



**NEWFOUNDLAND LNG LTD.**

# **GRASSY POINT EMPLOYMENT EQUITY PLAN**

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## 1.0 INTRODUCTION

This Equity Plan covers the construction, operations and decommissioning phases of the Grassy Point Liquefied Natural Gas (LNG) Project. It has been prepared in response to a condition for the release of the Project from provincial assessment, that 'an Employment Equity Plan must be submitted and approved by the Minister of Environment and Conservation prior to the start of construction'.<sup>1</sup>

The Plan is in three main sections. The first describes the Project and the occupations required for the construction and operations phases. This is followed by a description of the employment equity planning process, including: the responsibilities of Newfoundland LNG Ltd. and its main contractors; the process for identifying and implementing equity targets and initiatives, including the initial targets; and, the process whereby the implementation of those initiatives, and success in achieving these targets, are monitored and reported. The last section of the Plan identifies and describes possible initiatives that Newfoundland LNG Ltd. and its contractors can use to achieve employment equity for women.

## 2.0 THE PROJECT

Newfoundland LNG Ltd. proposes to develop a LNG Transshipment and Storage Terminal at Grassy Point, Placentia Bay, Newfoundland and Labrador, that will provide LNG to markets in the North Eastern United States (US) and Canada. The Terminal will provide facilities for LNG cargo transfer and storage, and a lay-up site for transiting LNG carriers. The marine facility will provide storage and loading capabilities for smaller or specialized carriers that are able to enter most LNG terminal ports in the US.

Newfoundland LNG Ltd. proposes to initially construct a marine terminal comprised of:

- One jetty/berth capable of handling LNG tankers of up to 265,000 m<sup>3</sup> capacity;
- A tug basin;
- One LNG storage tank;
- One reliquefaction system; and
- Supporting infrastructure including an access road, office facilities, security fencing, and utilities such as water, sewer, and power.

Additional facilities will be built over time in response to increased demand. There may ultimately be three jetties/berths, eight LNG storage tanks with a combined maximum storage capacity of 1.3 million m<sup>3</sup>, and additional reliquefaction units as required.

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<sup>1</sup> Government of Newfoundland and Labrador. Department of Environment and Conservation. Environmental Assessment Bulletin, January 19, 2007. St. John's: Department of Environment and Conservation, 2007.

The construction phase of the above Project will consist of the following activities:

- The construction of a 1.5 km access road to transport equipment, materials, and personnel between Arnold's Cove and the site;
- Preparation of the tank site. Trees will be cut with all merchantable timber salvaged. Overburden will be graded from the site and trucked to stockpiles which will be trimmed, levelled, reclaimed, and redeposited over developed areas in the future;
- Construction of one storage tank. It will be erected on foundations and construction materials will be brought to the site in pre-assembled pieces via a construction dock.
- Construction of one jetty/berth;
- Construction of a dedicated tug basin. Dredging may be required for the tug basin with all dredged material being disposed of on land, in accordance with provincial regulations; and
- Construction of one LNG reliquefaction system unit.

Depending on the availability and skill set of contractors at the time of construction, all contractors used for construction will be from Newfoundland and Labrador. The expected life of the Grassy Point LNG Transshipment and Storage Terminal is approximately 50 years.

**Table 2.1 Schedule of Site Activities**

Activity	Date
Detailed Design	Jan 2007 – May 2009
Procurement of Equipment	May 2008-June 2010
Site Preparation	May 2008-September 2008
Construction	June 2008-October 2010
Jetty/Berth Construction	June 2008-June 2009
Tank Construction	October 2008-September 2010
Mechanical Completion	October 2010
Start of Operations	December 2010

Newfoundland LNG Ltd. will be the overall manager of the Project during construction and operations. However, detailed design, site preparation, construction and work will be contracted out to existing local independent contractors. Operations will be carried out by Newfoundland LNG Ltd. staff, again supported by independent contractors. In the case of both construction and operations, there are a number of such contractors on the Avalon, Burin and Bonavista Peninsulas as a result of the region's long history in petroleum processing, transshipment, and construction and fabrication of major components for the Newfoundland and Labrador offshore oil and gas industry. As such, the Project will provide a continuity of existing local employment and business.

The required Newfoundland LNG Ltd. and contractor labour force for construction engineering and design, construction trades, and operations is described in Tables 2.2 – 2.4 respectively. Given the estimated 50-year Project life, it is not currently possible to forecast the methods used, and hence human resource requirements, for decommissioning.

**Table 2.2 Occupations Required for the Construction Phase (Engineering and Design)**

Occupation	NOC Code	# of People (Peak) <sup>2</sup>
Process Engineers	2134	4
Mechanical Engineer	2132	3
Civil/Structural Engineer	2131	4
Control Systems and Instrumentation Engineer	2133	2
Electrical Engineer	2133	2
Loss Prevention, Safety Engineer	2148	1
Designer (Drawing Office)	2252	12
CAD Operator	2253	12
Buyer (Procurement)	0113	1
Expeditor (Procurement)	1473	1
Document Controller	1413	1
Secretary	1241	2
Engineering Management	0211	4
Engineering Technologist	2232	12
HSEQ	2263	1
Project Management	0711	2
Project Controls	2131	2
Administration	1221	2
Architects	2151	1
Land Surveyors	2154	2
Civil Engineering Technologists	2231	2
Construction Estimators	2234	1
Senior Managers	0016	1
<b>Total</b>	-	<b>75</b>

All engineering and design work will take place either at the site or in St. John's.

<sup>2</sup> In this context, *peak* refers to the maximum number of employees required in each occupation. As such, the total employment refers to the total number of people employed over the course of the Project phase and should not be viewed as the peak number of employees at any point during that phase.

**Table 2.3 Occupations Required for the Construction Phase (Trades)**

Occupation	NOC Code	# of People (Peak)
Pipefitter	7252	20
Millwright	7311	10
Construction Management Scheduler	0711	6
Labourer	1476	1
Electrician	7611	80
Equipment Operator	7242	40
Pipe Welder	7421	25
Insulator	7265	10
Painter (Industrial)	7293	30
Carpenter	9496	6
Surveyors	7271	20
Plumbers	2154	4
Ironworker	7251	2
Welder - Structural	7264	20
Concrete Finisher	7265	20
Drywall Installers	7282	10
Heavy Duty Equipment Mechanics	7284	2
Crane Operators	7312	2
Drillers and Blasters	7371	6
Water Well Drillers	7372	2
Commercial Divers	7373	2
Truck Drivers	7382	4
Construction Supervisors – Electrical	7411	6
QA/QC - Inspectors	7212	2
Commissioning Personnel	2233	12
Construction Supervisors – Pipefitters	2241	12
Construction Supervisors – Carpentry	7213	2
Construction Supervisors – Other Trades	7215	2
<b>Total</b>	7219	<b>2</b>
	-	<b>420</b>

These construction phase requirements are based on the construction of one jetty/berth, one tank and one reliquefaction unit over a three-year period. During this phase, the estimated engineering and design employment and construction trades employment total 110 and 630 person-years respectively. The construction trade and engineering labour requirement for each additional tank and reliquefaction plant are 310 and 30 person-years respectively. When the design and construction of all additional jetties, tanks, and reliquefaction units are considered, the total construction trade and engineering labour requirements are estimated at 2830 person-years.

**Table 2.4 Occupations Required for the Operations Phase**

Occupation		NOC Code	# of People
<b>Management</b>	Plant Manager	9212	1
	Maintenance Manager / Coordinator	0721	1
	SH&E Manager	2263	1
<b>Maintenance</b>	Maintenance Superintendent	0016	1
	Reliability / Field Services / Mechanical and Instrumentation	2233	6
<b>Production</b>	LNG Operations / Shift Supervisor / Security	0721	4
	Marine and Security Coordinator	0721	2
	Plant Engineers – Mechanical / Electrical	2243	2
	Cross-Functional Operators	2262	24
	LNG Superintendent	1471	1
<b>Corporate Services</b>	Administrative Specialists	9212	3
	Accounting	0013	1
	Operations Schedule Planner	7242	3
<b>Sub -Total</b>			<b>50</b>
<b>Contract Employees</b>	Marine / Tugs	7436	30
	Linesmen (only on ship arrival and departure)	7451	6
	Security	6651	10
	Gauging	7612	2
	Grounds Maintenance	7612	5
	Electricians	7242	5
	Snow Clearing	7612	1
	Machinist	2243	1
	Cross Functional Mechanics	2243	6
	Cross Functional I & E	2243	3
	Operations Support	7612	5
<b>Sub-Total</b>			<b>74</b>
<b>Total</b>	-	-	<b>124</b>

### 3.0 THE PLANNING PROCESS

The Grassy Point Equity Plan process requires the involvement of Newfoundland LNG Ltd. and its Project contractors. This section of the Plan describes the planning process, including: the ways in which it is reflected in the selection of Project contractors; the involvements and responsibilities of contractors; equity targets and initiatives; and, monitoring and reporting.

#### 3.1 Selection of Project Contractors

Newfoundland LNG Ltd. is committed to employment equity. In support of this, it:

- Requires the same commitment from its contractors; and
- Will take into account employment equity considerations in the awarding of contracts.

All other things being equal, preference will be given to contractors employing women and/or with policies and practices that are supportive of employment equity. This Grassy Point Equity Plan, and hence this commitment and preference, will be attached to all Project requests for proposals (RFPs). Copies of all RFPs will also be provided to the Women and Resource Development Committee (WRDC) so it can alert prospective bidders.

SNC-Lavalin will be the main construction phase contractor, responsible for design and engineering, project management, and construction for the Grassy Point Project. It will be required to meet the goals and commitments outlined in the Grassy Point Equity Plan. SNC-Lavalin is also subject to the Government of Canada's Federal Contractors Program and, as such, has made a long-standing commitment to implement employment equity. To this end, all its sub-contractors will be required to adhere to both the Grassy Point Equity Plan and the equity plan outlined in SNC-Lavalin's Human Resources Handbook (Appendix I). The latter commits the SNC-Lavalin to respect all principles of employment equity and make sure that non-discriminatory practices are adopted in all employment-related systems. Key features of the plan include:

- Ensuring that non-discriminatory practices are adopted in all employment related systems;
- Evaluating statistics on the representativeness of designated groups (women, visible minorities, natives, and handicapped persons); and
- Forwarding employment statistics to federal and provincial governments as required by governmental contract compliance programs, which require that the company demonstrate progress in terms of human resources representativeness.<sup>3</sup>

### **3.2 Selection of Contractors for Equity Planning Purposes**

Newfoundland LNG Ltd. will identify its main contractors for employment equity planning purposes based on their share of project employment. This will normally be measured in terms of the person-years of employment involved. The list of main contractors will be reviewed and, as necessary, revised on an annual basis.

### **3.3 Equity Plan Responsibilities**

Newfoundland LNG Ltd. and each of the main contractors will identify a senior member of their staff responsible for implementing the Equity Plan. These individuals will form the membership of the Grassy Point Equity Committee, which will be chaired by the Newfoundland LNG Ltd. representative responsible for implementing the Plan.

Due to the relatively short duration of the construction phase, it is important that equity is a consideration of the Project employers from the outset. Experience with Husky Energy's White Rose Project has demonstrated the positive impact of employer engagement in making equity a priority throughout the project. This Project will be greatly assisted by having this Equity Plan in place in advance of the start of work. In addition, Newfoundland LNG Ltd. will liaise with the WRDC prior to and throughout the Project, including inviting the WRDC representatives to meet with the Grassy Point Employment Equity Committee within 60 days of Project sanction and periodically thereafter.

### **3.4 Employment Equity Targets and Initiatives**

Newfoundland LNG Ltd. has established overall targets for women's employment during construction and operations of the Project. These are based on, but significantly greater than, current women's participation rates in different Project occupations. These targets will be communicated to all potential and selected contractors. Decommissioning targets will be established at a later date.

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<sup>3</sup> SNC-Lavalin Human Resources Handbook. Employment Condition #6 (Equity Programs).

Newfoundland LNG Ltd. and each of its main contractors will identify actions for achieving the target levels of employment for women. When new main contractors are identified, they will identify and commit to, within one month of commencing work on the Project, the actions that they will take to promote employment equity for women.

### 3.4.1 Construction Phase

The construction phase of the Project is of relatively short duration and will be more directly affected by the current state of the workforce and women's participation levels within it. Construction occupations have long had small proportions of women workers. In 2001, only 1% of the membership of the Newfoundland and Labrador Construction Trades Council were women, and labour force survey estimates show that women held just 3.4% of construction trades occupations in 2006.<sup>4</sup>

*Accordingly, Newfoundland LNG Ltd. has established an overall target of 10% for women's employment in construction trades and related occupations during the construction phase of the Project.*

Entry level positions have been identified as one of the keys to increasing women's participation in construction trades. By increasing employment among first and second year apprentices during the construction phase, Newfoundland LNG Ltd. and its major contractors will have an opportunity to change mindsets beyond the scope of the Project by increasing the percentage of women journeypersons available to industry.

*To this end, Newfoundland LNG Ltd. will work with the WRDC in order to establish appropriate targets for women's participation among First and Second Year apprentices in the construction trades.*

It is recognized that there are opportunities to significantly exceed these targets in some employment categories, and hence Newfoundland LNG Ltd. and its contractors will work with the WRDC in order to determine the employment categories where additional targets would be most appropriate.

The participation of women in design and engineering positions is also traditionally low. In 2006, Memorial University reported that women comprised only 20% of graduates from the Bachelor of Engineering program. Additionally, Professional Engineers and Geoscientists of Newfoundland and Labrador membership data show women comprise 22% of the student engineers but only 5% of Professional Engineers.<sup>5</sup>

*Based on this, Newfoundland LNG Ltd. has established a target of 20% for women's employment in Project design and engineering during construction.*

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<sup>4</sup> Statistics Canada. *Table 282-0008 Labour Force Survey Estimates (LFS), by North American Industry Classification System (NAICS), Sex and Age Group, Annual (Table)*. CANSIM (database). Using CHASS (distributor). Version updated April 20, 2007. <http://dc2.chass.utoronto.ca.qe2a-proxy.mun.ca/cansim2/> (accessed April 25, 2007).

<sup>5</sup> Canadian Coalition of Women in Engineering, Science and Technology. 'Consultation Briefing Summary, Eastern Canada Regional Consultation.' St. John's, NL, 2003.

### 3.4.2 Operations Phase

It is estimated that the operations phase of the Project will last about 50 years. This will provide Newfoundland LNG Ltd. and its contractors with greater opportunity to implement programs to increase women's participation. Oil and gas industries have traditionally employed relatively small numbers of women. A 2000 survey of 135 petroleum industry companies in Newfoundland and Labrador found that women's involvement was increasing, but they still only comprised about 1.5% of employees in male dominated occupations, with a range from 0.6% to 7.5%.<sup>6</sup>

The most recent employment data from Statistics Canada shows that although women represent approximately 47% of total employment across all industries, in occupations related to processing, manufacturing and utilities (including petroleum, gas and chemical processing), women's participation levels have been consistently between 30% and 34% since 1987.<sup>7</sup> Additionally, Statistics Canada reports that in 1998, women's enrollment in resource processing technologies (first year) for Newfoundland and Labrador was 31.6%.<sup>8</sup>

*Accordingly, Newfoundland LNG Ltd. has established a 40% target for women's employment in technology-related occupations by the end of the first five years of Project operations. To assist in achieving this target, Newfoundland LNG Ltd. has also established a target for Project start-up, which would see the initial women's employment levels being at least equal to the availability of women in technology-related occupational categories in Newfoundland and Labrador, as identified by the federal 2001 Employment Equity Data Report<sup>9</sup>.*

As the Project proceeds, revised targets will be established every five years in consultation with the WRDC and Women's Policy Office. These revisions will take into consideration women's participation in identified occupational groups as well as labour market conditions generally. It is expected that the equity initiatives established by Newfoundland LNG Ltd. and its major contractors will facilitate a significant increase in the number of women employed in these positions over the estimated 50-year life of the Project.

Operations phase employees will be provided training through a post-employment/on-the-job training program. This will provide Newfoundland LNG Ltd. an opportunity to incorporate targets for women's employment into the initial intake of employees. This has the potential to both significantly increase the opportunity for success in achieving overall targets for employment in the early phase of Project operations and to have a lasting impact on equity over its life.

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<sup>6</sup> Women in Resource Development Committee, 'Where are the Women? (They're Everywhere!): Report of a Survey of Companies in the Petroleum Industry, Newfoundland and Labrador' St. John's, NL, 2003.

<sup>7</sup> Statistics Canada. *Table 282-0009 Labour Force Survey Estimates (LFS), By National Occupational Classification For Statistics (NOC-S) And Sex*. CANSIM (database). Using CHASS (distributor). Version updated April 20, 2007. <http://dc2.chass.utoronto.ca.qe2a-proxy.mun.ca/cansim2/> (accessed April 25, 2007).

<sup>8</sup> Statistics Canada. *Table 477-0006 Full-Time Enrolments And Graduates In Postsecondary Community College Programs, By Program Field, Year In Program And Sex*. CANSIM (database). Using CHASS (distributor). Version updated April 20, 2007. <http://dc2.chass.utoronto.ca.qe2a-proxy.mun.ca/cansim2/> (accessed May 2, 2007).

<sup>9</sup> Human Resources and Skills Development Canada, '2001 Employment Equity Data Report', Ottawa, ON, 2004.

As in the case of construction, it is recognized that there are opportunities to significantly exceed these targets in some employment categories, and hence Newfoundland LNG Ltd. and its contractors will work with the WRDC in order to determine the employment categories where additional targets would be most appropriate.

Marine related positions are the highest single labour requirement in the operations phase of the project. The Marine Careers Secretariat (MCS) has identified gender equity as a key issue facing the marine industry in the immediate future. As a result, the MCS has identified a need to develop initiatives in order to:

- Tap into the large market that women represent;
- Effectively market marine careers towards women; and
- Create the conditions that will make marine careers choices more attractive to women.

Newfoundland LNG Ltd. will support the MCS in the development and implementation of initiatives with the goal of increasing the percentage of women in marine careers related to the Project and to the benefit of the marine industry generally.

### **3.5 Monitoring and Reporting**

The Grassy Point Equity Committee will meet at least every six months. This will include an initial meeting, which will be held within one month of Project sanction with additional meetings every six months thereafter.

At these Grassy Point Equity Committee meetings, Newfoundland LNG Ltd. and its main contractors will each: review its equity initiatives; discuss its success in implementing them; report on the employment equity of its current Project workforce, by main employment types (e.g. numbers and percentage who are managers, administrative staff, professionals and technicians, and others); and discuss the progress that has been made towards the established targets. Outside resource people, with specialist information about employment equity issues, may be invited to present to the Committee.

Within one month of each annual Grassy Point Equity Committee meeting, Newfoundland LNG Ltd. and its main contractors will compile an up-to-date list of equity initiative commitments, together with a short summary report on the employment equity of its current Project workforce. Newfoundland LNG Ltd. will maintain a file of these commitments and reports, which will be available to the Women's Policy Office.

## **4.0 ACTIONS**

This part of the Equity Plan identifies and describes required and optional actions that are designed to achieve employment equity for women. These are:

- Information and Communications;
- Employee Recruitment and Selection;

- Employee Development;
- Working Environments; and
- Community Outreach.

Newfoundland LNG Ltd. and its main contractors will consider these actions in their own employment equity planning. For each of them, this section of the Equity Plan provides a description of appropriate actions, based on best practice experiences elsewhere.

The scope and scale of actions required of each Project contractor varies according to such things as its size, current labour force composition and activities, and the policies and practices it has already implemented. Given these variations in the characteristics and circumstances of the companies, this part of the Equity Plan is generally not prescriptive, but instead indicates potential actions they should consider in their employment equity planning. Other possible initiatives may be identified by companies.

#### **4.1 Information and Communications**

Information content and its communication have a major role to play in achieving employment equity. Appropriate actions Newfoundland LNG Ltd. and its main Project contractors may take in addressing this topic include:

- Hold information sessions specifically targeted at women;
- Ensure women are equitably represented in text and illustrations the companies use for promotional, motivational and information purposes, including handbooks, newsletters, posters and websites; and
- Review all text they use internally and externally to see that it uses gender-inclusive language.

#### **4.2 Employee Recruitment and Selection**

The characteristics of the Project workforce will to some degree reflect those of the labour market as a whole and of prospective new entrants to it. However, the recruitment process can serve to either reinforce or counter any under-representation of women. There is, accordingly, a need to use recruitment procedures that actively encourage women to apply for all positions, including full-time, part-time, temporary and co-op student ones.

Newfoundland LNG Ltd. will include in Project-related job advertisements, and require all contractors advertising for positions largely or entirely related to the Project to include, statements encouraging applications from women. Copies of all job advertisements will be provided to the WRDC so that it can alert potential candidates.

Appropriate other actions Newfoundland LNG Ltd. and its main Project contractors might take in addressing this topic include:

- Establish guidelines for writing model job advertisements that aim to reach female candidates;
- Review job descriptions and collective agreements for the use of gender-inclusive titles and text;

- Establish relationships with training institutions and work with them to include female candidates in regular and co-op student positions;
- Implement a system to document outreach recruitment initiatives;
- Establish relationships with women's groups and work with them to identify and encourage female candidates; and
- Implement a system to monitor the gender of persons with resumes on file.

#### **4.3 Employee Development**

It is important that women be encouraged to develop, and assisted in developing, their capabilities and achieving promotion within the Project companies. Appropriate actions Newfoundland LNG Ltd. and its main contractors might take in addressing this topic include:

- Consider the participation of women in all training initiatives; and
- Develop a strategy to increase women's representation in management through mentoring, special assignments, management training, the creation of junior management bridging positions, and targeting specific management positions for women.

#### **4.4 Working Environments**

During both the construction and operations phase of the Project, Newfoundland LNG Ltd. will work diligently to create a work environment that is conducive to equity. Gender sensitivity training will be required by all Project and Contract employees. Newfoundland LNG Ltd.'s goal is to create a culture that fosters equity and is encouraged by successful implementation of the Equity Plan.

The work environment, and the presence of policies that address harassment and other concerns, can be critical to retaining women in the workforce. Appropriate actions Newfoundland LNG Ltd. and its main contractors might take in addressing this topic at Grassy Point Project workplaces include:

- Establish respectful workplace guidelines and a harassment policy;
- Establish, distribute and publicize the harassment policy and procedures; and
- Provide anti-harassment training for managers and supervisors.

#### **4.5 Community Outreach**

The numbers of women in and interested in entering, construction and technical occupations will be a significant constraint to the employment of women on the Grassy Point Project. In the longer term, this is best addressed by initiatives that promote such occupations to girls and young women. Appropriate actions Newfoundland LNG Ltd. and its main Project contractors may take in this area include:

- Participation in career days and facilitating workplace visits; and
- Financial contributions to, or having personnel serve as mentors or otherwise supporting, Techsploration and other WRDC programs.