified and Program Leaders established
Review and approval of proposed Environmental Management System targets	Review and approval of proposed Environmental Management System targets	Review and approval of proposed Environmental Management System targets	Review and approval of proposed Environmental Management System targets	Review and approval of proposed Environmental Management System targets
Monthly update to status of EMS targets	Monthly update to status of EMS targets	Monthly update to status of EMS targets	Monthly update to status of EMS targets	Monthly update to status of EMS targets



Work plan template for year 1 initiatives
PUB-NLH-412, Attachment 2
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2011 INITIATIVES - Environment					
INITIATIVE	DELIVERABLE	RESPONSIBLE	TIMING		
Environmental Management System targets identified and Program Leaders established	Proposed EMS targets	EMS Management Representatives	January 2011		
Review and approval of proposed Environmental Management System targets	Approved EMS targets	NLH Leadership Team	January 2011		
Monthly update to status of EMS targets	Monthly report to NLH Leadership Team on EMS target status	EMS target Program Leader	monthly		



#### **OBJECTIVES - Environment**

• To enhance performance relating to NLH's environmental framework Stakeholder Acceptance building block increase customers identifying Hydro as an environmentally responsible organization by achieving an 8.8 rating on point "operates in an environmentally responsible manner" on the customer survey in 2012

#### **TARGETS - Environment**

2012	2013	2014	2015
8.8 rating	8.8 rating or better	8.8 rating or better	8.8 rating or better



INITIATIVES – Environment					
2011	2012	2013	2014	2015	
Create a plan for employee and stakeholder awareness of Hydro's environmental activities	Implement plan	Produce a Corporate Responsibility/Sustainab ility Report			



Work plan template for year 1 initiatives
PUB-NLH-412, Attachment 2
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2011 INITIATIVES - Environment					
INITIATIVE	DELIVERABLE	RESPONSIBLE	TIMING		
Create a plan for employee and stakeholder awareness of Hydro's environmental activities	An employee and stakeholder awareness plan	Environmental Services and Corporate Communication and Stakeholder Relations	Third quarter of 2011		



PUB-NLH-412, Attachment 2
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#### **OBJECTIVES - Environment**

 To support NLH's performance relating to Pollution Prevention and Stakeholder Acceptance environmental framework building blocks, put in place mechanisms to document and report on emissions of greenhouse gases associated with Corporate operations and activities by the end of 2013, consistent with the Provincial Energy Plan action proposal to join the Climate Change Registry to ensure consistent and verifiable measurement of GHG emissions.

TARGETS - Environment					
2011	2012	2013	2014	2015	
Identify geographic, organizational and operational boundaries for GHG quantification; determine suitable quantification methods;	Collect data from available sources identified and compile in a format compatible with the Climate Registry's voluntary reporting mechanism.	Review the 2012 GHG quantification program for issue, problems or areas for improvement			



INITIATIVES – Environment					
2011	2012	2013	2014	2015	
identify data / information sources and data capture mechanisms	Identify reasons for gaps in available data and actions required to remedy these weaknesses				



## **Goal 2: Environment**

Work plan template for year 1 initiatives
PUB-NLH-412, Attachment 2
Page 93 of 110, Isl Int System Power Outages

2011 INITIATIVES - Environment					
INITIATIVE	DELIVERABLE	RESPONSIBLE	TIMING		
identify data / information sources and data capture mechanisms	Documentation of data sources and gaps	Environmental Services, System Operations and Customer Services, Information Systems	Third Quarter 2011		



### **Goal 2: Environment**

PUB-NLH-412, Attachment 2
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energy

#### **OBJECTIVES - Environment**

 To support NLH's performance relating to Pollution Prevention and Stakeholder Acceptance environmental framework building blocks, enhance corporate environmental data monitoring capability to provide consistent, accurate and verifiable data for Environmental reports.

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IVK	6 - I V.	- Environment
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2011	2012	2013	2014	2015
•Identify data needs and gaps and an action plan	•Implement action plan	•Test/verify environmental data.		
		94		nalcor

2011	2012	2013	2014	2015
Identify Environmental data currently being eported. Identify the owners / people responsible for the data and all the stakeholders. Initiate discussions with IS on developing a database to store and manage the environmental data.	<ul> <li>Initiate the development of the environmental database.</li> <li>Develop methods and standards with data owners to ensure data is verifiable.</li> <li>Identify potential future reporting requirements (GHG, PCB, Sustainability, etc.)</li> </ul>	Finalize and test environmental database.     Develop and deliver training package for database stakeholders.		

Work plan template for year 1 initiatives
PUB-NLH-412, Attachment 2
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2011 INITIATIVES - Environment				
INITIATIVE	DELIVERABLE	RESPONSIBLE	TIMING	
•Identify Environmental data currently being reported.	Existing data report	Environmental Services	May 2011	
•Identify the owners / people responsible for the data and all the stakeholders.	Data needs report	Environmental Services	September 2011	
•Initiate discussions with IS on developing a database to store and manage the environmental data.	Environmental performance database	Information Services and Environmental Services	December 2011	



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#### **OBJECTIVES - Environment**

• To support NLH's performance relating to Species Management and Stakeholder Acceptance environmental framework building blocks, evaluate opportunities for improvements to Company policies, activities and programs affecting biodiversity.

#### **TARGETS - Environment**

2011	2012	2013	2014	2015
•Evaluate biodiversity requirements and existing programs in NLH	•Identify opportunities/recomme ndations for changes to NLH biodiversity policies and programs	•Implement selected opportunities/recomme ndations	•Implement selected opportunities/recomme ndations	
		0.7		Alpalcar

INITIATIVES – Environment							
2011	2012	2013	2014	2015			
Complete a review of biodiversity policies and program in selected utility and non-utility companies							
Complete a review of existing NLH programs and initiatives relating to biodiversity.							
Complete a review of existing and proposed regulatory requirements affecting biodiversity programs							



## Work plan template for year 1 initiatives PUB-NLH-412, Attachment 2 Page 99 of 110, Isl Int System Power Outages

2011 INITIATIVES - Environment						
INITIATIVE	DELIVERABLE	RESPONSIBLE	TIMING			
•Complete a review of biodiversity policies and program in selected utility and non-utility companies	Evaluation report	•Environmental Services	May 2011			
Complete a review of existing     NLH programs and initiatives     relating to biodiversity.	Evaluation report	•Environmental Services •System Operations •Hydro Generation •TRO Operations •Hydro Generation	September 2011			
•Complete a review of existing and proposed regulatory requirements affecting biodiversity programs	Evaluation report	Environmental Services	December 2011			

## Graphics For Various Goage 100 of 110, Isl Int System Power Outages



# Goal 1: Safety - Framework PUB-NLH-412, Attachment 2 Page 101 of 110, Isl Int System Power Outages

		Page 101 of 110, ISI Int System Power Outages						Outages	
Clear Vision Goals and Objectives	Techni Sound In Cla Proced	Best ass	Safety First Decision Making Culture	Timely And Effective Training	Cultu Ope Repo	en rting	Active Union Involvement In All Key Strateg	nt	Leading Lagging Ratio
			Sı	uccess Fact	ors				
Build, Operate and To Generate / Prod Distribute Energy			Successfu	l Execution :	=	• <i>Sa</i> j	nployee Co fety Perfor ued Emplo	mance	e
			В	Building Blo	cks				
Leadership	Procedur and Equipme		Competence	Supportive Culture	Mana	nion agement nment	Respons	ibility	Reporting
Capability			Focus	Discipli	Discipline Relation		onships Communicatio		munication



## **Our Framework for Safety**

## Excellence

PUB-NLH-412, Attachment 2
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#### **LEADERSHIP**

- Clear vision, goals and objectives
- Safety champions who model expected behaviors

## PROCEDURES & EQUIPMENT

- Documented methods for all safety-sensitive tasks
- Technically sound, best-in-class procedures
- Safe equipment and physical work environment

#### COMPETENCE

- Clear standards & qualification requirements
- Effective recruitment
- Competence assurance
- Timely and effective training
- Safety organization & specialists

### SUPPORTIVE CULTURE

- "Safety first" mindset
- Safety is everyone's responsibility
- We take care of each other
- All incidents are preventable
- Risk-free reporting

#### UNION-MGT ALIGNMENT

- Active union involvement in all key strategies
- Working as one, activities and initiatives based on alignment and mutual agreement
- Safety is not negotiable

#### **RESPONSIBILITY**

- All employees have a personal responsibility for their safety and the safety of others
- Clear system of internal responsibilities

#### Reporting, Analysis and Continuous Improvement

#### **LEADING INDICATORS**

Hazards, Near Misses, Safe and Unsafe Observations, First Aids, Inspections, Audits

#### LAGGING INDICATORS

Medical Treatments, Lost Time Injuries, Severity, analyzed by injury type, part of body, location, etc.



## **Safety Culture Model**

PUB-NLH-412, Attachment 2 Page 103 of 110, Isl Int System Power Outages

#### **Independent**

#### "Zero is attainable"

- Well understood process and operation
- Personal commitment
- Supervision/resource comfortable leading or allowing others to lead
- Ownership for procedures at team level
- Trust allowing for shared logic and ideas

#### Interdependent

#### "Zero is sustainable"

- Co-operation within and across teams
- Organizational pride
- We take care of each other
- Team fully engaged in the goal pesitor

#### **Dependent**

#### "Zero is difficult"

- Management commitment
- Governed by rules and regulations
- Management centered activities
- Selective communication of objectives
- Discipline as a development tool
- Turf-type atmosphere

#### Reactive

#### "Zero is unrealistic"

- Goal of compliance
- Discipline is reactive to incidents
- Performance driven by management
- Management provided resource but lack of management involvement



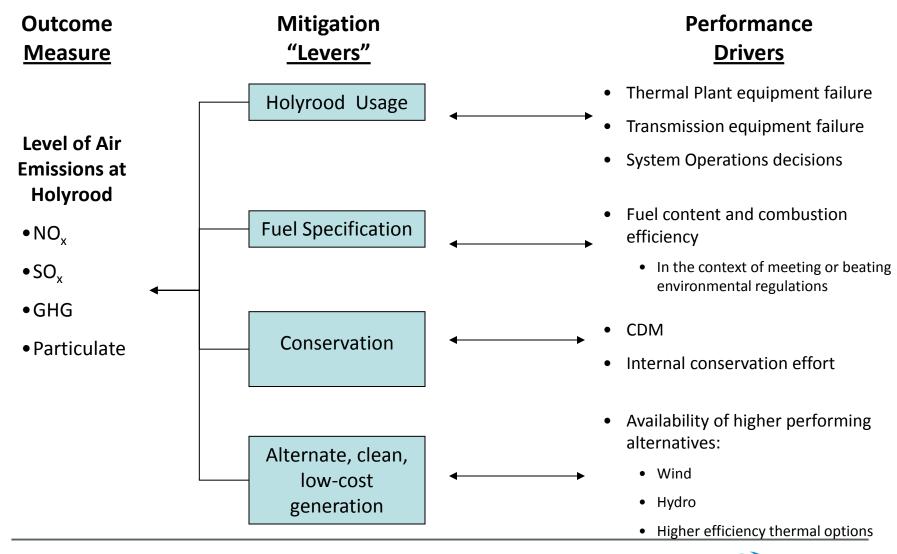
## Goal 2: Environment - Framework, Attachment 2

					nt System Power Outages		
Minimize Emissions Per kWh Delivered		Emission Reduction Plan	Displace Fuel	Meet EMS Targets	Conservation And Demand Management		
			Success Factor	ors			
		Env	vironmental Le	eader			
			Building Bloo	cks			
Compliance	Preventio Of Pollutio	Risk	Species Manageme	nt Stakeholder Acceptance			
Capability Focus			Disciplin	e Relations	hips Communication		



## **Environment – Air Emissions Detail**

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## **Environment – Land/Water Detail**

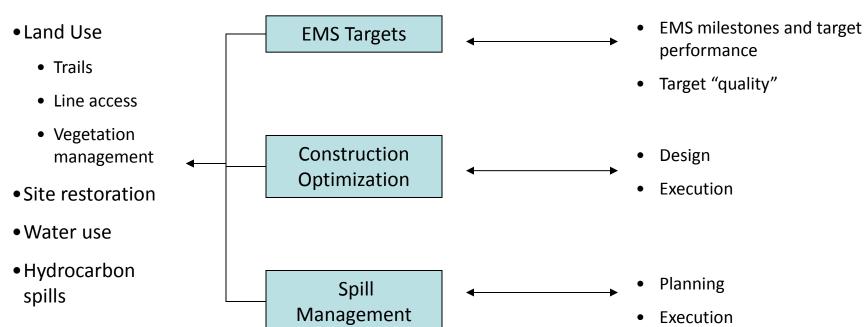
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Outcome Measure

Mitigation "Levers"

Performance Drivers

# Land/Water Stewardship





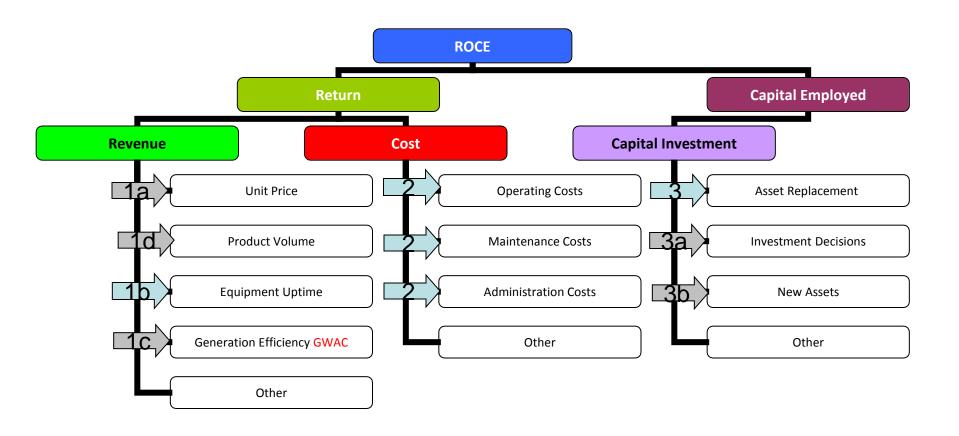
## Goal 3: Business Excellence - Framework

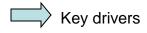
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						ı ağı	. 107 01 110	, isi iiit syste		ci Outages
ROCE Maximized										
Returr	n		Capital Employed				Reliability		Customer and	
Revenue (†)		t Mgmt (↓)	Sche (on t		(meets	uality appropr ndards)		eets up-tim standards)	е	Shareholder Satisfaction
Success Factors										
Consumer xpectations			Busi	ness E	xcel	lenc	е			
Apcotations										
			Bu	ilding	Blo	cks				
		Understa	nding and I	Measuring	y What	Drives	Our Busi	ness		
Planni	ng Excelle	nce				Execut	tion Excel	lence		
Investment Decision Making & Acquisition Process Quality	Busines Planning Reporting Contro Proces Quality	g, Engles, & Engles, & Ex	gineering/ FEL ccellence	Construction and Asset Managem Strateg		agement	Asse Replace Strate	ment	Commitment to Customer and Shareholder	
Capability Focus			cus	Disc	Discipline Relationships Commun			nmunication		



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# Goal 4: People - Framework PUB-NLH-412, Attachment 2 Page 109 of 110, Isl Int System Power Outages

Respect & Dignity	Informed & Involved	Feedback & Recognition	Skilled People with Required Tools	Union as Trusted Partner	Committed To Excellence		
Success Factors							

## NALCOR TEAM Skilled, Motivated and Committed

Building Blocks							
Employees Are VALUED	Are LEADERSHIP		SKILLED & CAPABLE Employees		Jnion-Company OLLABORATION	Focus on PERFORMANCE & ACCOUNTABILITY	
Capabi	lity		Focus	Discipline		Relationships	Communication



# Goal 5: Community - Framework, Attachment 2

Brand Equity	Strong stakeholder relationships	Employee Engagement	Strong/ Targeted Media Reputation	of 110, Isl Int System P Alignment Shareholder Board Leadership	Awards & Recognition			
	Success Factors							

<u>Principles:</u> Visibility, Transparency, Distinctiveness, Consistency, Authenticity

**Good Corporate Reputation =** 

- Powerful corporate asset
- Insurance policy
- Stakeholder support

Building Blocks							
Corporate Values							
Emotional Appeal	Products & Services, Operational Excellence		Vision & Leadership		Workplace Environment	Financial & Business Performance	Corporate Citizenship Safety, Env. Energy Cons. Comm.Invest
Capability		Foc	us		Discipline	Relationships	Communication



### Nalcor Energy PUB-NLH-412, Attachment 3 2012-2016 Plan – Hydro





April 30, 2012 deck

### **Presentation structure**

PUB-NLH-412, Attachment 3 Page 2 of 137, Isl Int System Power Outages

•	Quilt Snapshot	Slide 4
•	Hydro – High level plan detail	Slide 5
•	Hydro & Division/Departmental additional must do's	Slide 70
•	Hydro – Other desirable items that could be considered	Slide 86
•	Reliability Data analysis	Slide 100
•	Graphics For Various Goals	Slide 128

## **Hydro - Plan Highlights**

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## **2011 Plan Highlights**

	3
GOAL	
1. SAFETY	Achieve safety lead/lag ratio >= 600:1(tbc) or 0 events  Page 4 of 137, Isl Int System Power Outages  All injury frequency rate (AIF) ≤ 0.80(tbc) and Lost time injury frequency rate (LTIF) ≤ 0.20(tbc)  Complete planned 2012 activities related to Work Protection Code, Grounding and Bonding, Work Methods and  Task based Risk Assessment for high risk tasks
2. ENVIRONMENT	Complete a minimum of 95% of approved Environmental Management System Targets Reduce Holyrood emissions per unit of energy delivered by achieving ≤ 11.0% variance from Through Hydro managed CDM programs, achieve 1.8 GWh of energy savings in the residential & commercial area and 4.9 GWh of energy savings in the Industrial area. Achieve 0.15 GWh of energy savings through Hydro's internal energy efficiency programs
3a. BUSINESS EXCELLENCE Finance	Achieve HYDRO net income of \$42.7M(I), \$15.3M9R) Return on Capital Employed of 7.3% Maintain operating costs to no more than the approved O&M budget of \$110.3M. Readiness to file GRA within required timelines and Develop multi-year regulatory process improvement plan and complete planned 2012 activities <sup>3</sup>
<b>3b. BUSINESS EXCELLENCE</b> Project Execution	Completion rate of capital projects per original schedule improved from xx% to xx% Achieve all-project variance of $\geq$ 10% improvement year over year
3c. BUSINESS EXCELLENCE Asset Management/Reliability	NLH N-1 Winter Availability ≥ 98%  Complete 2012 phase of asset management plan (e.g. AMS reporting metrics validated. & Framework for critical spares evaluation completed.)
<b>3d. BUSINESS EXCELLENCE</b> Future reliable cost eff. supply	In collaboration with other Nalcor entities, complete planned 2012 activities to ensure a reliable, cost effective electricity supply for the long-term provincial power supply scenario as well as export opportunities.
3e. BUSINESS EXCELLENCE Customer Service	Maintain a Rural Residential Customer Satisfaction rate of <u>&gt;</u> 90%
<b>3f. BUSINESS EXCELLENCE</b> Non Regulated Assets	Complete planned 2012 activities to finalize integration of Exploits and Menihek assets
4. PEOPLE	Complete 95% of EOS Workplace improvement plans
5. COMMUNITY	Complete planned 2012 activities outlined in the multi-year community plan to support achieving a 50% "strong reputation" measure in 2013

# Hydro – Plan detail

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		Page 7 of 13	7, Isl Int System Powe						
INITIAT	INITIATIVES – Procedures and Equipment / Competence								
2012	2013	2014	2015	2016					
<ul> <li>Work Methods</li> <li>Review Terms of Reference for all Work Methods Committees.</li> <li>Assess Critical Task Inventories for additions or revisions.</li> <li>Develop TBRA's for any new or revised critical tasks performed in 2012.</li> <li>Develop Work Method (Reviewed AND Verified Status¹) for each critical task performed in 2012.</li> <li>Ensure TBRA's are completed for at least 85% of all critical tasks identified.</li> <li>Develop Work Methods (Reviewed NOT Verified Status²) for at least 85% of total critical tasks identified.</li> <li>Deliver HREC³ and TBRA⁴ training to employees as identified in 2011.</li> <li>Conduct audit of TBRA and Work Method Process.</li> <li>Work method has been reviewed and field verified.</li> <li>Work Method is reviewed but has not been verified either through field verification or desktop review.</li> <li>Hazard Recognition, Evaluation and Control.</li> <li>Task-Based Risk Assessment.</li> <li>Note: An example is provided on slide 13 outlining target expectations</li> </ul>	<ul> <li>Work Methods</li> <li>Assess Critical Task Inventories for additions or revisions.</li> <li>Develop TBRA's for all remaining critical tasks.</li> <li>Develop Work Method (Reviewed AND Verified Status) for each critical task actually performed in 2013.</li> <li>Develop Work Methods (Reviewed NOT Verified Status) for all remaining critical tasks.</li> <li>Continue auditing work methods process (TBRA and work methods)</li> </ul>	<ul> <li>Work Methods</li> <li>Assess Critical Task Inventories for additions or revisions.</li> <li>Develop TBRA's for any new or revised critical tasks.</li> <li>Develop Work Method (Reviewed AND Verified Status) for each critical task performed in 2014.</li> <li>Develop Work Methods (Reviewed NOT Verified Status) for all remaining critical tasks.</li> <li>Assess Critical Task Inventories to consider reduction of critical task criteria to include lower risk tasks</li> <li>Continue auditing work methods process (TBRA and work methods)</li> </ul>	Work Methods  Assess Critical Task Inventories for additions or revisions (considering any new criteria)  Develop TBRA's for all critical tasks.  Develop action plan for development and verification of Work Methods for Lower Risk Tasks meeting new Critical Task criteria.  Continue auditing work methods process (TBRA and work methods)	Work Methods  Assess Critical Task Inventories for additions or revisions (considering any new criteria)  Develop TBRA's for all critical tasks.  Continue auditing work methods process (TBRA and work methods)					



INITIATIVES – Procedures and Equipment / Competence							
2012	2013	2014	2015	2016			
<ul> <li>Work Protection Code</li> <li>Software – Implement in BDE and continue in-house development in ECC.</li> <li>Training - Continue with online training and evaluate its effectiveness.</li> <li>Support - Strengthen local code committee support.</li> <li>Feedback - Complete corporate and local process and paper audits.</li> </ul>	Work Protection Code      Software - Review the suitability of using the software application in transmission & distribution sites.      Training - Implement improvements from assessment and continue with online training.      Support - Implement support focusing on role of the supervisor.      Feedback - Complete corporate and local process and paper audits.	<ul> <li>Work Protection Code</li> <li>Training - Continue with online training and evaluate effectiveness.</li> <li>Support - shape the supervisor as a performance coach</li> <li>Feedback - review audit process to reflect the impact of the software application</li> </ul>	Work Protection Code  •Training – continue  •Support – continue  •Feedback – focus on process auditing	Work Protection Code  •Feedback – focus on process auditing			



Page 9 of 137, Isl Int System Power Outages INITIATIVES — Procedures and Equipment / Competence								
2012	2013	2014	2015	2016				
<ul> <li>Purchase equipment and material required to implement temporary Protective Grounding and Bonding Practices (such as pole bands and temporary ground assemblies)</li> <li>Develop and deliver Protective Grounding and Bonding Practices training package for Line Operations (trainers to be determined by GBC committee).</li> <li>Develop audit protocol to assess compliance with temporary Protective Grounding and Bonding Standard Practices for Line Operations.</li> </ul>	<ul> <li>Expand Grounding and Bonding Committee mandate to consider standards for permanent grounding applications including plant and terminal station grounding.</li> <li>Develop/revise standards where necessary for plant and terminal station grounding.</li> <li>Audit temporary grounding and bonding practices.</li> </ul>	Grounding and Bonding  Budget additional cost of equipment and material requirements to implement permanent grounding applications.  Audit temporary grounding and bonding practices.	Grounding and Bonding  Purchase equipment and material to implement permanent grounding applications.  Audit temporary grounding and bonding practices.	Grounding and Bonding  • Audit grounding and bonding practices.				



INITIATIVES – Procedures and Equipment / Competence								
2012	2013	2014	2015	2016				
<ul> <li>Fall Protection</li> <li>Identify those requiring training and develop plan to deliver training consistent with 2012 WHSCC requirements.</li> <li>Support development of Corporate Fall Protection Standard (including audit protocol) through Fall Protection Working Group.</li> <li>Support corporate development of work and rescue plan revisions through corporate Fall Protection Working Group participation.</li> </ul>	<ul> <li>Fall Protection</li> <li>Identify training requirements and continue training as per WHSCC protocol.</li> <li>Participate in audit program through the corporate Fall Protection Working Group.</li> <li>Complete development of work and rescue plan revisions.</li> </ul>	<ul> <li>Fall Protection</li> <li>Identify training requirements and continue training as per WHSCC protocol.</li> <li>Participate in audit program through the corporate Fall Protection Working Group.</li> </ul>	<ul> <li>Fall Protection</li> <li>Identify training requirements and continue training as per WHSCC protocol.</li> <li>Participate in audit program through the corporate Fall Protection Working Group.</li> </ul>	<ul> <li>Fall Protection</li> <li>Identify training requirements and continue training as per WHSCC protocol.</li> <li>Participate in audit program through the corporate Fall Protection Working Group.</li> </ul>				



IN	INITIATIVES – Procedures and Equipment / Competence							
2012	2013	2014	2015	2016				
Confined Space	Confined Space	Confined Space	Confined Space	Confined Space				
<ul> <li>Support revision of Confined Space Program consistent with 2013 WHSCC expectations.</li> <li>Submit revised Program to WHSCC for approval.</li> <li>Identify training instructors to be certified to conduct internal training</li> </ul>	<ul> <li>Identify those requiring training and develop plan to deliver training consistent with 2013 WHSCC requirements.</li> <li>Develop audit protocol for Confined Space Program</li> </ul>	<ul> <li>Continue training as per WHSCC requirements</li> <li>Continue auditing</li> </ul>	<ul> <li>Continue training as per WHSCC requirements</li> <li>Continue auditing.</li> </ul>	<ul> <li>Continue training as per WHSCC requirements</li> <li>Continue auditing</li> </ul>				



<b>2013</b> pational Health	2014	2015	2016
pational Health			2010
	Occupational Health	Occupational Health	Occupational Health
conservation  coordinate scheduling annual audiometric sting for noise posed employees. Continue noise apping based on 12 plan. Coordinate scheduling and present hearing inservation training noise exposed inployees.	Hearing Conservation  Continue training. Continue auditing	Hearing Conservation  Continue training. Continue auditing	Hearing Conservation  Continue training. Continue auditing
	conservation  coordinate scheduling fannual audiometric sting for noise sposed employees. Continue noise apping based on 212 plan. Coordinate scheduling fand present hearing conservation training conservation training conservation audit protocol	<ul> <li>Conservation</li> <li>Conservation</li> <li>Continue training.</li> <li>Continue auditing</li> <li>Continue training</li> <li>Continue auditing</li> <li>Continue auditing<td><ul> <li>Conservation</li> <li>Conservation</li> <li>Conservation</li> <li>Conservation</li> <li>Conservation</li> <li>Conservation</li> <li>Continue training.</li> <li>Continue auditing</li> <li>Continue auditing</li> <li>Continue auditing</li> <li>Continue auditing</li> <li>Continue training.</li> <li>Continue auditing</li> <li>Continue auditing</li> <li>Continue training.</li> <li>Continue training.</li> <li>Continue training.</li> <li>Continue auditing</li> <li>Continue training.</li> <li>Continue training.</li> <li>Continue training.</li> <li>Continue training.</li> <li>Continue training.</li> <li>Continue training.</li> <li>Continue auditing</li> </ul></td></li></ul>	<ul> <li>Conservation</li> <li>Conservation</li> <li>Conservation</li> <li>Conservation</li> <li>Conservation</li> <li>Conservation</li> <li>Continue training.</li> <li>Continue auditing</li> <li>Continue auditing</li> <li>Continue auditing</li> <li>Continue auditing</li> <li>Continue training.</li> <li>Continue auditing</li> <li>Continue auditing</li> <li>Continue training.</li> <li>Continue training.</li> <li>Continue training.</li> <li>Continue auditing</li> <li>Continue training.</li> <li>Continue training.</li> <li>Continue training.</li> <li>Continue training.</li> <li>Continue training.</li> <li>Continue training.</li> <li>Continue auditing</li> </ul>



INITIATIVES – Leadership/ Supportive Culture				
2012	2013	2014	2015	2016
Supportive Culture	Supportive Culture	Supportive Culture	Supportive Culture	Supportive Culture
<ul> <li>Vulnerable workers</li> <li>Implement New Worker Hard Hat Program</li> <li>Revise Work Method Document to reference new workers</li> <li>Revise Local Orientation Process</li> <li>Pilot "Control of Work Safety Check"</li> </ul>	Vulnerable workers  • Review progress, implement actions to address gaps/opportunities	Monitor performance, adjust as required	Monitor performance, adjust as required	Monitor performance, adjust as required
Safety coaching Complete delivery of Phase I and initiate Phase II coaching workshop	Supportive Culture  Safety coaching Continue Phase II coaching workshop	Supportive Culture  Safety coaching Continue Phase II coaching workshop	Supportive Culture  Safety coaching Continue Phase II coaching workshop	Supportive Culture  Safety coaching To be determined

	INITIATIVES – Leadership/ Supportive Culture				
2012	2013	2014	2015	2016	
Supportive Culture  Execute safety culture action plan activities for 2012 including delivery of SWOP training and SWOP train-the-trainer	Supportive Culture  Complete 2013 plan     activities and conduct     Safety Culture Survey     to identify future     focus areas	Supportive Culture  Develop/execute safety culture change plan based on 2013 safety culture survey results and complete 2014 activities	Supportive Culture  Complete 2015 plan     activities and conduct     Safety Culture Survey to     identify future focus     areas	Supportive Culture  Develop/execute safety culture change plan based on 2015 safety culture survey results and complete 2016 activities	
Supportive Culture  Wellness  Continue My Heart-My Health Campaign.	Supportive Culture  Wellness  Implement corporate wellness strategy based on ongoing program evaluation	Supportive Culture  Wellness  Implement corporate wellness strategy based on ongoing program evaluation	Supportive Culture  Wellness  Implement corporate wellness strategy based on ongoing program evaluation	Supportive Culture  Wellness  To be determined	



	INITIATIVES — Public Safety  Output  Output  Description: Proper Description: Proper Description: International Control of the Power Output  Description: Proper Descr				
2012	2013	2014	2015	2016	
Support Corporate Communications in the development of its Public Safety campaign specifically as it relates to electrical line contacts.	Continue support of public safety campaign	Continue support of public safety campaign	Continue support of public safety campaign	Continue support of public safety campaign	



#### **Footnotes**

For 2012, the following targets have been established: (To assist with establishing your specific targets the example below has been provided)
PUB-NLH-412, Attachment 3

- Develop Work Method (Reviewed AND Verified Status) for each critical task performed in 2012. Page 16 of 137, Isl Int System Power Outages
- Ensure TBRA's are completed for at least 85% of all critical tasks identified.
- Develop Work Methods (Reviewed NOT Verified Status) for at least 85% of total critical tasks identified.

#### **Example:**

An area has identified 1000 critical tasks (planned as well as unplanned). In 2012, the area will actually perform 300 of the 1000 critical tasks identified.

TBRA's <sup>[3]</sup> required in 2012 as a result of the actual work to be performed	300
Work Methods (R&V) <sup>[1]</sup> required as a result of the actual work to be performed	300

In addition,

The TBRA target for 2012 is 85% (cumulative) of all critical tasks The Work Method target for 2012 is 85% (cumulative) of all critical tasks

Therefore,

Additional TBRA's required for 2012 to meet 85% target	550 (includes 2010 & 2011 numbers)
Additional Work Methods (RNV)[2] required for 2012 to meet 85% target	550 (includes 2010 & 2011 numbers)

Therefore the total requirements for 2012 are as follows:

TBRA's required	850
Work Methods (R&V) <sup>[1]</sup> required	300
Work Methods (RNV) <sup>[2]</sup> required	550

In short, a TBRA and a field verified Work Method must be conducted for each critical task performed each year. Additional TBRA's and Work Methods must also be completed to bring the cumulative total up to the target number established for that year. However, work methods developed for tasks not performed during that year need not be field verified.

The same methodology holds true for subsequent years, keeping in mind that all targets refer to cumulative numbers.

- [1] Refers to Work Methods that have been reviewed AND field verified (Reviewed and Verified)
- [2] Refers to Work Methods that have been reviewed but have NOT received field verification (Reviewed and NOT Verified)
- [3] Refers to Task Based Risk Assessment



## **Goal 2: Environment**

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## **Goal 2: Environment**

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#### **OBJECTIVES - Environment**

• Maintain the number of environmental leadership\* targets accomplished at 95%.

TARGETS - Environment					
2012	2013	2014	2015	2016	
Number of environmental leadership targets accomplished within Nalcor Energy at 95%	Number of environmental leadership targets accomplished within Nalcor Energy at 95%	Number of environmental leadership targets accomplished within Nalcor Energy at 95%	Number of environmental leadership targets accomplished within Nalcor Energy at 95%	Number of environmental leadership targets accomplished within Nalcor Energy at 95%	



### PUB-NLH-412, Attachment 3 Page 19 of 137, Isl Int System Power Outages

INITIATIVES – Environment					
2012	2013	2014	2015	2016	
Environmental Management System targets identified and Program Leaders established	Environmental Management System targets identified and Program Leaders established	Environmental Management System targets identified and Program Leaders established	Environmental Management System targets identified and Program Leaders established	Environmental Management System targets identified and Program Leaders established	
Review and approval of proposed Environmental Management System targets	Review and approval of proposed Environmental Management System targets	Review and approval of proposed Environmental Management System targets	Review and approval of proposed Environmental Management System targets	Review and approval of proposed Environmental Management System targets	
Monthly update to status of EMS targets	Monthly update to status of EMS targets	Monthly update to status of EMS targets	Monthly update to status of EMS targets	Monthly update to status of EMS targets	



Work plan template for year 1 initiatives
PUB-NLH-412, Attachment 3
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2012 INITIATIVES - Environment					
INITIATIVE	DELIVERABLE	RESPONSIBLE	TIMING		
Environmental Management System targets identified and Program Leaders established	Proposed EMS targets	EMS Management Representatives	January 2012		
Review and approval of proposed Environmental Management System targets	Approved EMS targets	NLH Leadership Team	January 2012		
Monthly update to status of EMS targets	Monthly report to NLH Leadership Team on EMS target status	EMS target Program Leader	monthly		



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#### **OBJECTIVES - Environment**

 Minimize production requirements and associated air emissions from the Holyrood Thermal Generating Station

TARGETS - Environment					
2012	2013	2014	2015	2016	
Emission variance from ideal at Holyrood ≤ 11%.	10%	10%	10%	10%	
Achieve 1.8 GWh of annual energy savings in residential and commercial sectors, and 4.9 GWh in Industrial sector, through Hydro managed conservation and demand management programs	Achieve 5.1 GWh of annual energy savings in residential and commercial sectors, and 11.2 GWh in Industrial sector, through Hydro managed conservation and demand management programs	Achieve 3.2 GWh of annual energy savings in residential and commercial sectors, and 10.3 GWh in Industrial sector, through Hydro managed conservation and demand management programs	Achieve 2.1 GWh of annual energy savings in residential and commercial sectors through Hydro managed conservation and demand management programs	Achieve 1.7 GWh of annual energy savings in residential and commercial sectors through Hydro managed conservation and demand management programs	



## **Goal 2: Environment**

PUB-NLH-412, Attachment 3
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#### **OBJECTIVES - Environment**

• Minimize production requirements and associated air emissions from the Holyrood Thermal Generating Station (Continued)

#### **TARGETS - Environment**

2012	2013	2014	2015	2016	
Achieve 0.15 GWh of annual energy savings through internal energy efficiency programs	Achieve 0.4 GWh of annual energy savings through internal energy efficiency programs	Achieve 0.15 GWh of annual energy savings through internal energy efficiency programs	Achieve 0.15 GWh of annual energy savings through internal energy efficiency programs	Achieve 0.15 GWh of annual energy savings through internal energy efficiency programs	



INITIATIVES – Environment				
2012	2013	2014	2015	2016
Complete a gap analysis on the 2011 steam condenser study to determine maintenance or operational improvements.				
Complete a RATA on the CEMS system.				
Complete the scheduled portion of work for the hydrogen system upgrade.				
Complete the scheduled portion of work for the Unit 3 Synchronous Condenser project.				
Complete Joint Utility 5 yr CDM plan with Newfoundland Power.		Conduct update of CDM potential study		



### PUB-NLH-412, Attachment 3 Page 24 of 137, Isl Int System Power Outages

INITIATIVES – Environment				
2012	2013	2014	2015	2016
		Conduct evaluation of Industrial Energy Efficiency Program and provide recommendatio ns for next steps.		
Complete development of NLH facility end use profile for identification of internal efficiency opportunities.				
Implement no cost/low cost recommendations from Hydro facility walk through audits.	Regulated Operations to identify energy savings opportunities through review of facility operations and implement actions.	Regulated Operations to identify energy savings opportunities through review of facility operations and implement actions.	Regulated Operations to identify energy savings opportunities through review of facility operations and implement actions.	Regulated Operations to identify energy savings opportunities through review of facility operations and implement actions.



# Work plan template for year 1 initiatives PUB-NLH-412, Attachment 3 Page 25 of 137, Isl Int System Power Outages

2012 INITIATIVES - Environment					
INITIATIVE	DELIVERABLE	RESPONSIBLE	TIMING		
Complete a gap analysis on the 2011 condenser study to determine maintenance or operational improvements.	Gap analysis completed.	HTGS	April 30, 2012		
Complete a RATA on the CEMS system.	Audit completed.	HTGS	Dec 31, 2012		
Complete the scheduled portion of work for the hydrogen system upgrade.	Work completed.	HTGS and PETS	Dec 31, 2012		
Complete the scheduled portion of work for the Unit 3 Synchronous Condenser project.	Work completed.	HTGS and PETS	Dec 31, 2012		



# Work plan template for year 1 initiatives PUB-NLH-412, Attachment 3 Page 26 of 137, Isl Int System Power Outages

2012 INITIATIVES - Environment				
INITIATIVE	DELIVERABLE	RESPONSIBLE	TIMING	
Complete Joint Utility 5 yr CDM plan with Newfoundland Power.	Plan completed identifying new programs, including economic testing and program budgets.	EE group	TBD with NP (April 2012 – tentative)	
Complete development of NLH facility end use profile for identification of internal efficiency opportunities.	Documentation of energy end use profile for NLH facilities to be used in CDM target setting.	EE group	August 2012	
Implement no cost/low cost recommendations from Hydro facility walk through audits.	Achieve 150 MWh of new energy savings as follows: •25 MWh - HYP •25 MWh - HTGS •25 MWh - TROC •25 MWh - TRON •25 MWh - TROL •25 MWh - HG	EE Group, HTGS, TROC, TRON, TROL, Hydro Generation	Throughout 2012	



## **Goal 2: Environment**

PUB-NLH-412, Attachment 3
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### **OBJECTIVES - Environment**

• Reduce or minimize environmental risks and emissions from diesel generation systems

#### **TARGETS - Environment**

2012	2013	2014	2015	2016
Develop plan to acquire Diesel Plant Production Data from diesel plants to enable data analysis for efficiency improvements and emission reduction potential.	Implement Phase 1 of plan developed in 2012.	Implement Phase 2 of Plan developed in 2012.	Implement Phase 3 of plan developed in 2012 (completion of project assuming communication problems are resolved at all sites)	



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### **OBJECTIVES - Environment**

• Reduce or minimize environmental risks and emissions from diesel generation systems (continued)

### **TARGETS – Environment**

2012	2013	2014	2015	2016
Coastal Labrador Wind Monitoring Program  • Wind monitoring sites identified, ranked and selected • Erection of hub-height wind monitoring towers • Wind data summary report	Wind data summary report.	Wind data summary report. Prepare a feasibility report with an overall ranking of potential wind generation sites		
Feasibility Study of Hydraulic Potential of Coastal Labrador  • Develop stream flow monitoring program  • Install flow monitoring stations  • Submission of feasibility report	Annual stream flow data report	Annual stream flow data report	Annual stream flow data report Final flow data report	



### **Goal 2: Environment**

### PUB-NLH-412, Attachment 3 Page 29 of 137, Isl Int System Power Outages

2012	2013	2014	2015	2016
Establish data acquisition and recording systems for diesel plant production data.	Monitor data and analyze for plant efficiency and emission reduction potential for plants completed.	Monitor data and analyze for plant efficiency and emission reduction potential for plants completed in Phase 1.	Monitor data and analyze for plant efficiency and emission reduction potential for plants completed in Phase 1 and 2.	Monitor data and analyze for plant efficiency and emission reduction potential for plants completed in Phase 2 and 3.
Coastal Labrador Wind Monitoring Program	Coastal Labrador Wind Monitoring Program	Coastal Labrador Wind Monitoring Program		
Feasibility Study of Hydraulic Potential of Coastal Labrador	Feasibility Study of Hydraulic Potential of Coastal Labrador	Feasibility Study of Hydraulic Potential of Coastal Labrador	Feasibility Study of Hydraulic Potential of Coastal Labrador	



# Work plan template for year 1 initiatives PUB-NLH-412, Attachment 3 Page 30 of 137, Isl Int System Power Outages

2012 INITIATIVES - Environment					
INITIATIVE	DELIVERABLE	RESPONSIBLE	TIMING		
Establishing data acquisition and recording systems for diesel plant production data and implement	Develop a list of standard parameters of what will be measured and produce a standard format for reporting through PI.	Information Systems and TRO Operations	December 2012		
Coastal Labrador Wind Monitoring Program	<ul> <li>Wind monitoring sites identified, ranked and selected</li> <li>Erection of hub-height wind monitoring towers</li> <li>Wind data summary report</li> </ul>	Project Execution and Technical Services via professional services contract	August 2012 November 2012 November 2012		
Feasibility Study of Hydraulic Potential of Coastal Labrador	Develop stream flow monitoring program     Install flow monitoring stations     Submission of Feasibility Report	Project Execution and Technical Services via professional services contract	April 2012 November 2012 November 2012		



PUB-NLH-412, Attachment 3
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#### **OBJECTIVES - Environment**

 Remove all sealed equipment that contains, or could potentially contains, greater than or equal to 50 mg/kg (ppm) of PCBs from service by 2025\*

TARGETS - Environment					
2012	2013	2014	2015	2016	
Remove 6.5% of sealed equipment from service	Remove 6.5% of sealed equipment from service	Remove 6.5% of sealed equipment from service	Remove 6.5% of sealed equipment from service	Remove 6.5% of sealed equipment from service	

<sup>\*</sup>This objective assumes that Environment Canada will formally agree to proposals made by the Canadian Electricity Association to extend the requirement for removal of sealed equipment that may contain PCBs from 2014 to 2025.



### PUB-NLH-412, Attachment 3 Page 32 of 137, Isl Int System Power Outages

INITIATIVES – Environment				
2012	2013	2014	2015	2016
Update instrument transformer capital budget proposal to reflect plan for next 5 years. Execute instrument transformer replacement plan for 2012 as submitted to Environment Canada.	Execute instrument transformer and bushing replacement plan as submitted to Environment Canada. Update instrument transformer capital budget proposal to reflect plan for next 5 years.	Execute instrument transformer and bushing replacement plan as submitted to Environment Canada. Update instrument transformer capital budget proposal to reflect plan for next 5 years.	Execute instrument transformer and bushing replacement plan as submitted to Environment Canada. Update instrument transformer capital budget proposal to reflect plan for next 5 years.	Execute instrument transformer and bushing replacement plan as submitted to Environment Canada. Update instrument transformer capital budget proposal to reflect plan for next 5 years.
Update transformer upgrading capital budget proposal to reflect bushing replacements for the next 5 years	Update capital budget proposals for instrument transformers (transformer upgrading includes bushing replacement and breaker replacements)	Update capital budget proposals for instrument transformers (transformer upgrading includes bushing replacement and breaker replacements)	Update capital budget proposals for instrument transformers (transformer upgrading includes bushing replacement and breaker replacements)	Update capital budget proposals for instrument transformers (transformer upgrading includes bushing replacement and breaker replacements)



#### PUB-NLH-412, Attachment 3 Page 33 of 137, Isl Int System Power Outages

2012	2013	2014	2015	2016
Execute bushing replacement plan for 2012 as submitted to Environment Canada	Execute bushing replacement plan for 2013 as submitted to Environment Canada	Execute bushing replacement plan for 2013 as submitted to Environment Canada	Execute bushing replacement plan for 2013 as submitted to Environment Canada	Execute bushing replacement plan for 2013 as submitted to Environment Canada
Prepare capital budget proposals for breaker replacements to include replacement of oil circuit breakers	Update capital budget proposals for oil circuit breaker replacements	Update capital budget proposals for oil circuit breaker replacements	Update capital budget proposals for oil circuit breaker replacements	Update capital budget proposals for oil circuit breaker replacements



#### **Goal 2: Environment**

Work plan template for year 1 initiatives
PUB-NLH-412, Attachment 3
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2012 INITIATIVES - Environment					
INITIATIVE	DELIVERABLE	RESPONSIBLE	TIMING		
Update capital budget proposals to support PCB reduction targets	Capital budget proposal for sealed equipment replacement	TRO Operations, and Project Execution and Technical Services	First quarter of 2012		
Execute instrument transformer and bushings replacement plans for 2012 as submitted to Environment Canada	Replacement of instrument transformers and bushings	TRO Operations, and Project Execution and Technical Services	Throughout 2012		



## Goal 3: Business Excelence 35 of 137, is lift system Power Outages



TARGETS – Financial Performance PUB-NLH-412, Attachment 3					
2012	2013	2014	Page 36 of 137, Isl Int Sys <b>2015</b>	tem Power Outages 2016	
Maintain a ROCE of at least 8.8%	Maintain a ROCE of at least x%	Maintain a ROCE of at least xx%	Maintain a ROCE of at least xx%	Maintain a ROCE of at least xx%	
Provide Net Income of \$42.7M (tbc)	Provide Net Income of \$xM (tbc)	Provide Net Income of \$xM (tbc)	Provide Net Income of \$xM (tbc)	Provide Net Income of \$xM (tbc)	



STRATEGIC INITIATIVES – Electricity Operations					
2012	2013	2014	2015	2016	
Hydro General rate application/regulatory process <sup>1</sup>					

<sup>&</sup>lt;sup>1</sup>Two elements:

- Readiness to file GRA within required timelines; and,
- Develop multi-year regulatory improvement plan and complete approved 2012 activities.



# Goal 3: Business Excellence: Project Page 38 of 137, Isl Int System Power Outages Execution



#### **Goal 3: Business Excellence**

PUB-NLH-412, Attachment 3
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#### **OBJECTIVES – Project Execution & Technical Services**

- Quality Improve overall quality of projects based on Asset Owner expectations
- Cost Improve overall project and operating budget cost variance (10% improvement year over year on gap)
- **Delivery** Improve the number of on-time completed projects (10% improvement year over year on gap)
- **Process** Implement 2 Project Management processes (risk mitigation and quality management), external validation (estimating)

#### **Targets- Project Execution & Technical Services**

2012	2013	2014	2015	2016
Quality Reduce number of project change orders (target based on previous year performance)¹ Weighted scorecard?	Quality Reduce number of project change orders (target based on previous year performance)	Quality Reduce number of project change orders (target based on previous year performance)	Quality Reduce number of project change orders (target based on previous year performance)	Quality Reduce number of project change orders (target based on previous year performance)
Cost 10% year over year improvement (on gap) in capital project budget compliance compared to 2011	10% year over year improvement (on gap) in capital project budget compliance compared to 2012	10% year over year improvement (on gap) in capital project budget compliance compared to 2013	10% year over year improvement (on gap) in capital project budget compliance compared to 2014	10% year over year improvement in capital project budget compliance compared to 2015
2011 performance: XX%				

<sup>&</sup>lt;sup>1</sup>This is a manual process that can't really be automated. How do we track?



#### **Goal 3: Business Excellence**

PUB-NLH-412, Attachment 3
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Targets- Project Execution & Technical Services							
2012	2013	2014	2015	2016			
Cost 10% year over year improvement (on gap) in all-project variance from original budget compared to 2011 2011 performance: X%	10% year over year improvement (on gap) in all-project variance from original budget (pending completion of Project Execution review)	10% year over year improvement (on gap) in all-project variance from original budget (pending completion of Project Execution review)	10% year over year improvement (on gap) in all-project variance from original budget (pending completion of Project Execution review)	10% year over year improvement (on gap) in all-project variance from original budget (pending completion of Project Execution review)			
Delivery 10% year over year improvement (on gap) in capital project schedule compliance compared to 2011 2011 performance: XX%	10% year over year improvement (on gap) in capital project schedule compliance compared to 2012 (pending completion of Project Execution review)	10% year over year improvement (on gap) in capital project on-schedule completion compared to 2013 (pending completion of Project Execution review)	10% year over year improvement (on gap) in capital project on-schedule completion compared to 2014 (pending completion of Project Execution review)	10% year over year improvement (on gap) in capital project onschedule completion compared to 2015 (pending completion of Project Execution review)			
Delivery 10% Year over year reduction in number of unplanned carryovers 2011 performance: XX%	Delivery  10% year over year reduction in number of unplanned carryovers (target based on previous year performance)	Delivery Year over year reduction in number of unplanned carryovers (target based on previous year performance)	Delivery Year over year reduction in number of unplanned carryovers (target based on previous year performance)	Delivery Year over year reduction in number of unplanned carryovers (target based on previous year performance)			

<sup>\*\*</sup>Need to include the calculations and rules which apply to these targets – how do we do this?



# Goal 3: Business Excellence: Asset PUB-NLH-412, Attachment 3 Page 41 of 137, Isl Int System Power Outages Management



#### **Goal 3: Business Excellence – Asset Management**

INITIATIVES – Asset Management PUB-NLH-412, Attachmen					
2012	2013	2014	age 42 of 137, Isl Int Syster 2015	n Power Outages 2016	
Asset Condition Assessment Module Development	Asset Condition Assessment Module Implementation	Evaluate Effectiveness/Adjust AM Strategy – Performance	Integrate Strategic, Financial, Asset Plans & Risk	Evaluate Effectiveness & Adjust	
Design Standards, Planning Criteria, Operating Parameters – Phase 2 Execute Gap Closure Plan	Design Standards, Planning Criteria, Operating Parameters – Phase 2 Execute Gap Closure Plan	Design Standards, Planning Criteria, Operating Parameters – Ph 2 Execute Gap Closure Plan			
Leverage high value components from AMR work books	Training and Skills Development - Implementation	Long Term Asset Plan Risk Management			
Self-Assessment of Asset Management Maturity and Development Plan by LOB	Self-Assessment of Asset Management Maturity and Development Plan by LOB	Self-Assessment of Asset Management Maturity and Development Plan by LOB	Self-Assessment of Asset Management Maturity and Development Plan by LOB	Self-Assessment of Asset Management Maturity and Development Plan by LOB	
Metrics and Reporting Implementation	Asset Condition Monitoring Module Development	Asset Condition Monitoring Module Implementation			
Critical Spares Rationalization – Phase 2 Critical Analysis and Gap Closure Plan	Critical Spares Rationalization – Phase 3 Execute Gap Closure Plan, including link to assets	Operator Asset Care and Craft Flexibility	Life Cycle Cost Analysis		
Technical Councils Development – transformers and switchyard equipment, diesels, rotating equipment (essential care – lube & align)	Technical Councils Development  – Based on Business Need/Priorities	Equipment Standardization	RCM (Overall Unit Effectiveness)		
Asset Criticality Evaluation by LOB		AM/CMMS Evaluation	AM/CMMS Integration	Vendor Reliability	
Establish Experts List (Internal & External SME's)	Terminology and Definitions Module	Reliability Analysis	Benchmarking		
Consider value of alignment with PAS 55 & ISO	Integrate AMS with Other LOB's (Beyond Electricity)	Materials Management Review	Evaluate PAS 55/ISO Benefits of Compliance		
Training and Skills Requirements Development (functional AM roles)	Asset Condition Inspection Module Development	Asset Condition Inspection Module Implementation			
Asset Mgmt Documentation Repository and Supporting Software – Preliminary Review	Consolidate Asset History and Technical Data	Knowledge Management Development	Knowledge Management Implementation	nalcor	

#### **Goal 3: Business Excellence – Asset Management**

**2012 Initiatives** 

PUB-NLH-412, Attachment 3
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2012 INITIATIVES – Asset Management					
INITIATIVE	DELIVERABLE	RESPONSIBLE	TIMING		
Asset Condition Assessment Module Development	Develop a document that defines what condition assessment is and provides standards on how to do them consistently and to the right level of effort and detail	LTAP Council	Q1 – Q2		
Design Standards, Planning Criteria, Operating Parameters – Phase 2 Execute Gap Closure Plan	Execute the 2012 portion of the Basis of Design gap closure plan (as produced in 2011), update the remaining years of the gap closure plan based on 2012 experience	LOB's	Q1 - Q4		
Leverage high value components from AMR work books	Evaluate AMR work books, identify high value components and create plan to implement where value exists	LOB's	Q1		
Self-Assessment of Asset Management Maturity and Development Plan by LOB	LOB and/or BU (as appropriate) compete self-assessment via scorecards	OAM with LOB support	Q1		



#### **Goal 3: Business Excellence – Asset Management 2012 Initiatives**

PUB-NLH-412, Attachment 3

Page 44 of 137, Isl Int System Power Outages  2012 INITIATIVES – Asset Management					
INITIATIVE	DELIVERABLE	RESPONSIBLE	TIMING		
Metrics and Reporting Implementation	Review and validate proposed asset management metrics with LOB's and establish implementation plan	OAM with LOB support	Q1 - Q2		
Critical Spares Rationalization – Phase 2 Critical Analysis and Gap Closure Plan	Develop framework for evaluating critical spares	LTAP Council	Q2 – Q3		
	LOB develop implementation plan to perform evaluation and identify gaps	LOB's	Q3 – Q4		
Technical Councils Development – transformers and switchyard equipment, diesels, rotating equipment	For 2012 establish 3 new technical councils:  A) Transformers and switchyard	OAM	Q1 - Q2		
(essential care – lube & align)	equipment  B) Diesels C) Rotating equipment - focus is to develop body of knowledge on lubrication & alignment (essential care)	OAM OAM and RE Council	Q2 – Q3 Q3 – Q4		
	Implement Long Term Asset Management Plan process developed in 2011	LTAP Council with LOB support	Q2 – Q3		
	Develop Short Term Work Planning and Scheduling process document	STWPS Council with LOB support	Q1 – Q3		



# **Opportunity**

#### Goal 3: Business Excellence – Asset Management

#### **2012** Initiatives

PUB-NLH-412, Attachment 3
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	2012 INITIATIVES – Asset Managem			
	INITIATIVE	DELIVERABLE	RESPONSIBLE	TIMING
	Asset Criticality Evaluation by LOB	Develop framework and weighted criteria based on principles from 2011 and facilitate a pilot analysis	OAM with LOB support	Q3
	Establish Experts List (Internal & External SME's)	Document the core list of internal and external experts used by Nalcor LOB's	OAM with LOB support	Q4
<u>-</u>	Consider value of alignment with PAS 55 & ISO	Review requirements of the standard, identify benefits of aligning with standard	OAM	Q4
	Training and Skills Requirements Development (functional AM roles)	Identify suitable training programs to support people in the roles of LTAP, STWPS, WE and OPS leads	OAM with LOB support and HR support	Q1 – Q2
	Asset Mgmt Documentation Repository and Supporting Software – Preliminary Review	Discuss needs with IT and identify potential options to address	OAM with IT support	Q3

The initial focus of asset management development are the physical assets and functional roles on the electricity side of the business (I.e. Churchill Falls, Hydro, Exploits and Menihek), with other LOB's to follow later (e.g. Oil and Gas, Bull Arm, Muskrat).

There are varying levels of maturity and resource capacity between LOBs and, in some cases, their internal business units. This manifests in varying time lines for initiatives to move through the phases of develop, implement, and mature. Future year's plans will be driven by structured LOB self-assessments and subsequent gap closure plans.



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#### **Goal 3: Business Excellence**

PUB-NLH-412, Attachment 3
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#### **OBJECTIVES – Reliability**

- By 2014, meet and maintain 99% generating availability during the winter operating period when compared against the loss of largest single unit criteria.
- Continuously improving within top quartile Transmission delivery point performance, 2012 to 2016.

<b>TAR</b>	<b>GET</b>	'S –	Rel	ia	bil	itv
.,	<b>U</b> L.			-		

2012	2013	2014	2015	2016
NLH Winter Availability ≥ 98.0% •Thermal - 99.2% •Hydro - 99.6% •TRO - 99.6% •Sys Ops - 99.6%	NLH Winter Availability ≥ 98.5% •Thermal - 99.4% •Hydro - 99.7% •TRO - 99.7% •Sys Ops – 99.7%	NLH Winter Availability ≥ 99.0% •Thermal - 99.6% •Hydro - 99.8% •TRO - 99.8% •Sys Ops - 99.8%	NLH Winter Availability ≥ 99.0% •Thermal - 99.6% •Hydro - 99.8% •TRO - 99.8% •Sys Ops - 99.8%	NLH Winter Availability ≥ 99.0% •Thermal - 99.6% •Hydro - 99.8% •TRO - 99.8% •Sys Ops - 99.8%
Delivery Point Unreliability Index <11.36 System-minutes (16,000 MW-min)	Delivery Point Unreliability Index <10.96 System-minutes (16,000 MW-min)	Delivery Point Unreliability Index <10.60 System-minutes (16,000 MW-min)	Delivery Point Unreliability Index <10.32 System-minutes (16,000 MW-min)	Delivery Point Unreliability Index <10.08 System-minutes (16,000 MW-min)
47				1) nalcor

## Goal 3: Business Excellence age 48 of 137, Isl Int System Power Outages

TARGETS – Reliability (Hydro)					
2012	2013	2014	2015	2016	
Hydro – T-SAIFI	Hydro – T-SAIFI	Hydro – T-SAIFI	Hydro – T-SAIFI	Hydro – T-SAIFI	
0.85 int./DP	0.81 int./DP	0.76 int./DP	0.70 int./DP	0.67 int./DP	
Hydro – T-SAIDI	Hydro – T-SAIDI	Hydro – T-SAIDI	Hydro – T-SAIDI	Hydro – T-SAIDI	
52.5 min/DP	49.5 min/DP	46.0 min/DP	43.0 min/DP	40.0 min/DP	
Delivery Point Perform	nance	I	I	I	
Hydro – SAIFI	Hydro – SAIFI	Hydro – SAIFI	Hydro – SAIFI	Hydro – SAIFI	
3.65 int/cust	3.47 int/cust	3.29 int/cust	3.13 int/cust	2.97 int/cust	
Hydro – SAIDI	Hydro – SAIDI	Hydro – SAIDI	Hydro – SAIDI	Hydro – SAIDI	
5.90 hrs/cust	5.60 hrs/cust	5.32 hrs/cust	5.06 hrs/cust	4.81 hrs/cust	



# Goal 3: Business Excellence: Future Reliable Cost Effective Supply of (3), Isl Int System Power Outages Electricity



#### **Goal 3: Business Excellence**

PUB-NLH-412, Attachment 3

#### **OBJECTIVES – Reliable Least Cost Supply**

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• <u>Electricity Supply Cost</u> - Establish long term energy supply cost which is least cost which meets Provincial energy consumers requirements.

TARGET – Electri	city Cost			
2011	2012	2013	2014	2015
??? Not sure we have targets that are meaningful in short term???				•



INITIATIVES – Reliable	INITIATIVES – Reliable Least Cost Supply					
2012	2013	2014		, Attachme <b>2016</b>		
Complete detail integration studies for the Labrador Island Link and Maritime Link.  Prepare capital budget submissions for Island Upgrades required for the Labrador Island Link and the Maritime Link.	•Complete current year portion of plan for Island and Labrador system upgrades.	•Complete current year portion of plan for Island and Labrador system upgrades.	ge 51 of 137, Isl Int System Complete current year portion of plan for Island and Labrador system upgrades.	•Complete current year portion of plan for Island and Labrador system upgrades.		
Complete assessment and recommendations for NERC and NPCC reliability criteria for application in Newfoundland and Labrador post interconnection	•Complete current year portion of NERC and NPCC reliability standards implementation.	•Complete current year portion of NERC and NPCC reliability standards implementation.	•Complete current year portion of NERC and NPCC reliability standards implementation.	•Complete current year portion of NERC and NPCC reliability standards implementation.		
Complete hydrotechnical analysis for the integration of Labrador Hydro with the Island. Determine models and Implementation plan for operations.						



INITIATIVES – Reliable Least Cost Supply					
2012	2013	2014	<b>2015</b> РИВ-NLH-412.	2016 Attachment 3	
Complete commercial arrangements between Nalcor and NLH for a long term supply agreement from Muskrat Falls including interconnection of new transmission.		Page	52 of 137, Isl Int System Po	ower Outages	
Complete Operational Organizational Design and develop an implementation plan to enable reliable and least cost operation and maintenance of new assets.	•Implement current year plan for organizational change.	•Implement current year plan for organizational change.	•Implement current year plan for organizational change.	•Implement current year plan for organizational change.	
Complete regulatory strategic plan for implementation of change to enable reciprocal open access to the Provincial transmission grid including implementation of an independent system operator.	•Implement current year regulatory implementation plan	•Implement current year regulatory implementation plan	•Implement current year regulatory implementation plan	•Implement current year regulatory implementation plan	



INITIATIVES – Reliable Least Cost Supply					
2012	2013	2014	<b>2015</b> PUB-NLH-412,	2016 Attachment 3	
Participate in the analysis of a Labrador Sink Point which may be needed to facilitate potential power purchases to enable new Labrador Load. (note 1)		Page 5	3 of 137, Isl Int System Po		

Note 1

This is in anticipation of potential load needs in Labrador exceeding provincial, specifically Labrador (Muskrat Falls) being available in time to serve these needs. Considerable work and issues need to be addressed to facilitate this likely solution to the customers needs.



## Goal 3: Business Excellence: Customer Page 54 of 137, Isl Int System Power Outages Service



#### **Goal 3: Business Excellence**

PUB-NLH-412, Attachment 3

#### **OBJECTIVES – Customer Satisfaction**

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 <u>Rural Residential Customer Satisfaction</u> – Maintain greater than 90% of rural residential customers satisfied with Hydro

TARGET – Customer Satisfaction					
2011	2012	2013	2014	2015	
Maintain a Rural Residential Customer Satisfaction rate of <u>&gt;</u> 90%					



## Goal 3: Business Excellence: Non-Regulated

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**Assets** 



### Goal 3: Business Excelepage 57 of 137, Isl Int System Power Outages

#### **OBJECTIVES – Business Excellence**

 Transfer Exploits Generation and Menihek Generation Operational responsibilities to Hydro under regulated operations division.

TARGETS – Business - Excellence					
2012	2013	2014	2015	2016	
Corporate organization structure change implemented including supporting system changes.  Continue gap closure plans for all aspects of operations and assets to bring into alignment with Hydro/Nalcor approach as approved	Review organizational changes made for further optimization and efficiency enhancement.  Finalize long term asset determination as a regulated asset fully integrated with Hydro or a unregulated asset  Continue gap closure plans for all aspects of operations and assets to bring into alignment with Hydro/Nalcor approach as approved	At this time all planning activity for both Menihek and Exploits are expected to be fully integrated with Hydro			



## **Goal 4: People**

PUB-NLH-412, Attachment 3
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PUB-NLH-412, Attachment 3
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#### **OBJECTIVE - People**

• Improve all elements of employee engagement to a level where Nalcor Energy would qualify for recognition as one of Canada's best employers in reference to an acceptable external benchmark, and maintain each subsequent year.

<b>TARGETS</b>	- People	
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"" "Copie					
2012	2013	2014	2015	2016	
Achieve a participation rate of at least 80% in the company's best employer benchmarking survey	To be determined		To be determined		



## **Goal 4: People**

#### PUB-NLH-412, Attachment 3 Page 60 of 137, Isl Int System Power Outages

INITIATIVES – People					
2012	2013	2014	2015	2016	
Engagement Determine Complete 95% EOS action plan items documented and monitor results.  Complete external best employer benchmarking process (>80% participation) and participate in developing action plan.	Engagement To be determined. Execute 95% of 2013 activities outlined in best employer action plan.	Engagement Execute 2014 activities outlined in best employer action plan.  Complete external best employer benchmarking process (>80% participation) and participate in developing action plan.	Engagement Execute 2015 activities outlined in best employer action plan.	Engagement Complete external best employer benchmarking process (>80% participation) and participate in developing action plan.	

INITIATIVES – People			PUB-NLH-41 Page 61 of 137, Isl Int System	.2, Attachment 3
2012	2013	2014	2015	<b>2016</b>
Employees Valued Execute diversity and inclusion action plan, monitor results Focus on diversity awareness training.	Employees Valued Execute diversity action plan, monitor results.  Participate in initiatives outlined in diversity and inclusion strategy. (	Employees Valued Execute diversity action plan, monitor results. Participate in initiatives outlined in diversity and inclusion strategy.	Employees Valued Execute diversity action plan, monitor results.	Employees Valued Execute diversity action plan, monitor results. 100% of new hires to receive diversity training within 9 months of hire.



## **Goal 4: People**

PUB-NLH-412, Attachment 3
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INITIATIVES - People				
2012	2013	2014	2015	2016
<ul> <li>Skilled/Capable People*</li> <li>Alignment review of Rural Retention Strategy.</li> <li>Enhancements to orientation process.</li> <li>Implement new Hydro Plant Operator training program. (Fits into R&amp;R strategy).</li> <li>Develop DSR training program.</li> <li>Develop training templates for safety and mandatory training requirements (LMS).</li> <li>Develop LCP - Holyrood deployment planning</li> </ul>	Skilled & Capable People*  Job specific/technical training added to training templates.  Succession plans developed for high risk areas.  Completion of XX development plans related to Hi Po.  Refresh Holyrood deployment plans.	Skilled & Capable People* Technology Strategy for Mobile Crews.  Refresh Holyrood deployment plans.	Skilled & Capable People*  Refresh Holyrood deployment plans.  Revisit succession plans for high risk areas.	Skilled & Capable People*  Refresh Holyrood deployment plans.
NOTE: See references to delivering EG	B training, fall protection, confi	ned space under safety goal.		nalcor

## **Goal 5: Community**

PUB-NLH-412, Attachment 3
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## Goal 5: Community (Hydro objective PUB-NLH-412, Attachment 3)

#### **OBJECTIVES - Community**

• To increase the percentage of the public who believe that Hydro has a strong reputation to 51% by 2015 (based on a rating of 8+/10.)

TARGETS - Community					
2012	2012				

2012	2013	2014	2015	2016
	50% of the public believe Hydro has a strong reputation (maintain 2011 rating)		51% of the public believe Hydro has a strong reputation	



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INITIATIVES - Community				
2012	2013	2014	2015	2016
Emotional Appeal Complete two speaking engagements in local schools. CCSR will provide presentations on the following two topics:  1. Electrical safety 2. Electricity education (how electricity works)	Emotional Appeal Complete two speaking engagements in local schools. CCSR will provide presentations on the following two topics: 1. Electrical safety 2. Electricity education (how electricity works)	Emotional Appeal Complete two speaking engagements in local schools. CCSR will provide presentations on two topics (topics TBD)		•



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INITIATIVES - Community				
2012	2013	2014	2015	2016
Vision & Leadership Identify and hold interactions with top 2 stakeholders. Focus should be to interact with stakeholders that pose a significant risk or opportunity to build relationships/reputation. This could also include/ involve participating in a public meeting, holding a meeting to discuss planned capital work/upgrades/etc, meeting with stakeholders to discuss potential community concerns (i.e., frequent power outages.)				



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INITIATIVES - Community				
2012	2013	2014	2015	2016
Vision & Leadership Participate/attend minimum 3 regular community/ business based events/ luncheons such as local Chambers, economic boards, local/regional trade shows.				•
Workplace Environment/ Corporate Citizenship With a committee of your				
employees, organize community event that engages employees and is promoted both internally and externally (call to local radio, TV or newspaper or submit a photo)				



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INITIATIVES - Community				
2012	2013	2014	2015	2016
Corporate Citizenship/ Employee Engagement Promote employee volunteerism/matching funds program to employees and achieve a 10% participation rate in the program (\$100 donated to organizations where our employees volunteer)				
Other initiatives can be identified by the region /plant if resources available to deliver. If support is required from other areas, this should be secured before putting the initiative in the plan.				



# Hydro & Division/Departmental Page 69 of 137, Isl Int System Power Outages additional must do's



Objectives, Targets and Initiatives recommended for inclusional 412, Wattach Gent 3

Functional Divisional and Departmental Plans

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**GOAL 2 Environment** 



PUB-NLH-412, Attachment 3
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#### **OBJECTIVES - Environment**

 Minimize production requirements and associated air emissions from the Holyrood Thermal Generating Station

TARGETS - Environment				
2012	2013	2014	2015	2016
Complete an update of previous studies on the impact to future emissions, costs and reliability of the introduction of additional wind generation on the Island Interconnected System within a 2012 – 2016 time frame.	Implementation of wind generation recommendation from the 2012 study.			
Develop a policy on Independent Distributed Generation	Subject to external policy approval requirements, Implement internal action to support an approved Independent Distributed Generation Policy			



INITIATIVES – Environment				
2012	2013	2014	2015	2016
Complete a study using available data from Hydro's experience with the 2 existing wind generation plants, simulation tools for energy production analysis, simulation tools for electric system operation and reference the experience of other similar electrical systems with large penetrations of wind energy.				
Establish internal working groups and draft policy on Independent Distributed generation for review with stakeholders and approval by the PUB				



Work plan template for year 1 initiatives
PUB-NLH-412, Attachment 3
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2012 INITIATIVES - Environment			
INITIATIVE	DELIVERABLE	RESPONSIBLE	TIMING
Complete a study using available data from Hydro's experience with the 2 existing wind generation plants, simulation tools for energy production analysis, simulation tools for electric system operation and reference the experience of other similar electrical systems with large penetrations of wind energy.	Final Report	Lead by System Planning with inputs from Business Development and System Operations.	March 2012
Establish internal working groups and draft policy on Independent Distributed generation for review with stakeholders and approval by the PUB	Draft distributed generation policy	System Planning	June 2012



PUB-NLH-412, Attachment 3
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#### **OBJECTIVES - Environment**

• Reduce or minimize environmental risks and emissions from diesel generation systems

#### **TARGETS - Environment**

2012	2013	2014	2015	2016
Complete the analysis of air emissions monitoring data collected from the Little Bay Islands generating station.				



PUB-NLH-412, Attachment 3
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INITIATIVES – Environment					
2012	2013	2014	2015	2016	
Complete the analysis of air emissions monitoring data collected from the Little Bay Islands generating station.					

2012 INITIATIVES - Environment						
INITIATIVE	DELIVERABLE	RESPONSIBLE	TIMING			
Complete the analysis of air emissions monitoring data collected from the Little Bay Islands generating station.	Analysis report with recommendations.	Operations and Environmental Services	June 2012			



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#### **OBJECTIVES - Environment**

Reduction in the amount of selected waste types entering municipal landfills

TARGETS - Environment						
2012	2013	2014	2015	2016		
Reduce amount of disposable batteries and scrap metal entering landfills.	Reduce amount of CFLs and fluorescent lighting tubes entering landfills	Reduce amount of used oil filters and oily rags entering landfills				
Determine waste volumes and categories produced as a result of activities and operations at Bay d'Espoir Generating Station	Determine waste volumes and categories produced as a result of activities and operations at Port Saunders Regional Office					



INITIATIVES – Environn	nent			
2012	2013	2014	2015	2016
Confirm and implement opportunities in selected locations for diversion of disposable batteries and scrap metal from landfills	Confirm and implement opportunities in selected locations for diversion of CFLs and fluorescent lighting tubes from landfills	Confirm and implement opportunities in selected locations for diversion of used oil filters and oily rags from landfills		
Implement, or budget for, waste reduction initiatives resulting from Hydro Place waste audit	Implement, or budget for, waste reduction initiatives resulting from Bay dÈspoir Generating Station waste audit.	Implement, or budget for, waste reduction initiatives resulting from Port Saunders Regional Office waste audit.		
Complete Bay dÈspoir Generating Station waste audit, subject to budgetary approval	Complete Port Saunders Regional Office waste audit, subject to budgetary approval			
Budget and determine resource requirements for waste audit at the Port Saunders Regional Office				



### Work plan template for year 1 initiatives PUB-NLH-412, Attachment 3 Page 78 of 137, Isl Int System Power Outages

2012 INITIATIVES - Environment			
INITIATIVE	DELIVERABLE	RESPONSIBLE	TIMING
Confirm and implement opportunities in selected locations for diversion of disposable batteries and scrap metal from landfills	Opportunities implemented.	Environmental Services and Facility Managers	Throughout 2012
Implement, or budget for, waste reduction initiatives resulting from Hydro Place waste audit	Waste reduction initiatives implemented and/or planned	Hydro Place Administration and Environmental Services	Throughout 2012
Complete waste audit at Bay d'Espoir generating station, subject to approval of budget item in 2012 budget	Bay d'Espoir waste audit report	Hydro Operations and Environmental Services	October 2012
Budget and determine resource requirements for waste audit at the Port Saunders Regional Office	Operating budget proposal	Hydro Generation and Environmental Services	First quarter 2012



PUB-NLH-412, Attachment 3
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#### **OBJECTIVES - Environment**

• Minimize environmental impact of hydro electric operations.

TARGETS - Environment					
2012	2013	2014	2015	2016	
Review spilling procedures and identify measures to mitigate environmental risks.					
Develop a procedure for dealing with entrained fish					



Work plan template for year 1 initiatives
PUB-NLH-412, Attachment 3
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2012 INITIATIVES - Environment						
INITIATIVE	DELIVERABLE	RESPONSIBLE	TIMING			
Review spilling procedures and identify measures to mitigate environmental risks.	Revise and/or develop procedures to improve mitigation of environmental risks associated with spilling activities.	Environmental Services. Hydro Operations System Operations	2012			
Establish a procedure for dealing with entrained fish.	Operating Procedure relating to fish entrainment (e.g. communication and reporting; fish relocation; documentation etc).	Environmental Services Hydro Operations	2012			



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#### **OBJECTIVES - Environment**

**TARGETS - Environment** 

Work with DFO to revise and complete

operating agreement.

• Finalize operating agreement for Granite Canal ("Dusk to Dawn")

2012	2013	2014	2015	2016	
Review and provide feedback on DFO draft report					
Provide proposal to revise operating agreement					

Work plan template for year 1 initiatives
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2012 INITIATIVES - Environment				
INITIATIVE	DELIVERABLE	RESPONSIBLE	TIMING	
Review and provide feedback on DFO draft report	Feedback provided to DFO	Environmental Services	March 2012	
Provide initial proposal to DFO for Granite Canal operation	Proposal to revise operating agreement	Environmental Services	May 2012	
Work with DFO to revise and complete operating agreement, if accepted.	Revised operating agreement	Environmental Services	August 2012	



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#### **OBJECTIVES - Environment**

• Develop Environmental Management System for Star Lake

TARGETS - Environment					
2012	2013	2014	2015	2016	
Develop EMS components for Star Lake and integrate into Hydro EMS, subject to budget approval.	Star Lake EMS fully implemented (ready to be audited)				



Work plan template for year 1 initiatives
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2012 INITIATIVES - Environment				
INITIATIVE	DELIVERABLE	RESPONSIBLE	TIMING	
Star Lake EMS development	Develop EMS components for Star lake and integrate into Hydro EMS, subject to budget approval.	Environmental Services. Hydro Operations	December 2012	



Objectives, Targets and Initiatives recommended for inclusional and Functional Divisional and Departmental Plans if they can be delivered



PUB-NLH-412, Attachment 3
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#### **OBJECTIVES - Environment**

 To support NLH's performance relating to Pollution Prevention and Stakeholder Acceptance environmental framework building blocks, put in place mechanisms to document and report on emissions of greenhouse gases associated with Corporate operations and activities by the end of 2013, consistent with the Provincial Energy Plan action proposal to join the Climate Change Registry to ensure consistent and verifiable measurement of GHG emissions.

TARGETS - Environment					
2012	2013	2014	2015	2016	
Collect data from available sources identified and compile in a format compatible with the Climate Registry's voluntary reporting mechanism.	Review the 2012 GHG quantification program for issues, problems or areas for improvement				



INITIATIVES – Environment				
2012	2013	2014	2015	2016
Collect available data and review for compatibility with quantification methods				
Develop plan to close identified data capture gaps				



Work plan template for year 1 initiatives
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2012 INITIATIVES - Environment				
INITIATIVE	DELIVERABLE	RESPONSIBLE	TIMING	
Collect available data and review for compatibility with quantification methods	Data compiled in registry compliant format	Environmental Services	December 2012	
Develop plan to close identified data capture gaps	Actions identified to close data gaps.	Environmental Services, System Operations and Customer Services, Information Systems	Third Quarter 2012	



PUB-NLH-412, Attachment 3
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#### **OBJECTIVES - Environment**

 To support NLH's performance relating to Pollution Prevention and Stakeholder Acceptance environmental framework building blocks, enhance corporate environmental data monitoring capability to provide consistent, accurate and verifiable data for Environmental reports.

#### **TARGETS - Environment**

2012	2013	2014	2015	2016
•Identify data needs and gaps and an action plan	•Implement action plan	•Test/verify environmental data.		



NITIATIVES – Environ	ment			
2012	2013	2014	2015	2016
eldentify Environmental data currently being reported. Identify the owners / people responsible for the data and all the stakeholders. Initiate discussions with IS on developing a database to store and manage the environmental data.	<ul> <li>Initiate the development of the environmental database.</li> <li>Develop methods and standards with data owners to ensure data is verifiable.</li> <li>Identify potential future reporting requirements (GHG, PCB, Sustainability, etc.)</li> </ul>	<ul> <li>Finalize and test environmental database.</li> <li>Develop and deliver training package for database stakeholders.</li> </ul>		



Work plan template for year 1 initiatives
PUB-NLH-412, Attachment 3
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2012 INITIATIVES - Environment				
INITIATIVE	DELIVERABLE	RESPONSIBLE	TIMING	
•Identify Environmental data currently being reported.	Existing data report	Environmental Services	May 2012	
•Identify the owners / people responsible for the data and all the stakeholders.	Data needs report	Environmental Services	May 2012	
•Initiate discussions with IS on developing a database to store and manage the environmental data.	Environmental performance database concept defined	Information Services and Environmental Services	October 2012	



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#### **OBJECTIVES - Environment**

• To support NLH's performance relating to Species Management and Stakeholder Acceptance environmental framework building blocks, evaluate opportunities for improvements to Company policies, activities and programs affecting biodiversity.

#### **TARGETS - Environment**

2012	2013	2014	2015	2016
•Identify opportunities/recomme ndations for changes to NLH biodiversity policies and programs	•Implement selected opportunities/recomme ndations	•Implement selected opportunities/recomme ndations		



INITIATIVES – Environment					
2012	2013	2014	2015	2016	
•Implement selected opportunities/recomme ndations from the 2011 evaluation report					



Work plan template for year 1 initiatives
PUB-NLH-412, Attachment 3
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2012 INITIATIVES - Environment				
INITIATIVE	DELIVERABLE	RESPONSIBLE	TIMING	
Implement selected opportunities/recommendations from the 2011 evaluation report	Revised biodiversity policies in place and related programs identified.	•Environmental services	October 2012	



#### **OBJECTIVES - Environment**

ARGETS - Environment

harm to migratory bird

nests and eggs.

• Minimize environmental impacts of operations.

TARGETS - Environment						
2012	2013	2014	2015	2016		
Promote awareness around the Migratory Bird Conventions Act.						
Identify NE activities that may cause incidental						

Work plan template for year 1 initiatives
PUB-NLH-412, Attachment 3
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2012 INITIATIVES - Environment					
INITIATIVE	DELIVERABLE	RESPONSIBLE	TIMING		
Promote awareness of the Migratory Bird Conventions Act.	Arrange a workshop involving relevant managers and supervisors.	Environmental Services	2012		
Review NE activities to identify those that may cause incidental harm to migratory bird nests and eggs.	List of activities with potential to cause incidental harm to nests/eggs.	Environmental Services	2012		



### **Goal 3: Business Excellence**

INITIATIVES – Custo	omer Satisfaction	Pag	PUB-NLH-412, Attachment 3 Page 97 of 137, Isl Int System Power Outages		
2011	2012	2013	2014	2015	
Formalize a Customer Service (Internal) Improvement Committee with representation from Regulated Operations and each of the service groups					
Formalize a strategic plan for improving and benchmarking internal customer services provided to Regulated Operations based on a four year plan	<ul> <li>Implement all initiatives indentified for year</li> <li>1 of the four year plan</li> <li>Measure results and adjust for variations</li> </ul>	<ul> <li>Implement all initiatives indentified for year 2 of the four year plan</li> <li>Measure results and adjust for variations</li> </ul>	<ul> <li>Implement all initiatives indentified for year 3 of the four year plan</li> <li>Measure results and adjust for variations</li> </ul>	<ul> <li>Implement all initiatives indentified for year 4 of the four year plan</li> <li>Measure results and adjust for variations</li> </ul>	



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2013	2014	2015	2016
		2013	2016

## **Background Information on Reliability Targets**



### 2012 Reliability Performance Measures.

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The winter availability measure for 2012 and beyond is a reliability check of available system generation against loss of single largest unit in ensuring that system load would be met. A unit is available if it is operating or available for operation within a short time period (typically 15 minutes or less). Violations are reflected in one of four 'bins'; Thermal, Hydro, TRO and System Operations. Annual targets are set to show continual improvement, with an overall winter availability of 99% met and maintained through 2014-2016.

Five year targets were previously proposed for Delivery Point Unreliability Index, DP System Average Interruption Duration Index, and DP System Average Interruption Frequency Index. The objective was, over a five year period, to be in the top quartile among all utilities reporting to the Canadian Electricity Association (CEA) for all of these measures.

Service Continuity performance targets are set using similar objectives as the delivery point measures. There are also expected improvements to service continuity performance as a result of improved delivery point performance.

For the transmission system, the 2011 targets for T-SAIFI and T-SAIDI may not be met. It is proposed to set 2012 at the 2011 target level. The Service Continuity targets will follow the previous year's objective of an expected 5% improvement in performance related to capital work.

Due to the nature of all these measures the final target level will not be set until January 31, 2012 after the outcomes for 2011 are known. Some measures may require adjustment at that time.

### **Goal 3: Business Excellence**

PUB-NLH-412, Attachment 3
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#### **OBJECTIVES – Reliability**

- By 2014, meet and maintain 99% generating availability during the winter operating period when compared against the loss of largest single unit criteria.
- Continuously improving within top quartile Transmission delivery point performance, 2012 to 2016.

<b>TAR</b>	<b>GET</b>	'S –	Rel	ia	bil	itv
.,	<b>U</b> L.			-		,

2012	2013	2014	2015	2016
NLH Winter Availability ≥ 98.0% •Thermal - 99.2% •Hydro - 99.6% •TRO - 99.6% •Sys Ops - 99.6%	NLH Winter Availability ≥ 98.5% •Thermal - 99.4% •Hydro - 99.7% •TRO - 99.7% •Sys Ops – 99.7%	NLH Winter Availability ≥ 99.0% •Thermal - 99.6% •Hydro - 99.8% •TRO - 99.8% •Sys Ops - 99.8%	NLH Winter Availability ≥ 99.0% •Thermal - 99.6% •Hydro - 99.8% •TRO - 99.8% •Sys Ops - 99.8%	NLH Winter Availability ≥ 99.0% •Thermal - 99.6% •Hydro - 99.8% •TRO - 99.8% •Sys Ops - 99.8%
Delivery Point Unreliability Index <11.36 System-minutes (16,000 MW-min)	Delivery Point Unreliability Index <10.96 System-minutes (16,000 MW-min)	Delivery Point Unreliability Index <10.60 System-minutes (16,000 MW-min)	Delivery Point Unreliability Index <10.32 System-minutes (16,000 MW-min)	Delivery Point Unreliability Index <10.08 System-minutes (16,000 MW-min)
102				1) nalcor

### Goal 3: Business Excelence 102 of 137, Isl Int System Power Outages

TARGETS – Reliability (Hydro)						
2012	2013	2014	2015	2016		
Hydro – T-SAIFI	Hydro – T-SAIFI	Hydro – T-SAIFI	Hydro – T-SAIFI	Hydro – T-SAIFI		
0.85 int./DP	0.81 int./DP	0.76 int./DP	0.70 int./DP	0.67 int./DP		
Hydro – T-SAIDI	Hydro – T-SAIDI	Hydro – T-SAIDI	Hydro – T-SAIDI	Hydro – T-SAIDI		
52.5 min/DP	49.5 min/DP	46.0 min/DP	43.0 min/DP	40.0 min/DP		
Hydro – SAIFI	Hydro – SAIFI	Hydro – SAIFI	Hydro – SAIFI	Hydro – SAIFI		
3.65 int/cust	3.47 int/cust	3.29 int/cust	3.13 int/cust	2.97 int/cust		
Hydro – SAIDI	Hydro – SAIDI	Hydro – SAIDI	Hydro – SAIDI	Hydro – SAIDI		
5.90 hrs/cust	5.60 hrs/cust	5.32 hrs/cust	5.06 hrs/cust	4.81 hrs/cust		



### Goal 3: Business Excelence 103 of 137, Isl Int System Power Outages

#### **TARGETS – Reliability (Nalcor Corporate)** 2012 2013 2014 2015 2016 Nalcor - T-SAIFI 0.85 int./DP 0.81 int./DP 0.76 int./DP 0.70 int./DP 0.67 int./DP Nalcor - T-SAIDI 52.5 min/DP 49.5 min/DP 46.0 min/DP 43.0 min/DP 40.0 min/DP



### **Background Information on Targets**



### Winter Availability

PUB-NLH-412, Attachment 3
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#### **Objectives:**

- Implement a winter availability measure for 2012 and beyond whereby available system generation is checked against the loss of the single largest unit to ensure that system load will be met under this contingency.
- System Operations would determine when planned/maintenance outages are permitted, with careful consideration using existing tools – i.e., the Nostradaumus load forecasting application, weather forecasts, historical data, etc.
- System Operations would also advise when forced outages or forced de-ratings of units are creating or could potentially result in a violation of the winter availability measure, so that appropriate steps can be taken to return the unit to service or restore maximum unit capability in the most expedient manner.
- A metric will be tracked and reported which accounts only for unit unavailability hours for which there would not be ample system generation available to supply the system load under the loss of the largest generating unit. These unavailability hours will be compared against the total hours in the month to provide a simple percentage which will be allocated to the four areas ('bins') of contributors. The bins include Hydro Generation, Thermal Generation, TRO and System Operations. The TRO bin includes the standby units and equipment external to a generating unit (eg. transformers or transmissions lines) for which forced or planned outages would cause the unit to become unavailable.
- This new approach will help to avoid situations whereby costly overtime is incurred to get
  units back on line ASAP so as not to negatively affect the performance measure, whether the
  unit is needed or not. In addition, from a safety standpoint, there should be less exposure to
  employees who have to respond to unit issues during the off-hours.



### Winter Availability Cont'd Page 106 of 137, Isl Int System Power Outages

#### **Target Setting:**

- <u>In 2012</u> it is assumed that there are <u>two violations in the area of Thermal, and one violation in the areas of Hydro, TRO and System Operations in all four months of the winter period. A duration of three hours per violation was chosen as this reflects the length of a typical day's peak (morning or evening).</u>
- <u>In 2013</u> it is assumed that there are <u>two violations in the area of Thermal, and one violation in the areas of Hydro, TRO and System Operations in three of the four months of the winter period (i.e. December, January, and February).</u>
- <u>In the years 2014-2016</u> it is assumed that there are <u>two violations in the area of Thermal, and one violation in the areas of Hydro, TRO and System Operations in two of the four months</u> of the winter period (i.e. December and February).

The following tables indicate a breakdown of the targets for 2012-2016.



### Winter Availability Cont'd.

PUB-NLH-412, Attachment 3
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#### 2012 Winter Availability

**Target Setting** 

Two violations (Thermal) and One violation (Hydro, TRO and and Decision Making) in each of the months

2012 Winter Availability Ta	2012 Winter Availability Targets									
	January	February	March	December	Winter					
Generation - Thermal	99.2	99.1	99.2	99.2	99.2					
Generation - Hydro	99.6	99.6	99.6	99.6	99.6					
TRO	99.6	99.6	99.6	99.6	99.6					
Decision Making	99.6	99.6	99.6	99.6	99.6					
Total	98.0	97.8	98.0	98.0	98.0					

#### 2013 Winter Availability

Two violations (Thermal) and One violation (Hydro, TRO and Decision Making) in Jan, Feb and Dec

2013 Winter Availability Ta	2013 Winter Availability Targets										
	January	February	March	December	Winter						
Generation - Thermal	99.2	99.1	100.0	99.2	99.4						
Generation - Hydro	99.6	99.6	100.0	99.6	99.7						
TRO	99.6	99.6	100.0	99.6	99.7						
Decision Making	99.6	99.6	100.0	99.6	99.7						
Total	98.0	97.8	100.0	98.0	98.5						

#### 2014-16 Winter Availability

Two violations (Thermal) and One violation (Hydro, TRO and Decision Making) in Feb and Dec

2014-16 Winter Availability	2014-16 Winter Availability Targets										
	January	February	March	December	Winter						
Generation - Thermal	100.0	99.1	100.0	99.2	99.6						
Generation - Hydro	100.0	99.6	100.0	99.6	99.8						
TRO	100.0	99.6	100.0	99.6	99.8						
Decision Making	100.0	99.6	100.0	99.6	99.8						
Total	100.0	97.8	100.0	98.0	99.0						



# Delivery Point Unreliability Index Page 108 of 137, Isl Int System Power Outages

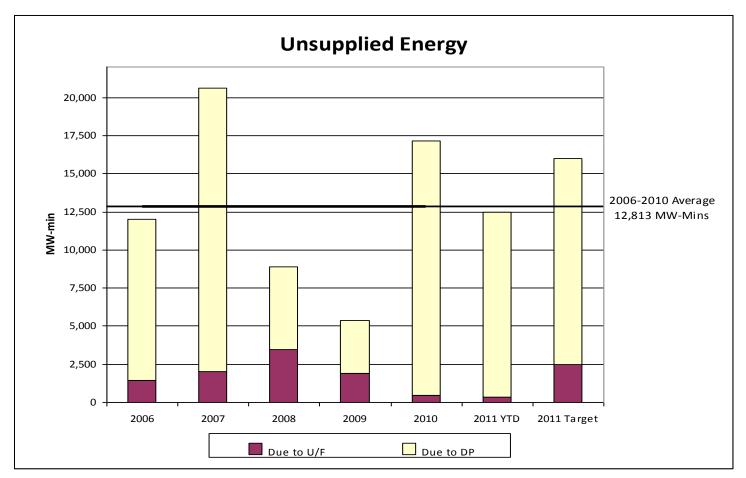
#### What it Measures

- Energy supply interrupted to customers due to forced outage incidents on the transmission and generation system.
- Does not include incidents that originate on the distribution systems or isolated diesel systems.
- Unsupplied energy is a measurement used in the CEA delivery point reliability performance measurement system.
- The CEA normalized measure is the Delivery Point
   Unreliability Index (DPUI). This is the ratio of unsupplied energy to system peak demand. It can be used to compare utilities of different sizes.



### Past Performance and 2011 year 109 of 137, 19th Clysten Power Outages

2012 Target: 16,000 MW-mins or 11.39 DPUI. (Delivery Point Unreliability Index).

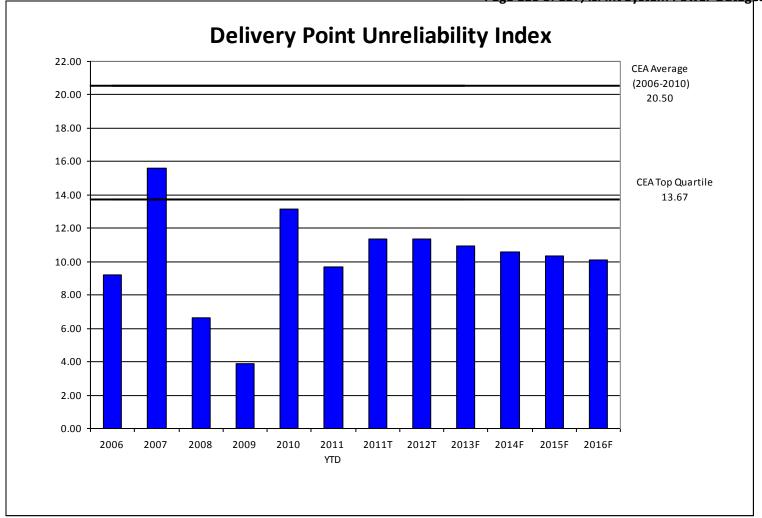




### **Target Proposal**

PUB-NLH-412, Attachment 3

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### **Target Proposal**

Year	Unsupplied Energy	Hydro DPUI
2012T	16,000	11.36
2013F	16,000	10.96
2014F	16,000	10.60
2015F	16,000	10.32
2016F	16,000	10.08



#### **Delivery Point Average Interruptions Duration and Frequency** Indexes

PUB-NLH-412, Attachment 3 Page 112 of 137, Isl Int System Power Outages

- There are two types of interruptions to the customer that can be measured. They are planned and forced outages.
- Forced outages occur with no notice and are caused by many factors. There is no control over the delivery point impact. Set the forced targets to the same level as the previous years working group proposals.
- Planned outages occur at a scheduled time to minimize the effect on customers. The can be required to complete both capital and operating projects. It is difficult to set multiple year targets due to the changes in the work from year to year and the requirement of planned outages with no notice. It is proposed to set targets for 2013 for this measure by March 31, 2012 after a final schedule of planned work is approved for 2012.



# Delivery Point System Average Interruption Fredhrit System Power Outages — T-SAIFI - Definition

#### What it Measures

- The frequency (number) of interruptions to a delivery point over a given period.
- A delivery point is defined as the point of supply where the energy from the bulk electric system is transferred to the distribution or the retail customer.
- Presently, there are 56 delivery points on the Hydro system.



# Delivery Point System Average Interruption Figure 137, Isl Int System Power Outages Index — T-SAIFI - Definition

**T-SAIFI** is the System Average Interruption Frequency Index. This provides a measure of the average number of interruptions that a delivery point experiences during a specified period

$$T - SAIFI(S) = \frac{Total \, No. of \, Sustained Interruptions}{Total \, No. of \, Delivery Points Monitored}$$



### **2012 Proposal**

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T-SAIFI (Forced Only)

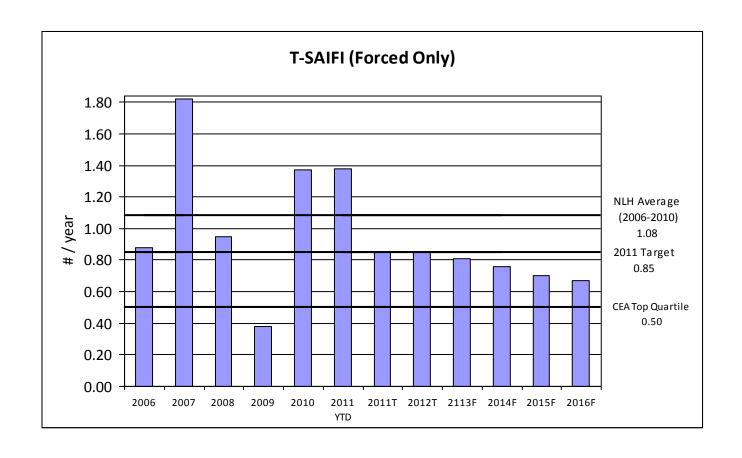
	Nalcor	Nalcor		TRO	TRO				
Year	Corporate	Energy-CF	Hydro	Northern	Labrador	TRO Central*	Central (rural)	Industrial	Nfld Power
2005	1.03	N/A	1.03	2.75	8.00	0.42	0.42	0.29	0.46
2006	0.88	N/A	0.88	2.58	7.00	0.31	0.75	0.38	0.08
2007	1.82	N/A	1.82	4.00	9.00	1.10	1.67	0.13	1.12
2008	0.95	N/A	0.93	2.58	9.00	0.33	0.92	0.00	0.15
2009	0.38	N/A	0.38	1.25	3.00	0.09	0.08	0.00	0.12
2010	1.38	N/A	1.31	4.08	5.00	0.54	0.75	0.00	0.54
2011 YTD	1.38	2.00	1.36	4.17	4.00	0.45	0.69	0.20	0.38
2011T	0.85	1.00	0.85	2.30	5.00	0.25	0.40	0.20	0.19
2012T	0.85		0.85						
2113F	0.81		0.81						
2014F	0.76		0.76						
2015F	0.70		0.70						
2016F	0.67		0.67						
Average									
(2006-2010)	N/A	N/A	1.08	2.90	6.60	0.47	0.83	0.12	0.40

Note: TRO Central is the equivalent total of Central (rural), Industrial and Nfld Power.



### T-SAIFI (forced) Performance

### PUB-NLH-412, Attachment 3 Page 116 of 137, Isl Int System Power Outages





# Delivery Point System Average Interruption PUB-NLH-412, Attachment 3 Frequency Index – T-SAIDI – Definity is new Power Outages

#### What it Measures

- The duration of interruptions to a delivery point over a given period.
- Usually measured in minutes.



# Delivery Point System Average Interruption Page 118 of 137, Isl Int System Power Outages Frequency Index — T-SAIDI - Definition

**T-SAIDI** is the System Average Interruption Duration Index. This index provides a measure of the average duration of sustained interruptions that a delivery point experiences during a specified period

$$T-SAIDI = \frac{Total \, Duration of \, All \, Interruptions}{Total \, No. of \, Delivery Points Monitored}$$



### **2012 Proposal**

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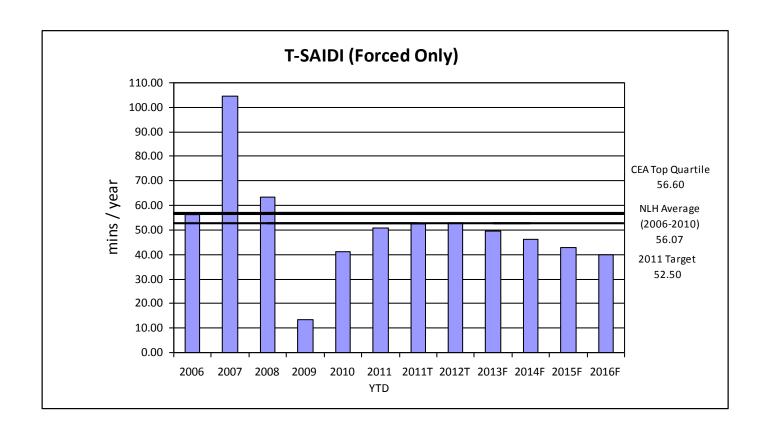
T-SAIDI (Forced Only)

	Nalcor	Nalcor		TRO	TRO	TRO	Central		
Year	Corporate	Energy-CF	Hydro	Northern	Labrador	Central*	(rural)	Industrial	Nfld Power
2005	56.86	N/A	56.86	130.67	186.00	34.31	36.08	106.00	14.19
2006	56.36	N/A	56.36	169.75	192.00	23.83	76.17	4.13	5.73
2007	104.71	N/A	104.71	47.92	131.00	119.01	336.83	0.13	54.15
2008	63.29	N/A	63.29	96.00	49.00	54.89	160.00	0.00	21.15
2009	13.53	N/A	13.53	58.17	15.00	1.56	0.08	0.00	2.73
2010	41.27	N/A	41.27	9.58	186.00	46.74	117.08	0.00	23.27
2011 YTD	50.61	22.00	51.61	142.83	161.50	20.81	58.18	6.20	6.85
2011T	52.50	45.00	52.50	80.00	80.00	40.00	110.00	10.00	20.00
2012T	52.50		52.50						
2013F	49.50		49.50						
2014F	46.00		46.00						
2015F	43.00		43.00						
2016F	40.00		40.00						
verage (2006	ı								
2010)	N/A	N/A	56.07	76.28	114.60	49.38	138.03	0.98	21.41

Note: TRO Central is the equivalent total of Central (rural), Industrial and Nfld Power.



### T-SAIDI (forced) Performance Page 120 of 137, Isl Int System Power Outages





### Service Continuity Performance Meass Lyking Swer Outages

System Average Interruption Frequency Index (SAIFI) is defined as the average number of interruptions per customer served per year.

$$SAIFI = \frac{Total\ Customer - Interruptions}{Total\ Customers\ Served}$$

System Average Interruption Duration Index (SAIDI) is defined as the average interruption duration per customer served per year..

$$SAIDI = \frac{Total\ Customer - Hours\_of\_Interruptions}{Total\ Customers\ Served}$$



#### Procedures used to calculate targets for SAIFI & SAIDI:

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**2012**: set both SAIFI & SAIDI at a 5% improvement in 2011 target.

How: We can expect a 5% improvement in performance due to capital work.

**2013**: set both SAIFI & SAIDI at a 5% improvement in 2012 target.

How: We can expect a 5% improvement in performance due to capital work.

2014: set both SAIFI & SAIDI at a 5% improvement in 2013 target.

How: We can expect a 5% improvement in performance due to capital work.

**2015**: set both SAIFI & SAIDI at a 5% improvement in 2014 target.

How: We can expect a 5% improvement in performance due to capital work.

**2016**: set both SAIFI & SAIDI at a 5% improvement in 2015 target.

How: We can expect a 5% improvement in performance due to capital work.



### **Service Continuity Performance**

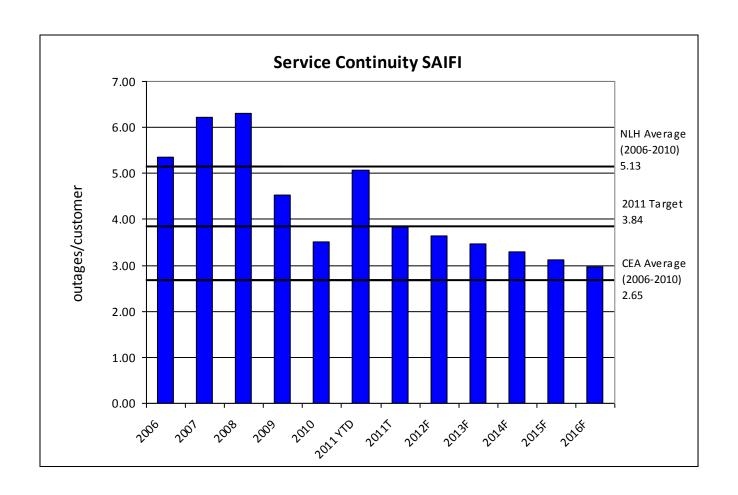
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#### **SAIFI**

		Central		Norther	n	Labrado	or
Year	Hydro	Interconnected	Isolated	Interconnected	Isolated	Interconnected	Isolated
2006	5.36	2.92	5.53	4.74	7.65	8.32	9.27
2007	6.22	3.44	2.37	4.55	8.53	11.43	7.91
2008	6.31	4.69	3.95	6.79	5.74	7.07	13.84
2009	4.53	2.91	2.42	2.68	4.25	7.24	13.87
2010	3.51	2.46	2.25	2.39	7.94	3.85	11.90
2011 YTD	5.07	2.64	5.55	4.99	5.23	7.80	6.85
2011T	3.84	2.77	2.77	3.84	4.32	4.65	7.24
2012F	3.65						
2013F	3.47						
2014F	3.29						
2015F	3.13						
2016F	2.97						
Average (2006-2010)	5.13	3.28	3.31	4.23	6.82	7.53	11.38



### Service Continuity Performan PUB-NLH-412, Attachment 3





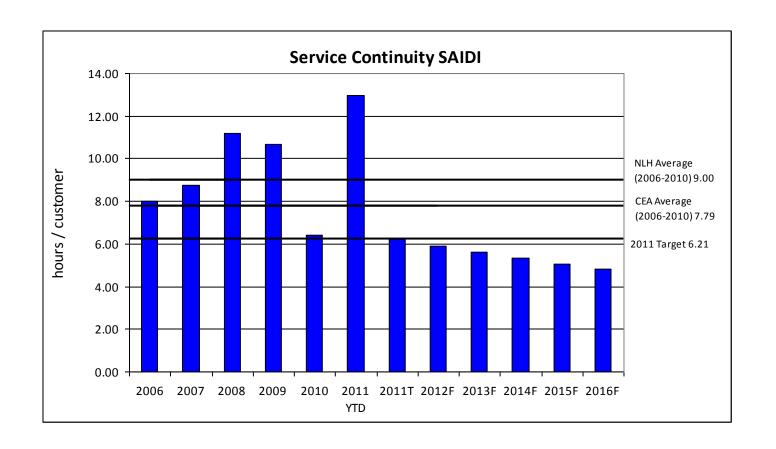
### Service Continuity Performan Pull-MIH-412, Attachment 3 Service Continuity Performant Stem Power Outages

#### **SAIDI**

		Central		Northerr	ı	Labrado	r
Year	Hydro	Interconnected	Isolated	Interconnected	Isolated	Interconnected	Isolated
2006	8.02	6.79	8.53	7.72	6.17	9.84	11.02
2007	8.74	7.81	1.55	7.42	6.85	11.45	14.92
2008	11.18	14.45	3.47	12.14	5.99	4.75	27.87
2009	10.67	6.02	1.55	4.41	3.97	24.99	12.75
2010	6.43	7.95	0.91	3.53	9.44	6.32	12.26
2011 YTD	12.97	14.18	3.24	16.31	3.83	11.36	10.68
2011T	6.21	6.21	3.21	6.21	4.05	6.21	10.39
2012F	5.90						
2013F	5.60						
2014F	5.32						
2015F	5.06						
2016F	4.81						
Average (2006-2010)	9.00	8.60	3.21	7.04	6.49	11.50	15.76



### Service Continuity Performan PUB-NLH-412, Attachment 3





### Graphics For Various Goag 1256f 137, Isl Int System Power Outages



# Goal 1: Safety - Framework PUB-NLH-412, Attachment 3 Page 128 of 137, Isl Int System Power Outages

**Safety First Technically Active Union Clear Vision Culture** of Timely Leading **Sound Best** Decision **Involvement** Goals and **And Effective** Open Lagging In Class **Making** In All **Objectives Training** Reporting Ratio **Procedures** Culture **Key Strategies Success Factors**  Employee Confidence Build, Operate and Maintain Facilities Safety Performance Successful Execution = To Generate / Produce, Transmit & Valued Employees Distribute Energy **Building Blocks Procedures** Union **Supportive** Leadership **Competence** Management Responsibility Reporting and Culture **Equipment Alignment Capability Discipline** Relationships Communication **Focus** 



## **Our Framework for Safety**

### Excellence

PUB-NLH-412, Attachment 3
Page 129 of 137, Isl Int System Power Outages

#### **LEADERSHIP**

- Clear vision, goals and objectives
- Safety champions who model expected behaviors

### PROCEDURES & EQUIPMENT

- Documented methods for all safety-sensitive tasks
- Technically sound, best-in-class procedures
- Safe equipment and physical work environment

#### COMPETENCE

- Clear standards & qualification requirements
- Effective recruitment
- Competence assurance
- Timely and effective training
- Safety organization & specialists

#### SUPPORTIVE CULTURE

- "Safety first" mindset
- Safety is everyone's responsibility
- We take care of each other
- All incidents are preventable
- Risk-free reporting

#### UNION-MGT ALIGNMENT

- Active union involvement in all key strategies
- Working as one, activities and initiatives based on alignment and mutual agreement
- Safety is not negotiable

#### **RESPONSIBILITY**

- All employees have a personal responsibility for their safety and the safety of others
- Clear system of internal responsibilities

#### Reporting, Analysis and Continuous Improvement

#### **LEADING INDICATORS**

Hazards, Near Misses, Safe and Unsafe Observations, First Aids, Inspections, Audits

#### LAGGING INDICATORS

Medical Treatments, Lost Time Injuries, Severity, analyzed by injury type, part of body, location, etc.



# **Safety Culture Model**

PUB-NLH-412, Attachment 3 Page 130 of 137, Isl Int System Power Outages

#### **Independent**

#### "Zero is attainable"

- Well understood process and operation
- Personal commitment
- Supervision/resource comfortable leading or allowing others to lead
- Ownership for procedures at team level
- Trust allowing for shared logic and ideas

#### Interdependent

#### "Zero is sustainable"

- Co-operation within and across teams
- Organizational pride
- We take care of each other
- Team fully engaged in the goal to

#### **Dependent**

#### "Zero is difficult"

- Management commitment
- Governed by rules and regulations
- Management centered activities
- Selective communication of objectives
- Discipline as a development tool
- Turf-type atmosphere

#### Reactive

#### "Zero is unrealistic"

- Goal of compliance
- Discipline is reactive to incidents
- Performance driven by management
- Management provided resource but lack of management involvement



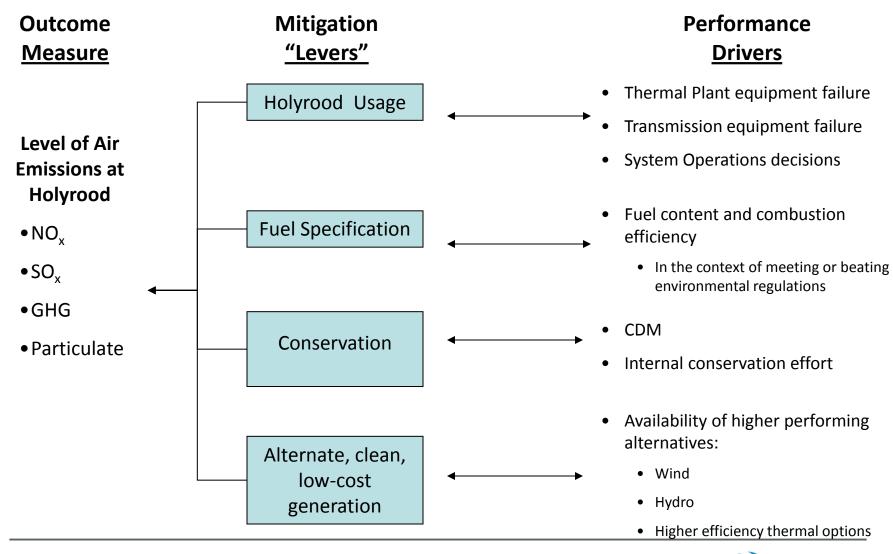
### Goal 2: Environment - Framework

				Page 131 of 137, Isl Int Sys	-412, Attachment 3 t <del>em Power Outages</del>
Minimize Emissions Per kWh Delivered	Emission Reduction Plan Fuel		Meet EMS Targets	Conservation And Demand Management	
		Sı	access Factors		
		Envir	onmental Lea	der	
	_				
		В	uilding Blocks	5	
Compliance	Prevention Of Pollution	Risk Management	Species Management	Stakeholder Acceptance	Environmental Consciousness
	y	Focus	Discipline	Relationships	Communicati



### **Environment – Air Emissions Detail**

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### **Environment – Land/Water Detail**

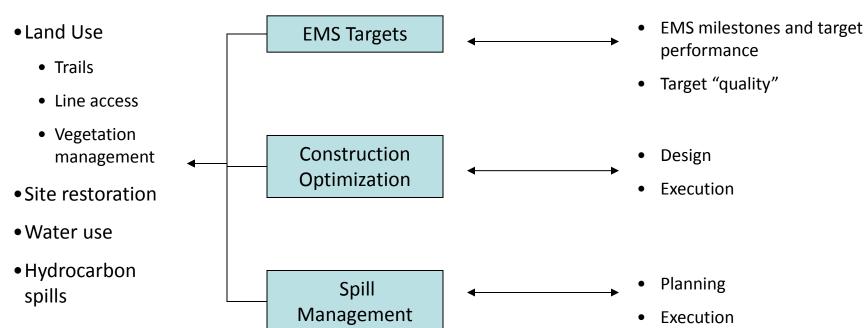
PUB-NLH-412, Attachment 3
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Outcome Measure

Mitigation "Levers"

Performance Drivers

# Land/Water Stewardship





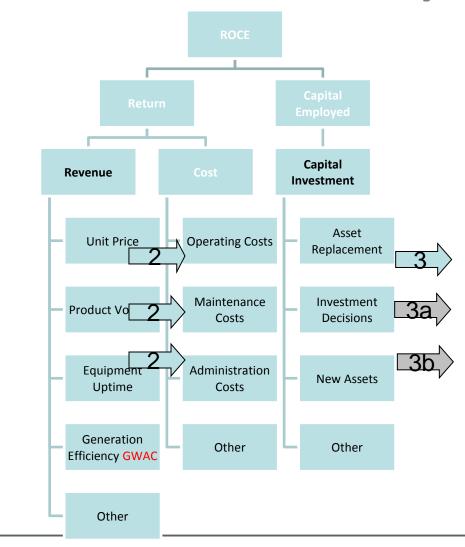
### Goal 3: Business Excellence - Framewo

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						Page	2 134 01 137	, isi int Syste	em Pow	er Outages
		ROCE	Maximized							
Retur	n		Capit	al Employ	ed			Reliability		Customer and Shareholder Satisfaction
Revenue (♠)		st Mgmt (↓)	Sche (on ti		(meets	uality appropr ndards)		eets up-time standards)	е	
			Suc	cess	Fact	ors				
Consumer Business Excellence										
Expectations										
			Bui	ilding	Blo	cks				
		Unders	tanding and N	Measuring	What	Drives	Our Busi	ness		
Planni	ing Excelle	ence				Execut	ion Excel	lence		
Investment Decision Making & Acquisition Process Quality	Busine Plannir Reportin Contro Proces Qualit	ig, E g, & ol	Engineering/ FEL Excellence	Construction and Commissioning Excellence Asset		gement	taran da anti-article de la companya de la company		Commitment to Customer and Shareholder	
Capabili	Capability Focu			Disc	cipline		Relatio	nships	Com	nmunication



### Newfoundland and Labrace 135 of 137 Islint System Power Outages









# Goal 4: People - Framework PUB-NLH-412, Attachment 3 Page 136 of 137, Isl Int System Power Outages

Respect & Dignity	Informed & Involved	Feedback & Recognition	Skilled People with Required Tools	Union as Trusted Partner	Committed To Excellence				
Success Factors									

### NALCOR TEAM Skilled, Motivated and Committed

			Ві			
Employees Are VALUED	Are Are		Strong LEADERSHIP	SKILLED & CAPABLE Employees	Union-Company COLLABORATION	Focus on PERFORMANCE & ACCOUNTABILITY
Capabi	lity		Focus	Discipline	Relationships	Communication



## Goal 5: Community - Framework, Attachment 3

Brand Equity	Strong stakeholder relationships	Employee Engagement	Strong/ Targeted Media Reputation	Alignment Shareholder Board Leadership	Awards & Recognition
		Succes	s Factors		

<u>Principles:</u> Visibility, Transparency, Distinctiveness, Consistency, Authenticity

**Good Corporate Reputation =** 

- Powerful corporate asset
- Insurance policy
- Stakeholder support

Building Blocks								
Corporate Values								
Emotional Appeal	Products & Services, Operational Excellence		Vision & Leadership		Workplace Environment	Financial & Business Performance	Corporate Citizenship Safety, Env. Energy Cons. Comm.Invest	
Capability		Foc	Focus		Discipline	Relationships	Communication	



### Nalcor Energy PUB-NLH-412, Attachment 49 2013-2017 Plan – Hydro





February 06, 2013 deck

### **Hydro - Plan Highlights**

PUB-NLH-412, Attachment 4
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GOAL	HYDRO									
1. SAFETY	Lead/Lag ratio 600:1	All injury f	All injury frequency (AIF) ≤ 0.80 Lost to			≤ 0.20				
	Complete planned 2013 activities related to Work Protection Attachment 4									
	Page 3 of 68, Isl Int System Power Outages  Complete planned 2013 activities related to Work Methods and Task Based Risk Assessment for all critical tasks <sup>2</sup>									
	Complete planned 2013 activities related to grounding and bonding <sup>3</sup>									
2. ENVIRONMENT	Complete ≥ 95% of Environmental Management System Targets									
	Reduce Holyrood emissions per unit of energy delivered by achieving ≤ 10.0% variance from N-1 ideal									
	Through Hydro managed CDM programs, achieve 2.9 GWh of energy savings in the residential & commercial area									
	Conduct evaluation of Industrial Energy Efficiency Program (IEEP) and develop multi-year plan									
	Achieve 0.40 GWh of energy savings through Hydro's internal energy efficiency programs									
3. BUSINESS EXCELLENCE	Œ									
Finance	Cash from Operations ≥ \$68.9M	Capital expenditures = \$86M	Op expenditures ≤ \$116	Net Income <u>&gt;</u> \$6.2I	Net Income ≥ \$6.2M					
	Readiness to file GRA within required timelines and approved rates in less than 8 months from filing									
Project Execution	Quality –improvement of projects delivered, without change orders (right first time)									
	Delivery - delivery of 90% of projects planned to be completed in the execution year									
Reliability/ Asset Management	Maintain generation contingency reserve requirement of ≥ 99.5% <sup>4</sup>									
	Complete 2013 phase of asset management plan <sup>5</sup>									
Future electricity supply	In collaboration with other Nalcor entities, complete 2013 activities to ensure a reliable, cost effective electricity supply for long-term provincial power supply by integrating the Lower Churchill Phase I assets and the Maritime Link into the power system									
Customer Service	Carry out customer improvement plant to ensure a Rural Residential Customer Satisfaction rate of >90% in 2014									
Non Regulated Assets	Complete planned 2013 activities to finalize integration of Exploits and Menihek with Regulated Operations by 2014									
4. PEOPLE	Complete 95% of EES action plan	Document multi-yea activities	Document multi-year plan for Holyrood Generating Station ELAC and complete 2013 activities							
5. COMMUNITY	Complete planned activities to ensure a 74% of the public believe Hydro has a strong reputation in 2013									
					<b>V</b> nalco	y				

#### **Footnotes**

- 1. Work protection code: Planned 2013 activities include
- 2. Work methods: Planned 2013 activities include:

- 3. Grounding and bonding: Planned 2013 activities include: Supporting the selectricity grounding and bonding training for electricity generation operations staff
- 4. Generation contingency reserve: Measure of availability of system generation. A generating unit is included in the reserve if it is operating or available for operation within a short time period. Performance is tracked and assessed monthly.
- 5. Asset management: Complete planned 2013 activities:
  - Asset criticality evaluation
  - Critical spares rationalization Phase 3 execute gap closure plan from 2012
  - Existing councils stabilize and grow (Rotating Equipment Essential Care; Long-term Asset Planning; Short-term Work Planning and Scheduling; Transformers and Switchyard; Root Cause Repeat Failure Analysis)
- 6. General Rate Application (GRA) readiness: Complete planned 2013 activities to support GRA.



# Hydro – Plan detail

PUB-NLH-412, Attachment 4
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PUB-NLH-412, Attachment 4
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PUB-NLH-412, Attachment 4
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#### **OBJECTIVES - Safety**

- Improve safety performance to world class standards and sustain this performance.
  - Lead/lag ratio of 1000:1sustained (2016)
  - All Injury Frequency Rate (AIF) ≤ 0.50 sustained or 0 incidents sustained (2016)
  - Lost-Time Injury Frequency Rate (LTIF) of ≤ 0.15 sustained or 0 incidents sustained (2015)

#### **TARGETS - Safety**

2013	2014	2015	2016	2017
Achieve safety lead/lag ratio of 600:1	Achieve safety lead/lag ratio of 750:1	Achieve safety lead/lag ratio of 1000:1	Achieve safety lead/lag ratio of 1000:1 sustained	Achieve safety lead/lag ratio of 1000:1 sustained
AIF ≤ 0.80	AIF ≤ 0.60	AIF ≤ 0.50	AIF ≤ 0.50 sustained	AIF ≤ 0.50 sustained
LTIF ≤ 0.20	LTIF ≤ 0.15	LTIF ≤ 0.15 sustained	LTIF ≤ 0.15 sustained	LTIF ≤ 0.15 sustained
N/A	N/A	Audit based measure of safety management system compliance (TBD in 2013/14)	Audit based measure of safety management system compliance	Audit based measure of safety management system compliance



PUB-NLH-412, Attachment 4

energy

INITIA	INITIATIVES – Procedures and Equipment 6 Competence						
2013	2014	2015	2016	2017			
<ul> <li>Work Methods</li> <li>Complete Task Inventories for all areas.</li> <li>Assess Critical Task Inventories for additions or revisions.</li> <li>Develop TBRA's and Work Methods (Reviewed, Verified or Approved Status) for all critical tasks.</li> <li>Continue auditing work methods process (TBRA and work methods) and field compliance</li> <li>A TBRA and Work Method must be developed for each critical task performed.</li> <li>Note: Exploits/ Menihek to complete 25 % of TBRA's and Work Methods for critical tasks.</li> <li>A TBRA and Work Method must be developed for all critical tasks</li> </ul>	<ul> <li>Work Methods</li> <li>Assess Critical Task Inventories for additions or revisions.</li> <li>Develop TBRA's for any new or revised critical tasks.</li> <li>Develop Work Method for any new or revised critical task.</li> <li>Assess Critical Task Inventories to consider reduction of critical task criteria to include lower risk tasks</li> <li>Continue auditing work methods process (TBRA and work methods) and field compliance</li> <li>Implement gap closure plan from audit results</li> </ul>	<ul> <li>Work Methods</li> <li>Assess Critical Task Inventories for additions or revisions (considering any new criteria)</li> <li>Develop TBRA's for all critical tasks.</li> <li>Develop action plan for development and verification of Work Methods for Lower Risk Tasks meeting new Critical Task criteria.</li> <li>Continue auditing work methods process (TBRA and work methods) and field compliance</li> </ul>	Work Methods  • Assess Critical Task Inventories for additions or revisions (considering any new criteria) • Develop TBRA's for all critical tasks. • Continue auditing work methods process (TBRA and work methods) and field compliance	Work Methods  • Assess Critical Task Inventories for additions or revisions (considering any new criteria) • Develop TBRA's for all critical tasks. • Continue auditing work methods process (TBRA and work methods) and field compliance			
performed.	Perform annual review of approved tasks	8		nalcor			

PUB-NLH-412, Attachment 4 Page 9 of 68, Isl Int System Power Outages

INITIATIVES – Procedures and Equipment / Competence						
2013	2014	2015	2016	2017		
<ul> <li>Work Protection Code</li> <li>Software - Review the suitability of using the software application in transmission &amp; distribution sites.</li> <li>Training - Implement improvements from assessment and continue with online training.</li> <li>Support - Implement support focusing on role of the supervisor.</li> <li>Feedback - Complete corporate and local process and paper audits.</li> <li>Audit - Implement electronic audit tool application</li> </ul>	•Training - Continue with online training and evaluate effectiveness.      •Support — shape the supervisor as a performance coach      •Feedback — review audit process to reflect the impact of the software application	<ul> <li>Work Protection Code</li> <li>Training – continue</li> <li>Support – continue</li> <li>Feedback – focus on process auditing</li> </ul>	Work Protection Code  •Feedback – focus on process auditing	Work Protection Code  •Feedback — focus on process auditing		



I	NITIATIVES – Procedures a		PUB-NLH-412, Atta of 68, Isl Int System Powe Competence	
2013	2014	2015	2016	2017
<ul> <li>Expand Grounding and Bonding Committee mandate to consider standards for temporary protective grounding and bonding practices including plant and terminal station grounding</li> <li>Commence development of standards for plant and terminal station grounding</li> <li>Audit temporary grounding and bonding practices for line operations</li> <li>Complete Protective Grounding and Bonding training delivery for Line Operations by 2nd Q in 2013</li> <li>Initiate budget proposal for 2014</li> </ul>	<ul> <li>Grounding and Bonding</li> <li>Develop training package for plants and terminal station grounding</li> <li>Develop train the trainer, Select trainers, and commence training</li> <li>Budget additional cost of equipment and material requirements to implement grounding applications including plants and terminals.</li> <li>Audit temporary grounding and bonding practices for line operations</li> <li>Allocate additional funds for training</li> <li>Commence training to plants and terminal stations</li> </ul>	Grounding and Bonding  Purchase equipment and material to implement grounding applications in plants and stations.  Audit temporary grounding and bonding practices.	Grounding and Bonding  • Audit grounding and bonding practices.  • Review Audit findings.	Grounding and Bonding  • Audit grounding and bonding practices.  • Review Audit findings.



INI	INITIATIVES – Procedures and Equipment / Competence					
2013	2014	2015	2016	2017		
<ul> <li>Identify training requirements and continue training as per WHSCC protocol.</li> <li>Develop audit program through the corporate Fall Protection Working Group.</li> <li>Continue with development and revisions of safe work plans.</li> <li>Implement online Fall Protection Equipment Inspection Records Database.</li> </ul>	<ul> <li>Identify training requirements and continue training as per WHSCC protocol.</li> <li>Participate in audit program through the corporate Fall Protection Working Group.</li> </ul>	<ul> <li>Identify training requirements and continue training as per WHSCC protocol.</li> <li>Participate in audit program through the corporate Fall Protection Working Group.</li> </ul>	<ul> <li>Identify training requirements and continue training as per WHSCC protocol.</li> <li>Participate in audit program through the corporate Fall Protection Working Group.</li> </ul>	<ul> <li>Identify training requirements and continue training as per WHSCC protocol.</li> <li>Participate in audit program through the corporate Fall Protection Working Group</li> </ul>		



	INITIATIVES – Procedures and Equipment / Competence				
2013	2014	2015	2016	2017	
<ul> <li>Confined Space</li> <li>Identify those requiring training and develop plan to deliver training consistent with 2013 WHSCC requirements.</li> <li>Develop audit protocol for Confined Space Program</li> </ul>	<ul> <li>Confined Space</li> <li>Continue training as per WHSCC requirements</li> <li>Continue auditing</li> </ul>	<ul> <li>Confined Space</li> <li>Continue training as per WHSCC requirements</li> <li>Continue auditing.</li> </ul>	<ul> <li>Confined Space</li> <li>Continue training as per WHSCC requirements</li> <li>Continue auditing</li> </ul>	<ul> <li>Confined Space</li> <li>Continue training as per WHSCC requirements</li> <li>Continue auditing</li> </ul>	
<ul> <li>Incident investigation</li> <li>Identify those that require training and continue training.</li> </ul>	<ul> <li>Incident investigation</li> <li>Identify those that require training and continue training.</li> </ul>	<ul> <li>Incident investigation</li> <li>Identify those that require training and continue training.</li> </ul>	<ul> <li>Incident investigation</li> <li>Identify those that require training and continue training.</li> </ul>	Identify those that require training and continue training.	



l l	INITIATIVES – Procedures and Equipment 7 Competence				
2013	2014	2015	2016	2017	
Occupational Health	Occupational Health	Occupational Health	Occupational Health	Occupational Health	
<ul> <li>Coordinate scheduling of annual audiometric testing for noise exposed employees.</li> <li>Continue noise mapping as required.</li> <li>Coordinate scheduling of and present hearing conservation training to noise exposed employees.</li> <li>Develop audit protocol</li> </ul>	Hearing Conservation  Continue training. Continue auditing				



	INITIATIVES – Leadership/ Supportive Culture					
2013	2014	2015		2, Attachment <b>2017</b>		
Supportive Culture	Supportive Culture	Supportive Culture	Page 14 of 68, Isl Int System Supportive Culture	<u>Supportive Culture</u>		
<ul> <li>Vulnerable workers</li> <li>Review progress, implement actions to address gaps/opportunities</li> <li>Review Local Orientation as per Corporate Local Orientation Standard</li> <li>Revisit Task Observations</li> </ul>	Review progress, implement actions to address gaps/opportunities	Monitor performance, adjust as required	Vulnerable workers     Monitor performance, adjust as required	Vulnerable workers  • Monitor performance, adjust as required		
Safety coaching Continue Phase II coaching workshop for existing workforce	Supportive Culture  Safety coaching Continue Phase II coaching workshop for existing workforce by end of 2014.	Supportive Culture  Safety coaching To be determined	Supportive Culture  Safety coaching To be determined	Supportive Culture Safety coaching To be determined		



	INITIATIVES	<ul><li>Leadership/ Supp</li></ul>	Page 15 of 68 Isl Int System Oortive Culture	Power Outages
2013	2014	2015	2016	2017
<ul> <li>Develop multi year plan to enhance safety culture and complete planned 2013 activities.</li> <li>Continue delivery of SWOP training</li> </ul>	<ul> <li>Complete planned 2014 activities outlined in multi year safety culture plan</li> <li>Continue delivery of SWOP training</li> </ul>	<ul> <li>Complete planned 2015 activities outlined in multi year safety culture plan</li> <li>Complete Safety Culture Survey to identify future focus areas</li> <li>Continue delivery of SWOP training</li> </ul>	<ul> <li>Develop/ execute         Safety Culture         change plan based         on 2015 safety         culture survey         results and         complete 2016         activities</li> <li>Continue delivery of         SWOP training</li> </ul>	<ul> <li>Identify and complete safety culture change plan based on 2015 safety culture survey results</li> <li>Continue delivery of SWOP training</li> </ul>



	INITIATIVES — Public Safety/ Supportive Culture					
2013	2014	2015	2016	2017		
Supportive Culture Occupational Health & Wellness	Supportive Culture Occupational Health & Wellness	Supportive Culture Occupational Health & Wellness	Supportive Culture Occupational Health & Wellness	Supportive Culture Occupational Health & Wellness		
Identify and complete 2013 activities to support corporate wellness strategy	Identify and complete 2014 activities to support corporate wellness strategy	Identify and complete 2015 activities to support corporate wellness strategy	To Be determined	To be determined		
Support Corporate Communications in the development of its Public Safety campaign specifically as it relates to electrical line contacts.	Continue support of public safety campaign	Continue support of public safety campaign	Continue support of public safety campaign	Continue support of public safety campaign		



### PUB-NLH-412, Attachment 4 INITIATIVES — Reporting/ Continuous mprovement em Power Outages

2013	2014	2015	2016	2017
Prevention Awareness  Participate in awareness	Prevention Awareness	Prevention Awareness	Prevention Awareness	Prevention Awareness
campaign activities relevant to line of business/functional area/department/ plant/region (slips/trips/falls; hand-related injuries; sprains/strains; and vulnerable workers)	Continue Awareness campaign, adjust as needed based on 2013 safety performance	Continue Awareness campaign, adjust as needed based on 2014 safety performance	To Be determined	To be determined
Arc Flash Support PETS in evaluation of Arc Flash compliance	Arc Flash Support PETS in evaluation of Arc Flash compliance	Arc Flash To be determined	Arc Flash To be determined	Arc Flash To be determined



PUB-NLH-412, Attachment 4
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PUB-NLH-412, Attachment 4
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#### **OBJECTIVES - Environment**

• Maintain the number of environmental leadership\* targets accomplished at 95%.

TARGETS - Environment					
2013	2014	2015	2016	2017	
Number of environmental leadership targets accomplished within Nalcor Energy at 95%	Number of environmental leadership targets accomplished within Nalcor Energy at 95%	Number of environmental leadership targets accomplished within Nalcor Energy at 95%	Number of environmental leadership targets accomplished within Nalcor Energy at 95%	Number of environmental leadership targets accomplished within Nalcor Energy at 95%	



### PUB-NLH-412, Attachment 4 Page 20 of 68, Isl Int System Power Outages

INITIATIVES – En	vironment			
2013	2014	2015	2016	2017
Environmental Management System targets identified and Program Leaders established	Environmental Management System targets identified and Program Leaders established	Environmental Management System targets identified and Program Leaders established	Environmental Management System targets identified and Program Leaders established	Environmental Management System targets identified and Program Leaders established
Review and approval of proposed Environmental Management System targets	Review and approval of proposed Environmental Management System targets	Review and approval of proposed Environmental Management System targets	Review and approval of proposed Environmental Management System targets	Review and approval of proposed Environmental Management System targets
Monthly update to status of EMS targets	Monthly update to status of EMS targets	Monthly update to status of EMS targets	Monthly update to status of EMS targets	Monthly update to status of EMS targets



Work plan template for year 1 initiatives
PUB-NLH-412, Attachment 4
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2013 INITIATIVES - Environment					
INITIATIVE	DELIVERABLE	RESPONSIBLE	TIMING		
Environmental Management System targets identified and Program Leaders established	Proposed EMS targets	EMS Management Representatives	January 2013		
Review and approval of proposed Environmental Management System targets	Approved EMS targets	NLH Leadership Team	January 2013		
Monthly update to status of EMS targets	Monthly report to NLH Leadership Team on EMS target status	EMS target Program Leader	monthly		



PUB-NLH-412, Attachment 4
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#### **OBJECTIVES - Environment**

 Minimize production requirements and associated air emissions from the Holyrood Thermal Generating Station

IARGEIS - Enviro	IARGEIS - Environment					
2013	2014	2015	2016	2017		
Emission Variance from ideal at Holyrood <10%	Emission Variance from ideal at Holyrood <10%	Emission Variance from ideal at Holyrood <10%	Emission Variance from ideal at Holyrood <10%	Emission Variance from ideal at Holyrood <10%		
Achieve 2.9 GWh of annual energy savings in residential and commercial sectors, through Hydro managed conservation and demand management programs	Achieve 2.2 GWh of annual energy savings in residential and commercial sectors through Hydro managed conservation and demand management programs	Achieve 1.2 GWh of annual energy savings in residential and commercial sectors through Hydro managed conservation and demand management programs	Achieve 1.2 GWh of annual energy savings in residential and commercial sectors through Hydro managed conservation and demand management programs	Achieve 1.2 GWh of annual energy savings in residential and commercial sectors through Hydro managed conservation and demand management		



programs

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#### **OBJECTIVES - Environment**

 Minimize production requirements and associated air emissions from the Holyrood Thermal Generating Station (Continued)

TARGETS - Environm	nent			
2013	2014	2015	2016	2017
Complete implementation of 2013 activities related to IEEP.				
Achieve 0.4 GWh of annual energy savings through internal energy efficiency programs.	Achieve 0.15 GWh of annual energy savings through internal energy efficiency programs.	Achieve 0.15 GWh of annual energy savings through internal energy efficiency programs.	Achieve 0.15 GWh of annual energy savings through internal energy efficiency programs.	Achieve 0.15 GWh of annual energy savings through internal energy efficiency programs.
Subject to external policy approval requirements, implement an Independent Distributed Generation (Net Metering).				



2013 INITIATIVES -	Environment			
2013	2014	2015	2016	2017
Implement programs as per the approved 5 Yr Plan	Conduct update of CDM potential study	Develop updated joint utility program Plan & prepare submission to PUB	Implement new programs as outlined in the approved Plan	
Conduct evaluation of Industrial Energy Efficiency Program (IEEP) and provide recommendations for next steps.	Address recommendations from IEEP Review.			
Develop and implement a communication plan for the results of the FEUP.	Determine metrics which evaluate the performance of IEE initiatives in addition to energy savings.			
Each region to create a minimum of one EE related EMS target.	Each region to create a minimum of one EE related EMS target.	Each region to create a minimum of one EE related EMS target.	Evaluate effectiveness of EE related EMS targets in achieving EE savings.	Each region to create a minimum of one EE related EMS target.



2013	2014	2015	2016	2017
Subject to external policy approval requirements, mplement internal action to support an Independent Distributed Generation (Net Metering).				
Complete a RATA on the CEMS system				
Perform required testing or data collection for dispersion modelling.				
mprove HTGS reliability				



# Work plan template for year 1 initiatives PUB-NLH-412, Attachment 4 Page 26 of 68, Isl Int System Power Outages

2013 INITIATIVES - Environment					
INITIATIVE	DELIVERABLE	RESPONSIBLE	TIMING		
Implement programs as per the approved 5 Yr Plan	New programs to market: Business Efficiency Program (BEP) HE HRVs Expanded Commercial Lighting	EE group	TBD with NP BEP – Q4 tentative HRV – Q2 tentative Lighting – Q2 tentative		
Complete readiness work for boardroom meetings with each IC.	Deck template completed re: review identified CDM opportunities and possible next steps to capture savings.	J. DeCoste	Q1		
Develop IC employee engagement tools to increase awareness of energy efficiency opportunities and actions.	Key messages prepared, draft pieces prepared for newsletter use, slide deck.	J. DeCoste	Q2		
Conduct evaluation of IEEP structure.	Completed review of the IEEP to be conducted by consultant.	J. DeCoste, S. Browne	Q4		



Work plan template for year 1 initiatives
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2013 INITIATIVES - Environment				
INITIATIVE	DELIVERABLE	RESPONSIBLE	TIMING	
Develop and implement a communication plan for the results of the FEUP.	Development of communication plan.	John Poole, Simone Browne	Nov 2013	
Each region to create and complete a minimum of one EE related EMS target.	Implementation of one EMS target per region which results in energy savings.	EE Group, HTGS, TROC, TRON, TROL, Hydro Generation	Throughout 2013	



# Work plan template for year 1 initiatives PUB-NLH-412, Attachment 4 Page 28 of 68, Isl Int System Power Outages

2013 INITIATIVES - Environment					
INITIATIVE	DELIVERABLE	RESPONSIBLE	TIMING		
Subject to external policy approval requirements, implement internal action to support an Independent Distributed Generation (Net Metering).	Independent Distributed Generation (Net Metering) submitted to the PUB for review.	Net-metering policy group.	Nov 2013		
Complete RATA on CEMS System	Complete RATA		December 31, 2013		
Collect data for dispersion modelling	Collect data.		December 31, 2013		
Implement recommendations of the GAP analysis of the steam condenser maintenance study from 2012	Present GAP analysis report to Plant Management and develop implementation plan.		December 31, 2013		
Improve HTGS reliability	Pending final approval and as part of the project, Replace Static Excitation Systems, complete the scheduled portion of the Replace Unit 3 Exciter work.		December 31, 2013		



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#### **OBJECTIVES – Environment**

• Reduce or minimize environmental risks and emissions from diesel generation systems

#### **TARGETS - Environment**

2013	2014	2015	2016	2017
Implement Phase 1 of plan developed in 2012 for electronic acquisition of diesel plant production data.	Implement Phase 2 of Plan developed in 2012.	Implement Phase 3 of plan developed in 2012	Implement Phase 4 of plan developed in 2012 (completion of project assuming communication problems are resolved at all sites)	



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#### **OBJECTIVES - Environment**

• Reduce or minimize environmental risks and emissions from diesel generation systems (continued)

#### **TARGETS – Environment**

2013	2014	2015	2016	2017
<ul> <li>Coastal Labrador Wind Monitoring Program <ul> <li>Erection of hub-height wind monitoring towers</li> <li>Wind data summary report.</li> </ul> </li></ul>	Wind data summary report.	Wind data summary report.  Prepare a feasibility report with an overall ranking of potential wind generation sites		
Feasibility Study of Hydraulic Potential of Coastal Labrador Install flow monitoring stations (2 OF 3), if deemed necessary. Annual stream flow data report	Annual stream flow data report	Annual stream flow data report Final flow data report	Annual stream flow data report Final flow data report	



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INITIATIVES – Environment					
2013	2014	2015	2016	2017	
Monitor data and analyze for plant efficiency and emission reduction potential for plants completed.	Monitor data and analyze for plant efficiency and emission reduction potential for plants completed in Phase 1.	Monitor data and analyze for plant efficiency and emission reduction potential for plants completed in Phase 1 and 2.	Monitor data and analyze for plant efficiency and emission reduction potential for plants completed in Phase 1 2 and 3.	•Monitor data and analyze for plant efficiency and emission reduction potential for plants completed in Phase 1 2, 3 and 4.	



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INITIATIVES – Environment				
2013	2014	2015	2016	2017
Coastal Labrador Wind Monitoring Program	Coastal Labrador Wind Monitoring Program	Coastal Labrador Wind Monitoring Program		
Feasibility Study of Hydraulic Potential of Coastal Labrador	Feasibility Study of Hydraulic Potential of Coastal Labrador	Feasibility Study of Hydraulic Potential of Coastal Labrador	Feasibility Study of Hydraulic Potential of Coastal Labrador	



2013 INITIATIVES - Environme	PUB-NLH-412, Attachment 4 Page 33 of 68, Isl Int System Power Outages		
INITIATIVE	DELIVERABLE	RESPONSIBLE	TIMING
Implement Phase 1 of plan developed in 2012.	Acquire data from at least one plant and develop monthly report from PI.	Information Systems and TRO Operations	December 2013
Coastal Labrador Wind Monitoring Program	<ul><li>Erection of hub-height wind monitoring towers</li><li>Wind data summary report</li></ul>	Project Execution and Technical Services via professional services contract	November 2013  December 2013
Feasibility Study of Hydraulic Potential of Coastal Labrador	Develop stream flow monitoring program     Install flow monitoring stations     Submission of Feasibility Report	Project Execution and Technical Services via professional services contract	November 2013, November 2013, November 2013



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#### **OBJECTIVES - Environment**

 Remove all sealed equipment that contains, or could potentially contains, greater than or equal to 50 mg/kg (ppm) of PCBs from service by 2025\*

TARGETS - Environment				
2013	2014	2015	2016	2017
Evaluate plan and produce annual summary for 2012 with a focus to meet 2025 deadline of having concerned PCB sealed equipment removed from service.	Evaluate plan and produce annual summary for 2013 with a focus to meet 2025 deadline of having concerned PCB sealed equipment removed from service.	Evaluate plan and produce annual summary for 2014 with a focus to meet 2025 deadline of having concerned PCB sealed equipment removed from service.	Evaluate plan and produce annual summary for 2015 with a focus to meet 2025 deadline of having concerned PCB sealed equipment removed from service.	Evaluate plan and produce annual summary for 2016 with a focus to meet 2025 deadline of having concerned PCB sealed equipment removed from service.

<sup>\*</sup>This objective assumes that Environment Canada will formally agree to proposals made by the Canadian Electricity Association to extend the requirement for removal of sealed equipment that may contain PCBs from 2014 to 2025.



### PUB-NLH-412, Attachment 4 Page 35 of 68, Isl Int System Power Outages

2013	2014	2015	2016	2017
Execute bushing and instrument transformer replacement plan for 2013 as submitted to Environment Canada	Execute bushing and instrument transformer replacement plan for 2014 as submitted to Environment Canada	Execute bushing and instrument transformer replacement plan for 2015 as submitted to Environment Canada	Execute bushing and instrument transformer replacement plan for 2016 as submitted to Environment Canada	Execute bushing and instrument transformer replacement plan for 2017 as submitted to Environment Canada
Update capital budget proposals for oil circuit breaker replacements, transformer bushing replacements and instrument transformer replacements	Update capital budget proposals for oil circuit breaker replacements transformer bushing replacements and instrument transformer replacements	Update capital budget proposals for oil circuit breaker replacements transformer bushing replacements and instrument transformer replacements	Update capital budget proposals for oil circuit breaker replacements transformer bushing replacements and instrument transformer replacements	Update capital budget proposals for oil circui breaker replacements transformer bushing replacements and instrument transformer replacements



# Work plan template for year 1 initiatives PUB-NLH-412, Attachment 4 Page 36 of 68, Isl Int System Power Outages

2013 INITIATIVES - Environment				
INITIATIVE	DELIVERABLE	RESPONSIBLE	TIMING	
Execute bushing and instrument replacement plan for 2013 as submitted to Environment Canada	Replacement of instrument transformers and bushings as outlined in plan.	TRO Operations, and Project Execution and Technical Services	Throughout 2013	
Update 2014 capital budget proposals for oil circuit breaker replacements, transformer bushing replacements and instrument transformer replacements	2014 Capital budget proposals prepared for oil circuit breaker replacements, transformer bushing replacements and instrument transformer replacements	TRO Operations, and Project Execution and Technical Services	April 2013	



### Goal 3: Business Excelence Page 37 of 68, 13 Int System Power Outages



# Goal 3: Business Excellence: Asset PUB-NLH-412, Attachment 4 Page 38 of 68, Isl Int System Power Outages Management



#### **OBJECTIVES – Asset Management**

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- Improve long term asset planning maturity
- Improve short term planning and scheduling maturity
- Improve maturity in root cause and repeat failure analysis
- Obtain common alignment with asset owners group on their role in leading teams and business units to excellence
- Focus development on most critical assets first
- Establish self-assessments as a tool to guide and measure improvement

#### **TARGETS**– Asset Management

2013	2014	2015	2016	2017
Baseline performance against gated 2013 metrics & set targets for 2014 performance • Weekly schedule compliance • Monthly annual work plan red line reviews • Emergency work • Total base annual controllable O&M cost • Change in 5 year capital project plans • LTAP function maturity • STWPS function maturity • PM Program compliance • Self-assessments				



#### Goal 3: Business Excellence – Asset Management, 2013-2017

	STRATEGIC INITIATIVES— Asset	Management	PUB-NLH-412, Attachment 4 Page 40 of 68, Isl Int System Power Outages			
	2013	2014	2015	2016	2017	
<u>5</u>	Asset Condition Assessment Module Implementation – communicate within LOB's and plan assessments into oper'g budgets	Evaluate Effectiveness/Adjust AM Strategy – Performance	Integrate Strategic, Financial, and Asset Plans & Risk	Reliability Analysis	Evaluate AM Effectiveness & Adjust	
5	Design Standards, Planning Criteria, Operating Parameters – Phase 2 LOB's Execute Gap Closure Plan, continued	Design Standards, Planning Criteria, Operating Parameters – Phase 2 LOB's Execute Gap Closure Plan	Consolidate Asset History and Technical Data	Knowledge Management Development	Knowledge Management Implementation	
-	Review and refresh 5 year project plans, includes MOC and high level implement plan	Review and refresh 5 year project plans, integrate risk (failure probability & impact)	Review and refresh Long Term Plans, includes 5 year	Review and refresh 5 year plans	Review and refresh 5 year plans	
	Self-Assessment of Asset Management Maturity by region (AO group to refresh survey)	Self-Assessments by region	Self-Assessments by region	Self-Assessments by region	Self-Assessments by region	
מ	Asset Criticality Evaluation by Applicable LOB	Asset Condition Inspection Module Development	Asset Condition Inspection Implementation	Condition Monitoring Module Development	Condition Monitoring Module Implementation	
5	Critical Spares Rationalization – Phase 3 Execute Gap Closure Plan from 2012	Critical Spares Rationalization – Phase 3 Execute Gap Closure Plan	Operator Asset Care and Craft Flexibility	Life Cycle Cost Analysis	RCM (Overall Unit Effectiveness)	
	Existing Councils – stabilize and grow Rotating Equip Essential Care LTAP STWPS Transformers & Switchyard RCRFA	TBD from Council specific, prioritized development plans - Data need and issues, gap analysis - External Assessment of Asset Management Maturity	TBD from Council specific, prioritized development plans - Metrics refresh - Update capital process from lessons learned	TBD from Council specific, prioritized development plans	TBD from Council specific, prioritized development plans	
5	New Councils (Initiate & Plan Forward) - Dam s and Dykes - Asset Owner Function	New Councils Development - Condition Inspection & Monitoring	Equipment Standardization	AM/CMMS Integration	Benchmarking	
7	(AM) Training and Skills Development - Build into personal development plans for key functional roles on needs basis	Establish Experts List (Internal & External SME's)	AM/CMMS Evaluation	Evaluate PAS 55/ISO Benefits of Compliance	Vendor Reliability	
1	Create Asset Management General Information Portal	Integrate AMS with Other LOB's (Beyond Electricity)	Materials Management Review	Review /update Standard Asset Hierarchies		



#### **Goal 3: Business Excellence – Asset Management**

**2013 Initiatives** 

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2013 INITIATIVES – Asset Management						
INITIATIVE	DELIVERABLE	RESPONSIBLE	TIMING			
Asset Condition Assessment Module Implementation – communicate within LOB's and plan assessments into operating budgets	Show critical condition assessments in 5 year plan for operating exceptions (budget)	Asset Owners with LTAP support	Q1-Q2			
Design Standards, Planning Criteria, Operating Parameters – Phase 2 LOB's Execute Gap Closure Plan, continued	Execute 2013 portion of the Basis of Design Gap Closure Plan (previously created and updated by LOB's)	Asset Owners	Q1-Q2			
Review and refresh 5 year project plans, includes MOC and high level implementation plan, scopes and justifications	Update existing plans and align with capital budgeting process  Document 5 year operating projects plan	LTAP's	Q1 Q2			
Self-Assessment of Asset Management Maturity (survey to be updated through Asset Owner council)	Complete and analyze updated standard survey, report survey results to OAM in standard format, use results as input to 2014 strategic plan	Asset Owners	Q1 – Q2			



#### **Goal 3: Business Excellence – Asset Management 2013 Initiatives**

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2013 INITIATIVES – Asset Management						
INITIATIVE	DELIVERABLE	RESPONSIBLE	TIMING			
Asset Criticality Evaluation by Applicable LOB	Perform asset criticality rankings and file with OAM	LTAP's	Q1-Q3			
Critical Spares Rationalization – Phase 3 Execute Gap Closure Plan from 2012	Execute 2013 portion of the Gap Closure Plan (as created by LOB's in 2012)	LTAP's	Q1-Q3			
Existing Councils						
- Rotating Equipment Ess Care Council	Develop lubrication self-assessment pkg and muti-year initiatives plan	REEC Council	Q1-Q3			
- LTAP Council	Develop LTAP self-assessment pkg & baseline applicable targets	LTAP Council	Q1-Q3			
- STWPS Council	Develop STWPS self-assessment pkg and multi-year initiatives plan and baseline applicable targets	STWPS Council	Q1-Q3			
- Transformers & Switchyard Council	Develop standard transformer test procedure and multi-year development	T&S Council	Q1-Q3			
- RCRFA Council	plan Develop RCRFA self-assessment pkg	RCRFA Council	Q1-Q3			



# Opportunity

# Goal 3: Business Excellence – Asset Management 2013 Initiatives

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2013 INITIATIVES – Asset Management						
INITIATIVE	DELIVERABLE	RESPONSIBLE	TIMING			
New Councils  Dam s and Dykes  Asset Owner Function	Form council and establish plan forward Form council and establish plan forward and baseline applicable targets	OAM with LOB OAM with LOB	Q3 Q1			
Training and Skills Development - Build into personal development plans for key functional roles	Build asset management role related training into personal development plans for core asset management functions on a needs basis	Asset Owners	Q1-Q2			
Create Asset Management General Information Portal	Work with IS to create an Asset  Management information access portal	OAM with IS support	Q1-Q4			



# Goal 3: Business Excellence Page 44 of 8, Islitt System Power Outages



# 2013 Reliability Performance 45 of 8, Islint System Power Outages

The Contingency Reserve measure for 2013 and beyond is proposed to be a reliability check of system generation reserve against loss of single largest unit in ensuring that system load would be met. A unit is included in the reserve if it is operating or available for operation within a short time period (typically 15 minutes or less). Violations are reflected in one of four 'bins'; Thermal, Hydro, TRO and System Operations. Annual targets are set to show continual improvement, with an objective to meet and maintain the annual contingency reserve requirement of 99.7% through the period of 2014-2017. Performance will be tracked and reported monthly.

For 2013, it is proposed that the Delivery Point Unsupplied Energy measure will include the impact of Planned, Forced, and Under Frequency Load Shedding events. The 2013 targets for forced and under frequency events are set to the previous year's targets. The 2013 target for planned is based on the 2007 to 2011 five year average.

For the transmission system, 2013 T-SAIFI and T-SAIDI targets are set at the same level as the previous year. Future targets are set to show a 5 % year over year improvement with the goal of approaching the CEA top quartile in 2017.

The Service Continuity targets will follow the previous years objective of a 5 % year over year improvement which is primarily attributable to capital enhancement work. There are also expected improvements to service continuity performance as the result of improved delivery point performance.



#### **Goal 3: Business Excellence**

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#### **OBJECTIVES – Reliability**

- By 2014, meet and maintain the contingency reserve requirement of 99.7% through the period of 2014-2017.
- Establish a planned Unsupplied Energy measure and set target at the previous five year average.
- Continuously improve towards the CEA top quartile Transmission delivery point performance over the period 2013 to 2017.
- Set Service Continuity targets to continue to show a five percent improvement over previous years targets.

#### **TARGETS** – Reliability

20	13	20	14	20	15	20	)16	20	17
NLH Conting Reserve ≥ 99.5% •Thermal •Hydro •TRO •Sys Ops	18 hours 9 hours 9 hours 9 hours	NLH Conting Reserve ≥ 99.7% •Thermal •Hydro •TRO •Sys Ops	12 hours 6 hours 6 hours 6 hours	NLH Conting Reserve ≥ 99.7% •Thermal •Hydro •TRO •Sys Ops	12 hours 6 hours 6 hours 6 hours	NLH Conting Reserve ≥ 99.7% •Thermal •Hydro •TRO •Sys Ops	12 hours 6 hours 6 hours 6 hours 6 hours	NLH Conting Reserve ≥ 99.7% •Thermal •Hydro •TRO •Sys Ops	12 hours 6 hours 6 hours 6 hours
Delivery Poi Unsupplied (MW-Mins) •Planned - 1 •Forced - 1 •UFLS - •Overall - 2	Energy 0,000 3,500 2,500	Delivery Poil Unsupplied (MW-Mins) •Planned - 1 •Forced - 1 •UFLS - •Overall - 2	Energy 0,000 3,500 2,500	Delivery Poi Unsupplied (MW-Mins) •Planned - 1 •Forced - 1 •UFLS - •Overall - 2	Energy .0,000 3,500 2,500	Delivery Poi Unsupplied (MW-Mins) •Planned - 1 •Forced - 1 •UFLS - •Overall - 2	Energy 10,000 .3,500 2,500	Delivery Poi Unsupplied (MW-Mins) •Planned - 1 •Forced - 1 •UFLS - •Overall - 2	Energy .0,000 3,500 2,500



## Goal 3: Business Excellence Page 47 of 68, Isl Int System Power Outages

TARGETS – Reliability (Hydro)								
2013	2014	2015	2016	2017				
Delivery Point Performance (Forced Outages)								
Hydro – T-SAIFI	Hydro – T-SAIFI	Hydro – T-SAIFI	Hydro – T-SAIFI	Hydro – T-SAIFI				
0.85 int./DP	0.81 int./DP	0.76 int./DP	0.70 int./DP	0.67 int./DP				
Hydro – T-SAIDI	Hydro – T-SAIDI	Hydro – T-SAIDI	Hydro – T-SAIDI	Hydro – T-SAIDI				
52.50 min/DP	49.50 min/DP	46.50 min/DP	44.00 min/DP	41.50 min/DP				
Service Continuity Pe	rformance (Forced & Pla	anned Outages)						
Hydro – SAIFI	Hydro – SAIFI	Hydro – SAIFI	Hydro – SAIFI	Hydro – SAIFI				
3.65 int/cust	3.47 int/cust	3.29 int/cust	3.13 int/cust	2.97 int/cust				
Hydro – SAIDI	Hydro – SAIDI	Hydro – SAIDI	Hydro – SAIDI	Hydro – SAIDI				
5.90 hrs/cust	5.60 hrs/cust	5.32 hrs/cust	5.06 hrs/cust	4.81 hrs/cust				



# Goal 3: Business Excellence: Future Reliable Cost Effective Supplied of 69, fill Int System Power Outages Electricity



#### **Goal 3: Business Excellence**

PUB-NLH-412, Attachment 4

#### **OBJECTIVES – Reliable Least Cost Supply**

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• <u>Electricity Supply Cost</u> - Establish long term energy supply which is least cost which meets Provincial energy consumers requirements.

TARGET – Electricity Cost						
2013	2014	2015	2016	2017		
Wholesale Transmission Level						
Energy Cost per						
MWh Island						
Interconnected						
System						



#### **INITIATIVES – Reliable Least Cost Supply**

2013	2014	2015	2016	2017
<ul> <li>Execute project plan for Bay d'Espoir to Western Avalon transmission upgrade.</li> <li>Execute 2013 project plan for the new Holyrood Combustion Turbine project.</li> <li>Execute 2013 project plan for breaker upgrades.</li> <li>Complete a study recommending the future least cost supply to the Happy Valley area.</li> </ul>	•Complete current year portion of plan for Island and Labrador system upgrades.	•Place into properation the new Holyrood Combustion Turbine.	operation the BDE to WAV line.  •Complete system breaker upgrades  •Complete BBK reconfiguration.	Attachment 4 Powco trublete the TL- 201 upgrades. •Complete the BDE bus reconfiguration for TL-204 and TL- 231.
Develop a multi-year NERC and NPCC compliance implementation plan for new transmission assets and the operation of the ML HVdc facilities and obtain approval to proceed.	•Complete current year portion of NERC and NPCC reliability standards implementation.	•Complete current year portion of NERC and NPCC reliability standards implementation.	•Complete current year portion of NERC and NPCC reliability standards implementation.	•Complete current year portion of NERC and NPCC reliability standards implementation.
Determine hydrotechnical models and Implementation plan for operations.				



INITIATIVES – Reliable	INITIATIVES – Reliable Least Cost Supply					
2013	2014	2015	<b>2016</b> PUB-NLH-412,	2017 Attachment 4		
Complete and implement commercial arrangements between Nalcor and NLH for a long term supply agreement from Muskrat Falls including interconnection of new transmission.		Рад	ge 51 of 68, Isl Int System Pe	ower Outages		
Complete Operational Organizational Design and develop an implementation plan to enable reliable and least cost operation and maintenance of new assets.	•Implement current year plan for organizational change.	•Implement current year plan for organizational change.	•Implement current year plan for organizational change.	•Implement current year plan for organizational change.		
Complete regulatory strategic plan for implementation of change to enable reciprocal open access to the Provincial transmission grid including implementation of an independent system operator as directed in legislation.	•Implement current year regulatory implementation plan	•Implement current year regulatory implementation plan	•Implement current year regulatory implementation plan	•Implement current year regulatory implementation plan		
		51		nalcor		
		)Ţ		energy		

### **Goal 3: Business Excellence**

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INITIATIVES – Reliable Lo	Page 52 of 68, Isl Int System Power Outages  NITIATIVES — Reliable Least Cost Supply				
2013	2014	2015	2016	2017	
Participate in the implementation of a Labrador Sink Point for supply to new Labrador Load prior to 2017.					
Develop and implement operational interfaces with LTA, LIL, MFP and ML projects. Identify critical design, construction and ready for operation aspects for NLH operations review and approval.					
Develop multi-year plan for implementation of the IOA with NSPI. Initiate Reserve Sharing and Adequacy reviews with NSPI as per IOA.					



### **Goal 3: Business Excellence**

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INITIATIVES – Reliable I	Page 53 of 68, Isl Int System Power Outages  INITIATIVES — Reliable Least Cost Supply					
2013	2014	2015	2016	2017		
Develop a training plan for system operation, planning and P&C staff for preparation for integrated operation of HVdc interconnections.						
Complete studies and issue reports for operation and special protection system s for the integrated HVdc interconnections including the basis of design. Develop a plan and execute 2013 portion of the SPS design and implementation.						
Develop regulation service costing and implementation plan including plan for review with Emera and submitting to PUB for approval.						



# Goal 3: Business Excellence: Customer Page 54 of 68, Isl Int System Power Outages Service



## **Goal 3: Business Excellence**

INITIATIVES – Customer Satisfaction		PUB-NLH-412, Attachment 4 Page 55 of 68, Isl Int System Power Outages			
2013	2014	2015	2016	2017	
Begin development of three year plan to achieve and sustain rural residential customer satisfaction target.	Implement year one activities in customer satisfaction plan.	Review customer satisfaction plan and outcomes for effectiveness and adjust as necessary to achieve/sustain rural residential customer satisfaction target.  Implement year two activities in customer satisfaction plan.	Implement year three activities in customer satisfaction plan.	Review customer satisfaction plan and outcomes for effectiveness and adjust as necessary to achieve/sustain rural residential customer satisfaction target.  Begin development of new three year plan.	



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#### **OBJECTIVE - People**

• Improve all elements of employee engagement to a level where Nalcor Energy would qualify for recognition as one of Canada's best employers in relation to an acceptable external benchmark.

#### **TARGETS - People**

2013	2014	2015	2016	2017
ENGAGEMENT EES - Action Plan Completion:	ENGAGEMENT EES - Participation Rate: ≥ 80% participation rate in EES survey.	ENGAGEMENT EES - Action Plan Completion:	ENGAGEMENT EES - Participation Rate:	ENGAGEMENT EES – Action Plan Completion:
Complete 95% of corporate and local EES action plan items planned for 2013	EES – Action Plan Completion: Complete 95% of corporate and local EES action plan items planned for 2014	Complete 95% of corporate and local EES action plan items planned for 2015	≥ 80% participation rate in EES survey.  EES – Action Plan Completion: Complete 95% of corporate and local EES action plan items planned for 2016	Complete 95% of corporate and local EES action plan items planned for 2017



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2013	2014	2015	2016	2017
Employees Valued Execute diversity and inclusion action plan Diversity Education and awareness training.  Target: XX% of employees in Reg. Operations complete training.	Employees Valued Execute diversity and inclusion action plan - Diversity Education and awareness training.  • Target: XX% of employees in Reg. Operations have completed training.	Employees Valued Execute diversity and inclusion action plan - Diversity Education and awareness training.  • Target: 100% of employees in Regulated Operations have completed training.	Employees Valued Execute diversity action plan, monitor results.  • Education / Awareness of new employees • Continue execution of other items as per multi-year action plan.	Employees Valued Execute diversity action plan, monitor results.  • Education / Awareness of new employees • Continue execution of othe items as per multi-year action plan.



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INITIATIVES – People				
2013	2014	2015	2016	2017
<ul> <li>Skilled/Capable People* Hi-Po/Succession:         <ul> <li>Identify hi-potentials following completion of 2012 performance review cycle.</li> <li>5 year workforce plan for core operations of Hydro (supported by HR).</li> <li>Identify high risk areas in 2013.</li> <li>Complete XX% of development plans related to Hi-Po.</li> <li>Succession plans for XX% of the high risk areas.</li> </ul> </li> <li>Rural Retention Strategy:         <ul> <li>Career awareness programs (school programs in rural areas) Target: 5 schools in 2013</li> <li>Delivery of DSR training program. Target: 50% DSRs complete training in 2013.</li> <li>Assessment of skill gap for Millwright trade to PSO qualification.</li> </ul> </li> </ul>	Skilled & Capable People* Hi-Po/Succession: Refresh hi-potentials following completion of 2013 performance review cycle. Complete of XX% development plans related to Hi Po. Succession plans completed for XX% of high risk areas.  Rural Retention Strategy: Career awareness programs (school programs in rural areas) Target: 5 schools in 2014 Delivery of DSR Training program. 100% DSRs to complete training by 2014. Support initiatives related to R&R Strategy.	Skilled & Capable People* Hi-Po/Succession:  Refresh hi-potentials following 2014 performance review cycle.  Refresh 5-year workforce plan for core operations of Hydro (supported by HR).  Complete 100% development plans related to Hi Po.  Succession plans completed for 100% of high risk areas.  Rural Retention Strategy:  Career awareness — continue to assess participation in rural areas.  Support initiatives related to R&R Strategy.	Skilled & Capable People* Hi-Po/Succession: Refresh hipotentials following 2015 performance review cycle. Refresh development plans related to Hi Po. Refresh succession plans for high risk areas.  Rural Retention Strategy: Refresher training for DSRs trained in 2013.	Skilled & Capable People* Hi-Po/Succession: Refresh hipotentials following 2015 performance review cycle. Refresh development plans related to HiPo. Refresh succession plans for high risk areas. Rural Retention Strategy: Refresher training for SRs trained in 2013.



INITIATIVES - Peop	INITIATIVES - People					
2013	2014	2015	2016	2017		
Skilled/Capable People* LMS  Supervisor awareness/training on LMS and to support gap reviews for safety and mandatory training requirements (LMS). Self-service launch for employees.  Muskrat-Related: TRO long-term structure reviewed. Deployment plans communicated to HTGS employees. Action plans developed to support transitions. Continue to identify opportunities throughout Hydro for deployment.	<ul> <li>Skilled &amp; Capable People* LMS         <ul> <li>Continue to support enhancements to LMS.</li> <li>Refining job specific templates.</li> </ul> </li> <li>Muskrat-Related:         <ul> <li>Deployment and action plans refreshed as necessary.</li> <li>Continue to identify opportunities throughout Hydro for deployment.</li> <li>Execute action plans identified for 2014 related to transition.</li> </ul> </li> </ul>	Skilled & Capable People*  Muskrat-Related:  Deployment plans refreshed as necessary.  Continue to identify opportunities throughout Hydro for deployment.  Execute action plans identified for 2015 related to transition	Skilled & Capable People*  Muskrat-Related:  Deployment plans refreshed as necessary.  Continue to identify opportunities throughout Hydro for deployment.  Execute action plans identified for 2016 related to transition	Skilled & Capable People*  Muskrat-Related:  Deployment plans refreshed for Post Steam.  Continue to identify opportunities throughout Hydro for deployment.  Execute action plans identified for 2017 (standby deployment)		
NOTE: See Safety Goal for init	latives related to safety training.	60		nalcor		

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INITIATIVES - Peop	INITIATIVES - People						
2013	2014	2015	2016	2017			
Organizational Effectiveness Execute 2013 activities in gap closure plans, monitor results.  Policy & Procedures  • Develop gap closure plan for policy & procedures related to Hydro Line of Business.  Asset management: Support initiatives to evolve asset management and project execution.	Organizational Effectiveness Execute 2014 activities in gap closure plans, monitor results.	Organizational Effectiveness Execute 2015 activities in gap closure plans, monitor results.	Organizational Effectiveness Execute 2016 activities in gap closure plans, monitor results.	Organizational Effectiveness Execute 2017 activities in gap closure plans, monitor results.			
		61		nalcor			

# **Goal 5: Community**

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# Goal 5: Community (Hydro objective of the System Power dutages

#### **OBJECTIVES - Community**

• To increase the percentage of the public who believe that Hydro has a strong reputation to 75% by 2015 (based on a rating of 7+/10.)

TARGETS - Community						
2013	2014	2015	2016	2017		
74% of the public believe Hydro has a strong reputation (maintain 2011 rating)		75% of the public believe Hydro has a strong reputation		75% of the public believe Hydro has a strong reputation (maintain 2015 rating)		



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INITIATIVES - Community					
2013	2014	2015	2016	2017	
Emotional Appeal Complete two speaking engagements in local schools. CCSR will provide an electrical safety presentation.	Emotional Appeal Complete two speaking engagements in local schools. CCSR will provide presentations on two topics (topics TBD)			•	



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INITIATIVES - Community					
2013	2014	2015	2016	2017	
Vision & Leadership Identify and hold interactions with top 2 stakeholders. Focus should be to interact with stakeholders that pose a significant risk or opportunity to build relationships/reputation. This could also include/ involve participating in a public meeting, holding a meeting to discuss planned capital work/upgrades/etc, meeting with stakeholders to discuss potential community concerns (i.e., frequent power outages.)				•	



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INITIATIVES - Community					
2013	2014	2015	2016	2017	
Vision & Leadership Participate/attend minimum 3 regular community/ business based events/ luncheons such as local Chambers, economic boards, local/regional trade shows.				•	
Workplace Environment/ Corporate Citizenship With a committee of your					
employees, organize community event that engages employees and is promoted both internally and externally (call to local radio, TV or newspaper or submit a photo)					



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INITIATIVES - Community					
2013	2014	2015	2016	2017	
Corporate Citizenship/ Employee Engagement Promote employee volunteerism/matching funds program to employees and achieve a 10% participation rate in the program (\$100 donated to organizations where our employees volunteer)					
Other initiatives can be identified by the region /plant if resources available to deliver. If support is required from other areas, this should be secured before putting the initiative in the plan.					



A proud, diverse energy company, whose people are committed to building a bright future for Newfound and and an area committed to building a bright future for Newfound and a second and a

#### Teamwork

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

### **Open Communication**

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

#### **Honesty and Trust**

Being sincere in everything we say and do.

# 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.



# Newfoundland and Labrador Hydro PUB-NLH-412, Attachment 5 2014-2018 Corporate Plan

May, 2014





GOAL		H	/DRO			
1. SAFETY	Lead/Lag ratio 600:1	All injury frequenc	All injury frequency (AIF) ≤ 0.80 Lost		njury frequency (LTIF) ≤ 0.15	
	Cor	nplete planned 2014activitie	s related to Work Pr	PUBLIND CADE	Attachment 5	
		Complete planned 2014 activities related to Work Methods ដាំងនេះ នៃក្រុង និង ខ្លាំង និង និង ខ្លាំង និង ខ្លាំង និង និង ខ្លាំង និង ខ្លាង និង ខ្លាំង និង ខ្លាំង និង ខ្លាំង និង ខ្លាំង និង ខ្លាំង និង ខ្ង				
	Con	nplete planned 2014 activitie	s related to groundi	ng and bonding	<sup>2</sup> 3	
2. ENVIRONMENT	Со	mplete <u>&gt;</u> 95% of Environme	ntal Management Sy	stem Targets <sup>4</sup>		
	Reduce Holyrood em	issions per unit of energy de	livered by achieving	≤ 10.0% variar	nce from N-1 ideal	
	Through Hydro managed CD	M programs, achieve 1.06	GWh of energy savir	ngs in the resid	ential & commercial area	
	Conduct evaluati	on of Industrial Energy Effici	ency Program (IEEP)	and develop m	nulti-year plan	
	Achieve 0.35 G	6Wh of energy savings throu	gh Hydro's internal e	energy efficiend	cy programs	
3. BUSINESS EXCELLENCE						
Finance	Cash from Operations <u>&gt;</u> \$97.6M	Capital expenditures = \$100.3M	Operating expe \$116.3		Net Income <u>&gt;</u> \$31.7M	
	Complete GRA and imp	Complete GRA and implement direction <sup>5</sup>		Develop multi-year regulatory process improvement strategy.  Complete 2014 Initiatives		
Project Execution	Quality imp	rovement of projects deliver	ed, without change	orders (right fi	rst time)	
	Delivery - de	elivery of 90% of projects pla	nned to be complet	ed in the exec	ution year	
Reliability/ Asset	Mai	ntain generation contingenc	y reserve requireme	nt of ≥ 99.5%	6	
Management		Complete 2014 phase of	of asset managemen	t plan <sup>7</sup>		
Integration	Complete 2014 LCP Integration A	ctivities as per Integration T	eam Plans			
Customer Service	To maintain an 80% Customer Sat	isfaction rating amongst Hyd	dro's rural customers	S		
Growth	Complete planned 2014 activities	Complete planned 2014 activities to finalize integration of Exploits into Hydro in 2014				
4. PEOPLE	Achieve 80% participation in best employer survey  Complete 2014 planned actions established by Holyrood ELAC					
5. COMMUNITY	Complete planned activities to ensure 75% of the public believe Hydro has a strong reputation when measured in 2016					
					newfoundland labrador hydro a nalcor energy company	

#### **Footnotes**

- 1. Work protection code: Planned 2014 activities include:
  - a. Audit code compliance (all areas)<sup>1</sup>
  - b. Review results and implement opportunities for improvement

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- 2. Work methods: Planned 2014 activities include:
  - a. Complete TBRAs/ work methods for critical tasks
  - b. Evaluate work method process<sup>2</sup>
  - c. Review results and implement opportunities for improvement
- 3. Grounding and bonding: Planned 2013 activities include:
  - a. Complete corporate initiatives for plants and stations ;
  - b. Commence auditing of Lines operations and implement gap closure plan.
- 4. Includes Environmental Management System targets for Hydro and business unit environmental targets/initiatives for Exploits and Menihek
- 5. General Rate Application (GRA): Successfully complete GRA and achieve approval of direction that supports strong financial performance for Hydro in 2014 and beyond.
- 6. Generation contingency reserve: Measure of availability of system generation. A generating unit is included in the reserve if it is operating or available for operation within a short time period. Performance is tracked and assessed monthly.
- 7. Asset management: Complete planned 2014 activities:
  - Assess implementation status of Hydro's Asset Management System
  - Assess asset management maturity level in key focus areas
  - Refresh the five year plan of asset management strategic initiatives
  - Stabilize and mature functionality of existing councils
- 8. Capital Expenditure value shown are Board Approved with known carry overs. It doesn't include supplemental capital or Large additional projects such as the new Holyrood CT, the Bay d'Espoir-Western Avalon Line or new line to Labrador West.



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# **Goal 1: Safety**

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#### **OBJECTIVES - Safety**

- Improve safety performance to world class standards and sustain this performance.
  - Lead/lag ratio of 1000:1 sustained (2016)
  - All Injury Frequency Rate (AIF) ≤ 0.50 sustained (2017)
  - Lost-Time Injury Frequency Rate (LTIF) of ≤ 0.15 sustained (2015)

#### **TARGETS - Safety**

2014	2015	2016	2017	2018
Achieve safety lead/lag ratio of 600:1	Achieve safety lead/lag ratio of 750:1	Achieve safety lead/lag ratio of 1000:1	Achieve safety lead/lag ratio of 1000:1 sustained	Achieve safety lead/lag ratio of 1000:1 sustained
AIF ≤ 0.80	AIF ≤ 0.60	AIF ≤ 0.50	AIF ≤ 0.50 sustained	AIF ≤ 0.50 sustained
LTIF ≤ 0.15	LTIF ≤ 0.15 sustained	LTIF ≤ 0.15 sustained	LTIF ≤ 0.15 sustained	LTIF ≤ 0.15 sustained
		OHSAS 18001 target based measure (TBD)	OHSAS 18001 target based measure (TBD)	OHSAS 18001 target based measure (TBD)



STRATEGIC INITIATIVES – Safety  PUB-NLH-412, Attachment 5						
2014	2015	2016	Page 6201457 sl Int System Power Outages			
Procedures & Equipment Work Protection Code • Audit code compliance (all areas)¹ • Review results and implement opportunities for improvement	Procedures & Equipment Work Protection Code To continue as part of normal operations	N/A	N/A	N/A		
Procedures & Equipment Work Methods  • Verify and approve work methods for critical tasks performed in 2014  • Evaluate work method process <sup>2</sup> • Review results and implement opportunities for improvement	Procedures & Equipment Work Methods • Audit work method compliance and implement gap closure plan	Procedures & Equipment Work Methods • Audit work method compliance and implement gap closure plan	Procedures & Equipment Work Methods To be determined	Procedures & Equipment Work Methods To be determined		



STRATEGIC INITIA	TIVES - Safety	PUB-NLH-412, Attachment 5 Page 7 of 45, Isl Int System Power Outages		
2014	2015	2016	2017	2018
Procedures & Equipment Grounding and Bonding • Complete corporate initiatives for plants and stations <sup>3</sup> • Commence auditing of Lines operations and implement gap closure plan	Procedures & Equipment Grounding and Bonding • Deliver EBG Training for Plants and Stations • Commence auditing for plants and stations and implement gap closure plan	Procedures & Equipment Grounding and Bonding • Audit compliance and implement gap closure plan	Procedures & Equipment Grounding and Bonding • Audit compliance and implement gap closure plan	Procedures & Equipment Grounding and Bonding TBD
<ul> <li>Supportive Culture</li> <li>Complete planned activities outlined in safety culture action plans</li> <li>Continue initiatives around Safety Coaching<sup>4</sup></li> </ul>	Supportive Culture  Complete Safety Culture Survey to identify future focus areas	Supportive Culture  • Develop/execute safety culture change plan based on 2015 safety culture survey results	Supportive Culture Identify and Complete safety culture change plan based on 2015 safety culture survey results	Supportive Culture • TBD



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STRATEGIC INITIATIVES - Safety						
2014	2015	2016	2017	2018		
Reporting/Continuous Improvement Prevention Awareness Continue injury prevention awareness campaign, adjust as needed based on 2013 safety performance	Reporting/Continuous Improvement Prevention Awareness Continue campaign, adjust as needed based on 2014 safety performance	Reporting/ Continuous Improvement Prevention Awareness To be determined	Reporting/ Continuous Improvement Prevention Awareness To be determined	Reporting/ Continuous Improvement Prevention Awareness To be determined		
Reporting/Continuous Improvement Standards & Records	Reporting/Continuous Improvement Standards & Records Complete safety management system readiness assessment for compliance with OHSAS 18001	Reporting/ Continuous Improvement Standards & Records Commence field level audit.	Reporting/ Continuous Improvement Standards & Records To be determined	Reporting/ Continuous Improvement Standards & Records To be determined		



STRATEGIC INITIATIVES – Safety  PUB-NLH-412, Attachment 5				
2014	2015	2016 Page 92045,7sl Int System Power Outages 8		
Competence Driving Evaluate and implement a training approach for Driving	Competence Driving To be determined	N/A	N/A	N/A
Procedures & Equipment Emergency Preparedness Review ERP and implement opportunities for improvement	Procedures & Equipment Emergency Preparedness To be determined	N/A	N/A	N/A
Procedures & Equipment Electrical Safety Program Support PETS with ongoing improvements around Arc Flash	Procedures & Equipment Electrical Safety Program To be determined	N/A	N/A	N/A



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STRATEGIC INITIAT	STRATEGIC INITIATIVES — Safety					
2014	2015	2016	2017	2018		
Procedures & Equipment Contractor Safety Management Program Support PETS with ongoing CSMP improvements	Procedures & Equipment To be determined	Procedures & Equipment To be determined	Procedures & Equipment To be determined	Procedures & Equipment To be determined		
Procedures & Equipment Occupational Health and Wellness Complete required initiatives around wellness, respiratory protection, hearing conservation, ergonomics and psychological health	Procedures & Equipment Occupational Health and Wellness Complete required initiatives around wellness, respiratory protection, hearing conservation, ergonomics and psychological health	Procedures & Equipment Occupational Health and Wellness To be determined	Procedures & Equipment Occupational Health and Wellness To be determined	Procedures & Equipment Occupational Health and Wellness To be determined		



#### **Footnotes**

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<sup>1</sup> Work Protection Code (WPC)

Targets established at LOB (2 live audits, 5 paper audits / Quarter)

<sup>2</sup>Work Methods

Monitor progress of work methods development from reviewed to approved status

<sup>3</sup>Grounding and Bonding

Complete EBG Standard and training package for Plants and Stations

<sup>4</sup>Safety Coaching

Continue delivery to frontline employees



## Goal 2: En Page 12 of 45, Isl Int System Power Outages





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#### **OBJECTIVES - Environment**

Maintain the number of environmental leadership\* targets accomplished at 95%.

#### **TARGETS - Environment** 2015 2016 2018 2014 2017 Number of Number of Number of Number of Number of environmental environmental environmental environmental environmental leadership targets leadership targets leadership targets leadership targets leadership targets accomplished within accomplished within accomplished within accomplished within accomplished within Nalcor Energy at 95% 95% 95% 95% 95%

<sup>\*</sup>Includes Environmental Management System targets for lines of business that use EMS and line of business targets for goal 2 for other lines of business.



STRATEGIC INITIATIVES - Environment			PUB-NLH-412, Attachment 5		
2014	2015	2016	Page 14 of 45, Isl Int System Power Outages 2017 2018		
EMS Execution of environmental management system gap closure plans for Exploits Generation and Menihek Generation	EMS Obtain EMS ISO registration Exploits Generation and Menihek Generation	EMS Complete Stage I of two-year internal audit plan for new EMS areas	EMS Complete Stage II of two-year internal audit plan for new EMS areas	EMS Execution of environmental management system gap closure plans for Exploits Generation and Menihek Generation	
Sustainability Evaluate application of the CEA's ISO based Sustainable Electricity Company framework and any other sustainability frameworks and if appropriate the selection option for further assessment	Sustainability Complete a gap analysis of Hydro's current practices and standards in reference to a selected corporate sustainability framework and recommend a long term strategy for Hydro				



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#### **OBJECTIVES - Environment**

 Minimize production requirements and associated air emissions from the Holyrood Thermal Generating Station

TARGETS					
2014	2015	2016	2017	2018	
Emission Variance from ideal at Holyrood <10%	Emission Variance from ideal at Holyrood <10%	Emission Variance from ideal at Holyrood <10%	Emission Variance from ideal at Holyrood <10%		
Achieve 1.06 GWh of annual energy savings in residential and commercial sectors, through Hydro managed conservation and demand management programs	Achieve 1.2 GWh of annual energy savings in residential and commercial sectors through Hydro managed conservation and demand management programs	Achieve 1.2 GWh of annual energy savings in residential and commercial sectors through Hydro managed conservation and demand management programs	Achieve 1.2 GWh of annual energy savings in residential and commercial sectors through Hydro managed conservation and demand management programs	Achieve 1.2 GWh of annual energy savings in residential and commercial sectors through Hydro managed conservation and demand management programs	



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#### **OBJECTIVES - Environment**

 Minimize production requirements and associated air emissions from the Holyrood Thermal Generating Station

TARGETS				
2014	2015	2016	2017	2018
Achieve 0.15 GWh of annual energy savings through internal energy efficiency programs.	Achieve 0.15 GWh of annual energy savings through internal energy efficiency programs.	Achieve 0.15GWh of annual energy savings through internal energy efficiency programs.	Achieve 0.15 GWh of annual energy savings through internal energy efficiency programs.	Achieve 0.15GWh of annual energy savings through internal energy efficiency programs
Achieve 1.06 GWh of annual energy savings in residential and commercial sectors, through Hydro managed conservation and demand management programs	Achieve 1.2 GWh of annual energy savings in residential and commercial sectors through Hydro managed conservation and demand management programs	Achieve 1.2 GWh of annual energy savings in residential and commercial sectors through Hydro managed conservation and demand management programs	Achieve 1.2 GWh of annual energy savings in residential and commercial sectors through Hydro managed conservation and demand management programs	Achieve 1.2 GWh of annual energy savings in residential and commercial sectors through Hydro managed conservation and demand management programs



# • INITIATIVES - Minimize production requirements and associated air emissions from the Holyrood Thermal Generating Station

2014	2015	2016	2017	2018
Conduct update of CDM potential study	Develop updated joint utility program Plan & prepare submission to PUB	Implement new programs as outlined in the approved Plan		
Address recommendations from Industrial Energy Efficiency Program Review.				
Delivery of Year 3 of Isolated Systems Community Program				
Each region to create a minimum of one EE related EMS target.	Each region to create a minimum of one EE related EMS target.	Evaluate effectiveness of EE related EMS targets in achieving EE savings.	Each region to create a minimum of one EE related EMS target.	
Subject to external policy approval requirements, implement internal action to support an Independent Distributed Generation (Net Metering).				



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# **Initiatives -** Reduce or minimize environmental risks and emissions from diesel generation systems

,				
2014	2015	2016	2017	2018
Implement Phase 2 of electronic acquisition of diesel plant production data. Implement efficiency and emissions reduction strategy for Phase 1 plants.	Implement Phase 3 of electronic acquisition of diesel plant production data. Implement efficiency and emissions reduction strategy for Phase 2 plants.	Implement Phase 4 electronic acquisition of diesel plant production data. Implement efficiency and emissions reduction strategy for Phase 3 plants.	Implement efficiency and emissions reduction strategy for Phase 4 plants.	
Coastal Labrador Wind Monitoring Program • Erection of hub-height wind monitoring towers • Wind data summary report.	Wind data summary report.	Wind data summary report.  Prepare a feasibility report with an overall ranking of potential wind generation sites		
Feasibility Study of Hydraulic Potential of Coastal Labrador Install flow monitoring stations (2 OF 3), if deemed necessary. Annual stream flow data report	Feasibility Study of Hydraulic Potential of Coastal Labrador	Feasibility Study of Hydraulic Potential of Coastal Labrador	Feasibility Study of Hydraulic Potential of Coastal Labrador	



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#### **OBJECTIVES - Environment**

 Remove all sealed equipment that contains, or could potentially contains, greater than or equal to 50 mg/kg (ppm) of PCBs from service by 2025\*

TARGETS - Environment					
2014	2015	2016	2017	2018	
Evaluate plan and produce annual summary for 2013 with a focus to meet 2025 deadline of having concerned PCB sealed equipment removed from service.	Evaluate plan and produce annual summary for 2014 with a focus to meet 2025 deadline of having concerned PCB sealed equipment removed from service.	Evaluate plan and produce annual summary for 2015 with a focus to meet 2025 deadline of having concerned PCB sealed equipment removed from service.	Evaluate plan and produce annual summary for 2016 with a focus to meet 2025 deadline of having concerned PCB sealed equipment removed from service.		

<sup>\*</sup>This objective assumes that Environment Canada will formally agree to proposals made by the Canadian Electricity Association to extend the requirement for removal of sealed equipment that may contain PCBs from 2014 to 2025.



# INITIATIVES –Remove all sealed equipment that contains, or could potentially contains, greater than or equal to 50 mg/kg (ppm) of PCBs from service by 2025\*

2014	2015	2016	2017	2018
Execute bushing and instrument transformer replacement plan for 2014 as submitted to Environment Canada	Execute bushing and instrument transformer replacement plan for 2015 as submitted to Environment Canada	Execute bushing and instrument transformer replacement plan for 2016 as submitted to Environment Canada	Execute bushing and instrument transformer replacement plan for 2017 as submitted to Environment Canada	Execute bushing and instrument transformer replacement plan for 2018 as submitted to Environment Canada
Update capital budget proposals for oil circuit breaker replacements, transformer bushing replacements and instrument transformer replacements	Update capital budget proposals for oil circuit breaker replacements transformer bushing replacements and instrument transformer replacements	Update capital budget proposals for oil circuit breaker replacements transformer bushing replacements and instrument transformer replacements	Update capital budget proposals for oil circuit breaker replacements transformer bushing replacements and instrument transformer replacements	Update capital budget proposals for oil circuit breaker replacements transformer bushing replacements and instrument transformer replacements



## Goal 3: Business Fage 2 Cof 45, Isl In System Power Outages





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STRATEGIC INITIATIVES – Regulatory Affairs					
2014	2015	2016	2017	2018	
General Rate Application (GRA): Successfully complete GRA and achieve approval of direction that supports strong financial performance for Hydro in 2014 and beyond.					



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TARGETS – Asset Management					
2014	2015	2016	2017	2018	
AMS execution plan on schedule	AMS execution plan on schedule	AMS execution plan on schedule	AMS execution plan on schedule	AMS execution plan on schedule	
STRATEGIC INITIA	ATIVES – Asset Ma	nagement			
2014	2015	2016	2017	2018	
Complete 2014 asset management implementation plan priorities	Complete 2015 asset management implementation plan priorities	Complete 2016 asset management implementation plan priorities	Complete 2017 asset management implementation plan priorities	Complete 2018 asset management implementation plan priorities	

#### <sup>1</sup> 2014 activities:

- Assess implementation status of Hydro's Asset Management System
  Assess asset management maturity level in key focus areas
  Refresh the five year plan of asset management strategic initiatives
  Stabilize and mature functionality of existing councils



#### Goal 3: Business Excellence – Asset Management, 2014 - 2018

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2014	2015	2016	2017	2018
Assess implementation status of Nalcor's Asset Managem't System and set next steps	Assess implementation status of Nalcor's Asset Management System			
Assess Asset Management maturity in key focus areas	Assess Asset Management maturity in key focus areas	Assess Asset Management maturity in key focus areas	Assess Asset Management maturity in key focus areas	Assess Asset Management maturity in key focus areas
Review and update 5 year project plans	Review and refresh Long Term Plans, includes 5 year	Review and update 5 year project plans	Review and update 5 year project plans	Review and refresh Long Term Plans, includes 5 year
Stabilize and mature existing Councils (Rotating Equipment Essential Care; Long-term Asset Planning; Short-term Work Planning and Scheduling; Transformers and Switchyard; Root Cause Repeat Failure Analysis, Diesel Generation, Asset Owners, Dams and Dykes, MOC)	Council Driven Initiatives and New Councils	Council Driven Initiatives and New Councils	Council Driven Initiatives and New Councils	Council Driven Initiatives and New Councils
Basis of Design - Execute existing gap closure plan and determine next steps	Materials Management Optimization and Effectiveness Review	Reliability Analysis	Evaluate AM Effectiveness & Adjust	RCM (Overall Unit Effectiveness)
Critical Spares Rationalization  – Execute existing gap closure plan and determine next steps	Consolidate Asset History and Technical Data – Vision and Plan	Operator Asset Care and Craft Flexibility	Evaluate PAS 55/ISO Benefits of Compliance	
Asset Condition Inspection & Monitoring	Asset Condition Inspection & Monitoring	Establish Experts List (Internal & External SME's)	AM/CMMS Evaluation	



### **Goal 3: Business Excellence – Asset Management**

**2014 Initiatives** 

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2014 INITIATIVES – Asset Managen INITIATIVE	RESPONSIBLE	TIMING	
Assess implementation status of Nalcor's Asset Management System and set next steps	Execute self-assessment package developed and tested in 2013 to measure status and identify opportunities	Asset Owners Council	Q1 - Q2
Assess Asset Management maturity in key focus areas	Use survey package developed in 2013 to measure maturity in key areas, identify opportunities and	Asset Owners Council	Q1 - Q2



#### **Goal 3: Business Excellence – Asset Management 2014 Initiatives**

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	2014 INITIATIVES – Asset Management						
INITIATIVE		DELIVERABLE	RESPONSIBLE	TIMING			
	Review and update 5 year project plans	Update existing plans and support budgeting process, consider risk of failure in terms of probability and impact in prioritization	LTAP Council	Q3 – Q4			
)	Stabilize and mature existing Councils	Execute Lubric'n Prog'm self-assessment Execute LTAP self-assessment Execute STWPS self-assessment Implement std. transformer test proced. Execute RCRFA self-assessment	REEC Council LTAP Council STWPS Council Trans&Swyd Council RCRFA Council	Q1 - Q2 Q1 - Q2 Q1 - Q2 Q1 - Q3 Q1 - Q2			
	Basis of Design - Execute existing gap closure plan and determine next steps	Execute 2014 portion of the Basis of Design Gap Closure Plan (as previously created and updated by LOB's)	Asset Owners Council	Q1 - Q4			



# **Goal 3: Business Excellence – Asset Management 2014 Initiatives**

PUB-NLH-412, Attachment 5

	2014 INITIATIVES – Asset Managem	Page 27 of 45, Isl Int System Power Outages		
	INITIATIVE	DELIVERABLE	RESPONSIBLE	TIMING
,	Critical Spares Rationalization – Execute existing gap closure plan and determine next steps	Execute 2014 portion of the previously created Gap Closure Plan (2012)	LTAP Council	Q1 – Q3



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STRATEGIC INITIATIVES – Project Execution							
2014	2015	2016	2017	2018			
Project Execution Excellence Execute 2014 activities outlined in implementation (gap closure) plan	Project Execution Excellence Execute 2015 activities outlined in implementation (gap closure) plan	Project Execution Excellence Execute 2016 activities outlined in implementation (gap closure) plan	Project Execution Excellence Execute 2017 activities outlined in implementation (gap closure) plan	Project Execution Excellence Execute 2018 activities outlined in implementation (gap closure) plan			



<sup>&</sup>lt;sup>1</sup> Project management process: Advance key project management best practices: time management (Phase II) and earned value analysis (Phase I).

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#### **OBJECTIVES – System Reliability**

- By 2015 achieve 99.7% generation contingency reserve and sustain this performance.<sup>1</sup>
- Maintain the unsupplied energy below 30,000 through to 2018

#### **TARGETS**

20	14	20	15	20	)16	20	017	20	)18
Achieve ge contingene > 99.5%¹ •Thermal •Hydro •TRO •Sys Ops		Achieve go contingen  > 99.7%  •Thermal  •Hydro  •TRO  •Sys Ops		Achieve go contingen  > 99.7%  •Thermal  •Hydro  •TRO  •Sys Ops	eneration cy reserve 12 hours 6 hours 6 hours 6 hours	_	eneration ncy reserve 12 hours 6 hours 6 hours 6 hours	Achieve g contingen  > 99.7%  •Thermal  •Hydro  •TRO  •Sys Ops	eneration icy reserve 12 hours 6 hours 6 hours 6 hours
Delivery Poi Unsupplied (MW-Mins) •Planned - 1 •Forced - 1 •UFLS - •Overall - 3	Energy 1,500 6,000 2,500	Delivery Poi Unsupplied (MW-Mins) •Planned - 1 •Forced - 1 •UFLS - •Overall - 3	Energy 1,500 6,000 2,500	Delivery Pol Unsupplied (MW-Mins) •Planned - 1 •Forced - 1 •UFLS - •Overall - 3	Energy 11,500 16,000 2,500	Delivery Po Unsupplied (MW-Mins) •Planned - •Forced - : •UFLS - •Overall -	l Energy ) 11,500 16,000 2,500	Delivery Po Unsupplied (MW-Mins) •Planned - : •Forced - : •UFLS - •Overall - :	Energy 11,500 16,000 0

<sup>&</sup>lt;sup>1</sup>Generation contingency reserve: Measure of availability of system generation. A generating unit is included in the reserve if it is operating or available for operation within a short time period. Performance is tracked and assessed monthly.



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#### **OBJECTIVES – System Reliability**

- Continuously improve to the CEA top quartile delivery point performance by 2018.
- Improve Service Continuity by 20% by 2018.

TARGETS				
2014	2015	2016	2017	2018
Delivery Point Perfor	mance (Forced Outages	)		
T-SAIFI	T-SAIFI	T-SAIFI	T-SAIFI	T-SAIFI
0.85 int./DP	0.80 int./DP	0.73 int./DP	0.67 int./DP	0.60 int./DP
T-SAIDI	T-SAIDI	T-SAIDI	T-SAIDI	T-SAIDI
52.50 min/DP	50.00 min/DP	48.00 min/DP	46.00 min/DP	44.00 min/DP
Service Continuity Pe	rformance (Forced & Pl	anned Outages)		
SAIFI	SAIFI	SAIFI	SAIFI	SAIFI
3.65 int/cust	3.47 int/cust	3.29 int/cust	3.13 int/cust	2.97 int/cust
SAIDI	SAIDI	SAIDI	SAIDI	SAIDI
5.90 hrs/cust	5.60 hrs/cust	5.32 hrs/cust	5.06 hrs/cust	4.81 hrs/cust



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STRATEGIC INITIATIVES – Growth Integration (Electricity ready for operations)							
2014	2015	2016	2017	2018			
Integration Complete 2014 activities outlined in electricity ready for operations multi- year strategy	Integration Complete 2015 activities outlined in electricity ready for operations multiyear strategy	Integration Complete 2016 activities outlined in electricity ready for operations multiyear strategy	Integration Complete 2017 activities outlined in electricity ready for operations multiyear strategy	Integration Complete 2018 activities outlined in electricity ready for operations multiyear strategy			



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INITIATIVES - Growth	INITIATIVES - Growth  Page 32 of 45, Isl Int System Power Outages					
2014	2015	2016	2017	2018		
<ul> <li>Execute project plan for Bay d'Espoir to Western Avalon transmission upgrade.</li> <li>Execute 2014 plan for the Island System capacity requirements.</li> <li>Execute 2014 project plan for breaker upgrades.</li> </ul>	<ul> <li>Complete current year portion of plan for Island and Labrador system upgrades.</li> <li>Place into operation solution for system capacity needs</li> </ul>	•Complete current year portion of plan for Island and Labrador system upgrades.	<ul> <li>Place into operation the BDE to WAV line.</li> <li>Complete system breaker upgrades</li> <li>Complete BBK reconfiguration.</li> <li>Complete the TL-201 upgrades.</li> <li>Complete the BDE bus reconfiguration for TL-204 and TL-231.</li> </ul>			
Develop a multi-year reliability compliance (NERC/NPCC) implementation plan for new transmission assets and the operation of the ML HVdc facilities and obtain approval to proceed.	•Complete current year portion of the reliability standards implementation.	•Complete current year portion of the reliability standards implementation.	•Complete current year portion of the reliability standards implementation.			



INITIATIVES – Growth		PUB-NLH-412, Attachment 5 Page 33 of 45, Isl Int System Power Outages			
2014	2015	2016	2017	2018	
Complete Operational Organizational Design and develop an implementation plan to enable reliable and least cost operation using established Asset Management Systems.	•Implement current year plan for organizational change.	•Implement current year plan for organizational change.	•Implement current year plan for organizational change.	•Implement current year plan for organizational change.	
Complete regulatory regime analysis for changes required by 2018 to enable reciprocal open access to the Provincial transmission grid including requirement for an independent system operator.	•Implement current year regulatory implementation plan	•Implement current year regulatory implementation plan	•Implement current year regulatory implementation plan	•Implement current year regulatory implementation plan	



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STRATEGIC INITIATIVES – Growth							
2014	2015	2016	2017	2018			
Labrador Industrial Activity Complete planned 2014 initiatives to respond to Labrador industrial activity <sup>1</sup>	Labrador Industrial Activity Complete planned 2015 initiatives to respond to Labrador industrial activity	Labrador Industrial Activity Complete planned 2016 initiatives to respond to Labrador industrial activity	Labrador Industrial Activity Complete planned 2017 initiatives to respond to Labrador industrial activity	Labrador Industrial Activity Complete planned 2017 initiatives to respond to Labrador industrial activity			



<sup>&</sup>lt;sup>1</sup> Labrador Industrial Activity: Complete 2014 activities including: completing any required commercial arrangements to support 2014 expiration of TwinCo arrangement, and advancing any necessary regulatory requirements.

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STRATEGIC INITIATIVES – Growth – Exploits Integration								
2014	2015	2016	2017	2018				
Exploits Integration Complete 2014 plan for Exploits Integration with Hydro								
Complete proposal to GNL for acquisition of Exploits assets for Ratepayer benefits								



INITIATIVES — Customer Satisfaction PUB-NLH-412, Attachment 5 Page 36 of 45, Isl Int System Power Outages				
2014	2015	2016	2017	2018
Implement year one activities in customer service strategy.	Implement year two activities in customer service strategy.	Implement year three activities in customer service strategy.	Evaluate customer service strategy and outcomes for effectiveness and adjust as necessary to achieve/sustain rural residential customer satisfaction target. Begin development of new three year plan.	



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#### **OBECTIVE - People**

• Improve all elements of employee engagement to a level where Hydro would qualify for recognition as one of Canada's best employers in reference to an acceptable external benchmark, and maintain each subsequent year.

#### **TARGETS - People**

2014	2015	2016	2017	2018
Achieve > 80% participation in 2014 Employee Engagement Survey	Complete > 95% of 2014 Employee Engagement Survey action plan items	Achieve > 80% participation in 2016 Employee Engagement Survey	Complete > 95% of 2016 Employee Engagement Survey action plan items	Achieve <u>&gt;</u> 80% participation in 2016 Employee Engagement Survey
Achieve overall Hydro Employee Engagement Survey score of > 4.40		Achieve overall Hydro Employee Engagement Survey score of > 4.50		Achieve overall Hydro Employee Engagement Survey score of $\geq 4.60$



STRATEGIC INITIA	ATIVES - People			I-412, Attachment 5
2014	2015	2016	Page 39 of 45, Isl Int Sys <b>2017</b>	tem Power Outages 2018
Engagement Execute 2014 activities stemming from 2012 employee engagement survey. Complete external best employer benchmarking process and develop action plan to address results	Engagement Execute 2015 activities outlined in employee engagement action plans	Engagement Execute 2016 activities stemming from 2014 employee engagement survey. Complete external best employer benchmarking process and develop action plan to address results	Engagement Execute 2017 activities outlined in employee engagement action plans	Engagement Execute 2018 activities stemming from 2016 employee engagement survey. Complete external best employer benchmarking process and develop action plan to address results



STRATEGIC INITIA	ATIVES - People		PUB-NLI	H-412, Attachment 5
2014	2015	2016	Page <b>2014</b> , Isl Int Sys	
Skilled/Capable People; Employees are Valued Continue execution of multi-year action plan for diversity/ inclusion <sup>1</sup>	Skilled/Capable People; Employees are Valued Complete a progress evaluation of diversity/inclusion, refresh strategy and multi-year action plan <sup>2</sup>	Skilled/Capable People; Employees are Valued Execute 2016 actions in multi-year diversity/inclusion action plan	Skilled/Capable People; Employees are Valued Execute 2017 actions in multi-year plan	Skilled/Capable People; Employees are Valued Complete a progress evaluation of diversity/inclusion, refresh strategy and action plan
Skilled/Capable People Continue execution of gap closure for succession planning and performance management Complete the implementation of Phase III of Learning Management System <sup>3</sup>	Skilled/Capable People Complete implementation of Phase IV Learning Management System <sup>4</sup>	Skilled/Capable People Review all elements of the company's Talent Management Strategy, identify strategy and process improvement opportunities	Skilled/Capable People Execute talent management improvement plan	Skilled/Capable People Continue to execute talent management improvement



- <sup>1</sup> Diversity/inclusion multi-year action plan: 2014 activities include continued delivery of Awareness and Skills 432 Attackment 5 ps and continuation of Awareness Campaign.
- <sup>2</sup> Diversity/inclusion multi-year action plan: 2015 activities include initiating a self-identification survey and completing evaluation against 2011 baseline data.
- <sup>3</sup> Learning Management System: Implement Phase III activities including complete professional development data integrity exercise (non-mandatory training) and implement core technical templates for key occupations. Conduct an alignment check on the LMS strategy and multi-year action plan.
- <sup>4</sup> Learning Management System: Implement Phase IV activities including completing core competency templates for all other identified occupations, and roll out to all users. Ensure greater linkages between our other talent management processes.



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# **Goal 5: Community**

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#### **OBJECTIVES - Community**

• To increase the percentage of the public who believe Hydro has a strong reputation to 74% by 2015.

#### **TARGETS - Community**

2014	2015	2016	2017	2018
		Hydro reputation at 75% (Percentage of the public who believe Hydro has a strong reputation)*		

<sup>\*</sup> Measured on a three year cycle



STRATEGIC INITIA	TIVES - Communi	ty	PUB-NLF	H-412, Attachment 5
2014	2015	2016	Page 44 of 45, Isl Int Sys	
Reputation Management Complete Hydro three year reputation management plan.	Reputation Management Execute year one actions and initiatives	Reputation Management Execute year two actions and initiatives	Reputation Management Execute year three actions and initiatives; evaluate and refresh plan	
Electricity Education Complete year three activities and explore alternative community based model with CSR team.				
Public Safety Communication Plan Execute 2014 activities, review, evaluate and refresh three year plan	Public Safety Communication Plan Execute year one activities	Public Safety Communication Plan Execute year two activities	Public Safety Communication Plan Execute year three activities; evaluate and refresh plan	
Corporate Citizenship Complete assessment of community investment program (CIP) and develop multi-year program and CIP Marketing Strategy	Corporate Citizenship Execute annual CIP strategy and year 1 of CIP Marketing Strategy	Corporate Citizenship Execute annual CIP strategy and year 2 of CIP Marketing Strategy	Corporate Citizenship Execute annual CIP strategy and year 3 of CIP Marketing Strategy; evaluate and refresh plan	



TRATEGIC INITIATIVES			PUB-NLH-412,	Attachment 5
2014	2015	2016	Page 4 <b>5 of 4</b> 5, Isl Int System Power <b>Qutage</b> s	
Digital/Social Hydro web site review nd development of ew site including nobile functionality	Digital/Social Complete social media strategy to complement Hydro rep mgmt plan			
Customer Communication Deview and update Outage communication Process Meter reader safety Chase two	Customer Communication Meter reader safety update strategy			
Regulatory Communication Strategy for GRA Communication Strategy for large Capital projects	Regulatory Continued GRA support Continued capital program support			
Energy Efficiency Complete plan and execute year one activities	Energy Efficiency Execute year two activities	Energy Efficiency Execute year three activities; evaluate and refresh three year plan		

