

Newfoundland Power

2005

Environmental Commitment & Responsibility (ECR) Program

(The following is a summary of the 2005 Newfoundland Power submission to CEA. If you require further information please contact the Environment Section.)

CEA – ECR Program 2005 Electronic Data Reporting Template (02/22/2006)

NOTES

Company Name: Newfoundland Power

(see separate tab)

Table B: Summary of Generation Statistics:**Gross Generation (GWh)**

B1	Fossil	0.5
B2	Hydroelectric	458.6
B3	Nuclear	Not App
B4	Alternative	Not App
B5	Total	459.1
B16	Alternative Energy purchased from non-CEA members	Not App

Net Generation (GWh)

B6	Fossil	0.5
B7	Hydroelectric	456.3
B8	Nuclear	Not App
B9	Alternative	Not App
B10	Total	456.7

Station Use (including plant losses)(GWh)

B11	Fossil	Not App
B12	Hydroelectric	2.4
B13	Nuclear	Not App
B14	Alternative	Not App
B15	Total	2.4

Table C: Total Length and Area of Transmission and Distribution Line

C1	Total Length of Distribution Lines (km)	8600.0
C2	Total Length of Transmission Lines (km)	2100.0
C3	Total Area of Transmission Rights-of-Way (ha)	4400.0

P1.1 Energy Conversion Efficiency of Fossil Fuel Generating Station

P1.1A	Net Generation (GWh)	
P1.1B	Thermal Energy Sales (GWh)	
P1.1C	Net Energy Output (GWh)	
P1.1D	Total Energy Input (GWh)	
P1.1E	Fuel Energy Conversion Efficiency (%)	

P1.2 Internal Energy Efficiency For Generation:

P1.2A	Gross Generation (GWh)	
P1.2B	Net Generation (GWh)	
P1.2C	Generation Energy Efficiency (%)	

P1.2 Internal Energy Efficiency For Transmission:	
P1.2F	Transmission System Energy Input (GWh)
P1.2G	Transmission Energy Output (GWh)
P1.2H	Transmission Energy Efficiency (%)
P1.2 Internal Energy Efficiency For Distribution:	
P1.2I	Distribution System Energy Input (GWh)
P1.2J	Distribution System Energy Output (GWh)
P1.2K	Distribution Energy Efficiency %
P1.4 Utilization of Solid Combustion By Product:	
P1.4A	Total Ash + FGD/FBC Residue Produced (tonnes)
P1.4B	Total Ash + FGD/FBC Residue Utilized (tonnes)
P1.4C	Percent Utilization
P1.4D	Amount sent to landfill (tonnes)
P1.4E	Amount sent to recoverable storage (tonnes)
P2.1 Atmospheric Emissions - Carbon Dioxide CO₂:	
P2.1A	Total Gross Annual CO ₂ Emission - fossil fuel related(tonnes)
P2.1B	Total CO ₂ Emission Offsets and Credits (tonnes)
P2.1C	Total Net CO ₂ Emission (tonnes)
P2.1D	Mass Gross CO ₂ Emitted Per Unit of Net Fossil Generation (kg/kWh)
P2.1E	Mass Gross CO ₂ Emitted Per Unit of Net System Generation (kg/kWh)
P2.1F	Mass Net CO ₂ Emitted Per Unit of Net Fossil Generation (kg/kWh)
P2.1G	Mass Net CO ₂ Emitted Per Unit of Net System Generation (kg/kWh)
P2.1W	Total kg of SF ₆ Used for Maintenance Purposes (topping up)
P2.1 Atmospheric Emissions - Sulphur Dioxide SO₂	
P2.1H	Total Gross Annual SO ₂ Emission (tonnes)
P2.1I	Total SO ₂ Emission Offsets and Credits (tonnes)
P2.1J	Total Net SO ₂ Emission (tonnes)
P2.1K	Mass Gross SO ₂ Emitted Per Unit of Net Fossil Generation (g/kWh)
P2.1L	Mass Gross SO ₂ Emitted Per Unit of Net System Generation (g/kWh)
P2.1M	Mass Net SO ₂ Emitted Per Unit of Net Fossil Generation (g/kWh)
P2.1N	Mass Net SO ₂ Emitted Per Unit of Net System Generation (g/kWh)
P2.1 Atmospheric Emissions - Nitrogen Oxides NO_x	
P2.1O	Total Gross Annual NO _x Emission (tonnes)
P2.1P	Total NO _x Emission Offsets and Credits (tonnes)
P2.1Q	Total Net NO _x Emission (tonnes)
P2.1R	Mass Gross NO _x Emitted Per Unit of Net Fossil Generation (g/kWh)
P2.1S	Mass Gross NO _x Emitted Per Unit of Net System Generation (g/kWh)
P2.1T	Mass Net NO _x Emitted Per Unit of Net Fossil Generation (g/kWh)
P2.1U	Mass Net NO _x Emitted Per Unit of Net System Generation (g/kWh)

P2.2 Spills		
P2.2A	Number of Reportable Spills	4
P2.2B	Number of Priority Spills	3
Priority Spills Information (SEE SEPARATE WORKSHEET (TAB) "Priority_Spills" TO INPUT DATA)		
		# Yes # No
P2.2H	Did the priority spill involve a petroleum product?	#REF! #REF!
P2.2I	Did the priority spill involve a PCB contaminated substance?	#REF! #REF!
P2.2J	Was the priority spill volume greater than 500 litres?	#REF! #REF!
P2.2K	Did the spilled substance enter a waterway?	#REF! #REF!
P2.4 PCB Management		
P2.4A	Total inventory of high level PCB material in storage (tonnes)	0
P2.4B	Total inventory of low level PCB material in storage (tonnes)	0
P2.4C	Total amount of high level PCB material sent for destruction (tonnes)	1
P2.4D	Total amount of low level PCB material sent for destruction (tonnes)	8
P2.4E	Total amount of high level PBC material taken out of service (tonnes)	1
P2.4F	Total amount of low level PBC material taken out of service (tonnes)	8
For Information Purposes Only (Not part of Indicator		
P2.4G	Total estimated inventory of high level PCB material in service (tonnes)	3
P2.4H	Total estimated inventory of low level PCB material in service (tonnes)	57
P2.5 Generation of Low and Intermediate Level Radioactive Waste		
P2.5A	Total volume of low level radioactive waste sent to storage (m3)	Not App
P2.5B	Total volume of intermediate level radioactive waste sent to storage (m3)	Not App
P2.5C	Number of Nuclear Units Generating Radioactive Waste	Not App
P2.5D	Rate of generation of low and intermediate radioactive waste (m3/unit)	Not App
For Information Purposes Only (Not part of Indicator		
P2.5E	Total Weight of High Level Radioactive Waste (used/spent fuel) in Storage to Date (Mg uranium)	Not App
P3.1 Public Reporting of Environmental Performance		
P.3.1F	Number of residential customers	227000
P3.1A	Does the utility produce a publicly available report on environmental performance?	Yes
5.1 Pilot Indicator for Treated Wood Poles		
5.1.1.	Are you following the recommendations the User Guidance Document?	Yes
5.1.2.	Number of wood poles taken out of service in the reporting year	1002
5.1.3.	Number of wood poles reused or recycled in the reporting year	1002 Note 1
5.1.4.	Number of wood poles disposed of in landfill in the reporting year	0

Note

- (1) The number of wood poles reused or recycled in 2005 is 1002. When poles are removed, they become the property of the contractor removing the poles. The contract document stipulates that the contractors will handle, use, and dispose of chemically treated poles and timbers in accordance with the CCME publication "Wood Treatment, the Canadian Perspective".

(complete the number of columns as required for each spill)			Spill #	Spill #	Spill #	
Priority Spills Information		# Yes	# No	1	2	3
P2.2H	Did the priority spill involve a petroleum product?	3	0	Yes	Yes	Yes
P2.2I	Did the priority spill involve a PCB contaminated substance?	0	3	No	No	No
P2.2J	Was the priority spill volume greater than 500 litres?	1	2	No	Yes	No
P2.2K	Did the spilled substance enter a waterway?	2	1	Yes	No	Yes

**CEA – ECR Program 2005 Electronic Data Reporting Template
Energy Efficiency**

Criteria - Follow-up / reporting on a previous success story that demonstrates environmental benefits, progress, achievements or continued success

Newfoundland Power's Energy Efficiency Program, *Bright Ideas*, continues to help customers better manage their electricity usage and get the most out of their energy dollar. Our Contact Center and Customer Service Specialists were busy delivering energy efficiency information and promoting our financing and rebate programs. Our energy activities included: trade shows, mall displays, product promotions (CFL promotions), partnerships with community groups (Eastern and Western Homebuilders Associations), and seminars to seniors, small businesses, the hospitality industry, and appearing on the CBC Evening News and Radio Noon.



Criteria - Principle 2 – To reduce the adverse environmental impact of our business.

Recognizing that its fleet of approximately 400 vehicles has an impact on the environment, Newfoundland Power developed an anti-idling action plan aimed at reducing unnecessary idling of Company vehicles. The plan promotes reducing vehicle warm-up time, avoiding the use of remote car starters and car pooling whenever possible. These small actions can impact the environment by reducing greenhouse gas emissions, improving air quality, reducing engine wear and tear and using less fuel.

**CEA – ECR Program 2005 Electronic Data Reporting Template
Reuse and Recycling**

Criteria - First time event or initiation of a new program

Recognizing that organic waste makes up as much as 30% of all waste generated in Newfoundland and Labrador, the provincial government, through its Multi Material Stewardship Board, sponsored the *It's Time to Pitch In* program. This program makes backyard composting information available and composting equipment affordable for all Newfoundlanders. Newfoundland Power promoted the program and subsidized the cost of backyard composting bins for its employees. Approximately 130 employees, almost 25% of the work force, took advantage of this special offer and purchased a total of 182 compost bins.



**CEA – ECR Program 2005 Electronic Data Reporting Template
Species and Habitat Diversity**

Criteria - Principle 2 – To reduce the adverse environmental impact of our business.

Newfoundland Power has heightened awareness of issues that affect wildlife and their habitat. This is demonstrated in many ways, including treatment of ospreys that occasionally construct nests in utility poles. During maintenance of several transmission lines in 2005, employees encountered osprey nests. In consultation with local wildlife officials, the Company was able to construct platforms in the structure and relocate the nests.



**CEA – ECR Program 2005 Electronic Data Reporting Template
Serving Communities and Responding to Customers**

Criteria - Event demonstrates social responsibility, stewardship, partnerships, stakeholder or community engagement

Newfoundland Power has shown its commitment to the environment through its eight-year sponsorship of *Fish Friends* in Newfoundland and Labrador. The *Fish Friend's* program teaches grades four to six students about the importance of aquatic ecosystems through caring for salmon fry in their classrooms. In addition to providing financial support, many Newfoundland Power employees participate in the program by delivering eggs to the school, providing assistance in the classroom and participating in the fry release.



**CEA – ECR Program 2005 Electronic Data Reporting Template
Environmental Management System Implementation**

Criteria - Principle 3 – To be accountable to our constituents

In 2005, much work was done to bring the Company's Environmental Management System up to the revised ISO 14001:2004 Standard. Procedures were reviewed and updated, revised training was given to employees and a new computerized legal aspect linkage system was put in place. In the last quarter of 2005, the Company successfully completed an EMS Audit that confirmed a successful transition to the new ISO standard.

**CEA – ECR Program 2005 Electronic Data Reporting Template
Employee Training and Awareness**

Criteria - Principle 4 – To ensure that our employees understand the environmental implications of their actions and have the knowledge and skills to make the right decision

Environmental training has always been an integral part of Newfoundland Power's culture. In 2005, the Company developed three new environmental training sessions: Job Specific Training; Environmental Planner Training; and, Environmental Training for Contractors and Suppliers. **Job Specific Training** was presented to operating staff to detail procedures for managing the environmental risks associated with their job functions. **Environmental Planner Training** was provided to supervisory and engineering staff responsible for planning and executing work. **Environmental Training for Contractors and Suppliers** further augmented existing communication of environmental requirements to contractors.

**CEA – ECR Program 2005 Electronic Data Reporting Template
Spills and Waste Management**

Criteria - Principle 1 – To be more efficient in our use of resources

To be more effective in its use of resources, Newfoundland Power has increased its utilization of contractors in three key environmental areas. Firstly, it utilizes contractors to manage disposal of scrap electricity equipment including insulating oil, which reduces the risk of spills. Secondly, while employees are first to respond to most spills, the services of a contractor are utilized to deal with final site remediation and regulatory clearance of spill sites. Thirdly, as Newfoundland Power generates various types of waste, ranging from normal office waste to hazardous waste such as PCBs, the Company utilizes contractors that specialize in the collection, storage and disposal of all types of waste.