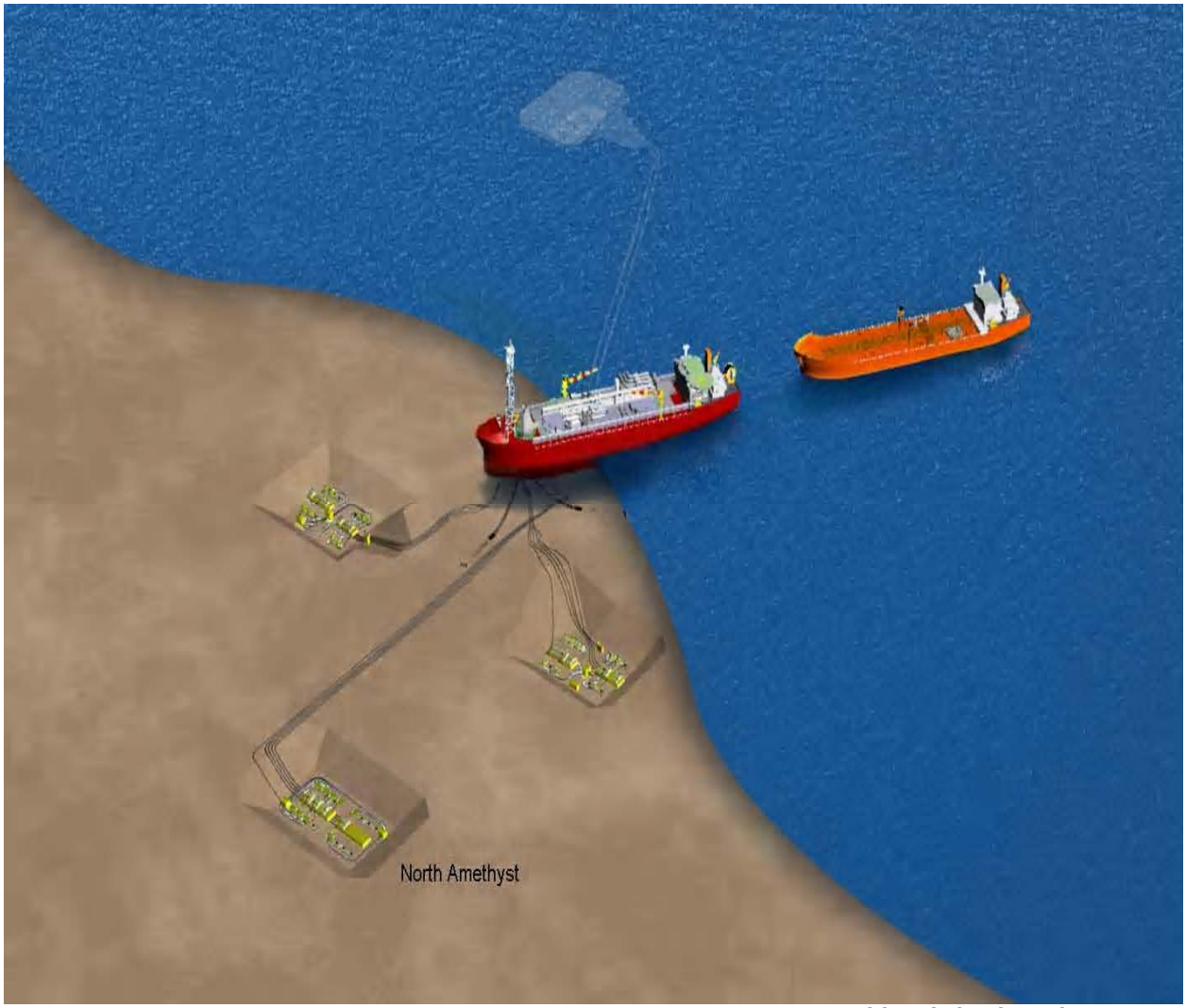
Husky Energy

Canada-Newfoundland and Labrador Benefits Plan

North Amethyst Satellite Tie-back



Cover graphic: Tie-back Option A

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1.0 Introduction

Husky Oil Operations Limited (Husky), as the Operator and in joint-venture with Petro-Canada, submitted a Benefits Plan for the White Rose Development to the Canada-Newfoundland and Labrador Offshore Petroleum Board (C-NLOPB) in January 2001. This Benefits Plan was prepared pursuant to the Canada-Newfoundland and Labrador Atlantic Accord Implementation Act and the Canada-Newfoundland and Labrador Atlantic Accord Implementation (Newfoundland) Act. The C-NLOPB approved the White Rose Benefits Plan in December 2001. The Production License PL 1006 applies to the existing White Rose Development.

This document provides a description of potential work Husky proposes to undertake within the area covered under Significant Discovery License 1024, Production License 1006 and Exploration License 1045 for development of the North Amethyst Satellite Tie-back to the *SeaRose FPSO*.

The North Amethyst Satellite Tie-back project requires a Benefits Plan and is subject to review and approval by the C-NLOPB. The principles and philosophies of the original White Rose Benefits Plan will also apply for the North Amethyst Satellite Tie-back Development. However, much of the construction-related detail provided in the original White Rose Benefits Plan is no longer relevant, given that the initial development phase of the White Rose Project is almost complete and production of the field has been ongoing since November 2005.

This document is submitted in support of the North Amethyst Satellite Tie-back to *SeaRose FPSO* Development Application and the White Rose Development Plan Amendment for *SeaRose FPSO* Modifications. It reaffirms Husky's commitment to maximizing benefits for the Province where practically and commercially achievable on a competitive basis and identifies potential areas where Newfoundland[1] companies and residents could participate in the development of this field expansion.

Husky has identified two alternatives for development of the North Amethyst field: a subsea tie-back system to the existing *SeaRose FPSO* facility or a subsea development to a new steel ship-shaped FPSO facility. Husky investigated options for a new build FPSO versus a tanker conversion and compared key risks, schedule impacts and development costs for each alternative. The investigation concluded that the North Amethyst field should be developed by subsea tie-back to the *SeaRose*. Refer to Appendix I for discussion on the alternatives.

[1] In the context of this benefits document "Newfoundland" refers to the Province – that is, Newfoundland and Labrador.

The North Amethyst Satellite Tie-back will consist of construction of a new glory hole with a capacity of up to sixteen wells. The total predicted recoverable oil from North Amethyst is 70 mm bbls on a P50 basis (estimated as of August 2007). The capital cost of the North Amethyst Satellite Tie-back is estimated to be approximately $1.3 billion (CDN) for either option discussed in this plan.

North Amethyst will be tied back to the *SeaRose FPSO*, either from the glory hole directly via new flow lines and new dedicated riser systems (Option A) or via new flow lines to the existing subsea infrastructure (Option B). If North Amethyst is tied back to the *SeaRose* using Option A, the necessary modifications to the vessel will require it to be brought to a shore-based facility. However, should North Amethyst be tied back to *SeaRose* using Option B, the *SeaRose* will not need to come to shore for modifications. Therefore, this Benefits Plan outlines the potential opportunities for Newfoundland companies and residents separately for Option A and Option B.

FEED engineering, flow assurance studies and further economic evaluation will also determine if enhancement is required, and can be justified, to the *SeaRose* topsides processing plant. In determining whether enhancement is required, the studies will address the requirements to tie in oil from adjacent pools. If, in fact, it is determined that topsides enhancement is required as a result of tie-back of North Amethyst and adjacent pools, the work required may be executed during the period the *SeaRose* is in port for Option A turret modifications. The potential opportunities related to the topsides enhancement are also outlined separately in this Benefits Plan.

As further information becomes available, plans will be modified and refined. It should be noted that activities identified are currently in the preliminary FEED phase and have not yet been sanctioned by the White Rose partners.

2.0 Development Overview

2.1 Preamble

The White Rose oil field is located on the Grand Banks, approximately 350 km east of the Island of Newfoundland on the eastern edge of the Jeanne d'Arc Basin (Figure 2-1)

Figure 2-1 White Rose Oil Field

The White Rose Significant Discovery Area consists of both oil and gas fields or pools, including the South Avalon Pool, the North Avalon Pool, and the West Avalon Pool. The main oil reservoir at White Rose is the Ben Nevis - Avalon Formation sandstone.

The White Rose Development utilizes a Floating, Production, Storage and Offloading (FPSO) facility, with ice avoidance capacity (disconnectable turret), and subsea wells. Crude oil is transported to market by shuttle tankers. Oil production from the White Rose field commenced in November 2005.

Subsea installations for the initial development scope (South Avalon) consisted of a potential of 21 subsea wells. As of July 2007, 17 wells have been drilled and completed

(9 water injection, 1 gas injection, and 7 oil producers). The base plan is for 18 wells including another gas injection well. The wells are manifolded together and connected to flowlines and flexible risers which terminate at the FPSO.

The base production profile for the White Rose Development predicts that the *SeaRose* will begin to reach the end of plateau in 2008. As spare production capacity becomes available in *SeaRose,* a subsea tie-back will make use of this future capacity, thereby maximizing utilization of the existing infrastructure and lowering the threshold for small field developments.

3.0 Development of the North Amethyst Satellite Tie-back

The North Amethyst Satellite Tie-back will be developed by excavating a new glory hole. Within the glory hole, one new drill centre, the North Amethyst Drill Centre (NADC), will be constructed. The North Amethyst Satellite Tie-back may be developed with wells tied back to the *SeaRose* via dedicated flowlines and risers terminating at the buoy (Option A) (Figure 3-1). However, pending further flow assurance studies and FEED engineering, North Amethyst may alternatively be tied back through existing subsea infrastructure (Option B) (Figures 3-2 and 3-3).

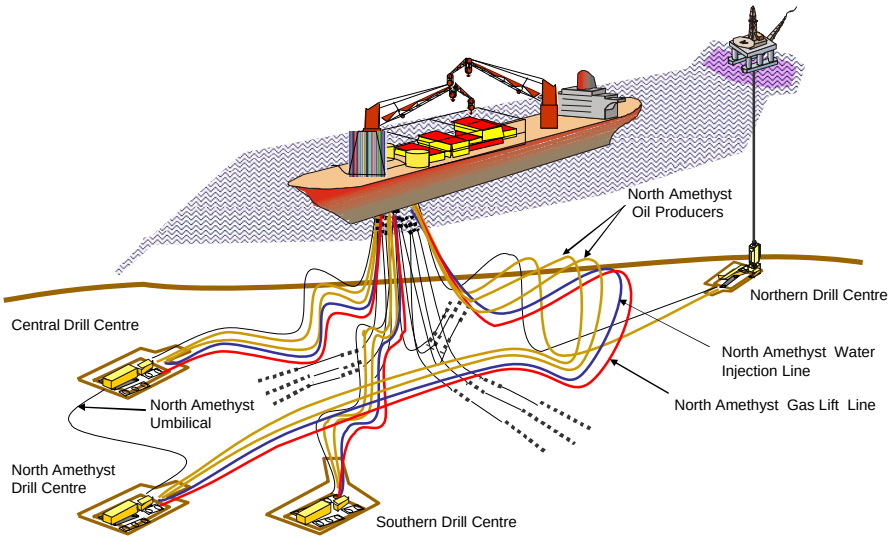


Figure 3-1 Option A North Amethyst Satellite Tie-back Direct to FPSO

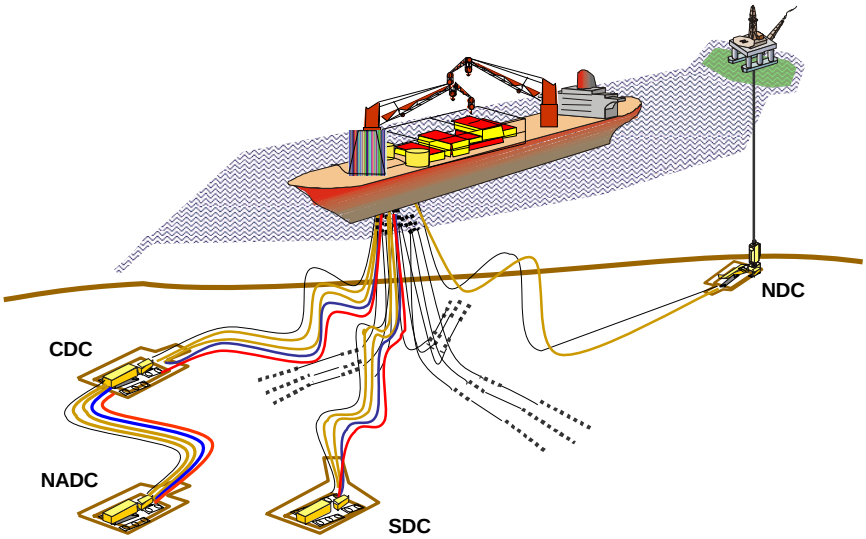


Figure 3-2 Option B North Amethyst Satellite Tie-back Via Central Drill Centre

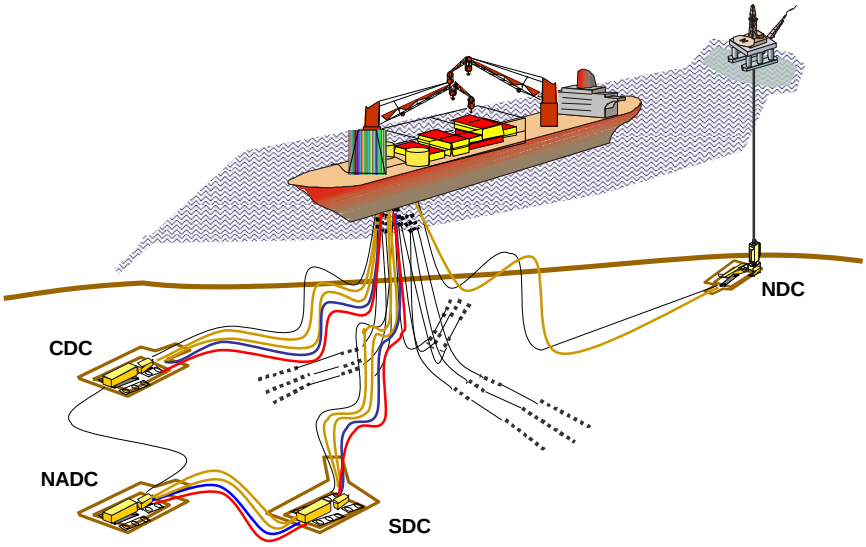


Figure 3-3 Option B North Amethyst Satellite Tie-back Via Southern Drill Centre

At this time, it is anticipated that the North Amethyst drill centre will require seven to ten wells (four production wells and three to six water injection wells) with expansion capacity to sixteen wells. The glory hole for the North Amethyst Tie-back was constructed in 2007 following approval by the Federal and Provincial Ministers of Natural Resources.

3.1 Glory Hole Construction

Glory hole construction methods for the North Amethyst glory hole were mainly the same as those employed for development of the South Avalon Pool; that is, the glory hole was dredged using a trailing suction hopper dredging vessel. This type of dredger is a self-propelled ship which fills its hold or hopper during dredging while following a pre-set track. Dredged material was disposed of in the approved spoils disposal area used during construction of the glory holes for White Rose. However, the dimensions of the North Amethyst glory hole are different than those used for the White Rose project. The glory hole needed to accommodate the NADC was excavated to a measured depth of -9 to -11 metres below existing seabed level with a maximum “floor” dimension of 45 m by 80 m with 1 vertical by 3 horizontal graded sloped sides as required for stability and flowline ramps. The dimensions of the glory hole were modified to accommodate design evolution of the subsea equipment. Husky established through the course of preliminary FEED that critical clearances are required in some areas, particularly with respect to remotely operated vehicle (ROV) access during the life of field, installation tolerances for major equipment, and drilling and completions interface requirements.

The glory hole layout for North Amethyst is indicated in Figure 3-4.

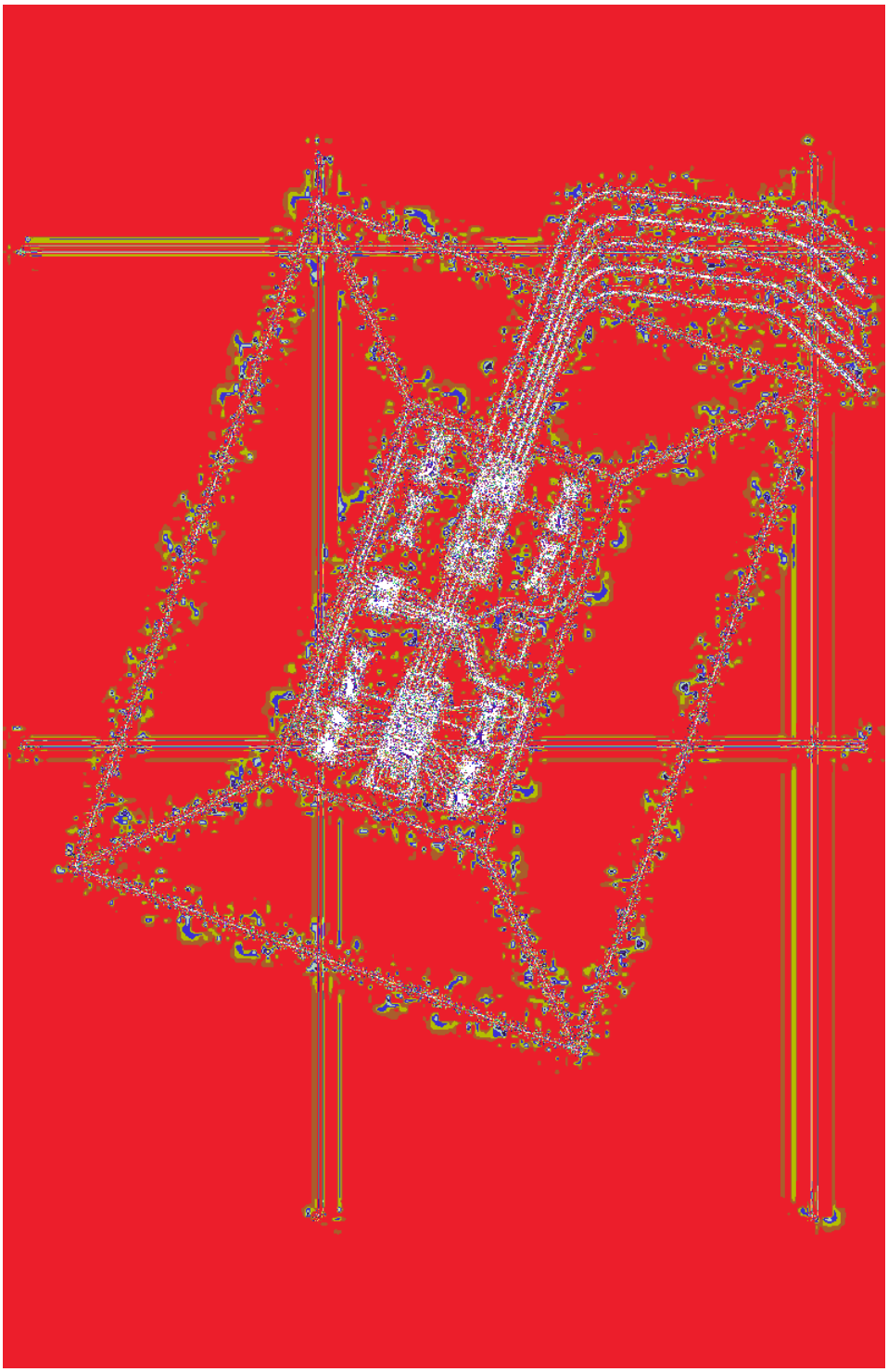


Figure 3-4 North Amethyst Glory Hole Layout

3.2 Subsea Equipment Installation

The subsea facilities at North Amethyst will include all equipment necessary for the safe and efficient operation and control of the subsea wells and transportation of production and injection fluids between the wells and the *SeaRose*. It is expected that two 10" oil production flowlines, one 9" water injection flowline, and one 4.25" gas lift flowline will be routed from the NADC either directly back to the *SeaRose* FPSO via new flow lines and new dedicated riser systems (Option A) or via new flow lines to the existing subsea infrastructure (Option B). Subsea installation and connections work in the North Amethyst glory hole will require use of divers and remotely operated vehicle (ROV) technology.

Similar to the White Rose Development, flowlines for North Amethyst will be laid on the seafloor and will be insulated for temperature and flow assurance purposes. Although it is currently anticipated that the umbilical and flowlines utilized for North Amethyst will be of similar design to those installed during initial development of White Rose, a rigid pipeline option is also under evaluation by the FEED team. Verification of the exact flowline design and routing, and internal diameters and length will be determined during the FEED process.

For both options A and B, an Electro-Hydraulic Multiplex (EHMUX) Umbilical is expected to be routed through the Central Drill Centre (CDC). This umbilical will extend from a new extension Subsea Distribution Unit (SDU) in the CDC and terminate at the SDU in the NADC. The nominal umbilical length has been determined to be 7 km. To extend the CDC umbilical to the NADC, the CDC will require modifications including a new extension SDU and mounting base, a control jumper between the extension and existing SDUs, and a control jumper between the extension SDU and the Umbilical Termination Assembly (UTA).

Subsea facilities will utilize the same design as previously used in the White Rose field. The following are the anticipated subsea equipment requirements for the NADC:

8 - Two-slot TGB's;

7-10 - Permanent Guide Bases (PGB);

7-10 – XTrees (3 Production and 3-6 Water Injection);

2 – Manifold support foundation (MSF) , each with 4 piles;

2 – Production Manifold modules;

2 – Water Injection Manifold modules;

3 – Insulated rigid spools;

3-6 – Un-insulated rigid spools;

2 – SDU bases (Anchored – Pile Driven, one per SDU);

2 – SDU's;

3 or 4 Gas Lift Jumpers;

1 – Subsea Umbilical Termination Assembly (UTA) – Comes with umbilical;

7-10 - SDU to XTree control jumpers;

3 or 4 XTree to manifold control jumpers;

1 – UTA to SDU1 control jumper;

1 – SDU1 to SDU2 control jumper.

Procedures for installation of subsea facilities and subsequent operations for North Amethyst are anticipated to be similar to those currently employed for the initial phase of White Rose Development. Once installation is completed, the system will be fully tested prior to being brought into service through the *SeaRose* FPSO infrastructure.

Husky intends to conduct a design review of the use of subsea multi-phase flow meters in the design of the NADC. This technology will be considered for use in conjunction with the existing test separation facilities as a means of conducting well testing and allocation on a well/ drill centre basis. Whenever well testing is not ongoing, it is anticipated that the test line will continue to be used for production to optimize production flow and mitigate wax formation in the line. Round trip pigging of the production and test lines will be extended from the *SeaRose* FPSO to the NADC drill centre.

3.3 Drilling and Completions

It is anticipated that Drilling and Completions activities will be carried out using existing White Rose processes and systems. The North Amethyst Tie-back will utilize well templates and wellhead systems similar to those used on the White Rose Development. At this time it is anticipated that the North Amethyst drill centre will require seven to ten wells consisting of four production wells and three to six water injection wells with expansion capacity to sixteen wells. Further field optimization and planning will determine the final well count.

In general the North Amethyst Satellite Tie-back well design and drilling operations programs will be based on experience from the White Rose Development. Synthetic oil-based muds will be used to drill the intermediate and production hole sections. Best available technology will continue to be utilized to minimize synthetic drill mud on cuttings. Advanced directional drilling tools and systems will continue to be used to drill the deviated and horizontal wells required to develop this region of the field.

Existing White Rose cementing practices will also be applied to the North Amethyst Tie-back. White Rose drilling practices employed to drill the conductor and surface hole sections will be applied to North Amethyst to mitigate the impact of drill cuttings and cement spillage into the glory hole. Specifically, Guar gum sweeps, cuttings transport systems and reduced excess cement will be used in conjunction with a modified template system.

The North Amethyst Satellite Tie-back well completions will be designed to maximize well productivity while maintaining necessary standards of risk and well integrity. Intelligent water injection and production wells may be utilized for North Amethyst. Intelligent completion technology is required for the water injection wells to control injection profiles into two reservoir intervals. The control of flow would be from a variable interval control valve operated hydraulically from the subsea pod via the subsea umbilical. Final design of the drilling program and the North Amethyst wells will be addressed in the individual Approval to Drill a Well (ADW) applications. Details of the completion design and installation plan will be outlined in the individual completion programs.

Early samples collected from the North Amethyst reservoir indicated that risk of sand production might be higher than that defined in the original White Rose design specification. Subsequent detailed analyses have shown that sand production from North Amethyst is not expected to exceed the current White Rose design specification. However, further sensitivity analyses are continuing. At this time, no additional protection or monitoring equipment is planned for installation on the FPSO. However, sand detection capability will be incorporated into the subsea production system to further monitor sand production.

3.4 SeaRose FPSO Modifications for North Amethyst Satellite Tie-back

Should North Amethyst be tied directly back to *SeaRose* (Option A), modifications to the *SeaRose* turret, buoy and topsides to accommodate the new flowlines, risers and umbilical from the NADC will be required.

Four spare turret riser slots currently on the *SeaRose* will be utilized for the new drill centre. Internal to the buoy and turret, there will be installation of control valves, pipe work, and instruments and controls comprising:

- Two production risers from the buoy through the turret to module MO1 including two pig launchers;
- One water injection flowline from the turret base to the upper swivel stack;

- One gas lift flowline from the turret base to the upper swivel stack; and
- Chemical injection and subsea controls from the turret base to the upper swivel stack.

The *SeaRose* was designed to accommodate these modifications and all safety systems and operational requirements will remain the same. Specifically, safety systems in the turret including active and passive fire protection systems and configuration of flowline and Quick Connect/Disconnect (QCDC) blow down systems will remain unchanged. Tie-ins to closed and open drains and Emergency Shutdown Valves (ESDV) will also be installed as per existing configurations.

New risers will be installed requiring topside and turret piping (and ancillary equipment) from the buoy I-tube connections to the respective topside manifold /skids. New risers will be connected via Quick Connect/Disconnect (QCDC) valves in the buoy similar to the existing risers.

Subsea systems equipment located in the turret, including the control systems, hydraulic power system, and chemical and methanol injection systems, will also require modification to tie-in the NADC.

There will be no requirement for modifications to the hull of the *SeaRose* to accommodate the North Amethyst Satellite Tie-back.

Currently it is envisioned that the *SeaRose* FPSO would come to shore in summer 2010 to implement these modifications. During this period subsea construction would take place at the White Rose field in preparation for first oil from North Amethyst in late 2010.

The highlighted areas on Figure 3-5 show where the North Amethyst pipelines and supporting structures tie-in to the existing *SeaRose* facility for Option A.

Should North Amethyst be tied back to *SeaRose* through existing infrastructure (Option B), there will still be a requirement for some minor modifications on the *SeaRose*, mainly in the area of chemical injection and storage, and controls software. These modifications would not require *SeaRose* to come to a shore-based facility.

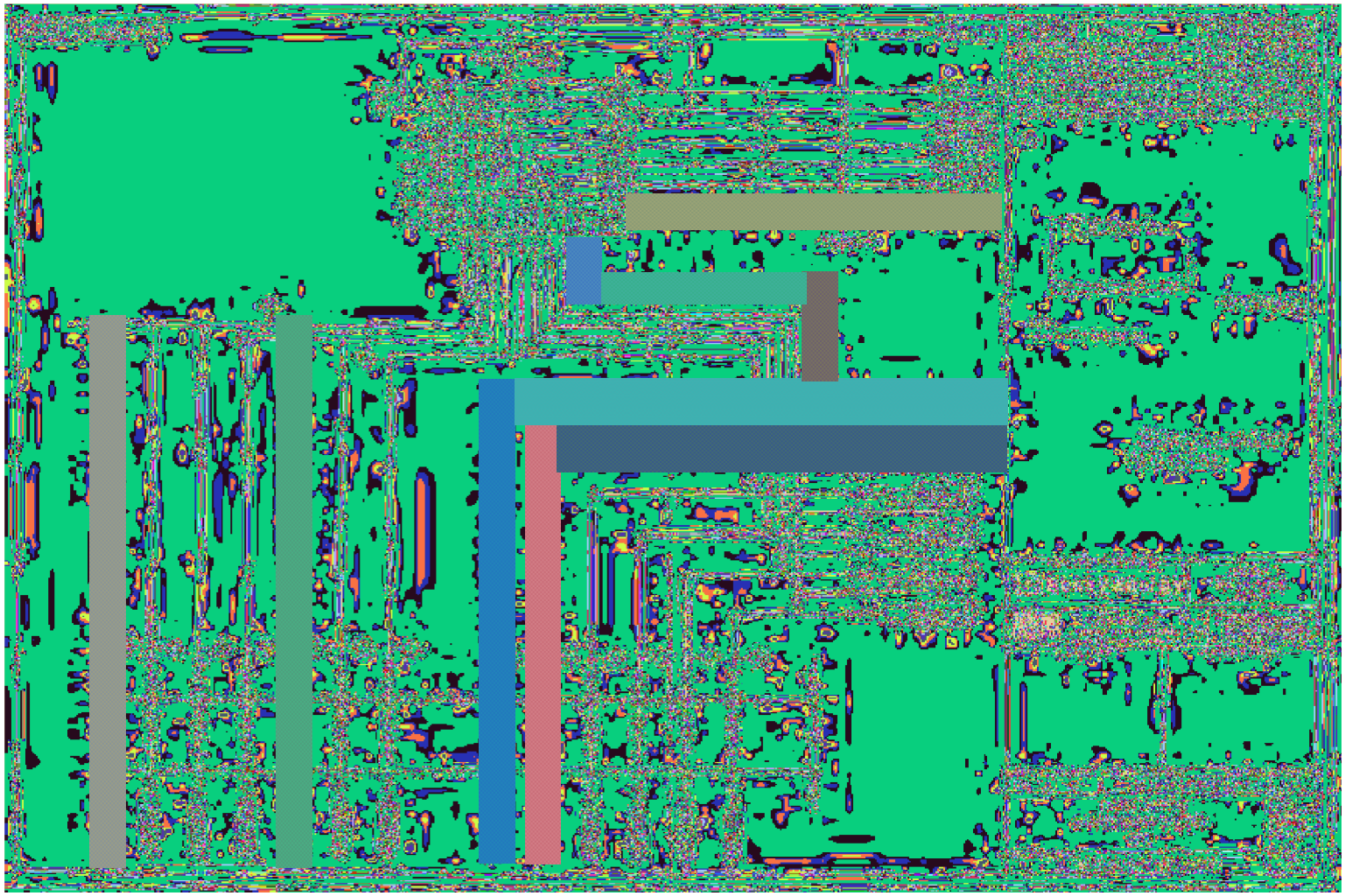


Figure 3-5 Topsides Tie-in Modifications for North Amethyst

3.5 Modifications to SeaRose FPSO to Increase Produced Water and Gas Handling Capacity

FEED engineering, flow assurance studies, and further economic evaluation will determine if enhancement is required to the SeaRose topsides processing plant. Maximum oil production will remain at 22,261 m^3/day (140,000 bpd). However, as a result of the potential enhancements, gas handling capacity will increase from 4.2E+6 Sm^3/day (150 mmscfd) to 6.14E+6 Sm^3/day (217 mmscfd), water injection capacity will increase from 44,000 m^3/day (277,000 bpd) to 57,000 m^3/day (359,000 bpd), and produced water handling capacity will increase from 28,000 m^3/day (176,400 bpd) to 31,000 m^3/day (195,300 bpd). Total liquids handling capacity will increase from 33,000 m^3/day to 39,000 m^3/day.

The following modifications may be made to the *SeaRose*:

- Increase HP Separator capacity and operate as three phase separation rather than the current two phase separation;
- Upgrade/replace the existing glycol regeneration package;
- Modify produced water hydro cyclones for HP feed;
- Strengthen roof steelwork to accommodate equipment and chemical storage;
- Replace produced water recycle pumps;
- Replace oxygen scavenger pumps and increase storage;
- Additional chemical injection skid for new wells and production centres;
- Replace cooling medium circulation pumps, pipe work and filters;
- Add a fourth gas turbine driven power generator;
- Relocate existing hypochlorite skid and jet fuel skid to another location;
- Change out gas compression coolers;
- Replace glycol contactor inlet cooler with higher capacity unit;
- Replace glycol contactor packing and inlet knock out drum internals;
- Modify HP gas compressor to limit of re-rated driver;
- Modify flash gas compressor to limit of re-rated driver;
- Modify LP/IP compressor to limit of re-rated driver (including pipe work);
- Change packing in existing de-aerator tower;
- Upgrade vacuum pump system; and
- Install new water injection pumps with separate booster pumps.

Modifications that may be made to the Main Equipment Room (upper and lower levels) include:

- Install turbine control panel;
- Relocate Uninterruptible Power Supply (UPS) distribution panels from lower level;
- Extend 13.8kV switchboard;
- Escape hatch to be installed in north wall of lower level; and
- Access door in lower level to be relocated east and bracing modified.

Note that the above modifications are indicative and subject to further development and refinement during the FEED process. Refer to Appendix II for diagrams depicting the locations and scope of the above noted modifications to the *SeaRose*.

3.6 Schedule

A high level preliminary conceptual schedule for development of North Amethyst Satellite Tieback is provided in Figure 3-6.

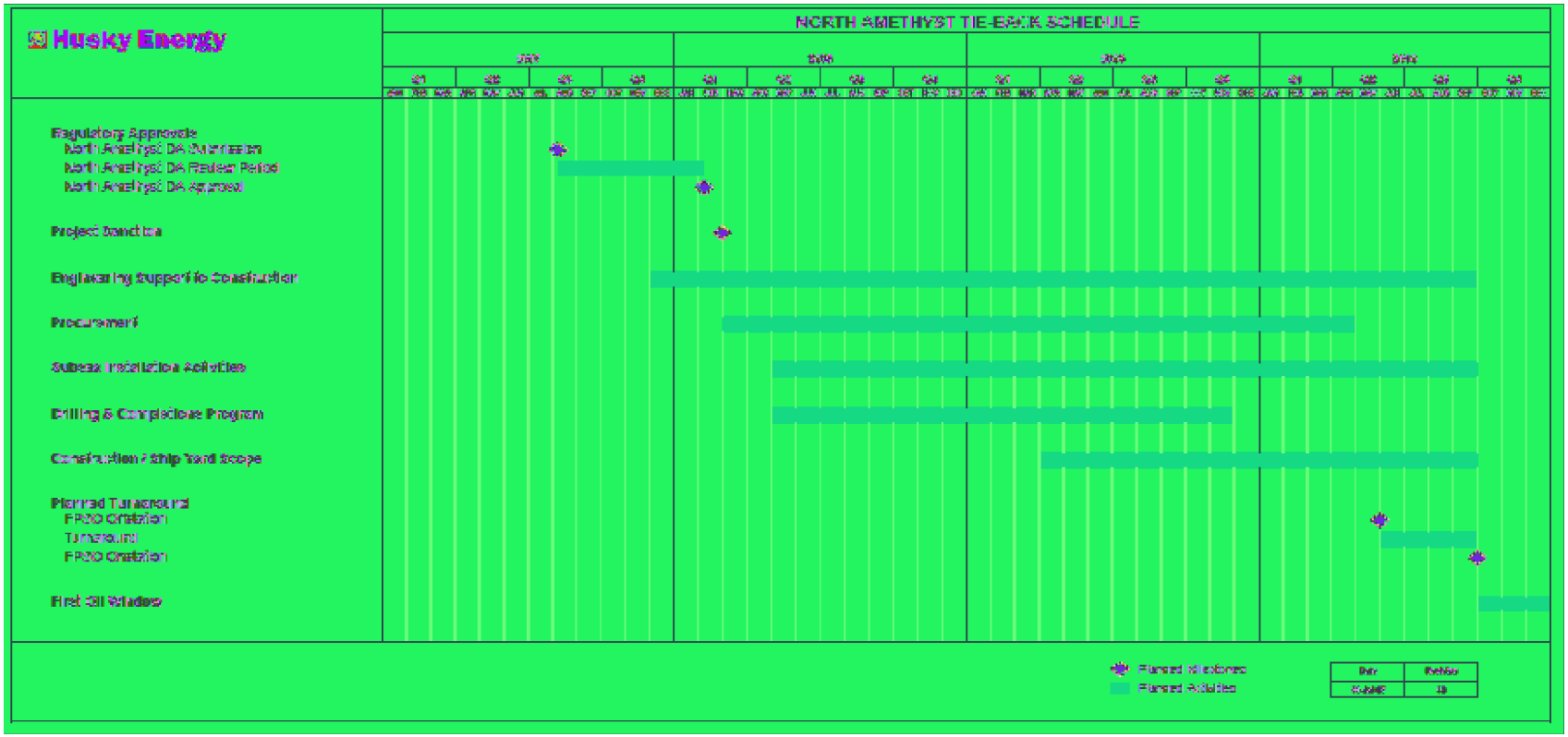


Figure 3-6 Conceptual Development Schedule for North Amethyst Satellite Tie-back

4.0 Canada Newfoundland Benefits Plan – Statutory Requirements

4.1 Introduction

Husky recognizes that the Atlantic Accord Implementation Acts provide the legislative basis for the development of the oil and gas resources offshore Newfoundland to benefit Canada as a whole and, in particular, the Province of Newfoundland and Labrador. The Atlantic Accord also recognizes the right of the Province to be the principal beneficiary of the oil and gas resources off its shores. Husky strongly believes in this assertion, and the success of the White Rose project is evidence of its commitment to delivering substantial benefits to the Province of Newfoundland and Labrador.

Husky's approach to benefits has remained consistent since it established operations in the Province. Early in the planning phases of the White Rose Development, Husky adopted a set of Canada-Newfoundland and Labrador Benefits Guidelines as a governing document (attached as Appendix III). This document has been integrated into the Canada Newfoundland Benefits Reporting and Procedure Manual (Appendix IV) which continues to guide how Husky and its contractors conduct business.

Accordingly, the policies and procedures outlined in the original White Rose Benefits plan are still relevant in 2007 and will remain unchanged as the company pursues other opportunities in the Newfoundland offshore area. These governing documents are also aligned with Husky's premise in 2000 that production facilities can be designed to accommodate multi-pool or expanded development concepts. Such is now the case with the North Amethyst Tie-back.

4.2 Office in the Province

Husky has maintained an office in the Province since 1998. A separate project office has been established in St. John's to manage the North Amethyst Satellite Tie-Back Project. This office will manage the entire project and is staffed by senior management personnel, engineers, technicians and support. Most high level decision-making with respect to the project will occur in this office.

4.3 Canada-Newfoundland Benefits Commitments

While the scope of the North Amethyst Tie-back is significantly smaller than the base White Rose Development, the original Husky Canada-Newfoundland Benefits Plan will continue to apply except as modified by this amendment, and in particular:

- Key functions will be performed in Newfoundland and Labrador. Husky is committed to managing the North Amethyst Tieback Development from the St. John's office. Management activities will include project

management, engineering, operations management, procurement, geosciences and reservoir engineering, drilling operations, logistics and project communications.

- Goods and services must be acquired on a best value basis.
- Canada-Newfoundland benefits will be a factor in procurement.
- Husky will provide identification of opportunities for the supply of goods and services required for the project and work with governments and industry organizations to jointly identify potential Newfoundland and Labrador suppliers.
- Husky will also work with governments and industry organizations to improve local supply capability by providing information about the project requirements and specifications in a timely manner.
- Husky will require project management and FEED and detailed engineering work for the North Amethyst Tie-back to take place in Newfoundland and Labrador.
- The company will give individuals resident in the Province first consideration for training and employment opportunities with the development. Positions will be recruited primarily through our online recruitment service, and from time to time, will be advertised in select local newspapers.
- All contractors and subcontractors will be contractually obligated to adhere to Husky's benefits philosophy, as detailed in the White Rose Reporting and Procedures Manual.
- Husky will continue to support and encourage initiatives in the areas of Technology Transfer and Research and Development.

4.4 Full and Fair Opportunity and Competitive Basis

Husky recognizes and commits to providing full and fair opportunity to manufacturers, consultants, contractors and service companies in the Province and other parts of Canada to participate on a competitive basis in the supply of goods and services that will be used in the development of the North Amethyst Satellite Tie-Back Project. For further

information refer to Husky's Canada Newfoundland and Labrador Benefits Guidelines (Appendix III).

4.5 Research and Development and Education and Training

Husky recognizes the importance of R&D and Education and Training in ensuring the sustainability of the oil and gas industry in the Province and commits to making expenditures in these areas consistent with the CNLOPB Guidelines. Husky will consider the use of facilities and institutions in Newfoundland and Labrador and Canada for any research and development work deemed necessary for the completion of the scope of work.

4.6 Disadvantaged Individuals or Groups

Husky values diversity in the workplace and is committed to building a work force that represents individuals from all sectors of society. The White Rose Diversity Plan was developed in 2003 and is updated on a yearly basis. This plan will also apply to the North Amethyst Satellite Tie-Back Project. For further information refer to The White Rose Diversity Plan (Appendix V).

4.7 Collective Agreements

Husky acknowledges that consistent with provisions in the Atlantic Accord Implementation Acts, a collective agreement may not frustrate access to training and employment opportunities for residents of the Province and that this applies particularly to disadvantaged individuals or groups.

5.0 Policies and Procedures

5.1 Project Management

Husky has identified the East Coast as a core business area for the company. The project management team will be located in Newfoundland and Labrador and has the responsibility for development plan execution and ensuring that all operations are conducted safely, in an environmentally responsible manner, and in accordance with all corporate and regulatory policies. Husky, as the White Rose Operator, will manage the development of the tie-back to the FPSO and subsequent operations. The Operator's authority, role, responsibility and reporting requirements are outlined in the Agreement that is already in place between the project partners.

Husky recognizes the maturity and experience of the engineering community within the province and where possible will endeavour to engage their services to assist in the execution of the North Amethyst Satellite Tie-Back Project. This could include contracting out various pieces of work related to environmental studies, inspection services, piping and instrumentation drawings, etc. Husky also commits to hiring Engineering Co-op students to work in the project office for the duration of the project.

All contractors who are engaged to carry out work on behalf of Husky will be managed from the project office and be required to adhere to all benefits commitments. Instructions for Canada NL Benefits reporting are included in Husky's Canada NL Benefits Reporting and Procedures Manual which will be issued to all contractors. For further information refer to Appendix IV.

5.2 Supplier Development

Husky and its contractors were involved in many proactive supplier development initiatives during the White Rose Project and will continue with similar initiatives for the North Amethyst Satellite Tie-Back. Bid lists for contracts and quarterly forecasts will be advertised on the Husky website and in the NOIA Bulletin. Expressions of interest and Requests for Bids/ Quotations will also be advertised on the Husky website as well as in local media such as the Telegram and the NOIA Bulletin. Husky commits to holding supplier development information sessions during the project to provide the local business community with an opportunity to learn about procurement opportunities. Husky's main sub-contractors will also be involved in similar activities as well; including advertising of all procurement opportunities on a timely basis. Where possible, Husky will identify areas where there may be a potential for technology transfer and work with the local business community, governments and educational institutions to explore and develop these opportunities. Husky has gained knowledge of and familiarity with the capability of the local business sector and will continue to update company databases as

new information becomes available. In January 2007 Husky visited the offices of several potential bidders for the fabrication of subsea equipment to inform them of up coming opportunities and to assess their capabilities. For further information on benefits philosophies and strategies refer to Husky's Canada Newfoundland and Labrador Benefits Guidelines (Appendix III).

5.3 Procurement and Contracting Strategy

Procurement and contracting activities will be conducted consistent with the strategies employed on the original White Rose Development and which are described in the Husky Canada Newfoundland Benefits Guidelines. Husky intends to continue the practices established in the past and ensuring bid specifications and packages are released to the business community on a timely basis and structured in a manner that will enable broad participation. As in the past, communication of Husky's bid procedures to qualified Newfoundland and Labrador and other Canadian suppliers and manufacturers will be on a timely basis. Procurement offices of Husky and its contractors will be located in Newfoundland and a listing of key procurement personnel will be published on the Husky website and that of our contractors as well as in other media such as the NOIA Bulletin. All contractors will be provided with Husky's Canada Newfoundland Benefits Guidelines and Reporting and Procedures Manual and briefed to ensure they understand Husky's commitments and obligations.

Husky contracts awarded for the development and production phase of White Rose made provision for increased work scope that could result from activities associated with future tie-back developments. In this context the following is a description of Husky's procurement and contracting strategy for some of the carry over services anticipated during the development of the project.

5.3.1 Marine Support Vessels

Husky's existing fleet of Anchor Handling Tug Supply (AHTS) and Supply/Standby vessels will be used to support the offshore construction and installation operations associated with this project. However, depending on the type of drill rig used the number of vessels may need to be supplemented. These vessels are and will be Canadian Flagged, crewed and will be managed from the Contractor's office in St. John's, Newfoundland.

5.3.2 Helicopter Support

Helicopter support based in the St. John's area will be required during the offshore construction, installation and commissioning phase. Cougar Helicopters Inc. (CHI) have been contracted to provide helicopter support to service the company's requirements. Cougar Helicopter Inc. will also provide all auxiliary flight services including First

Response Equipment and technicians, alternate landing site at Long Pond complete with weather station, aviation fuel, and helicopter passenger transportation suits and an aircraft maintenance and passenger handling facility located at the St. John's Airport. Cougar Helicopters Inc. will utilize its own internal flight following service.

5.3.3 Shorebase Facilities

Marine base facilities will be required to support the North Amethyst Satellite Tieback activity with appropriate wharfage for a dredge vessel and capability of servicing multiple operations. A. Harvey and Company Ltd. will provide marine base facilities to support tie-back activity and to the extent necessary it is anticipated that Pier 17 will provide the appropriate wharfage for the dredge vessel. Existing port facilities are capable of servicing multiple operations with the existing infrastructure including office space, crane support, bulk storage and consumable (fuel, water) storage and delivery capability. The existing infrastructure and activity at the Harvey's facility enables the industry to optimize the utilization of supply vessels and other logistic assets.

5.3.4 Warehouse Facilities

Warehouse facilities will be provided by Husky's contracted warehouse provider (ASCO) and existing contractors as required and will consist primarily of storage for tubular goods, and Husky owned equipment.

5.3.5 Voice and Data Communication Services

Operation and co-ordination service of voice and data communication services from offshore installations and vessels will be provided from the central facility Stratos Wireless Communications in St. John's. The primary communications link between the offshore installation(s) and the Project Operations office in St. John's will be via a dedicated C-Band satellite service.

5.3.6 Drilling and Completions

Husky's current drill rig contractor or a replacement drill rig contractor (in the event the existing drill rig is taken off hire in favour of a different rig) will operate a Mobile Offshore Drilling Unit (MODU) to drill the wells associated with the North Amethyst Satellite Tie-back. All associated drilling and completions support services will be contracted from reputable contractors who are encouraged to use local personnel and support their operations from local facilities. Some of the goods and services which will be required include; drilling fluids, drilling tools, cement, well testing, tubulars and chemicals.

5.4 Employment and Training

With respect to employment opportunities, Husky and its contractors remain committed to the principle of first consideration for residents of the Province. Husky will maximize to the extent possible, the number of Newfoundland and other Canadian residents employed on the project. The project office will be located in St. John's and recruitment will be carried out locally. When qualified Newfoundland or Canadian residents are unavailable to fill certain positions, whenever possible, succession plans will be established to qualify local residents to eventually fill positions held by Expatriates, especially for longer term positions that may carry over into operations. Husky will continue to employee work term students from Memorial and other local educational facilities to support the project team.

In the area of training, Husky will continue to work with government departments and private and public training institutions to identify and develop programs that relate to the industry in general. Whenever feasible, training and development activities will be designed to take place in the Province, thereby supporting the development of local training capabilities. Husky currently has a representative on the processing engineering technology focus group at the College of the North Atlantic. This group reviews course curriculum and provides feedback on the relevancy of course content with respect to actual industry requirements. Husky also has had representatives on the Provincial Government's Skills Task Force and Skills Canada both of which are looking at the demand for skilled trades in the Province. As part of an agreement to transfer Husky's process simulator to the Marine Institute, both parties have agreed to explore potential opportunities where by the Marine Institute can design specific courses which will meet the company's ongoing training needs for offshore. In June, 2007 another $500,000 in support was provided to the Husky Energy Oil and Gas Chair at Memorial University. This additional funding will ensure the sustainability of the Chair into the future. This will provide training and research opportunities for many local students hoping to pursue a career in the oil and gas industry.

5.5 Research and Development

The North Amethyst Tieback development is based on proven technological solutions, hence there are few related R&D activities. However, Husky will continue to support capacity development in regional R&D facilities and will consider the use of facilities and institutions in Newfoundland and Labrador and Canada for any research and development work deemed necessary for the completion of the scope of work.

5.6 Disadvantaged Individuals and Groups

Husky maintains a formal and documented Workforce Diversity Policy. The tenets of the policy are such that Husky:

- is committed to building a work environment that is free of discrimination and harassment;
- will ensure its employment policies are implemented in a fair manner and are free of discrimination and barriers;
- is committed to the principle of fair representation of the designated target groups (women, aboriginals, visible minorities and people with disabilities) at all levels of the organization; and
- will take special measures to facilitate the full participation of under-represented designated groups at all levels of the organization

Husky developed the White Rose Diversity Plan in 2003 (Appendix V) to specifically address and promote employment diversity. The plan applies equally to all contractors and sub-contractors. Husky has maintained close contact with the various community agencies and works cooperatively with them to identify new initiatives which encourage the participation of people from the designated groups. Husky will continue to implement the diversity plan and ensure its contractors and sub-contractors maintain similar plans and report on progress on a regular basis. Husky will continue to provide yearly reports to the C-NLOPB on initiatives and progress made with respect to workplace diversity.

6.0 Capacity of Newfoundland and Labrador and Canadian Economies To Meet the Requirements of the North Amethyst Satellite Tieback Development

A recent labour market availability study conducted by PSN (Appendix VI) on behalf of Husky confirms that the demand for labour to carry out the North Amethyst Satellite Tieback can be met to a large degree from within the province. The study evaluated the affect other potential construction projects such as the LNG Transshipment Terminal at Grassy Point, the INCO Hydro-Met Plant in Long Harbour, Lower Churchill Development, and the proposed new oil refinery for the Come-By-Chance area could have on the availability of labour and fabrication facilities. For the most part it confirms the demand can be met within the Province. The only concern raised was the availability of labour and fabrication facilities if all the above noted projects were to take place at the same time. The PSN findings suggest this would result in a shortfall of certain trades such as insulators, coatings applicators and electrical and instrumentation specialists. Husky will monitor the status of these projects and should it become evident they will be proceeding in the same time frame as the North Amethyst Satellite Tieback, a contingency plan will be developed to address the potential shortfall in these trades areas.

6.1 Subsea Construction for North Amethyst Satellite Tie-back

Regardless of whether the North Amethyst Satellite Tie-Back is tied back directly to the SeaRose FPSO (Option A) or is brought back to the facility through existing infrastructure (Option B), there will be basically the same subsea construction requirements because a glory hole, wells and flowlines will be required for either Option.

The North Amethyst Satellite Tie-back is primarily a subsea development with components similar to the subsea components of the original White Rose Development. The subsea configuration being considered for Option A is presented in Figure 3-2 and the configurations being considered for Option B are presented in Figures 3-3 and 3-4.

The umbilical and flowlines utilized for North Amethyst will be of similar design and specifications as those installed during the initial development. It is expected that two 10" oil production flowlines, one 9" water injection flowline, one 4.25" gas lift flowline will be routed from the NADC to the *SeaRose*. Much of the infrastructure created both offshore and onshore during the original White Rose Field Development will now be utilized to reduce the cost of the North Amethyst Satellite Tie-back. For example, it is anticipated that the tree transport and rigid spool frames designed and built during the original development will be used for North Amethyst.

Since the completion of the original White Rose Project, Husky has supported the construction of a new warehouse, storage/testing yard and subsea testing facility in Donovans Industrial Park. The extensive System Integration Testing (SIT) that was formerly conducted at Bull Arm will be reduced by utilizing similar equipment from White Rose proven design. Husky anticipates that manifold and foundation design and construction, with an associated SIT limited to the "new" configuration elements, will be contracted for and carried out in Newfoundland and Labrador.

Although the North Amethyst Satellite Tie-back is relatively straightforward and will employ for the most part off-the-shelf components, there are potential areas for local companies to participate. A list of equipment and services that will be required is included in Table 6-1. This information has been generated based on experience gained from the White Rose project

6.1.1 Goods and Services

On a competitive basis the following equipment could be fabricated in Newfoundland and Labrador (applicable to Option A or Option B):

- one subsea manifold foundation;
- one production manifold;

- one water injection manifold;
- two flowline end manifold modules (for tying in flowlines);
- four two-slot TGBs;
- three production rigid spools;
- two SDU foundations;
- four riser horizontal holdback gravity bases;
- six water injection rigid spools; and
- control jumpers (number yet to be determined)

Table 6-1 Procurement Opportunities - North Amethyst Satellite Tie-back

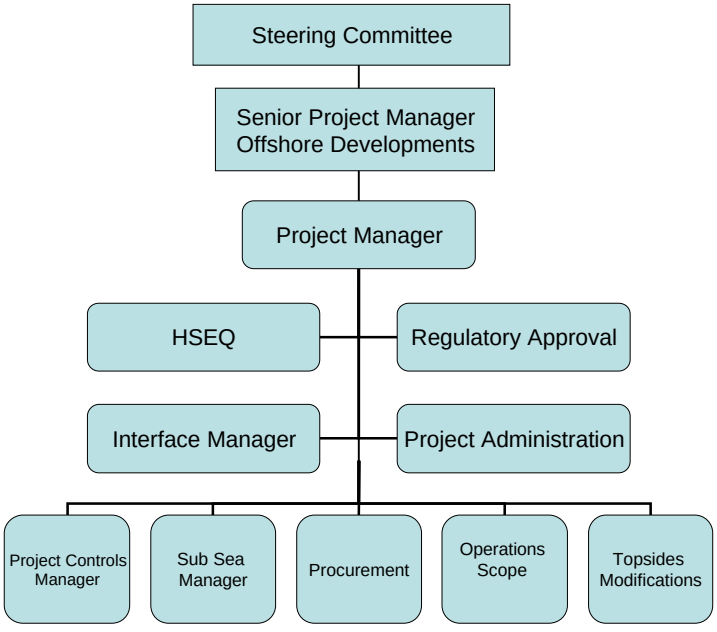
Major Sub-Sea Equipment Packages	Potental Supplier Locations		
	NL	Other Canada	Foreign
Tree Production			X
Tree, Water Injection			X
Temporary Guidebase	X	X	X
Permanent Guidebase	X	X	X
Manifold, Production (incl. Fdn)	X	X	X
Manifold, Water Injection (incl. Fdn)	X	X	X
SDU (incl. Fdn)	X	X	X
Flowlines, Risers and Umbilicals			X
Control Jumpers	X	X	X
Rigid Spools (Prod & WI)	X	X	X
Glory Hole Construction			X
Subsea Production Equipment Installation			X
Drilling & Completions			X
Subsea/Topsides Control Mods	X	X	X
FEED	X	X	X
Detailed Design Engineering	X	X	X
Eng. & Mgmt for HSEQ Studies/Doc Revisions	X	X	
Topsides Modifications	X	X	X
Environmental Assessment	X	X	
Seabed Environmental Sampling & Reporting	X	X	
Fish Habitat Remediation	X	X	
HSEQ Studies	X	X	
Logistics Support	X	X	
Tubulars	X	X	X
Chemicals	X	X	X
Waste Disposal	X	X	
Medical Services	X	X	
Well Services	X	X	X
ROV Services	X	X	
Printing Services	X	X	
Courier Services	X	X	
Diesel Fuel	X	X	
Custom Brokerage	X	X	

6.1.2 Employment

Offshore development activity generates both direct and indirect employment opportunities. For the North Amethyst Satellite Tie-back, employment opportunities will be concurrent with the general increase in offshore activity, through increased drilling, supply vessel and other support activity. The location of engineering in the Province will provide opportunities for engineers and technicians as well as other office support staff. Project management will be undertaken in-house by Husky and may result in the addition of new term positions for the duration of the project (Refer to Figure 6-1 for further details on project organization).

A total of 1,790,000 hours of employment is estimated to take place in Newfoundland during the engineering and construction phase of the North Amethyst Satellite Tieback if it is tied back to the FPSO via Option A. This equates to approximately 900 person years of employment in various disciplines including management and administration, engineering, trades and offshore marine. The total hours for a tieback through existing infrastructure (Option B) is estimated to be 1,660,000. For a summary of person hours for each option refer to Table 6-2. The topsides FEED for North Amethyst will employ an average of 18 engineers over four months while the topsides detail design will employ an average of 36 engineers over a six month period.

Figure 6-1 North Amethyst Satellite Tie-back Team Structure



Depending on the modification requirements, fabrication opportunities could provide work for local welders, electricians and pipe fitters. There will also be opportunities during the testing and installation phase for inspectors, marine personnel, divers, logistic coordinators and heavy equipment operators.

The following table is a preliminary estimate of the Newfoundland hours associated with completion of the North Amethyst Satellite Tie-back:

Table 6-2 Estimate of Newfoundland Person Hours For North Amethyst Satellite Tie-back Options A and B

Project Component	Estimated Person Hours Option A (Direct to FPSO)	Estimated Person Hours Option B (Existing Drill Centre)
Project Management	**400,000**	**350,000**
Drilling and Completions	**900,000**	**900,000**
Logistics	**200,000**	**200,000**
Glory Holes	**30,000**	**30,000**
Subsea Production System	**180,000**	**180,000**
FPSO Modifications	**80,000**	**0**
Total	**1,790,000**	**1,660,000**

The above components include the following scope:

- Project Management - FEED, Detailed design engineering, procurement, construction management, hookup and commissioning.

- Drilling & Completions - All marine and onshore activities associated with drilling and completion of nine wells with capacity for sixteen wells in total including management of a dedicated MODU and supply vessels as well as other logistical support.

- Glory Holes - Dredging activities, ROV inspection services, marine support, and modifications to glory holes, if required.

- Subsea Production system - construction of one new manifold structure, testing and installation, laying subsea lines and hookup to the *SeaRose* .

- FPSO Modifications (Option A) – could include changes to the turret and associated systems to accommodate tie-in of North Amethyst. .

It should be noted that this is a preliminary high level estimate, which is subject to change as the scope is further refined in the Front End Engineering Design (FEED) phase.

As described in Section 3.5, modifications to the SeaRose topsides processing plant may be required to increase produced water and gas handling capabilities. This will be determined pending FEED engineering, flow assurance studies and further economic evaluation. The estimated hours associated with this potential upgrade are outlined in Table 6-3

Table 6-3 Estimated Person Hours for Upgrade Modifications to SeaRose FPSO

Project Component	Total Employment	NL Employment	Other Canadian Employment	International Employment
Eng/ PM (Topsides Upgrade Opt 2A)	550,000	550,000	0	0
FPSO (Upgrade Modifications)	450,000	450,000	0	0
Total	**1,000,000**	**1,000,000**	**0**	**0**

6.2 Production Operations

Production from North Amethyst will be tied back directly to the *SeaRose*. New opportunities associated with the production operations of the North Amethyst Satellite Tieback will relate primarily to subsea inspection and maintenance and work over activities associated with the wellhead equipment and subsea lines.

6.2.1 Goods and Services

Goods and Services required during the production phase of North Amethyst will not differ from previous operations. North Amethyst will allow the *SeaRose* to maintain plateau production for several years and thereby ensure that the present demand for goods and services to operate the facility will continue.

6.2.2 Employment

Extension of the production plateau from the addition of oil from the North Amethyst field will result in a continuation of employment levels at peak for an estimated four to six years. Currently the steady state employment associated with the White Rose operations is around 1000 people which include direct Husky employees as well as contractors and subcontractors.

7.0 Consultation, Monitoring and Reporting

7.1 Consultation

Husky remains responsive to community interests, and routinely consults with key stakeholder groups on operational activity. Husky also meets with stakeholder groups or individuals upon request to discuss their concerns or answer questions regarding the business or employment opportunities associated with the development of the North Amethyst Satellite Tieback.

7.2 Monitoring and Reporting

With respect to the collection and reporting of benefits (employment and expenditure) information, consistent with the White Rose Reporting and Procedure Manual, Husky will continue to work with its contractors to provide this information to regulatory agencies on a timely basis.

Moreover, Husky remains committed to maintaining its public website which provides information regarding procurement opportunities, employment opportunities and other related project information. During the course of the initial White Rose Development, systems for monitoring and reporting on Canada-Newfoundland benefits were developed and will remain in place for any future projects.

These systems were subjected to a rigorous review by Audit Services Canada and have proven to be reliable. Standard questionnaires and forms have been developed for use by contractors and service providers. Calculation of Canada Newfoundland content has been incorporated into Husky's SAP financial systems which allow for accurate and timely reporting of this information. The detailed reporting requirements with respect to timing and content will be determined in consultation with the C-NLOPB.

7.3 Summary of Benefits Commitments

The following is a summary of benefits commitments contained in this Benefits Plan:

1) Maximize benefits for the Province where practically and commercially achievable on a competitive basis and identify potential areas where Newfoundland companies and residents can participate in the development of this field expansion.

2) Locate the project office for the North Amethyst Satellite Tieback in St. John's.

3) Provide full and fair opportunity to manufacturers, consultants, contractors and service companies in the Province and other parts of Canada to participate on a competitive basis in the supply of goods and services that will be used in the development of the North Amethyst Satellite Tie-Back..

4) Canada-Newfoundland benefits will be a factor in procurement.

5) Commit to making expenditures in the areas of R&D and Education and Training consistent with the C-NLOPB Guidelines.

6) Build a work force that represents individuals from all sectors of society.

7) Maximize to the extent possible, the number of Newfoundland and other Canadian residents employed on the project.

8) Carry out recruitment from the local office

9) Establish succession plans to eventually phase out expatriate positions over the course of the project, especially for longer term positions that may carry over into operations.

10) Work with government departments and private and public training institutions to identify and develop programs that not only are related to the project, but also for the operations phase and the industry in general.

11) Hold supplier development information sessions during the project to provide the local business community with an opportunity to learn about procurement opportunities.

12) Hire Work Term students to support the project team.

13) Maintain a public website which provides information regarding procurement opportunities, employment opportunities and other related project information.

8.0 Conclusion

The base White Rose Development demonstrated there are substantial skills and infrastructure established in the Province to participate at a high level in offshore oil and gas development. Husky looks forward to building on this foundation as it moves forward with planning for the North Amethyst Satellite Tie-back.

9.0 Glossary and Acronyms

AHTS. Acronym for Anchor Handling Tug Supply Vessel

ADW. Approval to drill a well. Permission required from the CNLOPB

C-NLOPB. Acronym for Canada-Newfoundland and Labrador Offshore Petroleum Board

CDC. Acronym for Central Drill Centre

CHI. Acronym for Cougar Helicopters Incorporated

Development Application. The official title of the documentation submitted to the C-NLOPB in support of an oilfield development request.

EHMU. Acronym for Electro Hydraulic Multiplex Umbilical

ESDV. Emergency Shutdown Valve

FEED. Acronym for Front End Engineering Design

FPSO. Acronym for Floating Production, Storage and Offloading Vessel.

Glory Hole. Hole, excavated in the seabed, in which wellhead facilities are placed for protection from iceberg scour.

Umbilical. Device through which control of subsea instrumentation is maintained from the FPSO.

Flowlines. Pipe which conveys crude oil, water and/or gas from the well to the riser, or water or gas from the riser to the well.

Flowline Weak Link Technology. Technology that is built into the flowline system so that the wellhead structures are protected should flowlines be snagged due to scouring icebergs.

Gas Lift. Gas injected into the well to reduce the hydrostatic pressure on the fluid column and hence enhance flow.

MODU. Acronym for Mobile Offshore Drilling Unit

MSF. Acronym for Manifold Support Foundation

NADC. Acronym for North Amethyst Drill Centre

NDC. Acronym for Northern Drill Centre

OPEX. Acronym for operating expenditure.

PGB. Acronym for Permanent Guide Base

Produced Water. Water from the producing formation that comes to surface with the oil and gas. It separates from the oil and gas at atmospheric temperatures and pressure.

QC/DC. Acronym for Quick Connect/ Disconnect. Refers to flowline couplings.

R&D. Research and Development

Riser. A flowline carrying oil or gas from the seabed to the deck of a production platform or a tanker loading platform.

ROV. Acronym for Remotely Operated (underwater) Vehicle

SDC. Acronym for Southern Drill Centre

SDU. Acronym for Subsea Distribution Unit

Spider Buoy. Disconnectable interface between the risers and the FPSO.

SWRX. Acronym for South White Rose Extension

Template. Device through which a group of wells is drilled and produced.

TGB. Acronym for Temporary Guide Base. Used for positioning drill bits in correct position on the seafloor.

Topside (or topsides) Facilities. The oil- and gas-producing and support equipment located on the top of an offshore structure.

Turret. A low, tower-like structure capable of revolving horizontally within the hull of a ship and connected to a number of mooring lines and risers. It allows the ship to rotate with the weather while maintaining a fixed mooring system.

UPS. Acronym for Uninterruptible Power Supply

UTA. Acronym for Umbilical Termination Assembly

WWRX. Acronym for West White Rose Extension

Appendix I

Alternative Modes of Development

The following outlines Husky's examination of the feasibility of alternative production and export systems for the North Amethyst field.

Concept Selection

An investigation was carried out by Husky to identify the alternatives and preferred options for development of the North Amethyst field. The first stage of the alternatives investigation reviewed previous work related to selection of the *SeaRose FPSO* for the White Rose Development.

For the initial White Rose Development concept selection, eight production concepts were evaluated based on economics, flexibility, feasibility, deliverability and Canada-Newfoundland and Labrador Benefits:

- steel FPSO facility;
- concrete FPSO facility;
- steel floating, production, drilling, storage, offloading (FPDSO) facility;
- concrete gravity-base structure (GBS);
- steel semi-submersible facility with and without integral storage;
- concrete semi-submersible facility;
- disconnectable concrete tension leg platform (TLP); and
- concrete barrier wall with floating production unit (FPU).

This process eliminated options that were not technically or economically feasible. Although the work was completed five years ago, the fundamental drivers for the decisions have not changed. These drivers relate to relative levels of cost and effort, and although absolute values have altered, the relative rankings remain the same.

Taking into account this previous work, Husky examined two alternative concepts for development of the North Amethyst field:

- A subsea tie-back system to the existing *SeaRose FPSO* facility
- A subsea system to a greenfield steel ship-shaped FPSO facility.

Production System Alternatives Considered

Subsea Tie-Back to *SeaRose FPSO*

The subsea tie-back to the *SeaRose* will consist of templates, manifolds, flowlines, umbilicals and risers tied directly back to the facility or back to the facility via existing infrastructure (i.e., existing White Rose drill centres). The main method of iceberg scour protection for wellhead equipment, trees and manifolds will be a dredged glory hole at a strategic location to optimize well placement for production.

Subsea System to Greenfield FPSO Facility

The alternative method of developing North Amethyst that was considered comprised a tie-back to a standalone greenfield FPSO facility. This alternative would be very similar to the existing White Rose Development although the vessel would likely be smaller than the *SeaRose* with one drill centre for production and tied into the existing Northern Drill Centre (NDC) for gas injection.

Similar to the *SeaRose*, the new FPSO would be moored using a geo-stationary turret, which is anchored to the seabed. The turret mooring would be disconnectable so that the FPSO could move from station to avoid icebergs. The functional characteristics of the turret would be similar to the *SeaRose* vessel.

The subsea solution for the floating production facility would be the same as for the existing White Rose Development, consisting of templates, manifolds, flowlines, umbilicals and risers. A glory hole would protect the subsea wellhead components.

Also similar to the *SeaRose*, production facilities would be mounted on raised supports above the vessel deck. Reservoir fluids pass from subsea production wells, via flowlines and risers up into the turret and then to the production facilities. Produced oil would be stored in the vessel cargo tanks and periodically offloaded on to a shuttle tanker via an offloading hose.

The processing requirements would likely be based upon a single train and not require any unconventional facilities. The oil would be stabilized in a conventional separation train and de-watered prior to rundown. Produced gas would be compressed for re-injection using a multi-stage compression train.

If the NDC was used for gas injection, a subsea structure would be installed to accommodate tie in of a new flowline and umbilical to the existing NDC flowline and control systems, currently controlled from the *SeaRose*.

Investigations into the Greenfield FPSO Alternative

To better understand the feasibility of the new FPSO alternative, an investigation was conducted to review procurement options. Consideration was given to current market conditions for shipyard construction, and for the design, construction and installation of topsides and turret mooring systems. The following sections outline the results of that investigation.

FPSO Options

Two potential FPSO facility options exist:

a) Near sister ship to *SeaRos*e, using similar production throughputs, and with enhancements based on lessons learned from *SeaRose* operation.

b) Smaller facility to address lower production scenarios i.e., 60,000 to 80,000 bbl/day production and possibly a reduced storage capacity (circa 600,000 bbls).

Both options could utilize either a new build or a converted tanker for the hull. The most likely scenario is that the larger facility would utilize a new build hull, as it would prove difficult to find an existing hull of sufficient size, quality, strength and design life to meet project needs. For the smaller facility, conversion candidates that meet the required specifications are more readily available. Table 1 outlines the relative positive and negative aspects of a new build FPSO versus a tanker conversion.

Table 1 New Build vs. Tanker Conversion

New Build		Tanker Conversion	
Positive Aspects	**Negative Aspects**	**Positive Aspects**	**Negative Aspects**
Design flexibility	Longer procurement (design/build cycle)	Shorter procurement cycle	Fixed hull configuration
Wider range of configuration options	Relatively high cost	Lower cost	Unknowns with respect to start point/condition
Material selection options			Challenging upgrade requirements (structure and systems)
Clear compliance requirements			Challenging compliance requirements
Incorporate structural enhancements			Scope definition will be

/integration			high risk
Optimisation of marine systems			Steel quality/grade issues
Pre-planned interface systems			
Enhancements for access, inspection & maintenance			

Another option for the smaller unit would be to consider redeployment of an existing unit on either a lease or a purchase basis. There were a small number of existing units identified which could be available for redeployment from areas such as the North Sea (UK and Norway). These units would require varying levels of upgrade and refurbishment. The availability and suitability of such units would depend on:

- near proximity of the vessel's specification with required functional requirements;
- suitability of the vessel hull to meet the low design temperature requirements for Atlantic Canada which demands a very high grade of steel construction;
- suitability of the vessel to meet requirements related to green water protection and survival conditions under the 100 year storm criteria on the Grand Banks;
- suitability of the vessel to meet disconnection for ice avoidance requirements;
- suitability of the vessel to meet Canadian legislative regulations (i.e., double hull, etc);
- extent of modifications required to topsides processing and utilities equipment;
- availability of deck space and load capacity for additional equipment;
- degree to which the CoP (Cessation of Production) dates can be accurately forecast by the owners and existing charter holders; and
- current level of extension options available to existing charter holders.

Current FPSO Market Conditions

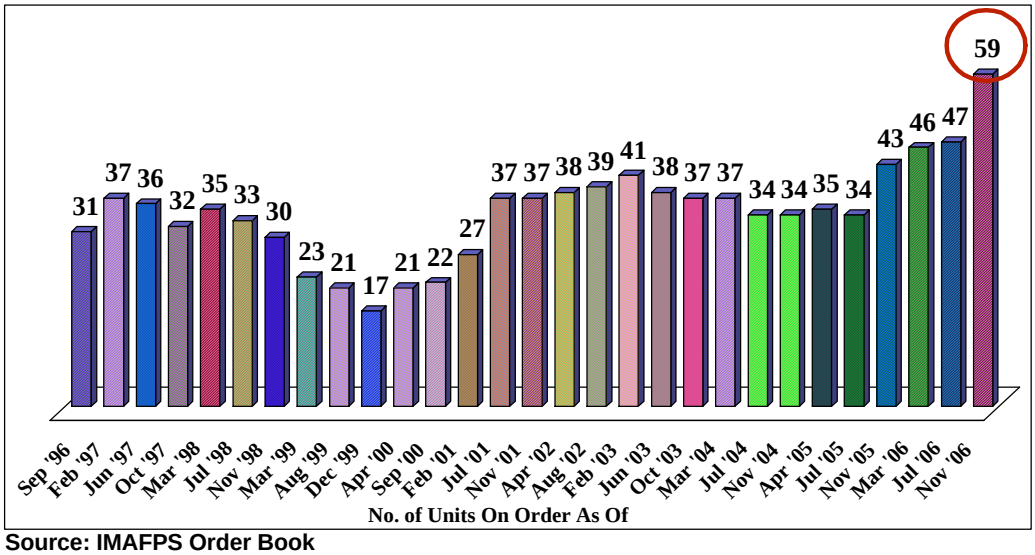
The offshore engineering and construction market has experienced a significant up-turn in activity over the last few years, driven by a combination of sustained high oil prices and resulting increased investor confidence.

Within the overall engineering and construction market, floating production systems have also seen an up-turn in activity, which has generated an all time record high level of activity and order backlogs.

The current order book for production and storage systems as of November 2006, based on data from International Maritime Associates Inc. (IMA) in Washington, DC, has the following floating production systems registered for order:

- two Tension Leg Platforms (new build);
- forty-three Floating Production Storage Offloading (FPSO) (14 new, 27 conversions, two redeployments);
- eight production semi-submersibles (new build);
- four production spars (new build);
- one production barge (new build);
- one floating production unit (conversion);
- one Mobile Offshore Production Unit (conversion); and
- five Floating Storage Offloading (FSO) vessels (one new build, four conversions).

Figure 1 shows the current and historical Floating, Production, Storage (FPS) Order Book.



Source: IMAFPS Order Book

Figure 1 Current and Historical FPS Orders

The consequences of these general market conditions include:

- the FPSO order backlog is at an all time high at 70% above the 10 year average (1996-2006);
- the supply side for equipment and services is currently operating at overcapacity with lead times in many cases doubling or tripling so that even stock items are now wait listed
- long lead times for new hull construction slots (currently circa three to four years from the time of order, depending on hull type and specification);
- longer lead times for key equipment items (e.g. valves, high specification materials, power generators, pumps);
- an industry-wide shortage of experienced people in engineering, project management and construction;
- competition with other industries and infrastructure projects for resources (e.g. onshore petrochemicals, oil sands projects); and
- contractor focus on lowering their commercial project execution risk.

The impact of these conditions on the specific FPSO market includes:

- Established FPSO contractors have solid order backlogs and can afford to be selective about the contracts they pursue to ensure best risk/return opportunities.

- If a new hull is required then early commitment to a hull construction slot is required to meet hull delivery within a three to four year window.

- There are many new market entrants into the sector (particularly for contractor owned units) and many units are being built speculatively. The specifications of these units are not generally suited to Atlantic Canada and ice presence.

- Topsides Engineering, Procurement and Construction (EPC) contractors have high workloads in most areas and are looking for contracts with no risk (i.e. most will only take on reimbursable or target price contracts rather than lump sum risk for EPC contracts).

- Most Korean shipyards are willing to take on full EPC responsibility using traditional Engineering and Construction contractors as sub-contractors.

Currently shipyards are also enjoying a market which is at or near all time record levels of activity. This is being driven mainly by a dramatic upturn in demand in LNG vessels, oil tankers and bulk carriers. This, in turn, has lead to a dramatic increase in shipyard prices and a shortage of hull slots leading to long lead times for construction.

The reasons for these high prices include:

- increase in the cost of Asian steel to that of European levels;

- increase in the cost of main vessel equipment such as pumps and generators;

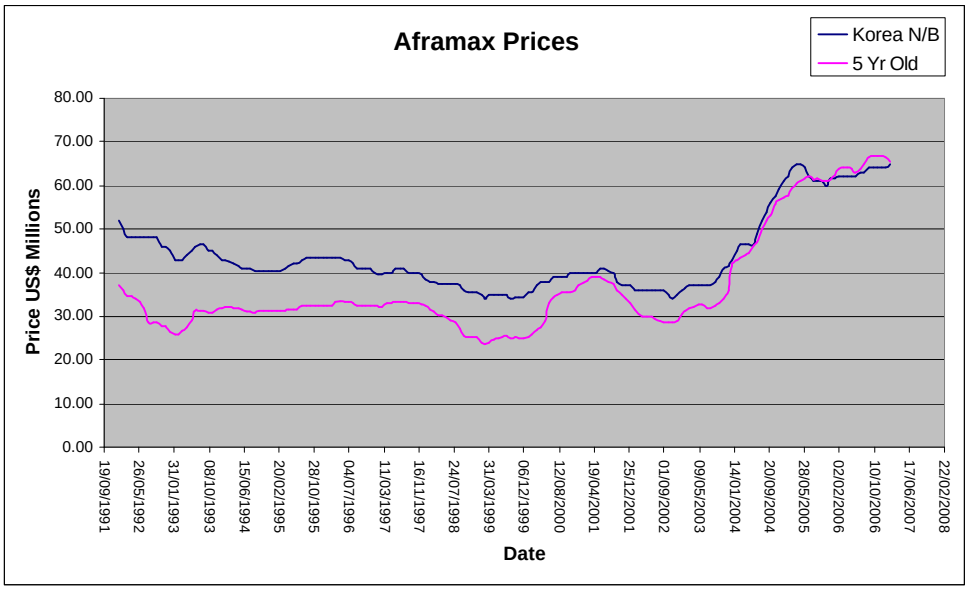
- changes in currency exchange rates (Won to Euro and $US); and

- increases in shipyard margins as the owners are able to increase their profit margins in line with the high market activity.

Price comparisons for Aframax and SuezMax tankers over time are shown in Figures 2 and 3, respectively.

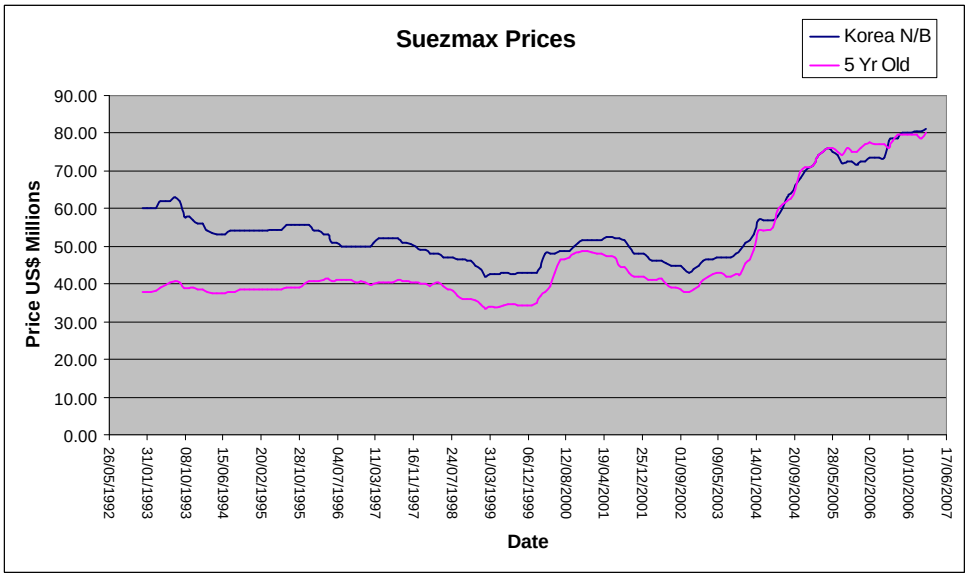
The increase in demand since early 2005 has driven the price of the new build hulls up by 100% and reduced the margin between a new build and a five year old unit to close

to nothing. This demonstrates that demand has far outstripped supply capacity and that factors such as condition or specification have very little influence in the out turn cost.



Source SSY London

Figure 2 AfraMax Tanker Prices - Korean New Build & Five Year Old



Source SSY London

Figure 3 SuezMax Prices - Korean New Build & Five Year Old

Base Case FPSO Alternative

Taking into account current market conditions and expected functional requirements, the FPSO alternative investigated for the North Amethyst field was redeployment of an existing unit with circa 600,000 bbls storage capacity as described below. These specifications represent generic facilities expected to match development requirements. However, it should be noted that any vessel redeployed to Newfoundland and Labrador would require re-fitting to meet all regulatory and Husky standards.

Hull

- Aframax sized – Double hull – fully segregated cargo and ballast
- Ice strengthened (structure to Ice Class)
- Accommodation for 100 persons (maximum)
- 300,000 - 600,000 bbls storage
- Self propelled with heading control facility – possibly multiple azimuth thrusters

Turret/Mooring System

- Moored by internal disconnectable turret mooring system
- 8 to10 risers

Topsides

- Oil production capacity of 60,000 to 80,000 bbl/day
- Liquids handling capacity of 125,000 to 165,000 bbl/day
- Water injection capacity of 165,000 to 220,000 bbl/day
- Gas compression capacity of 80 to 105 mmscf/day
- Tanker export @ <0.5%BS&W <12RVP

This alternative was further investigated as the option would be less capital intensive and therefore more acceptable to potential contractors.

Based on the foregoing analysis, the alternative that was considered for development of North Amethyst was a converted tanker with new turret and topsides or a

modified/upgraded existing unit. For the above alternative, it would be likely that the vessel would be procured on a lease (bare boat charter) basis.

Key Risks Identified

The following were identified as key issues in today's FPSO contractor market:

- Market activity in the FPSO sector is at an all time high with a record number of new units on order (i.e., Lloyds List 28-03-07 states "More than 60 floating production systems are currently on order and over 100 could be booked over the next five years").

- Long lead times for new hull construction exist because of high levels of activity within the shipbuilding market sector.

- Long lead times exist for many items of oilfield equipment because of high levels of development activity.

- There is a general shortage of suitably qualified and experienced project, engineering and construction resources throughout the oil and gas industry.

- Only a limited number of suitably experienced full service engineering and construction contractors are able to deliver a complete FPSO which significantly reduces the competition.

- There is a general shift away from lump sum EPC work (particularly in the area of topsides design and fabrication) and a move towards project execution based on a more segmented contracting strategy which reflects a fundamental shift of risk away from contractors to Operators/Owners.

- Competition between suitably qualified turret/mooring system vendors exists, although the number of independent turret vendors is declining due to mergers and acquisitions.

Development Alternatives Costs

Incremental capital and operating cost estimates on an annual basis for the two alternatives are presented in Table 2. Operating costs do not include crude transportation or decommissioning and abandonment.

Table 2 Incremental Capital and Operating Cost

Year	Subsea Tie-Back to *SeaRose* (CAD $MM)				Subsea System to Greenfield FPSO (CAD $MM)				
	DRILLEX	CAPEX	OPEX	Total	DRILLEX	CAPEX	OPEX	Lease Payment	Total
1	2	60		62	2	26			29
2	245	115		360	245	149			394
3	238	166		404	238	176			414
4	259	201		460	259	138			396
5		1	10	11		1	120	142	263
6			10	10			120	142	262
7			10	10			120	142	262
8			10	10			120	142	262
9			10	10			120	142	262
10			10	10			120	142	262
Total	744	544	60	1,347	744	491	720	852	2,806

Assumptions:

1. All CAPEX for the greenfield FPSO is absorbed in lease payment
2. Excludes transportation, decommissioning and abandonment costs, includes Insurance.
3. Tie-back to *SeaRose* costs include estimate for modifications to the FPSO.
4. OPEX related to subsea infrastructure remains constant as new equipment replaces abandoned items.
5. All costs in 2007 dollars
6. Assumes first five years of production only. Relative differences in cost would be maintained throughout the life of project.

The alternative of development of North Amethyst to a greenfield FPSO increases overall capital cost exposure due to the cost of building or acquiring an FPSO. If an FPSO is leased rather than owned than this financial arrangement would reduce CAPEX (any costs associated with the FPSO being absorbed in the lease payments). However, it would add OPEX due to the significant lease payments. The greenfield FPSO alternative does not increase recoverable reserves and therefore the additional cost must be justified on the time value of accelerated production. The greenfield FPSO alternative is not economic as it erodes Net Present Value (NPV) of the project.

Schedule for Development of Alternatives

The delivery times for the development alternatives considered are shown in Figures 4 and 5. Although the approval timeline shown is common for all alternatives under consideration, it is anticipated that a Greenfield FPSO would require substantial regulatory review which may add as much as another year to the schedule.

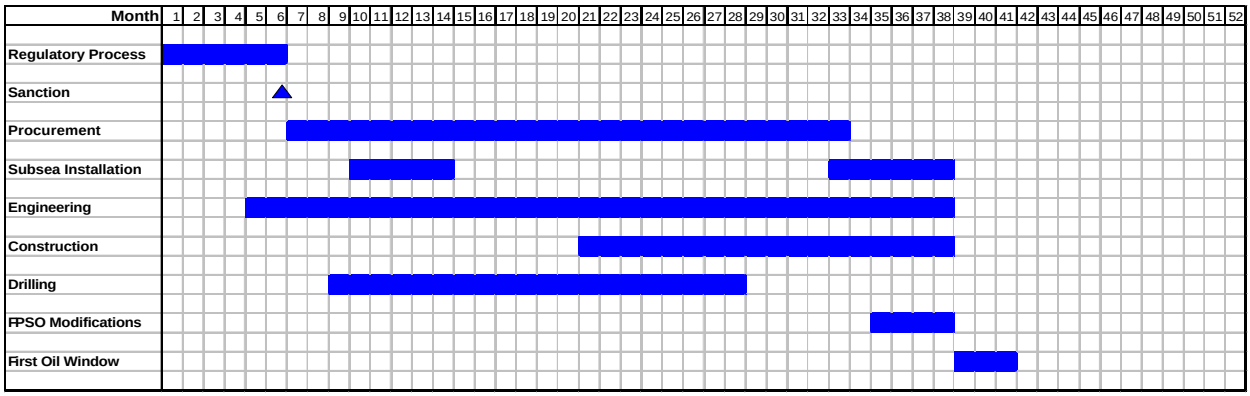


Figure 4 Subsea Tie-Back to *SeaRose* FPSO Notional Timeline

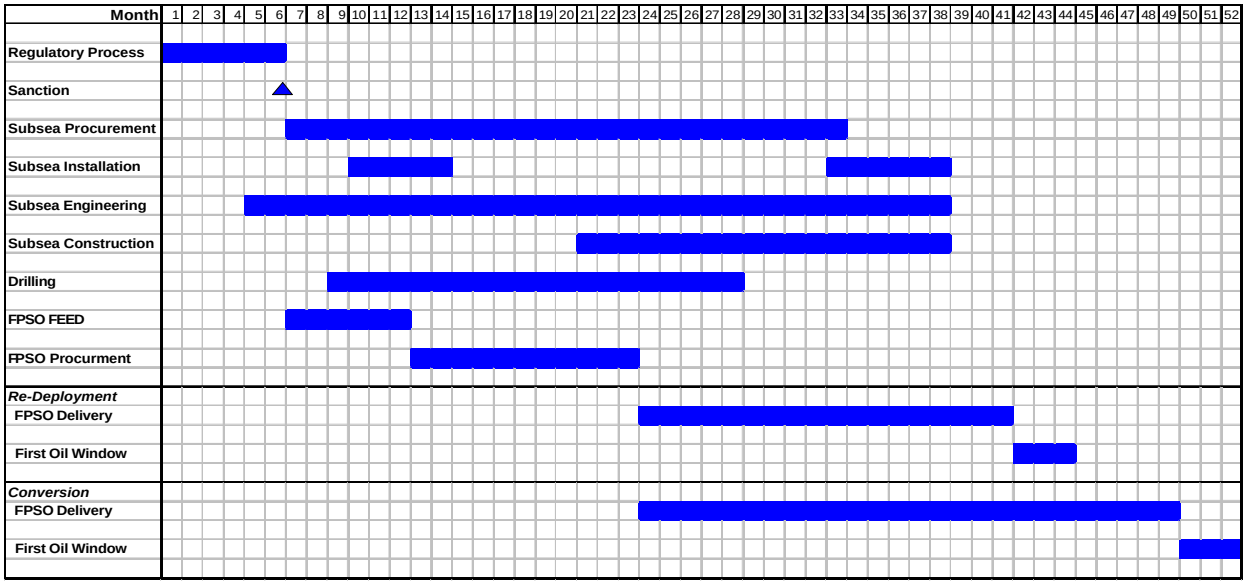


Figure 5 Subsea System to Greenfield FPSO Notional Timeline

Since much of the infrastructure is already in place, the subsea tie-back to the *SeaRose* can be brought into production more quickly.

Preferred Development Option

The investigation of the various production systems concluded that the preferred option for the North Amethyst field development should be based on a subsea tie-back system to the existing *SeaRose FPSO*. A greenfield FPSO for the North Amethyst field is not economically attractive, as all economic reserves can be developed through *SeaRose* with lower cost.

As is the practice in areas such as the North Sea and Gulf of Mexico (also West Africa, Brazil, Australia, and Indonesia), the use of a subsea tie-back system to an existing facility for processing capability is a cost effective way to develop small offshore oil and gas fields and it can extend the field life of existing production infrastructure. Historically, the largest fields have been developed first, mostly using steel and concrete platforms (mobile or fixed). However, to profitably exploit smaller fields, the trend is now towards subsea tie-back systems to the existing infrastructure of these larger fields. This is even more apparent in today's market conditions for new production facilities.

With the current base production profile for the White Rose Development, production on the *SeaRose* is expected to reach the end of plateau in 2008. As spare production capacity becomes available in *SeaRose*, a subsea tie-back will make use of this future capacity, thereby maximizing utilization of the existing infrastructure and lowering the threshold for small field developments. This development option is the more feasible alternative for North Amethyst.

Appendix II

Pictorials of Potential Topsides Modifications to Increase Produced Water and Gas Handling Capacity

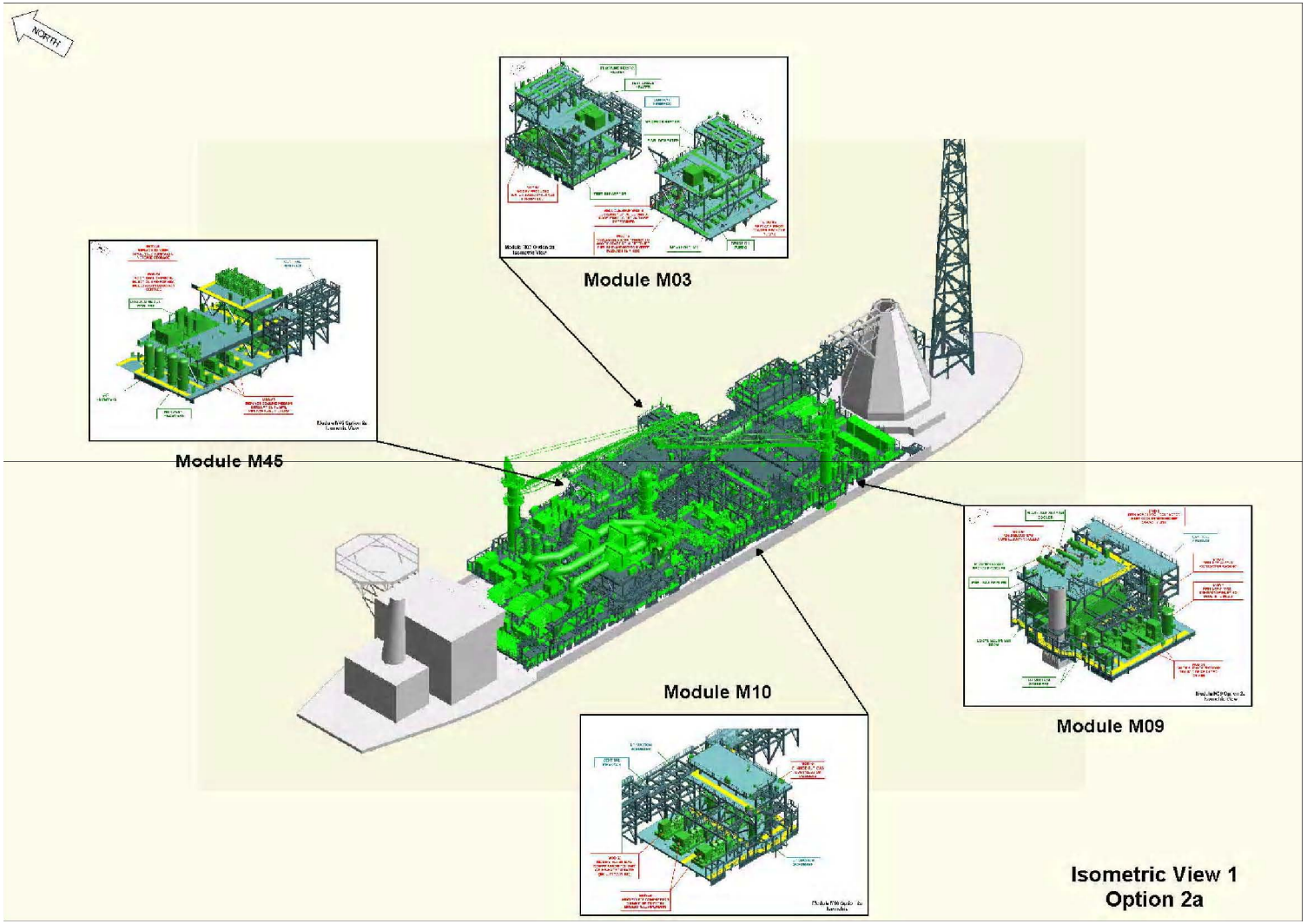

NORTH
Module M03
Module M45
Module M10
Module M09
Isometric View 1
Option 2a

Figure 1

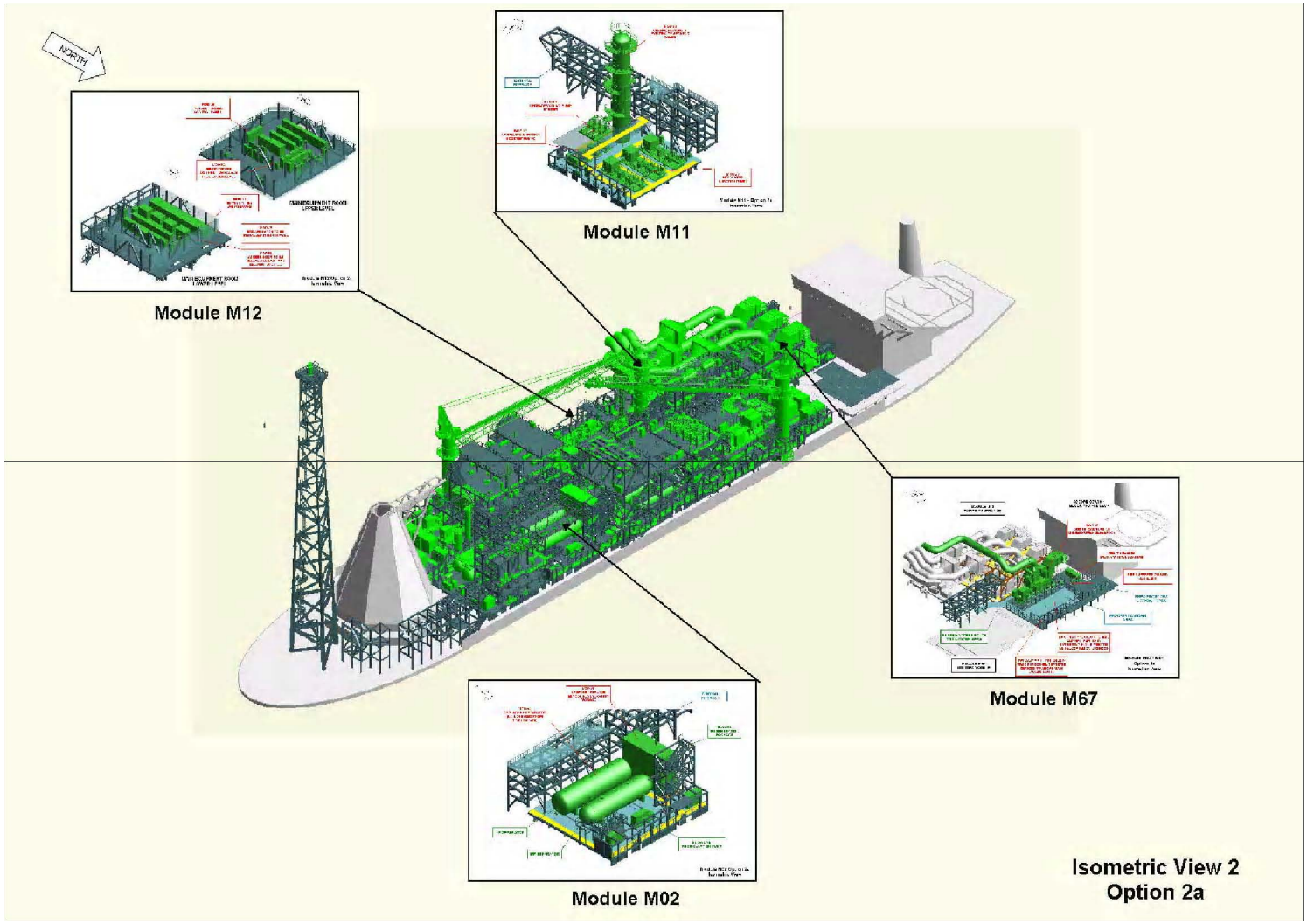

NORTH
Module M12
Module M11
Module M67
Module M02
Isometric View 2
Option 2a

Figure 2

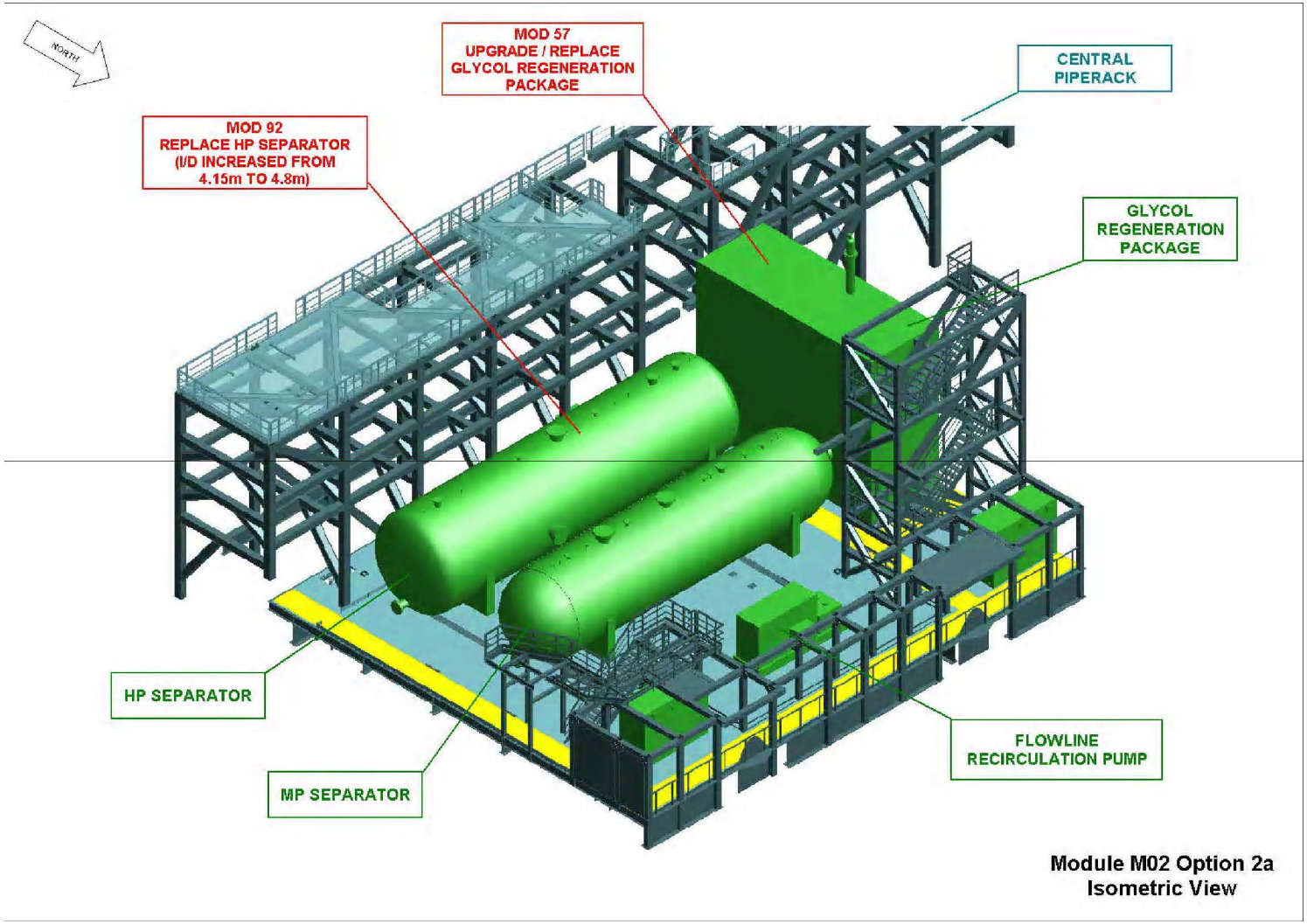

NORTH
MOD 57
UPGRADE / REPLACE
GLYCOL REGENERATION
PACKAGE
CENTRAL
PIPERACK
MOD 92
REPLACE HP SEPARATOR
(I/D INCREASED FROM
4.15m TO 4.8m)
GLYCOL
REGENERATION
PACKAGE
HP SEPARATOR
MP SEPARATOR
FLOWLINE
RECIRCULATION PUMP
Module M02 Option 2a
Isometric View

Figure 3

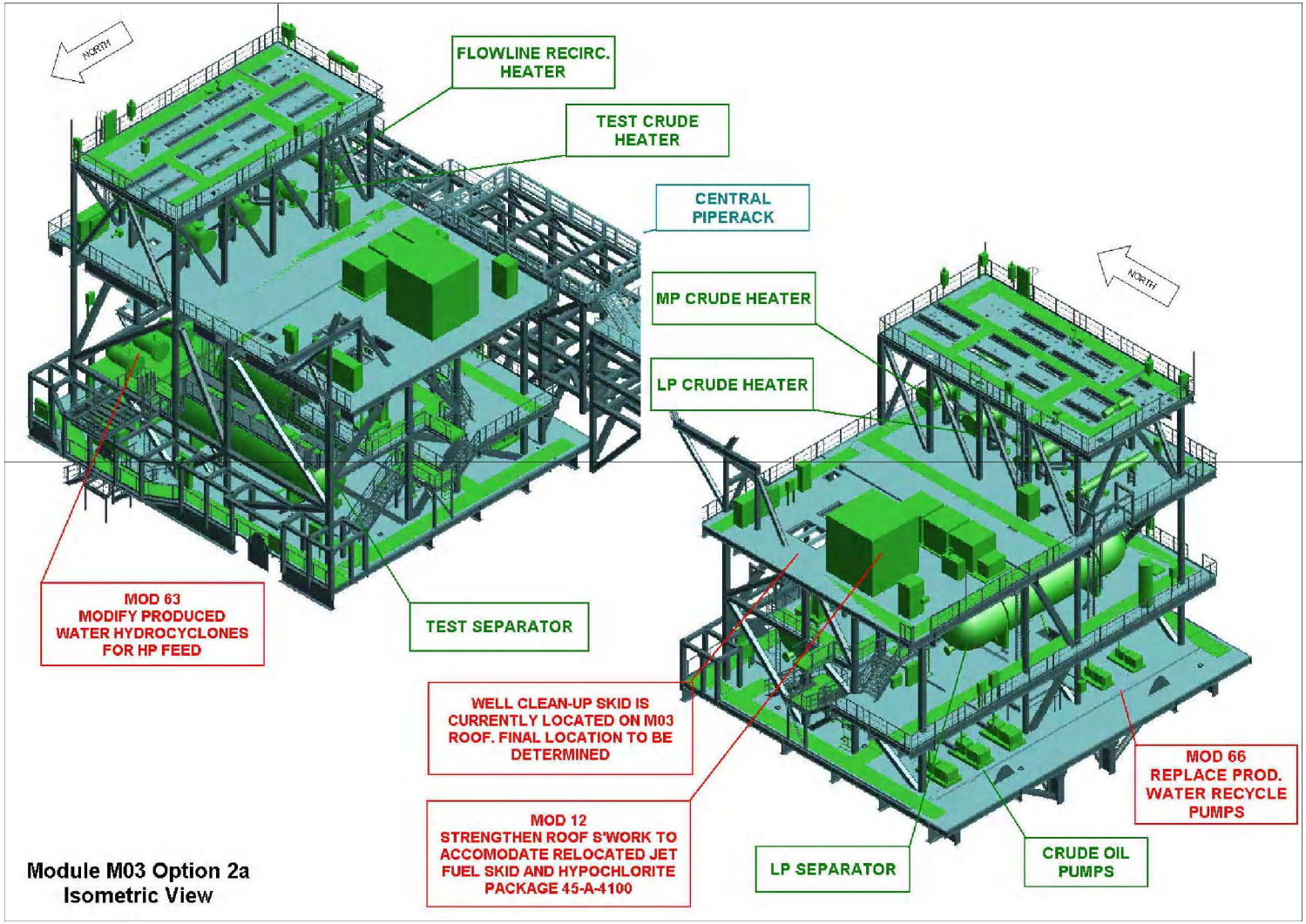

NORTH
FLOWLINE RECIRC. HEATER
TEST CRUDE HEATER
CENTRAL PIPERACK
MP CRUDE HEATER
LP CRUDE HEATER
NORTH
MOD 63
MODIFY PRODUCED WATER HYDROCYCLONES FOR HP FEED
TEST SEPARATOR
WELL CLEAN-UP SKID IS CURRENTLY LOCATED ON M03 ROOF. FINAL LOCATION TO BE DETERMINED
MOD 66
REPLACE PROD. WATER RECYCLE PUMPS
MOD 12
STRENGTHEN ROOF S'WORK TO ACCOMODATE RELOCATED JET FUEL SKID AND HYPOCHLORITE PACKAGE 45-A-4100
LP SEPARATOR
CRUDE OIL PUMPS
Module M03 Option 2a
Isometric View

Figure 4

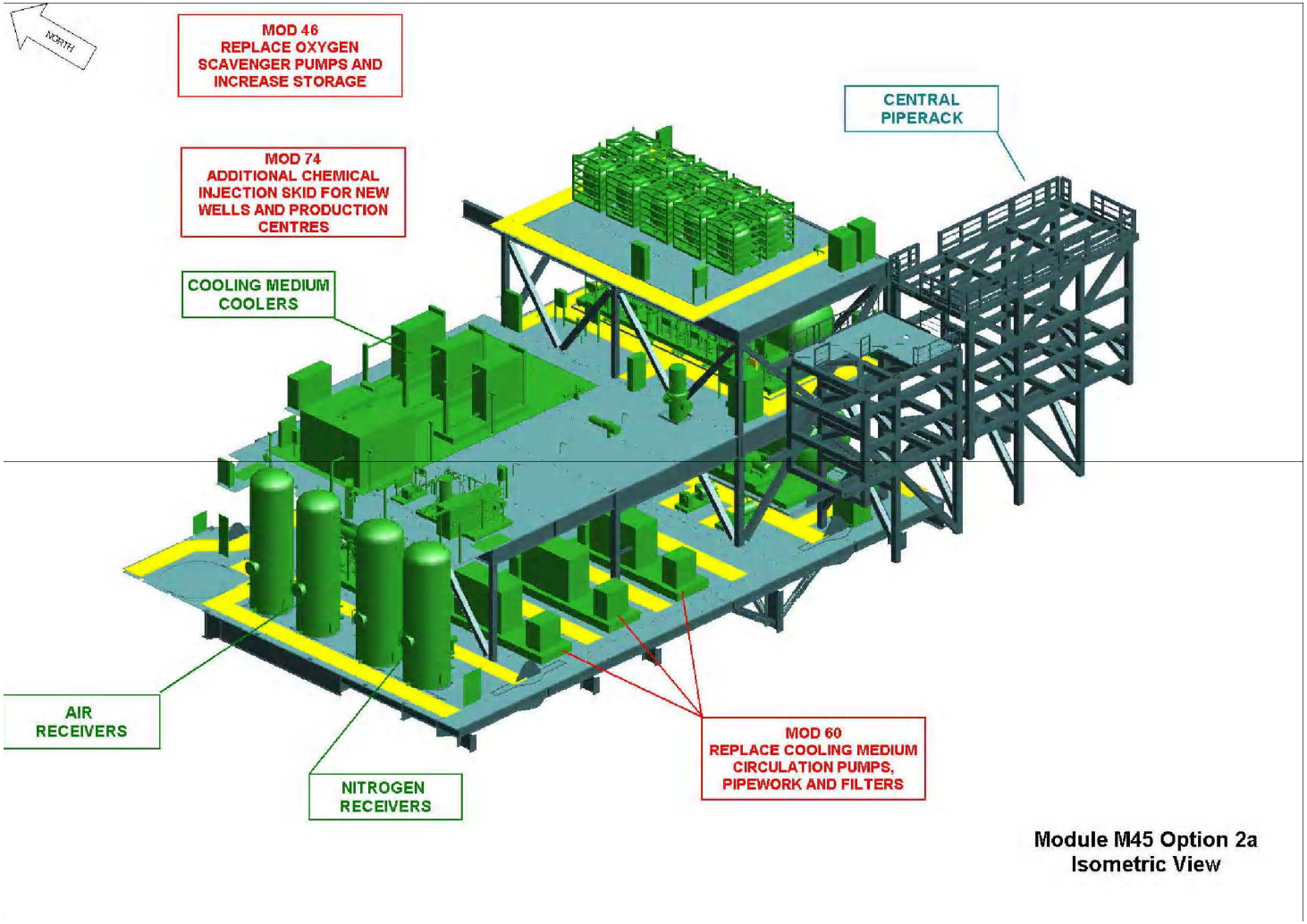

NORTH
MOD 46
REPLACE OXYGEN
SCAVENGER PUMPS AND
INCREASE STORAGE
CENTRAL
PIPERACK
MOD 74
ADDITIONAL CHEMICAL
INJECTION SKID FOR NEW
WELLS AND PRODUCTION
CENTRES
COOLING MEDIUM
COOLERS
AIR
RECEIVERS
NITROGEN
RECEIVERS
MOD 60
REPLACE COOLING MEDIUM
CIRCULATION PUMPS,
PIPEWORK AND FILTERS
Module M45 Option 2a
Isometric View

Figure 5

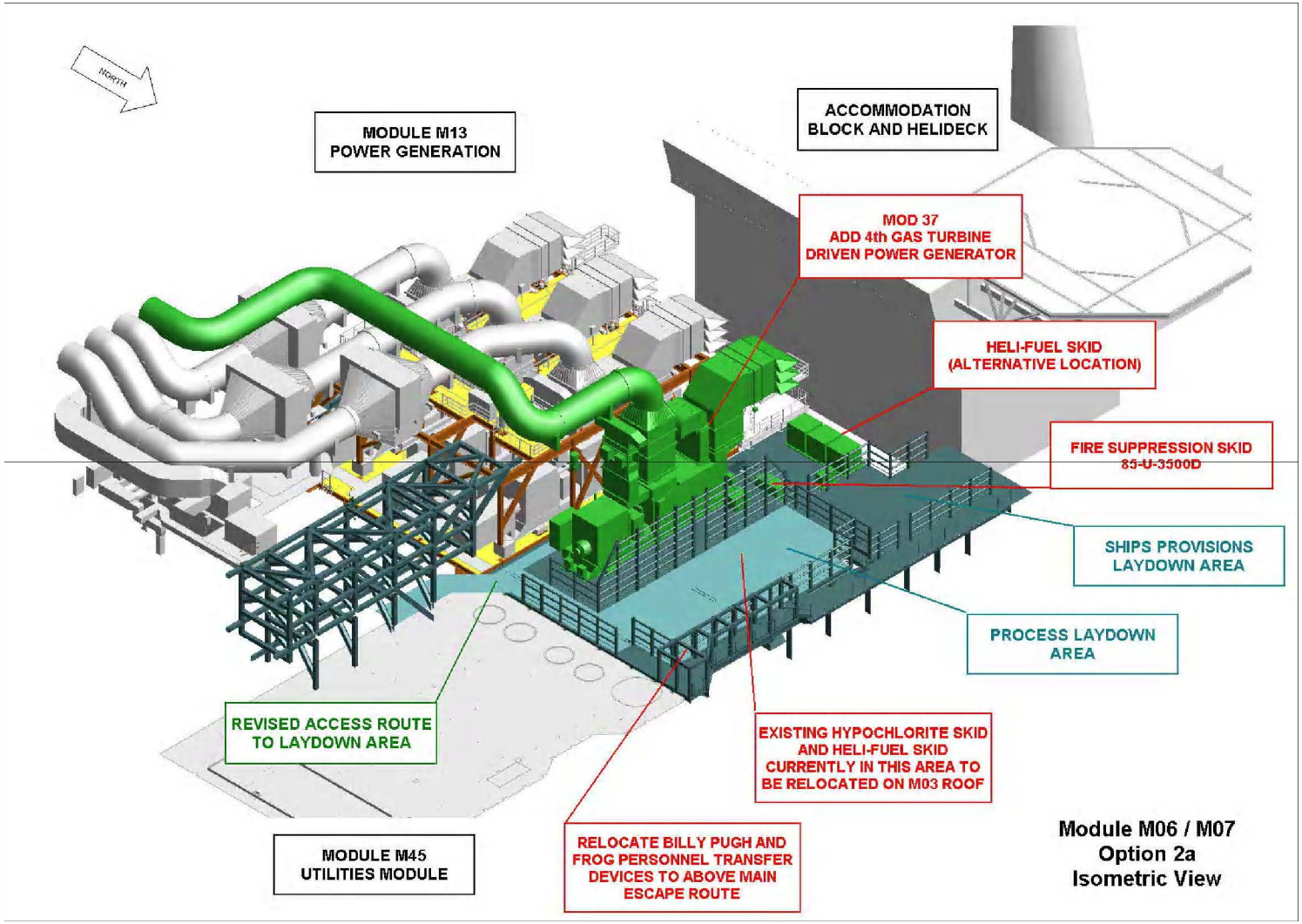

NORTH
MODULE M13
POWER GENERATION
ACCOMMODATION
BLOCK AND HELIDECK
MOD 37
ADD 4th GAS TURBINE
DRIVEN POWER GENERATOR
HELI-FUEL SKID
(ALTERNATIVE LOCATION)
FIRE SUPPRESSION SKID
85-U-3500D
SHIPS PROVISIONS
LAYDOWN AREA
PROCESS LAYDOWN
AREA
REVISED ACCESS ROUTE
TO LAYDOWN AREA
EXISTING HYPOCHLORITE SKID
AND HELI-FUEL SKID
CURRENTLY IN THIS AREA TO
BE RELOCATED ON M03 ROOF
MODULE M45
UTILITIES MODULE
RELOCATE BILLY PUGH AND
FROG PERSONNEL TRANSFER
DEVICES TO ABOVE MAIN
ESCAPE ROUTE
Module M06 / M07
Option 2a
Isometric View

Figure 6

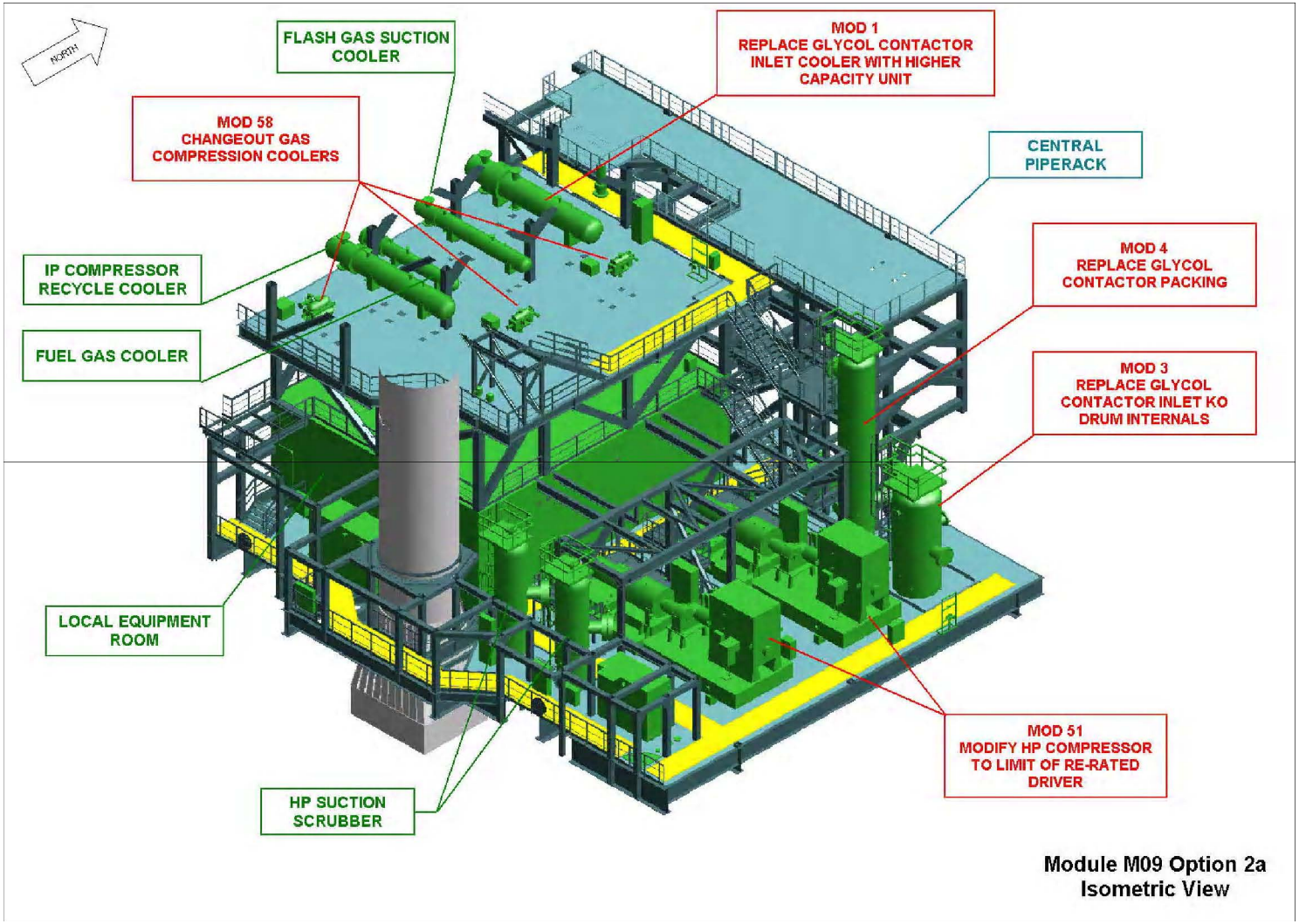

NORTH
FLASH GAS SUCTION COOLER
MOD 1
REPLACE GLYCOL CONTACTOR INLET COOLER WITH HIGHER CAPACITY UNIT
MOD 58
CHANGEOUT GAS COMPRESSION COOLERS
CENTRAL PIPERACK
IP COMPRESSOR RECYCLE COOLER
MOD 4
REPLACE GLYCOL CONTACTOR PACKING
FUEL GAS COOLER
MOD 3
REPLACE GLYCOL CONTACTOR INLET KO DRUM INTERNALS
LOCAL EQUIPMENT ROOM
MOD 51
MODIFY HP COMPRESSOR TO LIMIT OF RE-RATED DRIVER
HP SUCTION SCRUBBER
Module M09 Option 2a
Isometric View

Figure 7

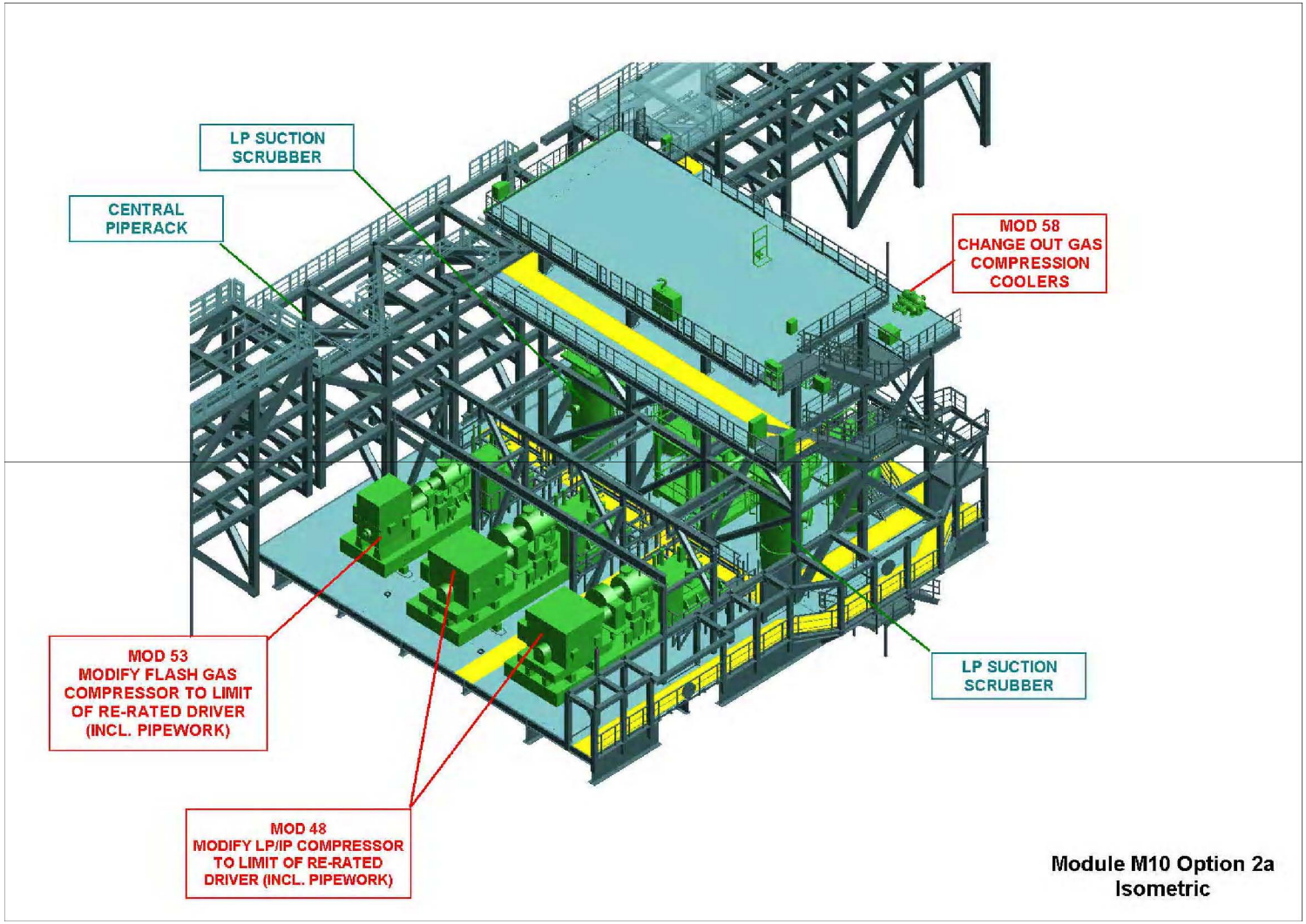

LP SUCTION SCRUBBER
CENTRAL PIPERACK
MOD 58 CHANGE OUT GAS COMPRESSION COOLERS
MOD 53 MODIFY FLASH GAS COMPRESSOR TO LIMIT OF RE-RATED DRIVER (INCL. PIPEWORK)
LP SUCTION SCRUBBER
MOD 48 MODIFY LP/IP COMPRESSOR TO LIMIT OF RE-RATED DRIVER (INCL. PIPEWORK)
Module M10 Option 2a
Isometric

Figure 8

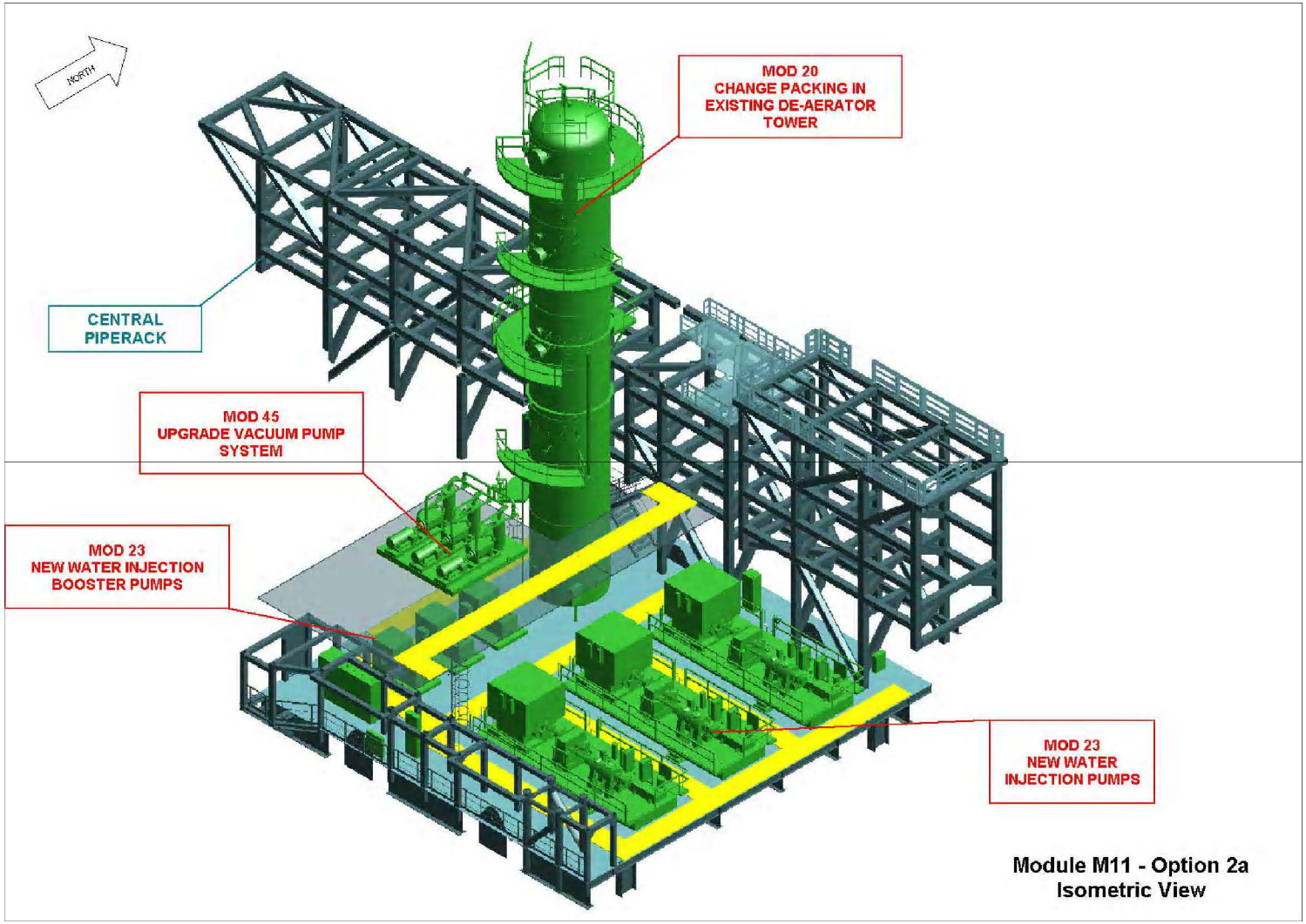

NORTH
MOD 20
CHANGE PACKING IN
EXISTING DE-AERATOR
TOWER
CENTRAL
PIPERACK
MOD 45
UPGRADE VACUUM PUMP
SYSTEM
MOD 23
NEW WATER INJECTION
BOOSTER PUMPS
MOD 23
NEW WATER
INJECTION PUMPS
Module M11 - Option 2a
Isometric View

Figure 9

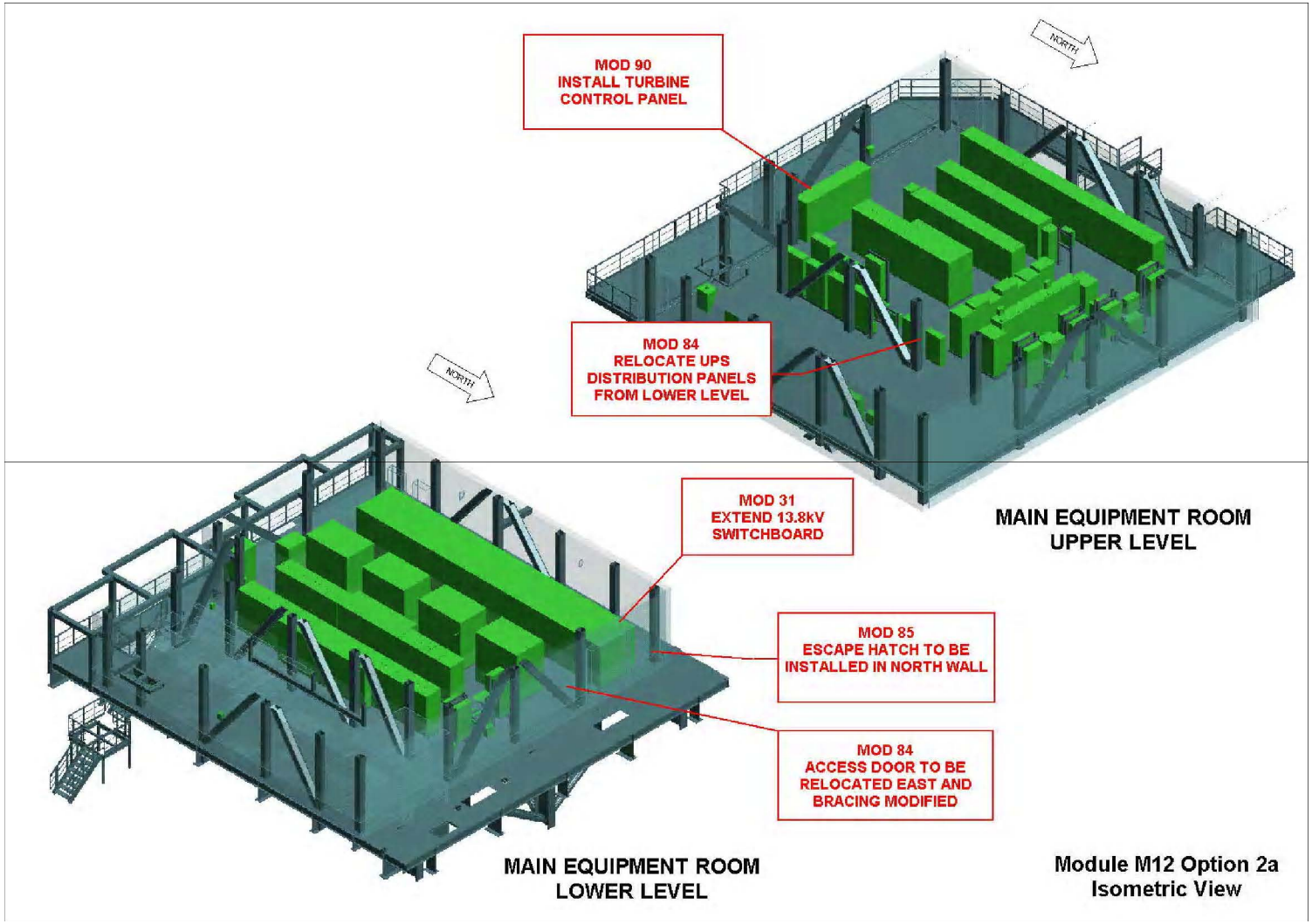

MOD 90
INSTALL TURBINE
CONTROL PANEL
NORTH
MOD 84
RELOCATE UPS
DISTRIBUTION PANELS
FROM LOWER LEVEL
MAIN EQUIPMENT ROOM
UPPER LEVEL
NORTH
MOD 31
EXTEND 13.8kV
SWITCHBOARD
MOD 85
ESCAPE HATCH TO BE
INSTALLED IN NORTH WALL
MOD 84
ACCESS DOOR TO BE
RELOCATED EAST AND
BRACING MODIFIED
MAIN EQUIPMENT ROOM
LOWER LEVEL
Module M12 Option 2a
Isometric View

Figure 10

Appendix III

Canada-Newfoundland and Labrador Benefits Guidelines

Canada-Newfoundland and Labrador Benefits Guidelines

1.0 INTRODUCTION

1.1 Husky strongly supports providing opportunities to Canada and in particular Newfoundland and Labrador. It is our desire to bring the maximum benefit to the region. We feel it makes economic sense to perform work close to the field location.

1.2 The *Atlantic Accord*[1] (Accord) provides the legislative framework for the development of the Eastern Canadian offshore resources mandating that development benefits Canada as a whole and, in particular, the Province of Newfoundland and Labrador. Husky's Canada-Newfoundland and Labrador Benefits Guidelines reflect the regulatory requirements outlined in the Accord and associated Accord Acts.

1.3 Husky concludes that by taking a proactive approach, significant work and employment can be provided to Canadians, including Newfoundland and Labrador residents, in a cost effective and efficient manner.

2.0 PHILOSOPHY

The development of Husky's Canada-Newfoundland and Labrador opportunities philosophy for its operating area programs is based on our beliefs and guiding principles.

2.1 Beliefs

Husky beliefs applicable to Canada-Newfoundland and Labrador opportunities:

a) **Significant skill base** - The studies conducted for other developments and the research done by Husky indicate there is a substantial skill base in Newfoundland and Labrador, other parts of Eastern Canada and the remainder of Canada. The combined resources of the engineering community and labour resources in Newfoundland and Labrador in particular, and in the remainder of Canada, can provide the majority of skills necessary to carry out the scope of work that is required on a value added basis in Canada.

Significant industrial base - Husky has extensive knowledge of Newfoundland and Labrador facilities and the larger fabrication facilities in Canada. Based on our knowledge, we believe the capabilities and resources exist to carry out the majority of the work required for offshore development in Newfoundland and Labrador and other facilities in Canada.

Training and transfer of technology - The training of local personnel and the transfer of technology to local and more broadly based Canadian companies reduce long term operating costs and provide cost effective support services for current programs and future

[1] Memorandum of Agreement between the Government of Canada and the Government of Newfoundland and Labrador on offshore oil and gas resource management and revenue sharing, dated February 11, 1985, and includes any amendment thereto.

projects. The earlier these activities are conducted with maximum opportunity for participation by Canadian companies, the greater the long term return for all stakeholders.

Rights of government and people - We recognise the right of Newfoundland and Labrador to be the principal beneficiary of the oil and gas resources off its shores, consistent with the requirement of a strong and united Canada.

Husky understanding - We believe Husky understands the objectives and commitments necessary to achieve cost effective Canadian-Newfoundland and Labrador content.

2.2 Guiding Principles

To enhance these beliefs Husky has documented principles to guide our approach to identify and provide opportunities for Canada-Newfoundland and Labrador participation. These guiding principles are as follows:

a) **Full and fair opportunity** - Full and fair opportunity will be provided for Canadian-Newfoundland and Labrador personnel and companies to participate in the supply of goods and services. This can best be defined by the way we do business as characterized by the following:

- development of approved vendors files
- investigation of labour and fabrication capabilities
- sizing of packages to fit the capabilities of Canadian companies
- early dissemination of information on the scope of work
- open communication with all personnel and companies requesting information
- on-site presence of engineering, procurement and project management in Newfoundland and Labrador and Canada
- open communication with government and industry associations to identify potential suppliers
- development and implementation of transfer of technology and training programs for long term cost effectiveness

b) **First consideration to Newfoundland and Labrador and Canada** - Husky supports the principle that first consideration be given to personnel, support and other services that can be provided by Newfoundland and Labrador and to goods manufactured in Newfoundland and Labrador, where such goods and services are competitive in terms of fair market price, quality and delivery. We also support the principle of ensuring that individuals resident in Newfoundland and Labrador are given first consideration for training and employment opportunities. This principle also applies next to Canadian companies and personnel relative to international competition. This principle of first consideration will result in

opportunities to the Newfoundland and Labrador and Canadian community provided the impact of value added and life cycle costs are satisfactory.

c) **Proactive** - Husky is aggressive in our approach to Canada-Newfoundland and Labrador opportunities. Proactive means the innovative, co-operative, supportive and open pursuit of involvement of Canadian, and in particular, Newfoundland and Labrador companies and residents to achieve "best value" for the project. We are challenging the mentality that says, "it can't be done!"

d) **"Value adding" is an imperative** - Husky, in the evaluation of opportunities, will emphasize "best value" for the project. Opportunities must be cost effective in the long term and bring value to project stakeholders.

3.0 APPROACH

3.1 Issues

Husky has identified key issues that arise for the successful completion of Grand Banks projects in alignment with the aim and objectives of all stakeholders. This section details these issues and outlines the actions Husky has taken to ensure the successful completion of the project on a "best value" basis while addressing the needs of the stakeholders.

a) **Development in accordance with the Accord** - The Accord requires that offshore oil and gas project's policies and procedures embody the commitment to carry out the program in the spirit of the Accord Acts. This translates into:

- Full and fair opportunity for Canadian and Newfoundland and Labrador firms to participate in the supply of goods and services.
- Goods manufactured in and services provided from Newfoundland and Labrador are given first consideration where they are competitive in terms of fair market price, quality, and delivery.
- Residents of Newfoundland and Labrador are given first consideration for employment opportunities and training.

b) **Key functions will be performed in Newfoundland and Labrador** - Husky has committed to managing activities associated with or resulting from the White Rose Project from St. John's. Project decision-making authority, consistent with normal corporate business practices, will reside in the St. John's, Newfoundland and Labrador office. This rationale is based on the premise that the presence of appropriate levels of management decision making and the performance of key functions from a local office will assist in focusing on local and regional benefits issues, increase understanding of local capabilities and increase sensitivity to local concerns.

c) **Goods and services on "Best Value Basis"** - For the Company's offshore programs, goods and services must be acquired on a "best value" basis. Local industry must be encouraged to strive to provide goods and services that will compete effectively in a global

marketplace. Our evaluation criteria for determining best value are consistent with those for assessing the relative competitiveness of goods and services outlined in the Accord Acts. The evaluation criteria making up best value are fair market price, quality and delivery.

d) **Canada-Newfoundland and Labrador benefits will be a factor in procurement** - International competitive bidding processes must be used to acquire goods and services in order to ensure the commercial viability of the program.

Husky will establish procurement policies and procedures consistent with the requirements of the Accord Acts and the CNLOPB. These policies and procedures, without limiting the scope of the Accord Acts or the discretion of the CNLOPB, will include provisions to ensure that:

- The requirements for goods and services are communicated, in a timely fashion, to Canadian and, in particular, to Newfoundland and Labrador firms.
- The bid packaging, technical specifications, bidding procedures, and bid follow-up provide Newfoundland and Labrador firms and individuals with a full and fair opportunity to provide goods and services.
- Where bids are essentially equal on a best value basis, first choice will be given to goods and services provided from Newfoundland and Labrador. In all bidding processes the level and quality of Newfoundland and Labrador benefits, as well as technical and commercial considerations, shall be one of the key selection factors in awarding development contracts.
- Supplier identification - Husky will provide early identification of opportunities for the supply of goods and services required for the program, work with governments and industry organizations to jointly identify potential Newfoundland and Labrador suppliers of such required goods and services and, on request, provide feedback to unsuccessful suppliers, as appropriate.
- Supplier development - Husky will work with governments and industry organizations to improve Newfoundland and Labrador supply capability by providing information about the program requirements and specifications in a timely manner and encourage the establishment of new suppliers in Newfoundland and Labrador and the formation of appropriate alliances involving Newfoundland and Labrador firms, where such alliances enhance the ability to compete for the work.
- Identification in bids of Newfoundland and Labrador participation - Husky will require bidders to fully disclose information relevant to Newfoundland and Labrador benefits content, including:
    - The nature of the arrangements among the participants in the bid, including the respective shares of equity in the consortium.
    - The share and nature of the work to be carried out by each of the participants in the bid.

- The nature of arrangements for the transfer of technology.

e) **Newfoundland and Labrador and Canadian infrastructure use to be encouraged** – Husky will ensure qualified Newfoundland and Labrador fabrication and construction yards are provided a full and fair opportunity to bid on work.

f) **Contractors and Subcontractors will adhere to philosophy and guiding principles** - Contractors play a large role in the procurement of goods and services.

- To ensure the benefits objectives and commitments are achieved in all areas, Husky requires all Contractors and Subcontractors to comply with the benefits principles, objectives and commitments.

- To ensure that the concept of full and fair opportunity is extended to all potential suppliers, Husky requires its Contractors and Subcontractors to also comply with the commitments and provide full and fair opportunity to Canadians including Newfoundland and Labrador manufacturers, consultants, contractors and service companies to participate on a competitive basis in the supply of goods and services to the development.

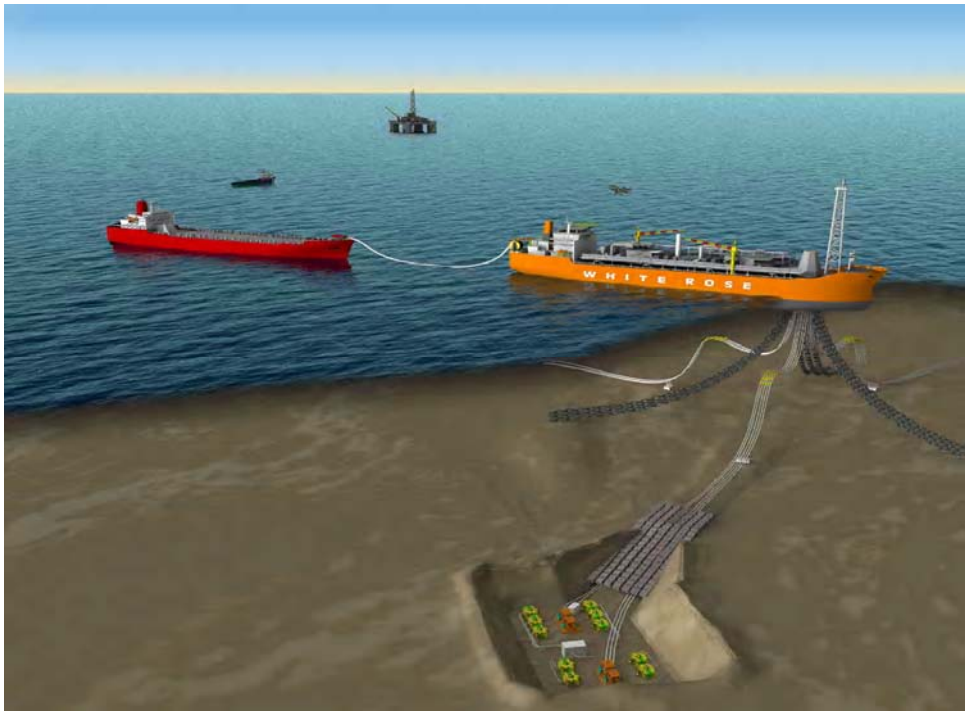
g) **Engineering to be done in Newfoundland and Labrador** - Husky will use best efforts within the competitive bidding process to cause the project management and engineering work for the program to take place in Newfoundland and Labrador.

h) **Technology Transfer, Research and Development** - Technology transfer and research and development are important components of a Canada-Newfoundland and Labrador Benefits Plan. Husky supports and encourages initiatives in these areas.

Appendix IV

Canada Newfoundland Benefits Reporting and Procedures Manual

Husky Energy



WHITE ROSE DEVELOPMENT PROJECT

Canada-Newfoundland Benefits

Reporting and Procedure Manual

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1.0 Introduction

Section 45 of the Canada-Newfoundland Atlantic Accord Implementation Acts requires that the White Rose Project Owners, their contractors, subcontractors and suppliers provide a Full and Fair Opportunity to Newfoundland and other Canadian manufacturers, contractors, consultants and service companies to participate, on a competitive basis, in the supply of goods and services to the White Rose Oilfield Development.

The legislation further requires that within this context of full and fair opportunity, First Consideration be given to goods manufactured in, and services provided from within, the Province of Newfoundland where those goods and services are competitive (in terms of best value).

Husky Energy Inc (Husky) recognizes the importance of the White Rose Oilfield Development in social and economic terms to Canada and particularly Newfoundland and Labrador. The Company seeks to enhance opportunities for Canadian and Newfoundland and Labrador companies and individuals through provisions of the Acts, such as Full and Fair Opportunity, First Consideration and corporate commitments made through the Benefits Plan.

The purpose of this manual is to outline Husky's policies and procedures pertaining to Canada-Newfoundland Benefits for the White Rose Oilfield Development. Compliance by Husky and its contractors and subcontractors with the procedures outlined in this manual is essential to meeting:

- Legislative requirements of the Canada-Newfoundland Atlantic Accord Implementation Acts,
- Commitments of the White Rose Project Owners, as stated in the White Rose Canada-Newfoundland Benefits Plan
- Requirements of the Canada-Newfoundland and Labrador Offshore Petroleum Board (C-NLOPB) as set out in White Rose Development Application Decision 2001.01 (refer Appendix I).

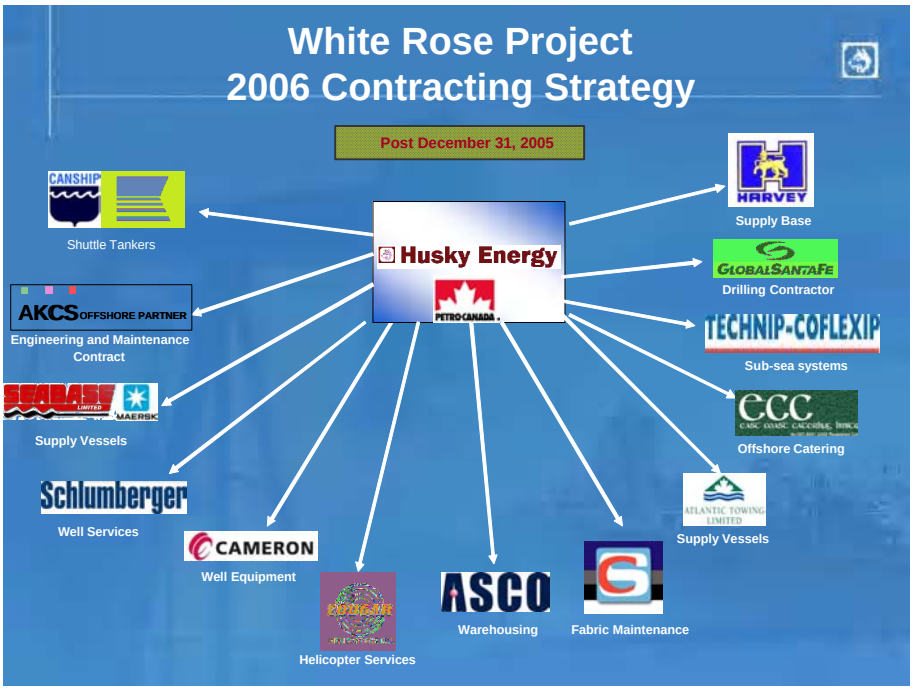
In order for Husky, its contractors and subcontractors to ensure that Canada-Newfoundland Benefits commitments are achieved, the principles of Full and Fair Opportunity, First Consideration as outlined in the legislation must be endorsed and adhered to in the contracting, procurement and employment processes. In support of this effort, Canada-Newfoundland Benefits requirements are an integral part of the contract and procurement process. In addition, Husky has undertaken a series of initiatives in order to encourage Newfoundland and Canadian participation. These initiatives include:

- Open communication with lead contractors and the business community
- Where possible and appropriate, bid sizing and design to meet Canada and Newfoundland and Labrador companies' capabilities
- Creation and utilization of a White Rose vendor database
- Identification of Newfoundland and Canadian labour and fabrication capabilities
- Provision of long lead times for information concerning good and services requirements
- Provision for the calculation of Canada-Newfoundland content estimates from bidders in bid packages and the requirement for successful bidders to steward to those estimates

- Benefits monitoring and public reporting to assess White Rose achievements on a quarterly basis

The Operational structure for White Rose links Husky, as the Operator, to the major contractors who will in turn co-ordinate and complete the subcontracting process for their respective areas of responsibility. The relationships are represented in the model below.

Figure 1.1: White Rose Contracting Strategy



2.0 Canada Benefits Application Strategy

Condition 8 of Decision 2001.01 states:

"Upon Project Sanction, the Proponent establish systems and procedures, to the satisfaction of the Board and with particular attention to the calculation of Newfoundland & Labrador and Canadian content, to ensure the bid evaluation and reporting framework matches that which is described in the Benefits Plan. Further, the Proponent must establish, for approval by the Board, a methodology and a verification process for all Newfoundland & Labrador and Canadian content calculations by it and by its contractors and subcontractors."

This Manual has been developed to satisfy this Condition. Husky will require all White Rose contractors and subcontractors to comply with the requirements outlined herein. The overall objectives of benefits information submitted to the C-NLOPB by Husky, as Operator of the White Rose Project, are:

- Report in a manner that is consistent with established principles and guidelines
- Compliance with accepted interpretations
- Amounts reported are accurate, based upon accounts and records

Consistent application of these established principles, guidelines and interpretations serve as the agreed upon terms of reference for the conduct of any monitoring or compliance reviews by the Operator and/or audit engagements by Consulting and Audit Canada (CAC), on behalf of the C-NLOPB.

It is Husky's responsibility to ensure:

- Canada Benefits principles and guidelines are applied consistently to White Rose Project business
- Accurate reporting of Canadian and Newfoundland Content to the C-NLOPB.

Husky wants to ensure that this responsibility for accurate reporting is passed down the contracting chain to its major contractors and their subcontractors, to adequately monitor their reported achievements. Consistent application of the principles and procedures outlined in this manual is fundamental to the fulfilment of that responsibility.

Application of Canada Benefits principles and guidelines form an integral part of the business cycle as it pertains to the White Rose Project. All contractors are required to incorporate these principles and guidelines in their daily business and decision processes. More specifically, application of Canada Benefits guidelines will be incorporated in the following areas:

- Procurement and Contracting
  - Contract/P.O. Forecasting
  - Vendor List Development and Pre-qualification
  - Request for Proposals (RFP) and Bid Evaluation
  - Contract/P.O. Award and Administration
  - Contractor Performance Monitoring
- Employment, Education and Training
- Research and Development
- Canada Benefits Content Reporting
- Compliance Review Process

Detailed guidelines and procedures dealing with each of these topics follows, with additional supporting information, where warranted, contained in the attached Appendices.

3.0 Procurement and Contracting

Sound policies and procedures for procurement are required to ensure Canada-Newfoundland Benefits are maximized within the competitive framework of "Best Value" – providing the best blend of total cost, quality, technical suitability, delivery and continuity of supply and service. Knowledgeable Bid Evaluation Teams, responsible for determining contract awards through the procurement process, will consistently apply the principles of Full and Fair Opportunity, First Consideration in selecting successful bidders.

Canada Benefits guidelines and principles are an integral part of the Procurement and Contracting function as it relates the White Rose Project. These guidelines are intended to provide a framework for the C-NLOPB's review of designated contracts, subcontracts and purchase orders associated with the White Rose Development Project, including contracting and procurement by all contractors and subcontractors. The framework comprises three main elements:

- Quarterly Procurement Forecast
- Review Procedures
- Quarterly Procurement Report

It is C-NLOPB's expectation that the number of contracts, subcontracts and purchase orders designated for review by C-NLOPB will not exceed 20% of all contracts, subcontracts and purchase orders ≥ $250,000 Cdn. Any contracts, subcontracts or purchase orders < $250,000 Cdn. which in Husky's or the C-NLOPB's opinion may be sensitive, will also be subject to these guidelines.

3.1 Contract/P.O. Forecasting

Condition 6 of the C-NLOPB Decision 2001.01 states:

"During the construction and operation of the White Rose Project, the Proponent provide, 30 days prior to the commencement of each quarter, quarterly forecasts of Project requirements, at a satisfactory level of detail, to C-NLOPB and to the public."

In order to fulfill this Condition, forty-five (45) days prior to the commencement of the reporting period, Husky will require a listing of all contracts, subcontracts and purchase orders, ≥ $250,000 Cdn., which will commence (or are forecast to commence) the contracting process in the upcoming quarter. Additionally, any contracts, subcontracts or purchase orders < $250,000 Cdn. which may be sensitive in nature, should also be identified in this listing.

For each contract, subcontract and purchase order this listing should be structured within the following forecast ranges:

Category	Range ($M)	Category	Range ($M)
A	251 - 500	I	10,001 - 15,000
B	500 - 1,000	J	15,001 - 20,000
C	1,001 - 1,500	K	20,001 - 30,000
D	1.501 – 2,000	L	30,001 - 50,000
E	2,001 - 3,000	M	50,001 - 75,000
F	3,001 - 5,000	N	75,001 - 100,000
G	5,001 – 7,500	O	Over 100,000
H	7,001 – 10,000		

and contain the following information as it pertains to each contract/P.O.:

- A description of the service(s) or item(s) to be contracted/purchased;

- Anticipated Request For Proposal (RFP) or Request for Quotation (RFQ) issuance date, closure date and contract/P.O. award date.

This information should be compiled by all contractors and subcontractors using Microsoft Excel (template provided with Manual) and presented in the format found in Appendix VII "Quarterly Procurement Report – Forecast & Actual". This Report should be transmitted electronically to Husky by the 45 days prior to the Quarter to which the report pertains. Husky will compile the information provided in a comprehensive forecast and submit it to the C-NLOPB thirty (30) days prior to the commencement of the upcoming quarter.

The C-NLOPB will advise Husky, by the first day of each quarter, which contracts, subcontracts and purchase orders have been designated by them for review. The C-NLOPB shall also be informed of all additions and changes to the forecast and shall advise Husky of its contract review requirements accordingly.

Any contracts which arise during any given quarter which were not included in the quarterly forecast or any significant changes to forecast contracts or purchase orders that may affect C-NLOPB designated items must be immediately reported to Husky.

3.2 Approved Vendor Lists

Where Husky, its main contractors or subcontractors use Approved Vendor Lists (AVL), such lists shall be provided to the C-NLOPB by Husky, as soon as they become available. AVL should be organized by product/service category or by project component to facilitate C-NLOPB review.

Within thirty days of receiving the proposed AVL, C-NLOPB will advise Husky of any suggested additions. They will also advise Husky, on an ongoing basis, of any new vendors for consideration; and, conversely, Husky will advise C-NLOPB, of any additions or deletions which Husky, its contractors or subcontractors may make to the AVL. The C-NLOPB shall be consulted before any Newfoundland or other Canadian companies are deleted from the AVL.

Where Husky, its main contractors or subcontractors maintain a general registry of potential suppliers and vendors, a copy shall be provided for the C-NLOPB's information. Updates of the Vendor Registration Lists (VRL) shall be provided to the C-NLOPB.

3.3 Prequalification

Where designated by the C-NLOPB, at the prequalification stage and prior to issuing a prequalification questionnaire to prospective bidders, the C-NLOPB will require the following:

- Description of the scope of work
- Copy of the prequalification questionnaire (if these documents differ from the standard prequalification questionnaires previously reviewed by the C-NLOPB)
- List of companies who will be receiving the questionnaire, indicating location of head office(s),

- Anticipated dates for closure of prequalification and issuance of an RFP or RFQ.

The notification format, "Vendor Evaluation Report", is provided in Appendix VI.

3.4 Bidder List

Where designated by the C-NLOPB, at the bidder list stage, and prior to issuing a RFP or RFQ, the C-NLOPB requires the following:

- List of bidders;
- A copy of the RFP/RFQ; (C-NLOPB will advise Husky of its requirements in this regard on a case by case basis);
- A description of corporate ownership (main shareholders by percentage) of bidders
- Location(s) of any Canadian based offices/plants/facilities;
- Anticipated dates for closure of bids and award of contract/purchase order.

The notification format, "Vendor Evaluation Report", is provided in Appendix VI.

3.5 Request For Proposal and Bid Evaluation

In developing RFP/RFQ's for all White Rose business, an integral component of that RFP/RFQ will be the Canada - Newfoundland and Labrador Benefits Guidelines. This document, attached as Appendix II, defines Husky's requirements with respect to generating and documenting benefits for Newfoundland & Labrador and Canada from activities associated with the White Rose Project. The Canada - Newfoundland and Labrador Benefits Guidelines:

- Informs bidders of Husky's Canada-Newfoundland Benefits commitments
- Requests information from bidders regarding their ability to support these commitments
- Requests estimates of the Canada-Newfoundland content of the bid
- Ultimately, is incorporated as an attachment to the contracts/P.O.'s of successful bidders outlining their contractual requirements pertaining to Canada–Newfoundland Benefits

The completed questionnaires are used as the basis for the Canada-Newfoundland Benefits portion of the bid evaluation. Attached as Appendix IV is a Canada-Newfoundland Benefits Sample Bid Evaluation procedure which provides a detailed description of the Canada Benefits evaluation process using the information submitted by the bidders in their bid documents.

All contractors and suppliers are required to include these, or similar documents as approved by Husky, in their bid packages for work related to the White Rose Project and incorporate similar Canada Benefits evaluation processes in their bid evaluations.

3.6 Contract/P.O. Award and Administration

Where designated by the C-NLOPB, at the award stage, and prior to the award of contract/P.O. to the selected bidder, C-NLOPB requires the following:

- The name of the selected contractor/vendor;
- A listing of designated sub-contractors/sub-vendors;
- Where applicable, a listing of proposed sub-contractors, sub-vendors and sub-suppliers;
- For construction/service contracts; the estimated Canadian and Newfoundland employment (in person-hours);
- Contract/purchase order commencement and completion dates;
- Award rationale (evaluation of bids):
  - % difference in price between selected bidder and each bid,
  - primary location(s) of work associated with each bidder,
  - estimates of Canadian and Newfoundland content associated with each bidder calculated in accordance with the Canadian General Standards Board (CSGB) definition of Canadian Content found in CAN2-147.3-82, attached hereto as Appendix III. (Note: The definition of "Newfoundland Content" shall be the same definition as "Canadian Content" except that "imported costs" refer to costs incurred in all areas outside the Province of Newfoundland and Labrador.)
  - other information relevant to the evaluation of bidders including where applicable, a summary of the technical, commercial and Canada-Newfoundland benefits aspects of the bid evaluations;
- The C-NLOPB Award Notification signed by a Husky officer (Refer "Vendor Evaluation Report" in Appendix VI).

The C-NLOPB will conduct its reviews within the following time frames:

Prequalification	5 business days
Bidders' list	3 business days
Award	2 business days

3.7 Quarterly Procurement Report

C-NLOPB requires Husky to submit, within thirty (30) days of the end of each quarter, a listing of all contracts, subcontracts and purchase orders, ≥ $250,000 Cdn., awarded in the previous quarter. For each contract, subcontract and purchase order this listing should be categorized in the following ranges:

Category	Range ($M)	Category	Range ($M)
A	251 - 500	I	10,001 - 15,000
B	500 - 1,000	J	15,001 - 20,000
C	1,001 - 1,500	K	20,001 - 30,000
D	1.501 – 2,000	L	30,001 - 50,000
E	2,001 - 3,000	M	50,001 - 75,000
F	3,001 - 5,000	N	75,001 - 100,000
G	5,001 – 7,500	O	Over 100,000
H	7,001 – 10,000		

and contain the following information as it pertains to each contract/P.O.:

- Name of successful contractor/vendor
- Item/service
- Primary location of work
- Estimates of Newfoundland and Canadian content
- Commencement and completion date

This information should be compiled by all contractors and subcontractors using Microsoft Excel (template provided with Manual) and presented in the format found in Appendix VII "Quarterly Procurement Report – Forecast & Actual". This Report should be transmitted electronically to Husky by the 10th business day following the Quarter end to which the report pertains.

4.0 Canada Benefits Content Reporting

The C-NLOPB has placed additional requirements on the monitoring and reporting of Benefits activities. Condition 10 of the C-NLOPB Decision Report 2001.01 states:

"The Proponent report on a quarterly basis, in a format satisfactory to C-NLOPB, expenditure and employment information, including Canadian and Newfoundland & Labrador content. Each quarterly report should also include an assessment of progress toward the achievement of Canada-Newfoundland Benefits commitments, as referenced in Condition 7. Such reports will be shared with the public. The Proponent should provide the results of internal audits completed with respect to Benefits reporting and an assessment of performance against identified contract goals to C-NLOPB and the public when complete."

Condition 11 of the C-NLOPB Decision Report 2001.01 outlines monitoring and reporting requirements on a quarterly basis for the life of the project. Also noted is the requirement to detail reasons for any deviations between estimated results and actual performance. It states:

"It is a condition of this Benefits Plan approval that the Proponent submit on a quarterly basis during the construction and operations phases of the Development a report describing its actual performance against the estimates provided in its correspondence contained in Appendix D of this Report. Any deviation between the benchmarks of estimates, plans and objectives and actual performance should be accompanied by explanatory notes in sufficient detail to allow assessment of the reasons for the deviation."

To comply with this condition Husky requires all of its contractors to compile and supply information in the form outlined. Additionally, upon completion of a contract, actual cost and employment content is required to be reconciled, reported and certified by all contractors/suppliers with contracts/P.O.'s having a value greater than $250,000.

4.1 Employment Reporting

For purposes of the reporting of employment generated by the White Rose Project, the C-NLOPB requires Husky to report all full time employment of all major contractors and subcontractors. Employment statistics must be reported in both the number of persons and person-hours. In reporting employment, the categorization is based on the residence of the individual at the time of

joining the White Rose Project. The following guideline outlines how to define Newfoundland, Canadian and Foreign residents, for purposes of employment reporting:

i. **Newfoundland Resident** – a Canadian citizen (or landed immigrant) who meets the residency requirements of the Newfoundland Election Act. (e.g., a person who has presided in the province for the immediately preceding six-month period).

ii. **Other Canadian Resident** – a Canadian citizen (or landed immigrant) who has maintained a permanent, primary residence in a province of Canada, other than Newfoundland and Labrador prior to being employed on the Project.

iii. **Foreign** – All persons who are not Newfoundland residents or Other Canadian residents

For Employment Reporting of person hours, categorization is based on the following matrix:

Resident Status	**Work Performed in:**		
	Newfoundland	**Canada**	**Foreign Location**
Newfoundland	Newfoundland	Other Canadian	Foreign
Canadian	Newfoundland	Other Canadian	Foreign
Foreign	Newfoundland	Other Canadian	Foreign

This information should be compiled by all contractors and subcontractors using Microsoft Excel (template provided with Manual) and presented in the format found in Appendix VII" Employment Statistics Report". This Report should be transmitted electronically to Husky by the 5th business day following the Quarter end to which the report pertains.

4.2 Expenditure Reporting

Fundamental to effective and accurate reporting is an adequate financial system utilized to generate and substantiate the Project benefits achievement, in terms of expenditures. The amounts of expenditure reported to the C-NLOPB must be reconcilable through to various disbursement reports generated from the financial system used to maintain the financial accounting for the Project. Husky has implemented a custom designed financial system for the White Rose Project, which is structured to capture and report expenditure in the Canada benefits categories.

Canada Benefits estimates, provided by all contractors and subcontractors, were included in the contract/P.O. upon award. These estimates are the benchmarks used to measure contractor performance relative to Canada Benefits content.

To facilitate this monitoring and the capture of Canada Benefits data in Husky's financial system, all contractors and subcontractors are required to submit Canada Benefits breakdown of all amounts invoiced. Each invoice must reflect the actual Canada benefit content associated with the amounts invoiced. The determination of this categorization must be calculated in accordance with the Canadian General Standards Board (CSGB) definition of Canadian Content found in CAN2-147.3-82, attached hereto as Appendix VI. (Note: The definition of "Newfoundland Content" shall be the same definition as "Canadian Content" except that "imported costs" refer to costs incurred in all areas outside the Province of Newfoundland and Labrador.)

To meet those timelines, this information should be compiled by all contractors and subcontractors using Microsoft Excel (template provided with Manual) and presented in the format found in Appendix VII" Quarterly Expenditure Report". This Report should be transmitted

electronically to Husky by the 5th business day following the Quarter end to which the report pertains.

5.0 Education & Training and Research & Development

Section 45.3 (C) establishes a statutory requirement ensure that a provision is made through the project for Research & Development (R&D) and Education & Training (E&T) expenditures to occur in Newfoundland and Labrador. Condition 3 of Decision 2001.01 states:

"Within 60 days of Project Sanction, the Proponent submits a plan to address the obligation in the Legislation that expenditures shall be made for research & development to be carried out in the Province and for education & training to be provided in the Province. The Board will review the Proponent's submission and establish an appropriate expenditure target. The Proponent shall report to the Board annually on the progress with respect to achievement of the established targets. the Board anticipates that for this Project, the target will not be less than $12 million during the pre-production stage."

Husky met the $12 million target and has committed to report annually at the end of the first quarter with respect to E&T and R&D during the operations phase**.** To meet those timelines, this information should be compiled by all contractors and subcontractors using Microsoft Excel (template provided with Manual) and presented in the format found in Appendix VII" Education & Training and Research & Development Report". This Report should be transmitted electronically to Husky by March 1, to enable review, consolidation and submission to the C-NLOPB.

6.0 Human Resources Plan

Husky has committed that full and fair opportunity will be provided to Canadians and first consideration to Newfoundland and Labrador residents for employment and training. Condition 2 of Decision 2001.01 states:

"The Proponent submits to C-NLOPB, for approval, a comprehensive Human Resource Plan for the construction phase of the Project within 60 days of Project Sanction; and for the operations phase, within one year of Project Sanction. These plans shall, among other items, include:

(i) hiring and training needs;

(ii) the time frame associated with employment opportunities for each phase; and

(iii) estimates of expenditures associated with training requirements.

The Proponent shall report to the C-NLOPB on the progress with respect to these plans on a regular basis as agreed with the C-NLOPB. In both cases, the Proponent should provide reasonable and ample advanced notice to the C-NLOPB of any anticipated requirements for foreign workers."

7.0 Compliance Reviews

In order to ensure the accuracy and completeness of information provided to the C-NLOPB over the life of the Project, Husky has committed to conducting compliance reviews of its own benefits

numbers and those of its contractors and subcontractors. The frequency of these reviews shall not exceed once every 12 months. The primary objective will be to determine whether Canada-Newfoundland Benefits for individual contractors and subcontractors, as well as for the Project as a whole are being achieved and if not, what reasons exist for the shortfall. The second major objective in conducting the compliance reviews will be to develop strategies for continuous improvement in the level of Canada-Newfoundland Benefits for White Rose, future projects, and the industry as a whole.

Compliance reviews will be conducted by an independent 3rd party, contracted by Husky for this specific purpose. These reviews will focus on the following:

- Expenditure Reporting
- Employment Statistics (persons and person-hours)
- Technology Transfer
- Education and Training
- Research and Development initiatives

Comparative analysis will be undertaken of benefits commitments outlined in the contractors and subcontractors contracts and reported benefits performance by those contractors and subcontractors. Results of these reviews will be submitted to the Canada-Newfoundland Benefits Manager for review and approval. This information will also be shared with the C-NLOPB for their information and to enable an efficient alignment with any audit work they may wish to perform.

Appendix I

Decision 2001.01

Application For Approval

White Rose Canada-Newfoundland Benefits Plan

(To be provided separately)

Appendix II

Canada – Newfoundland and Labrador Benefits Schedule

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INTRODUCTION

This document defines Husky Oil Operations Limited's (Husky, 'Company') Guidelines and requirements with respect to generating and documenting benefits for Newfoundland & Labradorand Canada from activities associated with the White Rose Development.

LEGISLATIVE REQUIREMENTS:

Section 45 of the Canada-Newfoundland Atlantic Accord Implementation Acts (the legislation) requires that Husky (Company) and their contractors, Subcontractors and suppliers (Contractor) provide a Full and Fair Opportunity to Newfoundland and Labrador and other Canadian manufacturers, contractors, consultants and service companies to participate, on a competitive basis, in the supply of goods and services for the White Rose Development Program. The legislation further requires that within this context of full and fair opportunity, First Consideration be given to goods manufactured in, and services provided from within, the Province of Newfoundland and Labrador where those goods and services are competitive.

CANADA - NEWFOUNDLAND AND LABRADOR BENEFITS GUIDELINES

The Company's Canada - Newfoundland and Labrador Benefits Guidelines are contained in Attachment 1. As outlined in Section 3.1(f) of the Company's Guidelines all Contractors and Subcontractors are required to comply with the benefits principles and objectives. As well, for the White Rose Project, the Canada Newfoundland Offshore Petroleum Board has approved Husky's Canada Newfoundland Benefits Plan. Compliance with the White Rose Benefits Plan is a Condition of Project approval, and therefore applies to all Contractors and Sub-contractors. The Company therefore intends to work with the Contractor in order to maximize the incorporation of the Company's Canada -Newfoundland and Labrador Benefits Guidelines.

Contractor Obligations:

CONTRACT MANAGEMENT

The Contractor agrees to manage the contract from Newfoundland and Labrador.

BENEFITS COMPLIANCE

The Contractor agrees to comply with requirements of the Company or any Governmental authority with respect to benefits; to comply with all applicable guidelines of the Company and to comply with all benefits commitments made in the contract.

ROLE OF BENEFITS GUIDELINES IN AWARD OF SUBCONTRACTS

Subcontracts will be subject to the approval by the Company. As part of the approval process the Contractor shall demonstrate that its subcontractors also meet the requirements of the Company's benefits guidelines and that the levels of benefits to be gained from the subcontract meets the level identified by the Contractor. Prior to the award of any subcontract, the Contractor shall require the subcontractor to complete the Canada Newfoundland and Labrador Benefits Monitoring Program, provided in Attachment 2. The Contractor shall be responsible for ensuring its subcontractors' ongoing compliance with these benefits guidelines.

SUPPLIER DEVELOPMENT AND PROCUREMENT

The contractor agrees:

- To work co-operatively with governments and industry associations that promote local offshore products such as, the Newfoundland Ocean Industries Association (NOIA) and the Offshore/Onshore Technologies Association of Nova Scotia to assess and identify potential Newfoundland and Labrador and Canadian suppliers and subcontracts.

- To consult industry and supplier information sources such as www.success.nfld.net. and "STRATEGIS" (http://strategis.ic.gc.ca)

- To demonstrate that all equipment specifications have been developed with appropriate references to Standards and Specifications used by Canadian industry.

- To include debriefing procedures as part of the procurement activities to inform, upon request, Canadian, Newfoundland and Labrador manufacturers and suppliers of specific shortfalls when they are unsuccessful with bids.

RESEARCH AND DEVELOPMENT

Contractor shall consider the use of facilities and institutions in Newfoundland & Labrador and Canada for any R&D work deemed necessary for completion of its scope of work.

TRAINING

Contractor and its subcontractors are required to provide training and learning opportunities relevant to their scope of work. The extent of this training will be assessed and agreed upon by the Company prior to the approval of any subcontracts. The quality and performance of this training will be subject to audits by Company during the contract term. (Contact details of local training organizations for the offshore industry are included in Attachment 3.)

SUBMISSIONS REQUIRED FROM CONTRACTOR

The Contractor and its subcontractors agree to actively manage the procurement of goods and services to ensure the benefits objectives and commitments listed in these guidelines are achieved. The Company will monitor the Contractor's and Subcontractors' performance via audts.

REPORTING REQUIREMENTS

The Contractor shall provide the Company with detailed reports as outlined in the "White Rose Development Project - Canada Benefits Reporting and Procedures Manual". The Contractor reports on expenditure and Canadian/Newfoundland content shall correspond to invoices. Receipt of monthly reports is a prerequisite to invoice processing.

ATTACHMENT 1 - CANADA - NEWFOUNDLAND AND LABRADOR BENEFITS GUIDELINES

1.0 INTRODUCTION

1.1 Husky strongly supports providing opportunities to Canada and in particular Newfoundland and Labrador. It is our desire to bring the maximum benefit to the region. We feel it makes economic sense to perform work close to the field location.

1.2 The Atlantic Accord provides the legislative framework for the development of the Eastern Canadian offshore resources mandating that development benefits Canada as a whole and, in particular, the Province of Newfoundland and Labrador. The Accord and associated Acts are sympathetic to Husky's Canada-Newfoundland and Labrador Benefits Guidelines.

1.3 Husky concludes that by taking a proactive approach, significant work and employment can be provided to Canadians, including Newfoundlanders and Labradorians, in a cost effective and efficient manner.

2.0 PHILOSOPHY

The development of Husky's Canada-Newfoundland and Labrador opportunities philosophy for its Grand Banks programs is based on our beliefs and guiding principles.

2.1 Beliefs

Husky beliefs applicable to Canada-Newfoundland and Labrador opportunities:

i) **Significant skill base** - The studies conducted for other developments and the research done by Husky indicate that there is a substantial skill base in Newfoundland and Labrador, other parts of Eastern Canada and the remainder of Canada. The combined resources of the engineering community and labour resources in Newfoundland and Labrador in particular, and in the remainder of Canada, can provide the majority of skills necessary to carry out the scope of work that is required on a value added basis in Canada.

ii) **Significant industrial base** - Husky has extensive knowledge of Newfoundland and Labrador facilities and the larger fabrication facilities in Canada. Based on our knowledge, we believe the capabilities and resources exist to carry out the majority of the work required for offshore development in Newfoundland and Labrador and other facilities in Canada.

iii) **Training and transfer of technology** - The training of local personnel and the transfer of technology to local and more broadly based Canadian companies reduce long term operating costs and provide cost effective support services for current programs and future projects. The earlier these activities are conducted with maximum opportunity for participation by Canadian companies, the greater the long term return for all stakeholders.

iv) **Rights of government and people** - we recognise the right of Newfoundland and Labrador to be the principal beneficiary of the oil and gas resources off its shores, consistent with the requirement of a strong and united Canada.

v) **Husky understanding -** We believe Husky understands the objectives and commitments necessary to achieve cost effective Canadian - Newfoundland and Labrador content.

2.2 Guiding Principles

To enhance these beliefs Husky has documented principles to guide our approach to identify and provide opportunities for Canada-Newfoundland participation. These guiding principles are as follows:

a) **Full and fair opportunity** - Full and fair opportunity will be provided for Canadian-Newfoundland and Labrador personnel and companies to participate in the supply of goods and services. This can best be defined by the way we do business as characterised by the following:

- development of approved vendors files
- investigation of labour and fabrication capabilities
- sizing of packages to fit the capabilities of Canadian companies
- early dissemination of information on the scope of work
- open communication with all personnel and companies requesting information
- on-site presence of engineering, procurement and project management in Newfoundland and Labrador and Canada
- open communication with government and industry associations to identify potential suppliers
- development and implementation of transfer of technology and training programs for long term cost effectiveness

a) **First consideration to Newfoundland and Labrador and Canada** - Husky supports the principle that first consideration be given to personnel, support and other services that can be provided by Newfoundland and Labrador and to goods manufactured in Newfoundland and Labrador, where such goods and services are competitive in terms of fair market price, quality and delivery. We also support the principle of ensuring that individuals resident in Newfoundland and Labrador are given first consideration for training and employment opportunities. This principle also applies next to Canadian companies and personnel relative to international competition. This principle of first consideration will result in opportunities to the Newfoundland and Labrador and Canadian community provided that the impact of value added and life cycle costs are satisfactory.

b) **Proactive** - Husky is aggressive in our approach to Canada-Newfoundland and Labrador opportunities. Proactive means the innovative, co-operative, supportive and open pursuit of involvement of Canadian, and in particular, Newfoundland and Labrador companies and residents to achieve “best value” for the project. We are challenging the mentality that says “it can’t be done!”

c) **“Value adding” is an imperative** - Husky, in the evaluation of opportunities, will emphasize “best value” for the project. Opportunities must be cost effective in the long term and bring value to project stakeholders.

3.0 APPROACH

3.1 Issues

Husky has identified key issues that arise for the successful completion of Grand Banks projects in alignment with the aim and objectives of all stakeholders. This section details these issues and outlines the actions Husky has taken to ensure the successful completion of the project on a "best value" basis while addressing the needs of the stakeholders.

a) **Development in accordance with Atlantic Accord** - The Atlantic Accord requires that offshore oil and gas project's policies and procedures embody the commitment to carry out the program in the spirit of the Acts. This translates into:

- Full and fair opportunity for Canadian and Newfoundland and Labrador firms to participate in the supply of goods and services
- Goods manufactured in and services provided from Newfoundland and Labrador are given first consideration where they are competitive
- Residents of Newfoundland and Labrador are given first consideration for employment opportunities and training

b) **Key functions will be performed in Newfoundland and Labrador -** Husky has committed to managing the program from St. John's. Program decision making authority consistent with normal corporate business practices will reside in this office. This rationale is based on the premise that the presence of appropriate levels of management decision making and the performance of key functions from a local office will assist in focusing on local and regional benefits issues, increase understanding of local capabilities and increase sensitivity to local concerns.

c) **Goods and services on "Best Value Basis"** - For the Company's offshore programs, goods and services must be acquired on a "best value" basis. Local industry must be encouraged to strive to provide goods and services that will compete effectively in a global marketplace. Our evaluation criteria for determining best value are consistent with those for assessing the relative competitiveness of goods and services outlined in the Atlantic Accord Act. The evaluation criteria making up best value are: fair market price, quality and delivery.

d) **Canada-Newfoundland and Labrador benefits will be a factor in procurement** - International competitive bidding processes must be used to acquire goods and services in order to ensure the commercial viability of the program.

Husky will establish procurement policies and procedures consistent with the requirements of the Acts and the C-NLOPB. These policies and procedures, without limiting the scope of the Acts or the discretion of the C-NLOPB, will include provisions to ensure that:

- The requirements for goods and services are communicated, in a timely fashion, to Canadian and, in particular, to Newfoundland and Labrador firms.
- The bid packaging, technical specifications, bidding procedures, and bid follow-up provide Newfoundland and Labrador firms and individuals with a full and fair opportunity to provide goods and services.
- Where bids are essentially equal on a best value basis, first choice will be given to goods and services provided from Newfoundland and Labrador. In all bidding processes, the

level and quality of Newfoundland and Labrador benefits, as well as technical and commercial considerations, shall be one of the key selection factors in awarding development contracts.

- Supplier identification - Husky will provide early identification of opportunities for the supply of goods and services required for the program, work with governments and industry organizations to jointly identify potential Newfoundland and Labrador suppliers of such required goods and services, and, on request, provide feedback to unsuccessful suppliers, as appropriate.

- Supplier development - Husky will work with governments and industry organizations to improve Newfoundland and Labrador supply capability by providing information about the program requirements and specifications in timely manner and encourage the establishment of new suppliers in Newfoundland and Labrador and the formation of appropriate alliances involving Newfoundland and Labrador firms, where such alliances enhance the ability to compete for the work.

- Identification in bids of Newfoundland and Labrador participation - the Proponents will require bidders to fully disclose information relevant to Newfoundland and Labrador benefits content, including:
  - The nature of the arrangements among the participants in the bid, including the respective shares of equity in the consortium
  - The share and nature of the work to be carried out by each of the participants in the bid
  - The nature of arrangements for the transfer of technology

e) **Newfoundland & Labrador and Canadian infrastructure use to be encouraged** Husky will ensure qualified Newfoundland and Labrador offshore fabrication and construction yards are provided a full and fair opportunity to bid on work.

f) **Contractors and Subcontractors will adhere to philosophy and guiding principles.** Contractors play a large role in the procurement of goods and services.

- To ensure the Benefits objectives and commitments are achieved in all areas, Husky requires all contractors and Subcontractors to comply with the Benefits principles, objectives and commitments.

- To ensure that the concept of full and fair opportunity is extended to all potential suppliers Husky requires their contractors and Subcontractors to also comply with the commitments and provide full and fair opportunity to Canadians, including Newfoundland and Labrador manufacturers, consultants, contractors and service companies to participate on a competitive basis in the supply of goods and services to the development.

g) **Engineering to be done in Newfoundland and Labrador -** Husky will use best efforts within the competitive bidding process to cause the project management and engineering work for the program to take place in Newfoundland and Labrador.

h) **Technology Transfer, Research and Development** - Technology transfer and Research and Development (R&D) are important components of the Canada-Newfoundland and Labrador Benefits Plan. Husky supports and encourages initiatives in these areas.

ATTACHMENT 2 - CANADA - NEWFOUNDLAND AND LABRADOR BENEFITS MONITORING AND REPORTING PROGRAMME

(To be completed at Bid Phase and implemented upon award of the contract.)

Introduction to Benefits Monitoring and Reporting Program

Husky's Benefits Monitoring and Reporting Program is used in three stages of the procurement process:

1. **Bid Phase:** the completed Benefits submissions, in the format set out herein, are used in the formal bid evaluation process.
2. **Contract Award Phase:** the Benefits submissions (including content and employment estimates) are included in the legal contracts between the Company and the Contractor. The estimates are the baseline for evaluating the Contractor's benefits performance during the Contract Monitoring Phase.
3. **Contract Monitoring Phase:** Monthly reports, in the format outlined herein, are used to monitor and report on overall benefits performance.

Failure to provide the information requested will result in the assumption that the Contractor's commitment to Canada-Newfoundland and Labrador Benefits in that area is zero.

The content, degree, frequency and format of reporting requirements is subject to change as determined by the Company and the Canada-Newfoundland Offshore Petroleum Board (C-NLOPB). As a minimum, however, the Contractor shall complete and return information regarding the following sections on a monthly basis.

Canadian - Newfoundland and Labrador Content

The calculation of Canadian - Newfoundland and Labrador content is based upon a value added concept and is simply a representation of the value of the various components of Contractor's tender expressed as a percentage of Contractor's total cost. A detailed explanation of how to calculate Canadian and Newfoundland & Labrador content is provided in Attachment 2A.

CONTENT TABLE

The Contractor must complete the following table. If a figure is not provided it will be assumed that the Canadian - Newfoundland and Labrador content for that item is 0%. Accurate information, consistent with generally accepted accounting principles, is important as the Company may request verification of figures. For bidding purposes, please provide estimates based on the total scope of the contract.

The Contractor is required to complete the following Content Table indicating the estimated percentages for each category where applicable (For example, when tender takes the form of a purchase order, then content percentages for Labour would not be applicable and should be entered as zero%). NOTE: RIGHT COLUMN / BOTTOM ROW SHOULD SUM TO 100%.

Total Cost: **$**	**CONTENT AS A % OF TOTAL COST**											
For period:	This Month				Year to Date				Total to Date **(Scope of Work)**			
To: July 2003	NF & Labrador	Other Canadian	Non-Canadian	Total	NF & Labrador	Other Canadian	Non-Canadian	Total	NF & Labrador	Other Canadian	Non-Canadian	Total
Labour (Management/Staff/Labour)				0.00%				0.00%				0.00%
Materials				0.00%				0.00%				0.00%
Equipment				0.00%				0.00%				0.00%
Services				0.00%				0.00%				0.00%
Transportation (within Canada)				0.00%				0.00%				0.00%
Other (taxes, overhead & profits)				0.00%				0.00%				0.00%
Total Content	**0.00%**	**0.00%**	**0.00%**	**0.00%**	**0.00%**	**0.00%**	**0.00%**	**0.00%**	**0.00%**	**0.00%**	**0.00%**	**0.00%**
Completed By:												
Title/Position:					Contact #:				Date:			

Note: See Attachment 2A of this monitoring program for the definition of Canadian - Newfoundland and Labrador Content and examples of how to calculate these percentages.

SUBCONTRACTORS (AND/OR SUPPLIERS) TABLE

The Contractor shall provide, where applicable, a list of its major subcontractors/ suppliers and a description of the goods and/or services provided, or to be provided:

For period:_____to_____				% Content of Bid			
Description of Goods/ Services	Subcontractor/ Supplier Name	Location of Work	% of Total Cost	NF%	OC%	NC%	Total
							0.0%
							0.0%
							0.0%
							0.0%
							0.0%
							0.0%
							0.0%
							0.0%
							0.0%
							0.0%
							0.0%
Total			0%	0%	0%	0%	0%
Completed By:							
Title/Position:			Contact #:		Date:		

EMPLOYMENT TABLE (NUMBER OF PERSONS)

The Contractor shall provide, where applicable, the total estimated number of persons anticipated to be utilized in completing this scope of work, categorized as follows: **(Not applicable for Purchase Order tenders).** For the purposes of these Guidelines a Newfoundland resident is a Canadian (or landed immigrant) who meets the residency requirements of the province as defined by the Newfoundland Election Act, Chapter 105, Sections 3 & 11, i.e. has resided in the province for the immediately preceding six month period. Residency information is captured at the point of hire.

Note: If the occupation categories are not appropriate, Contractor may add categories accordingly.

For period:

OCCUPATION	Newfoundland & Labrador Residents			Other Canadians			Non Canadians			Total Number of Positions		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Management & Administration			0			0			0	0	0	0
Engineers & Technicians			0			0			0	0	0	0
Skilled Trades			0			0			0	0	0	0
Labourers			0			0			0	0	0	0
Marine Crew			0			0			0	0	0	0
Other Field Services			0			0			0	0	0	0
			0			0			0	0	0	0
TOTAL	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Completed by:
Title/Position: Contact #: Date:

EMPLOYMENT TABLE (PERSON-HOURS)

Contractor shall provide, where applicable, the total estimated number of person-hours anticipated to be utilized in completing this scope of work, categorized as follows: **(Not applicable for Purchase Order tenders).** Person hours are to be reported based on the location of work.

Note: If the occupation categories are not appropriate, Contractor may add categories accordingly.

For period:

OCCUPATION	Newfoundland & Labrador			Other Canadians			Non Canadians			Total Number of Hours		
	Onshore	Offshore	Total	Onshore	Offshore	Total	Onshore	Offshore	Total	Onshore	Offshore	Total
Management & Administration			0			0			0	0	0	0
Engineers & Technicians			0			0			0	0	0	0
Skilled Trades			0			0			0	0	0	0
Labourers			0			0			0	0	0	0
Marine Crew			0			0			0	0	0	0
Other Field Services			0			0			0	0	0	0
			0			0			0	0	0	0
TOTAL	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Completed by:
Title/Position: Contact #: Date:

TOTAL TRAINING EXPENDITURES

For period:_____to_____			
Type of training	Expenditure this month $	$ YTD	$ TTD
TOTAL			
Completed By:			
Title/Position:	Contact #:		Date:

RESEARCH AND DEVELOPMENT EXPENDITURES

The contractor shall list all estimated research and development activities to be undertaken, where activities are related to Husky work:

For period:_____to_____				
DESCRIPTION	Date/ Time	This month $	YTD Total $	TTD Total $
Total				
Completed By:				
Title/Position:		Contact #:		Date:

CANADA-NEWFOUNDLAND AND LABRADOR BENEFITS COMMITMENTS

Where applicable, the Contractor will provide detailed information concerning items 3.1 to 3.8 of this Attachment.

RESEARCH & DEVELOPMENT

The Contractor shall, where applicable, detail all Canadian - Newfoundland and Labrador research and development to be conducted or supported by The Contractor for this scope of work.

SUPPLIER DEVELOPMENT

The Contractor shall, where applicable, detail policies and initiatives to promote the development of Canadian - Newfoundland and Labrador suppliers.

TECHNOLOGY TRANSFER

The Contractor shall, where applicable, detail policies and initiatives to promote Technology Transfer to the Canadian - Newfoundland and Labrador participants within the Contractor's Company, Partnership or Joint Venture and/or to proposed Canadian - Newfoundland and Labrador contractors; including:

- a description of the intended technology transfer and the strategy and methods which will be employed to achieve this transfer; particularly, the arrangements for the transfer of technology from non-Canadian participants to Newfoundland and Labrador and Canadian led, owned or controlled participants,

- The nature of the arrangements amongst the participants, including the respective shares of equity and the long-term intentions for their business entity; and, the share and nature of the work to be carried out by each of the participants; and Newfoundland and Labrador suppliers.

TRAINING

The Contractor shall, where applicable, detail policies and initiatives for the development and training of Canadian - Newfoundland and Labrador employees, including on-the-job training and formal training programs to be carried out in Newfoundland and Labrador; and including initiatives aimed at ensuring that disadvantaged individuals or groups have access to training and employment opportunities.

SUCCESSION PLANNING

The Contractor shall provide details of how Newfoundland/Canadian resident succession planning to phase out foreign workers will be implemented as the contract proceeds.

OWNERSHIP

List main shareholders by percentage.

CANADIAN FACILITIES

List Canadian based offices/plants/facilities.

COMPLIANCE

The Contractor must state that it will comply with requirements of the Company (or any governmental authority) with respect to benefits; that it will comply with all applicable guidelines of the Company; and, that it will comply with all of the benefits commitments made in this Contract.

ATTACHMENT 2A - CALCULATION OF CANADA/ NEWFOUNDLAND AND LABRADOR CONTENT

DEFINITION OF CANADIAN CONTENT - CANADIAN GENERAL STANDARDS BOARD STANDARD (CAN2-147.3-82)

1.0 SCOPE

This standard defines Canadian content and then gives explanations and examples of the terms in the definition. “Canadian content”, frequently an important aspect of the procurement process, is here defined so that it can be considered from a common understanding.

2.0 DEFINITION

2.1 Canadian Content[1] is that portion of the selling price of a product or service associated with the work performed in Canada. Canadian Content may also be calculated as the selling price less the cost of directly and indirectly imported materials, labour, services, overhead and profit not taxable in Canada.

2.1.1 Selling Price is the net selling price to the buyer after all discounts. It includes all applicable federal and provincial sales taxes, excise taxes and tariffs.

2.1.2 Cost of Direct Imports[1] is that portion of the selling price associated with directly imported materials, labour, services and overhead. It includes the tariffs and the cost of transportation to the Canadian place of Importation (place where first landed in Canada).

2.1.3 Cost of Indirect Imports[1] is that portion of the selling price associated with the costs for materials, labour, services and overheads that, while obtained through a Canadian supplier, in fact originated outside Canada.

---

[1] Reasonableness and materiality should apply when apportioning any of the above costs for foreign and domestic sources.

- The content of Profit will be based on where the Profit is taxed.
- The content of Leasing shall be consistent with the added value concept for content allocation.
- Calculation of Canadian content should be based on information derived through generally accepted accounting principles.

3.0 EXAMPLES

To aid in the interpretation of several terms, the following examples are provided:

3.1 Cost of Direct Imports

3.1.1 Directly Imported Material Cost – the cost of an electric motor bought directly from a firm producing it outside Canada. The cost of Import includes all duties paid and the transportation cost to the Canadian place of Importation.

3.1.2 Directly Imported Labour Cost – the labour cost of sewing together, in a factory outside Canada, a glove from leather and other materials supplied from Canada.

3.1.3 Directly Imported Service Cost – the cost of design work performed outside Canada.

3.1.4 Directly Imported Overhead Cost – the royalties or management fees paid outside Canada.

3.2 Cost of Indirect Imports

3.2.1 Indirectly Imported Material Cost – the cost of an electric motor produced outside of Canada and purchased from a distributor located in Canada for incorporation into a product assembled or manufactured in Canada.

3.2.2 Indirectly Imported Labour Cost – the labour cost, to a company with manufacturing facilities in Canada, of testing product in facilities outside Canada.

3.2.3 Indirectly Imported Service Cost – the computer costs, to a Canadian firm that provides computer services, of using a computer outside Canada in providing those services.

4.0 NOTES

Examples of the calculation of Canadian content as both a dollar value and a percentage of total net selling price, based on knowledge of either imported costs (4.1) or domestic costs (4.2), are given below:

4.1 Calculation Based on Knowledge of Imported Costs

A.	Total Net Selling Price		$287,000
B.	Imported Costs: Costs related to directly and indirectly imported materials, labour, services, overhead and profit not taxable in Canada.		
	Materials (incl. Tariffs)		
	- Direct	$ 35,000	
	- Indirect	18,000	
	Labour		
	- Direct	20,000	
	- Indirect	3,000	
	Services		
	- Direct	3,000	
	- Indirect	-------	
	Transportation (to Place of Importation)	4,000	
	Overheads	l6,000	
		$ 99,000	$ 99,000
C.	Canadian Content (line A minus line B)		$188,000
D.	Percentage Canada Content (line C) / (line A) X 100		66%

4.2 Calculation Based on Knowledge of Domestic Costs

A.	Total Net Selling Price		$287,000
B.	Canadian Content – Cost related to domestic materials, labour services,overheads, taxes and profits		
	Domestic Costs		
	Materials	$ 60,000	
	Labour	40,000	
	Services	2,500	
	Transportation (within Canada)	5,000	
	Overheads (incl. Profit)	42,500	
	Fed. & Prov. Taxes	38,000	
		$188,000	$188,000
C.	Percentage Canadian Content (line B) / (line A) X 100		66%

WHITE ROSE PROJECT EXAMPLES

The purpose of the following examples is to discuss the application of the Canadian General Standards Board "Definition of Canadian Content" in the context of the White Rose Development Program.

Labour:
For expenditures related to labour, The CGSB implies by its definitions of Imported Labour Costs, that the determination of whether labour costs are Newfoundland, Canadian or Foreign Labour is based on where the work is performed, regardless of nationality or residency status of the workers. For expenditure reporting of labour cost, categorization is based on the following matrix:

Resident Status	Work Performed in:		
	Newfoundland	**Canada**	**Foreign Location**
Foreign	Newfoundland Cost	Other Canadian Cost	Foreign Cost
Canadian	Newfoundland Cost	Other Canadian Cost	Foreign Cost
Newfoundland	Newfoundland Cost	Other Canadian Cost	Foreign Cost

Materials:
Materials content classification depends on the country where the materials used in final processing were obtained. For example, consider a Newfoundland and Labrador cement plant which obtains its materials (limestone and additive requirements) as follows:

- 20% from the United States
- 30% from elsewhere in Canada
- 50% from within Newfoundland and Labrador

Further assume that:

- materials comprise 70% of the cost of the finished product,
- labour, services and overhead, (which are assumed as 100% Newfoundland), comprise the other 30% of the cost of the finished product.

The finished product would be:

- 65% Newfoundland content [(5 x .7) + (1 x .3) = 65]
- 21% Other Canadian content [(3 x .7) + (0 x .3) = 21]
- 14% Non-Canadian content [(2 x .7) + (0 x .3) = 14]

Equipment:
Equipment content classification depends on the country where the main components of the finished product were obtained. For example, consider a Canadian plant (located outside of Newfoundland and Labrador) which produces a diesel driven pump set; and, assume that the main components of this pump are sourced and costed as follows:

- diesel engine is 100% U.K. content and comprises 35% of the finished cost
- centrifugal pump is 100% Japanese content and comprises 25% of the finished cost
- pipework, skid and other materials, labour and overhead are 100% Other Canadian content and comprises 40% of the finished product cost.

This completely assembled equipment (pump set) is then shipped to the White Rose construction site in Newfoundland for installation in a Module by another contractor. The finished product would be categorized as follows:

- 0% Newfoundland content [(0 x.35) + (0 x .25) + (0 x .40) = 0]
- 40% Other Canadian content [(0 x .35) + (0 x .25) + (1 x .40) = 40]
- 60% Non-Canadian content [(1 x .35) + (1 x .25) = (0 x .40) = 60]

Services:

A Contract Value > $100,000

The benefit classification is based on an analysis of the components that make up the service fee (i.e. capital cost, labour, overhead and profit) from the supplier's books of records. The Canada/Newfoundland benefit content for each of these components is assessed in the following manner:

- Capital component -classified according to the source of the equipment. In instances however, where a leased asset is fully depreciated, the entire fee is broken down into labour, overhead, profit and classified accordingly.
- Labour component - classified according to the location of the work.
- Overhead component - classified according to the location it was incurred.
- Profit component - classified based upon where the profit is taxed.

Examples:

1. A Newfoundland incorporated company provides a fully equipped supply vessel at a total contract value of $30 million. Assume the vessel is still being depreciated in its books and the source and costing of the main components of the rental fee are as follows:
   - vessel is 100% UK content and comprises 60% of the rental fee
   - vessel upgrades are 30% Other Canadian and 70% UK and comprises 15% of the rental fee
   - remaining 25% of the rental fee is made up of profit, overhead and labour that are 100% Newfoundland.

   The categorization of this vessel contract is as follows:

25% Newfoundland content	[(0x.60) + (0x.15) + (1x.25) = 25%]
5% Other Canadian content	[(0x.60) + (.3x.15) + (0x.25) = 5%]
70% Non-Canadian content	[(1x.6) + (.7x.15) + (0x.25) = 70%]

2. Same example as # 1 above except the vessel is fully depreciated on the books. In this instance any portion of the rental fee associated with the cost of the vessel itself is coded in the same manner as profit. Consequently the Newfoundland content of this vessel then becomes 100%.

100% Newfoundland content	[(1 x 1) = 100%]
0% Other Canadian content	
0% Non-Canadian content	

B Contract Value < $100,000

All other services are classified according to the location of the supplier's servicing office.

Transportation Charges:
Follow the classification of the labour, materials or services which are being shipped. (Note that major marine transportation contracts are classified as Services; see above)

Overhead Charges:
Refer to costs such as supplier carrying charges and restocking costs are included as part of the cost of labour, materials or services. The content classification of this portion of the cost is allocated on a proportional basis to the locations where the expenses were incurred.

Profit Charges:
The content classification of profit margins depends on where the profit is taxed. This is usually determined by ownership. For example, assume a U.S. manufactured valve is supplied from a Newfoundland incorporated branch office for a total cost of $2 million. Assume the main components of the valve are sourced and costed as follows:

- valve is 100% U.S. content and comprises 80% of the total cost
- remaining 20% is profit.

Assume also that 85% of the profit associated with this contract will accrue to the U.S. parent through head office charges and/or other transfers and consequently be taxed in the U.S. In this case, the categorization is as follows:

3% Newfoundland content	[(0 x .8) + (.2 x .15) = 3]
0% Other Canadian content	
97% Foreign content	[(1 x .8) + (.2 x .85) = 97]

ATTACHMENT 3 - CONTACTS FOR LOCAL OFFSHORE ASSOCIATIONS AND TRAINING ESTABLISHMENTS

Please note that this list is subject to additions or changes. As such, it may not be exhaustive

LOCAL TRADE AND INDUSTRY ASSOCIATIONS

1) Atlantic Canada Opportunities Agency
10 Barter's Hill
Cabot Phase 2
11th Floor
St John's, Newfoundland A1C 5M5
Tel: ++1-709-772-5928
Fax: ++1-709-772-6090

2) Consulting Engineers of Newfoundland and Labrador
PO Box 1236
St John's, Newfoundland A1C 5M9

3) Newfoundland Ocean Industries Association (NOIA)
Box44, Atlantic Place
Suite 602
215 Water Street
St John's, Newfoundland A1C 6C9
Tel: ++1-709-758-6610
Fax: ++1-709-758-6611
e-mail: noia@noianet.com

4) Newfoundland and Labrador Department of Mines and Energy, Industrial Benefits Branch
4th Floor, West Block, Confederation Bldg
P.O. Box 8700
St. John's, NL A1B 4J6
Tel: 709-729-5064 / Fax: 709-729-4011
Email: bsparkes@gov.nl.ca

5) St John's Board of Trade
66 Kenmount Road
PO Box 5127
St John's, Newfoundland A1B 3V6
Tel: ++1-709-726-2961
Fax: ++1-709-726-2003
e-mail: boardoftrade.nfld.net

6) Offshore/Onshore Technologies Association of Nova Scotia (OTANS)
Suite 813
World Trade and Convention Centre
1800 Argyle Street
Halifax, Nova Scotia B3J 3NB
Tel ++1-902-425-4774
Fax ++1-902-422-2332
e-mail: otans@istar.ca

LOCAL TRAINING INSTITUTIONS

1) Memorial University of Newfoundland/Marine Institute
St. John's, Newfoundland, A1C 5S7
Tel: ++1-709-737-7540
Fax: ++1-709-737-8486
Web page: www.mun.ca

2) College of the North Atlantic
Prince Philip Drive Campus
PO Box 1693
St. John's, Newfoundland A1C 5P7
Tel: ++1-709-758-7531
Fax: ++1-709-758-7297

3) Operating Engineers College
PO Box 389
Salmonier Line
Holyrood, Newfoundland A0A 2R0
Tel: ++1-709-229-6464
Fax: ++1-709-229-6469

4) NorTech College
655 Topsail Road
St John's, Newfoundland A1E 2E3
Tel: ++1-709-364-8324
e-mail: info@nortechcollege.com

APPENDIX III

CANADIAN GENERAL STANDARDS BOARD

DEFINITION OF CANADIAN CONTENT

(CAN2-147.3-82)

CANADIAN GENERAL STANDARDS BOARD

Standard For

DEFINITION OF CANADIAN CONTENT

(CAN2-147.3-82)

1.0 SCOPE

This standard defines Canadian content and then gives explanations and examples of the terms in the definition. “Canadian content”, frequently an important aspect of the procurement process, is here defined so that it can be considered from a common understanding.

2.0 DEFINITION

2.1 Canadian Content[1] is that portion of the selling price of a product or service associated with the work performed in Canada. Canadian Content may also be calculated as the selling price less the cost of directly and indirectly imported materials, labour, services, overhead and profit not taxable in Canada.

2.1.1 Selling Price is the net selling price to the buyer after all discounts. It includes all applicable federal and provincial sales taxes, excise taxes and tariffs.

2.1.2 Cost of Direct Imports[1] is that portion of the selling price associated with directly imported materials, labour, services and overhead. It includes the tariffs and the cost of transportation to the Canadian place of Importation (place where first landed in Canada).

2.1.3 Cost of Indirect Imports[1] is that portion of the selling price associated with the costs for materials, labour, services and overheads that, while obtained through a Canadian supplier, in fact originated outside Canada.

---

[1] Reasonableness and materiality should apply when apportioning any of the above costs for foreign and domestic sources.

- The content of Profit will be based on where the Profit is taxed.
- The content of Leasing shall be consistent with the added value concept for content allocation.
- Calculation of Canadian content should be based on information derived through generally accepted accounting principles.

3.0 EXAMPLES

To aid in the interpretation of several terms, the following examples are provided:

3.1 Cost of Direct Imports

3.1.1 Directly Imported Material Cost – the cost of an electric motor bought directly from a firm producing it outside Canada. The cost of Import includes all duties paid and the transportation cost to the Canadian place of Importation.

3.1.2 Directly Imported Labour Cost – the labour cost of sewing together, in a factory outside Canada, a glove from leather and other materials supplied from Canada.

3.1.3 Directly Imported Service Cost – the cost of design work performed outside Canada.

3.1.4 Directly Imported Overhead Cost – the royalties or management fees paid outside Canada.

3.2 Cost of Indirect Imports

3.2.1 Indirectly Imported Material Cost – the cost of an electric motor produced outside of Canada and purchased from a distributor located in Canada for incorporation into a product assembled or manufactured in Canada.

3.2.2 Indirectly Imported Labour Cost – the labour cost, to a company with manufacturing facilities in Canada, of testing product in facilities outside Canada.

3.2.3 Indirectly Imported Service Cost – the computer costs, to a Canadian firm that provides computer services, of using a computer outside Canada in providing those services.

4.0 NOTES

Examples of the calculation of Canadian content as both a dollar value and a percentage of total net selling price, based on knowledge of either imported costs (4.1) or domestic costs (42), are given below:

4.1 Calculation Based on Knowledge of Imported Costs

A.	Total Net Selling Price		$287,000
D.	Imported Costs: Costs related to directly and indirectly imported materials, labour, services, overhead and profit not taxable in Canada.		
	Materials (incl. Tariffs)		
	- Direct	$ 35,000	
	- Indirect	18,000	
	Labour		
	- Direct	20,000	
	- Indirect	3,000	
	Services		
	- Direct	3,000	
	- Indirect	-------	
	Transportation (to Place of Importation)	4,000	
	Overheads	l6,000	
		$ 99,000	$ 99,000
E.	Canadian Content (line A minus line B)		$188,000
D.	Percentage Canada Content (line C) / (line A) X 100		66%

4.2 Calculation Based on Knowledge of Domestic Costs

A.	Total Net Selling Price		$287,000
C.	Canadian Content – Cost related to domestic materials, labour services, overheads, taxes and profits		
	Domestic Costs		
	Materials	$ 60,000	
	Labour	40,000	
	Services	2,500	
	Transportation (within Canada)	5,000	
	Overheads (incl. Profit)	42,500	
	Fed. & Prov. Taxes	38,000	
		$188,000	$188,000
C.	Percentage Canadian Content (line B) / (line A) X 100		66%

White Rose Project Examples

The purpose of the following examples is to discuss the application of the Canadian General Standards Board "Definition of Canadian Content" in the context of the White Rose Development Program.

Labour:
For expenditures related to labour, The CGSB implies by its definitions of Imported Labour Costs, that the determination of whether labour costs are Newfoundland, Canadian or Foreign Labour is based on where the work is performed, regardless of nationality or residency status of the workers. For expenditure reporting of labour cost, categorization is based on the following matrix:

Resident Status	Work Performed in:		
	Newfoundland	**Canada**	**Foreign Location**
Foreign	Newfoundland Cost	Other Canadian Cost	Foreign Cost
Canadian	Newfoundland Cost	Other Canadian Cost	Foreign Cost
Newfoundland	Newfoundland Cost	Other Canadian Cost	Foreign Cost

Materials:
Materials content classification depends on the country where the materials used in final processing were obtained. For example, consider a Newfoundland and Labrador cement plant which obtains its materials (limestone and additive requirements) as follows:

- 20% from the United States
- 30% from elsewhere in Canada
- 50% from within Newfoundland and Labrador

Further assume that:

- materials comprise 70% of the cost of the finished product,
- labour, services and overhead, (which are assumed as 100% Newfoundland), comprise the other 30% of the cost of the finished product.

The finished product would be:

- 65% Newfoundland content [(5 x .7) + (1 x .3) = 65]
- 21% Other Canadian content [(3 x .7) + (0 x .3) = 21]
- 14% Non-Canadian content [(2 x .7) + (0 x .3) = 14]

Equipment:
Equipment content classification depends on the country where the main components of the finished product were obtained. For example, consider a Canadian plant (located outside of Newfoundland and Labrador) which produces a diesel driven pump set; and, assume that the main components of this pump are sourced and costed as follows:

- diesel engine is 100% U.K. content and comprises 35% of the finished cost
- centrifugal pump is 100% Japanese content and comprises 25% of the finished cost
- pipework, skid and other materials, labour and overhead are 100% Other Canadian content and comprises 40% of the finished product cost.

This completely assembled equipment (pump set) is then shipped to the White Rose construction site in Newfoundland for installation in a Module by another contractor. The finished product would be categorized as follows:

- 0% Newfoundland content [(0 x.35) + (0 x .25) + (0 x .40) = 0]
- 40% Other Canadian content [(0 x .35) + (0 x .25) + (1 x .40) = 40]
- 60% Non-Canadian content [(1 x .35) + (1 x .25) = (0 x .40) = 60]

Services:

C Contract Value > $100,000

The benefit classification is based on an analysis of the components that make up the service fee (i.e. capital cost, labour, overhead and profit) from the supplier's books of records. The Canada/Newfoundland benefit content for each of these components is assessed in the following manner:

- Capital component -classified according to the source of the equipment. In instances however, where a leased asset is fully depreciated, the entire fee is broken down into labour, overhead, profit and classified accordingly.
- Labour component - classified according to the location of the work.
- Overhead component - classified according to the location it was incurred.
- Profit component - classified based upon where the profit is taxed.

Examples:

3. A Newfoundland incorporated company provides a fully equipped supply vessel at a total contract value of $30 million. Assume the vessel is still being depreciated in its books and the source and costing of the main components of the rental fee are as follows:
   - vessel is 100% UK content and comprises 60% of the rental fee
   - vessel upgrades are 30% Other Canadian and 70% UK and comprises 15% of the rental fee
   - remaining 25% of the rental fee is made up of profit, overhead and labour that are 100% Newfoundland.

   The categorization of this vessel contract is as follows:

   25% Newfoundland content [(0x.60) + (0x.15) + (1x.25) = 25%]
   5% Other Canadian content [(0x.60) + (.3x.15) + (0x.25) = 5%]
   70% Non-Canadian content [(1x.6) + (.7x.15) + (0x.25) = 70%]

4. Same example as # 1 above except the vessel is fully depreciated on the books. In this instance any portion of the rental fee associated with the cost of the vessel itself is coded in the same manner as profit. Consequently the Newfoundland content of this vessel then becomes 100%.

   100% Newfoundland content [(1 x 1) = 100%]
   0% Other Canadian content
   0% Non-Canadian content

D Contract Value < $100,000

All other services are classified according to the location of the supplier's servicing office.

Transportation Charges:
Follow the classification of the labour, materials or services which are being shipped. (Note that major marine transportation contracts are classified as Services; see above)

Overhead Charges:
Refer to costs such as supplier carrying charges and restocking costs are included as part of the cost of labour, materials or services. The content classification of this portion of the cost is allocated on a proportional basis to the locations where the expenses were incurred.

Profit Charges:
The content classification of profit margins depends on where the profit is taxed. This is usually determined by ownership. For example, assume a U.S. manufactured valve is supplied from a Newfoundland incorporated branch office for a total cost of $2 million. Assume the main components of the valve are sourced and costed as follows:

- valve is 100% U.S. content and comprises 80% of the total cost
- remaining 20% is profit.

Assume also that 85% of the profit associated with this contract will accrue to the U.S. parent through head office charges and/or other transfers and consequently be taxed in the U.S. In this case, the categorization is as follows:

3% Newfoundland content	[(0 x .8) + (.2 x .15) = 3]
0% Other Canadian content	
97% Foreign content	[(1 x .8) + (.2 x .85) = 97]

Appendix IV

Canada-Newfoundland Benefits Sample Bid Evaluation

1.0 Introduction

This section provides a generic procedure for the evaluation of Canada-Newfoundland Benefits information submitted by bidders to Husky in response to the Canada-Newfoundland Benefits Appendix contained in the bid packages issued to all bidders. The Benefits Appendix serves two functions:

- provides Canada-Newfoundland Benefits information for evaluation in the bidding process
- becomes an attachment to legal contracts in the contract negotiation phase.

As noted, these evaluation formats are generic in nature and are intended to serve as a guideline. Individual contracts will adopt the actual evaluation criteria and associated weightings appropriate to the nature of the tender at the discretion of the Canada-Newfoundland Benefits Manager.

In line with the Husky policy of maximizing Canada-Newfoundland Benefits while achieving "Best Value," Canada-Newfoundland Benefits will be a factor in awarding all contracts. For major contracts (>$100M) a detailed evaluation will be carried out, including evaluations of bidder's responses to issues of supplier development, research and development (R & D), and technology transfer.

Due to the White Rose Execution Structure (see Figure 1.1), Husky's lead contractors will also carryout procurement activities. Contractors and subcontractors will each undertake procurement activities following their internal Procurement Guidelines, as approved by Husky. In line with Husky's commitments, Canada-Newfoundland Benefits has been incorporated as an important aspect of these Procurement Guidelines for the White Rose Project. As well, these contractors and subcontractors are required to adhere to Husky Energy's Canada-Newfoundland Benefits Guidelines, included in each Request for Proposal, and meet the commitment of maximizing Canada-Newfoundland Benefits within a competitive framework.

2.0 Evaluation

Evaluations of proposals and bids are carried out by the Evaluation Team as outlined in the contracts' Bid Plan for Opening, Evaluation and Award of Contract ("the Bid Plan"). Evaluations are carried out over four sections of the proposals: technical, commercial, Health, Safety and Environment (HS&E), and Canada-Newfoundland Benefits. The Evaluation Team member for Canada-Newfoundland Benefits evaluations is the Canada-Newfoundland Benefits Manager.

Before EOIs are issued on a contract, a determination shall be made as to the relative weight of each evaluation section for selection of the winning bidder. Depending on the nature of the contract in terms of technical and commercial complexity, the weight of the Canada-Newfoundland Benefits evaluation will be determined. The minimum weight for Canada-Newfoundland Benefits for any contract is 5%.

3.0 Evaluation Report

As designated in the Bid Plan, the Manager, Canada-Newfoundland Benefits - or a designate – will write the Canada-Newfoundland Benefits section of the Evaluation Team's Evaluation Report. This section will include an overall summary and preferred bidder form a Canada-Newfoundland Benefits perspective. This will be supported with a completed Benefits Evaluation Table (see Appendix 2), based on factual information submitted in a bid or clarification.

4.0 Clarifications

Clarifications are issued to bidders, in writing, by the Purchasing/Contracts Administrator on direction from the Canada-Newfoundland Benefits Manager. This is to ensure that consistent information is provided to all bidders. Clarifications are generally issued for two reasons: to request information

provided in the bid be presented in another format to make comparable evaluations against other bidders or to request a more in-depth response to portions of the Benefits Appendix.

Information provided by a bidder through a clarification acquires the same standing as the original bid. This information will be evaluated on the same scale and criteria as the original bid and, if the bidder is awarded the contract, will be included in the attachment to the legal contract. If this information remains incomplete or incompatible for comparison purposes then a second clarification may be issued at the discretion of the Canada-Newfoundland Benefits Manager.

If responses to clarification requests substantially alter the original bid, such responses are to be ignored in the evaluation of the bid and the bidder be so informed.

5.0 Criteria for Benefits Evaluation

The criteria used for Benefits Evaluation are derived from the Canada-Newfoundland Benefits Appendix included with each bid package and completed by bidders as a section of the bid. The eight evaluation criteria are:

- Local Office/Operations/etc.
- Ownership
- Technology Transfer
- Research and Development
- Human Resources Planning
- Training
- Supplier Development/Identification
- Newfoundland Content and Person Hours

The criteria are ranked on a 0 to 5 scale for each bidder and then applied to the weight multiplier associated with the criteria to determine the overall score. The exception is Local Office/Operations/etc., which is given either a 0 or 1 and then applied to the multiplier to achieve an overall score. The overall scores are then summed to achieve a total ranking out of 100. A completed Benefits Evaluation illustrates this process in Appendix 4.

Some criteria will be evaluated in a quantitative manner, using percentages or hours to determine the score out of 5. Others such as R&D initiatives will be evaluated in a qualitative manner. This will be discussed in greater detail in the following sections describing how each criterion will be evaluated.

6.0 Local Office/Operations/Etc.

In section 5.3 of the Canada-Newfoundland Benefits Guidelines, Husky requires all successful bidders to establish an office with management capabilities in St. John's. This requirement is targeted at building the level of expertise in the local offshore support industry, as well as raising the awareness of local and regional benefits issues and industry capabilities. This criterion is given either full points or none in the evaluation.

7.0 Ownership

Evaluation of this criterion is determined by examining percentage ownership levels from Newfoundland, Other Canada, and Foreign on a comparison basis. Generally, a raw score is determined on the Newfoundland percentage Ownership, with 40-60% Newfoundland Ownership setting a benchmark score of 3 out of 5. Differentiation of bidders with relatively equivalent levels of Newfoundland Ownership occurs by comparing Canadian percentage Ownership. If a bidder has significantly more Canadian Ownership than another, points may be added to its raw score to reflect that fact. A 100% Non-Canadian owned bidder receives a score of 0. All tables used for Benefits Evaluations are evaluated in a similar manner with different levels associated with the benchmark score of 3 for each. An example of Evaluation results is presented in Table 2.1.

Table 2.1: Example Ownership Evaluation

Bidder	% NF Ownership	% Canada Ownership	% Foreign Ownership	Score
A	56	44	0	**4**
B	49	20	31	**3**
C	0	0	100	**0**

8.0 Technology Transfer

Technology Transfer evaluation is based on the bidder's response to the Canada-Newfoundland Benefits Appendix and initiative identified therein. This criterion is qualitative in nature, thus bidder's will be rewarded for responses detailing innovative initiatives, strategies and methods for transfer of technology, especially from non-Canadian participants to Canadian, and particularly Newfoundland and Labrador, led participants and suppliers. This criterion is in line with Husky's commitment to the development of the local offshore industry through a greater concentration of expertise in the area.

Example Evaluation Results

Bidder A:

- Commits to transfer knowledge, expertise and processes to Newfoundland subsidiary and its suppliers to maximize work conducted in Newfoundland

Score [4]

Bidder B:

- Commits to hire local graduates to work on other international projects, as well as transfer of systems and procedure to Newfoundland from other operations

Score [3]

Bidder C:

- History of technology transfer in past Newfoundland work. Commitment to train Newfoundland employees on new technology adopted for the project

Score [4]

9.0 Research and Development

Bidders are required to detail all R&D initiatives, particularly those associated with the contract, in completion of the Canada-Newfoundland Benefits Appendix as part of the bid. In evaluating this information a particular emphasis is laced on rewarding R&D initiatives occurring in Newfoundland and targeted at developing the Newfoundland offshore industry.

Bidder A:

- Not currently conducting R&D initiatives for this contract. Maintains a lab in Newfoundland for offshore R&D. Has history of R&D initiatives in the province

Score [4]

Bidder B:

- States that R&D is not applicable to this contract, conducts R&D in Canada

Score [2]

Bidder C:

- States R&D is not applicable to the contract a this time, conducts R&D in Canada, commits to collaboration with local institutions and facilities for any R&D initiatives undertaken

Score [3]

10.0 Human Resources Planning/Employment

In evaluating this category both qualitative and quantitative elements are examined. The primary source of information here is Table 3.3 in the Canada-Newfoundland Benefits Appendix, which outlines the number of employees to be utilized on the contract, broken out by occupation as well as by Newfoundland/Other Canada/Non-Canada. (See Appendix 3) The Newfoundland/Other Canada/Non-Canada numbers are then examined similarly to the ownership numbers, with a benchmark score of 3 set for a range of 50-70% Newfoundland employees.

Also contributing to the score for this criterion is Human Resources (HR) Planning for the company, and in particular for the contract. In particular the evaluation will reward succession planning that allows Newfoundland employees to be promoted into lead roles as training, experience and technology transfers advance. Also acknowledged will be local recruitment, diversity group recruitment, as well as other HR programs. An example of Evaluation results is presented in Table 2.2.

Table 2.2: Employment Table (number of persons) Example Evaluation

Bidder	Newfoundland %	Other Canada %	Non-Canada %
A	75	10	15
B	65	20	15
C	45	20	35

Bidder A:

- Commitment to recruit locally, including use of MUN Co-op programs, active succession plan

Score [4]

Bidder B:

- Active succession plan

Score [4]

Bidder C

- Committed to local recruitment

Score [3]

11.0 Training

Husky has identified training as an important area for the development of the local offshore industry. There is a strong commitment to training within Husky and amongst its contractors and subcontractors,

as training will reduce long-term operating costs and provide a pool of qualified individuals for cost-effective, local support for current programs and future projects.

Husky contractors and subcontractors are required to provide training and learning opportunities relevant to their scope of work. The quality of this training will be subject to audits by Husky throughout the life of the contract. This will determine if training meets commitments outlined in the bid submission, is of a satisfactory quality, and what impact it has made on local training facilities. (Husky Oil Operations Ltd., January 2001b)

Evaluations for training centre on responses to two sections of the Canada-Newfoundland Benefits Appendix. In Table 3.5 Total Training Expenditures, bidders must outline training for the contract by types and provide an estimate of monthly, yearly, and total cost for each. In addition, section 4.4 requires bidders to detail all policies and initiatives for training Canadian and Newfoundland employees. This includes on-the-job and formal training programs and initiative targeted toward training for disadvantaged groups.

Example Evaluation Result

Bidder A:

- Committed to use of Newfoundland facilities for training, will provide training required for all employees

Score [3]

Bidder B:

- Committed to providing formal training for First Nation's groups. Committed to using Newfoundland facilities for formal training of employees, will also provide on–the-job training

Score [4]

Bidder C:

- Provides continuous training for employees, will use Newfoundland facilities

Score [3]

12.0 Supplier Identification/Development

Husky considers supplier Identification and Development crucial to the development of the Newfoundland offshore. In line with this belief, Husky provides support and assistance to bidders through early notification of program requirements and specification and encouragement of Newfoundland and Labrador suppliers to become globally competitive – including the provision of technical assistance and advice where necessary. Information collected in this process, as well as notification of procurement activity, is made widely available to the business community through various publication sources. (Husky Oil Operations Ltd., January 2001b)

Bidders are required to complete two sections in the Canada-Newfoundland Benefits Appendix outlining the use of policies and strategies for use and development of subcontractors and suppliers. The first is Table 3.2 Subcontractors (and/or Suppliers) Table. This requires identification of goods or services required, intended subcontractor/supplier, the location of work, and the percentage of total cost with a break out of the total cost by Newfoundland/Other Canada/Non-Canada. This table is evaluated much the same as earlier tables with a benchmark score of 3 set for a Newfoundland percentage range of 40-65%. The availability of Newfoundland and Canadian subcontractors/supplier for the required work as well as the percentage of the total cost involved largely determine the relative weight for this table in evaluation of this criterion.

The second section evaluated is 4.2 Supplier Development. This provides a qualitative examination of policies and initiative outlined by the bidder toward the development of Canadian- Newfoundland and Labrador suppliers.

Example Evaluation Results

Table 2.3: Supplier Identification Example Evaluation

Bidder	Newfoundland %	Other Canada %	Non-Canada %	% of Total Cost
A	70	0	30	15
B	50	10	40	20
C	40	20	40	18

Bidder A:

- Committed to first consideration and full and fair opportunity principles, will pursue "partnerships" with suppliers to assist in reaching standard performance

Score [4]

Bidder B:

- Committed to first consideration and full and fair opportunity principles

Score [3]

Bidder C:

- Will use Newfoundland suppliers "wherever possible"

Score [3]

13.0 Newfoundland Content and Person Hours

The evaluation of this criterion considers two tables from the Canada-Newfoundland Benefits Appendix. Table 3.1 Content Table is a breakout of various components as a percentage of total cost. This is further broken out by Newfoundland/Other Canada/Non-Canada by month, year, and total. The benchmark score of 3 is set for a range of 50-70% total Newfoundland Content, and is subject to similar changes to reflect distinctions between bids as earlier tables. A completed example of a Newfoundland Content Calculation can be found in the Canada-Newfoundland Benefits Appendix. (See Appendix 3)

Table 3.4 Employment Table (Person Hours) records the number of person-hours anticipated to be used by occupational category. This is further broken out by Newfoundland/Other Canada/Non-Canada. These figures are then converted to percentages. Rather than evaluate an often inequitable absolute estimate of person-hours – which can often result in inflated commercial terms - the more compatible percentage representation is used. This benchmark score of 3 is generally set for a range of 50-70%, and is subject to similar variations as earlier tables.

These two mechanisms for evaluation are given equal weight in determining the final score for the criterion. This portion of the evaluation is quite important to the Total Ranking for Canada-Newfoundland Benefits and this is reflected in the relatively high weight multiplier applied in the Benefits Evaluation Table (See Appendix 4).

Example Evaluation Results

Table 2.4: Canada-Newfoundland Content Example Evaluation

Bidder	% Newfoundland	% Other Canada	% Non-Canada
A	65	20	15
B	55	15	30
C	45	10	45

Table 2.5: Employment Table (3.1) (person-hours) Example Evaluation

Bidder	% Newfoundland	% Other Canada	% Non-Canada
A	75	15	10
B	60	20	20
C	60	10	30

Table 2.6: Ranking

Bidder	Score
A	4
B	3
C	3

14.0 Criteria for Overall Evaluation

Final ranking of bidders from a Canada-Newfoundland Benefits perspective will be on a scale of 0 to 5, which is subsequently multiplied by the weight multiplier, as outlined in the Bid Plan, to determine the score for overall evaluation. For example, if a bidder receives a score of 4.5 out of 5 and the weight for Canada-Newfoundland Benefits for the contract is 20%, the final score for overall evaluation is 18.

Score X Weight Multiplier = Final Score

4.5 X 4 = 18

In order to differentiate bidders, the 0 to 5 scale score is calculated by dividing the bidder's score on the Benefits Evaluation by the highest score on the Benefits Evaluation and multiplying the result by 5. For example, if one bidder has a total ranking of 90 and the other of 80, the scores on the 0 to 5 scale would be 5 and 4.44 respectively.

Company A -> 90/90 X 5 = 5

Company B -> 80/90 X 5 = 4.44

If any bidder scores less than 2 on the 0 to 5 scale for any category (HS&E, Technical, Commercial, or Canada-Newfoundland Benefits), then the bid may be reviewed by the Evaluation Team for elimination.

The 0 to 5 scale shall be based on the following assessments:

0 No understanding of the issues/No evident commitment to Canada-Newfoundland Benefits

1 Well below basic requirements

2 Slightly below basic requirements

3 Meets specific requirements

4 Well above basic requirements/demonstrates understanding of Canada-Newfoundland Benefits and proposes innovative solutions

5 Demonstrates strong commitment to Canada-Newfoundland Benefits objectives and goes beyond ordinary expectations

15.0 C-NLOPB Notification

Husky has a commitment to keep the C-NLOPB informed of the status of major contracts as they progress through the evaluation process to the final award. C-NLOPB will first be notified upon the development of the bidders list from EOI submissions before the list is released to the public. Final notification will come upon Owners' approval of the contract award recommendation for the C-NLOPB to review and concur with (within two business days) before the contract is awarded.

16.0 Award of Contracts

The successful bidder will be notified of the award of contract as soon as possible after final Management, Partner, and C-NLOPB approval of the recommendation. Execution of the final agreement between the bidder and Husky Energy will occur at this time.

Unsuccessful bidders will be notified of the results of the procurement process in writing. Where requested and appropriate a debriefing will take place in a qualitative and not quantitative manner as set out in Husky Energy's Purchasing Practises document.

Where it is deemed necessary, Public Affairs will issue a press release indicating the award of contract and the successful bidder. Notification will also be provided to Stakeholders and published in the NOIA (Newfoundland Ocean Industries Association) Daily Bulletin.

Appendix VI

Canada Benefits Report Formats

Quarterly Training Expenditure Report

Husky Energy — **WHITE ROSE DEVELOPMENT PROJECT**
QUARTERLY TRAINING EXPENDITURE REPORT

CONTRACTOR: ____________________

PERIOD: ____________________

DESCRIPTION	Date/ Time	This Period $	YTD Total $	TTD Total $
		-	-	-

Completed by: ____________________ Date: __________

Title/Position: ____________________ Contact #: __________

Quarterly Procurement Report – Forecast & Actual **Vendor Evaluation Report** **Employment Statistics**

Husky Energy

WHITE ROSE DEVELOPMENT PR
QUARTERLY EMPLOYMENT & STAFFING R

CONTRACTOR: _____ Period: _____

Work Location	GEOGRAPHIC LOCATIONS OF WORK											
	NF	Cdn	Fore	Subtotal	NF	Cdn	Fore	Subtotal	NF	Cdn	Fore	Subtotal
MANAGEMENT & ENGINEERING				0				0				
SUBCONTRACTS & CONSULTANTS				0				0				
TRADES - Peak no. this period				0				0				
OTHER (_____)				0				0				
TOTAL NUMBER EMPLOYED	0	0	0	0	0	0	0	0	0	0	0	
TRADES - Total Work-Hours				0				0				

Work Location: Identify each location by major city or fabrication/work site

NF: Newfoundland Resident – a Canadian citizen (or landed immigrant) who meets the residency requirements of the Newfoundland Election… a person who has resided in the province for the immediately preceding six-month period;

Cdn: Other Canadian Resident – a Canadian citizen (or landed immigrant) who has maintained a permanent, primary residence in a province … other than Newfoundland and Labrador prior to being employed on the Project.

Fore: Foreign – All persons who are not Newfoundland residents or Other Canadian residents

Report

Person Hours Report

Husky Energy

WHITE ROSE DEVELOPMENT PROJECT
MONTHLY EMPLOYMENT & STAFFING REPORT

Contractor: _____

Period: _____

OCCUPATION	Newfoundland & Labrador			Other Canadian	Foreign	Total
	Onshore	Offshore	Sub-Total			
Management & Administration						
Technicians						
Skilled Trades						
Labourers						
Marine Crew						
Other Field Services						
Professionals						
TOTAL PERSON HOURS			-	-	-	-

Completed by: _____ Date: _____

Title/Position: _____ Contact #: _____

Expenditure Report

Husky Energy

WHITE ROSE DEVELOPMENT PROJECT
MONTHLY EXPENDITURE REPORT

CONTRACTOR: _____

Note: All amounts reported are in Canadian Dollars, exclusive of HST

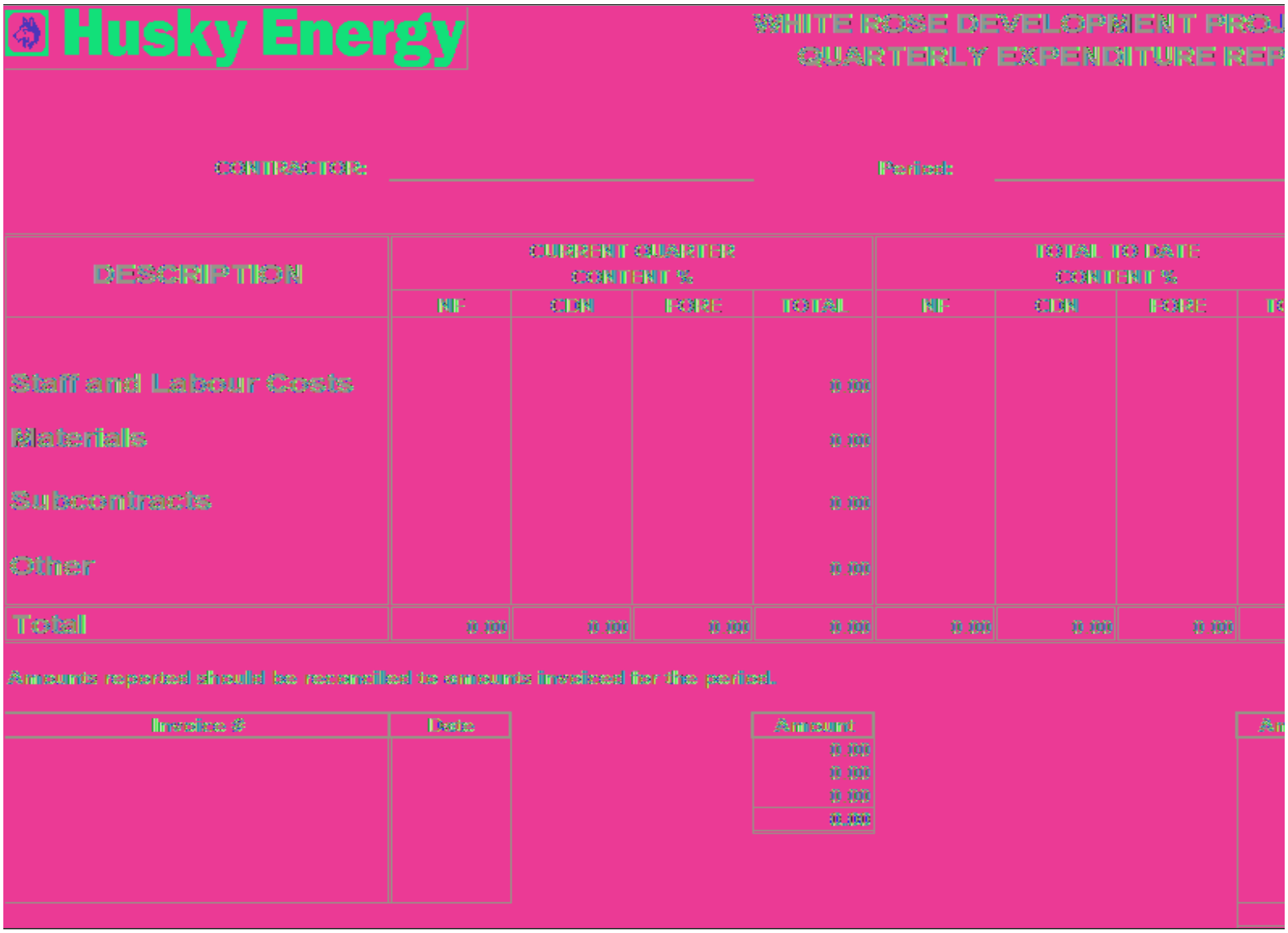
PERIOD: _____

	Current Month								Total To Date							
	NL & Labrador		Other Canadian		Foreign		Total		NL & Labrador		Other Canadian		Foreign		Total	
	$	%	$	%	$	%	$	%	$	%	$	%	$	%	$	%
Labour (Management, Staff, Labour)		0%		0%	-	0%	-	0%		0%	-	0%	-	0%	-	0%
Materials & Equipment		0%		0%		0%	-	0%	-	0%		0%		0%	-	0%
Services		0%	-	0%	-	0%	-	0%	-	0%		0%		0%	-	0%
Transportation		0%	-	0%	-	0%	-	0%		0%		0%		0%	-	0%
Subcontracts		0%		0%	-	0%	-	0%	-	0%		0%		0%	-	0%
Other		0%	-	0%	-	0%	-	0%		0%		0%		0%	-	0%
	-	0%	-	0%	-	0%	-	0%	-	0%	-	0%	-	0%	-	0%

Education and Training Report

2006 Education and Training Summary (Q-)					
Training Course			Training Institution		Costs
Dates	Name	Description	Name	Location	Course Fee
2006					
Total					$ -

Quarterly Expenditure Report



Husky Energy

WHITE ROSE DEVELOPMENT PROJ
QUARTERLY EXPENDITURE REP

Contractor: _____ Period: _____

DESCRIPTION	CURRENT QUARTER CONTENT %				TOTAL TO DATE CONTENT %			
	NF	CDN	FORE	TOTAL	NF	CDN	FORE	TO
Staff and Labour Costs				x,xxx				
Materials				x,xxx				
Subcontracts				x,xxx				
Other				x,xxx				
Total	x,xxx	x,xxx	x,xxx	x,xxx	x,xxx	x,xxx	x,xxx	

Amounts reported should be reconciled to amounts invoiced for the period.

Invoice #	Date	Amount	Am
		x,xxx	
		x,xxx	
		x,xxx	
		x,xxx	

Appendix V

Husky Energy Diversity Plan

WHITE ROSE PROJECT

DIVERSITY PLAN

October 2003

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1.0 Introduction

Husky Oil Operations Limited, and its parent company, Husky Energy Inc. (together, "Husky"), believe that an effective employment and business diversity strategy is important to the success of the White Rose Project and the future development of the Newfoundland and Labrador offshore oil and gas industry. Diversity initiatives have the potential to expand the petroleum industry's labour pool at a time when it is experiencing shortages in some trades, and these are forecast to increase. Such initiatives also provide Husky and its contractors access to a wider range of capabilities, improve worker retention, and contribute to healthy and productive working environments.

The White Rose Project Diversity Plan facilitates the access of designated groups (women, aboriginal peoples, visible minorities and persons with disabilities) to employment and training and to opportunities to bid on contracts for the supply of goods and services, on the Project. The Plan applies to Husky and its contractors operating or hiring in Canada on the White Rose Project, and to both the development and operations phases of the Project.

1.1 Diversity Requirement

Under Section 45(4) of the *Atlantic Accord Implementation Acts*, the Canada-Newfoundland Offshore Petroleum Board (CNOPB) may require that:

"*Any Canada-Newfoundland benefits plan include provisions to ensure that disadvantaged individuals or groups have access to training and employment opportunities and to enable such individuals or groups or corporations owned or co-operatives operated by them to participate in the supply of goods and services used in any proposed work or activity referred to in the benefits plan.*"

The Acts specify that the provision, under Section 45(3)(b), that a collective agreement may not frustrate access to training and employment opportunities for residents of the Province, applies equally to disadvantaged individuals.

The CNOPB White Rose Project Decision Report (Decision 2001.01) required, as Condition 9, that Husky "submit a report for approval by the Board describing its approach to affirmative action as contemplated in subsection 45(4) of the Legislation." (p. 35)

This Diversity Plan addresses this requirement by documenting Husky's approaches, principles, process and initiatives for addressing diversity goals during the development and operations phases of the Project. As such, it supplements the Human Resource Plans prepared in response to the CNOPB White Rose Decision Report Condition 2 and builds on the White Rose Project Canada-Newfoundland Benefits Plan.

The Benefits Plan notes that Husky's Workforce Diversity Policy will be enforced throughout the Project, and that Husky will require that White Rose contractors operating or hiring in Canada act in a manner consistent with it. Under this Policy, Husky:

- Is committed to building a work environment that is free of discrimination and harassment;
- Will ensure that its employment policies are implemented in a fair manner and are free of discrimination and barriers;
- Is committed to the principle of fair representation of the designated target groups at all levels of the organization; and
- Will take special measures to facilitate the full participation of under-represented designated groups at all levels of the organization. (Benefits Plan, p.30)

The Husky Workforce Diversity Policy uses a very broad definition of diversity, stating that it 'can take many forms: differences in training, experience, gender, age, ethnic background, work or communications styles, and so on.' However, in line with the above references to designated target groups, and the Decision Report reference (p.24) to the federal *Employment Equity Act*, this Diversity Plan focuses on the four groups designated under federal legislation: women, aboriginal peoples, visible minorities, and persons with disabilities.

1.2 Diversity Plan Responsibilities

Further to the above requirement, and consistent with the commitments made in the Benefits Plan and the White Rose Project Construction Phase Human Resources Plan, Husky has the primary responsibility for advancing diversity throughout the Project. This includes: providing leadership in developing and implementing this Plan; advocating and supporting relevant diversity initiatives; reporting on Project diversity to the CNOPB; maintaining a liaison with other stakeholders, including community groups; and, holding an annual Diversity Plan Workshop. Husky's corporate-wide diversity experience, which includes its involvement in the Federal Contractors Program and its respectful workplace initiative, will be important here, providing a valuable source of information and expertise.

The leadership responsibility includes Husky serving as an example in meeting the Plan's requirements in respect of its own Project activities, such as putting in place the necessary organizational resources, setting diversity targets, and monitoring and reporting on its success in meeting targets, including by submitting an annual Diversity Report.

Given that contractors and sub-contractors are undertaking much of the Project work, they have a critical role to play in the Diversity Plan. Husky's Canada-Newfoundland Benefits Guidelines, which encompass the provisions of the Diversity Plan, are a contractual obligation for all companies involved in the White Rose Project. Contractors and sub-contractors must adhere to the Guideline's philosophy and guiding principles, and meet its requirements.

In implementing the Diversity Plan, the main Project contractors, selected by Husky on the basis of the amount of work they are undertaking or subcontracting in Canada, must: put in place of various organizational requirements: set diversity targets; and monitor and report to Husky their success in meeting targets, including by submitting annual Diversity Reports. They must also seek to ensure their sub-contractors meet the Plan's requirements.

1.3 Diversity Plan Format

The rest of this Diversity Plan has the following format:

- Section 2.0 describes the distinctive features of the White Rose Project that have shaped the design of the Plan, and the principles that underlie its approach to diversity.
- Section 3.0 describes the process that the Plan uses to advance diversity throughout the Project. It describes: the organizational requirements Husky and the main contractors have to satisfy in order to integrate diversity into the way they do their White Rose business; the diversity target setting, monitoring and reporting process that is used; and a number of Husky initiatives designed to support the planning process.
- Section 4.0 provides Husky and its contractors with guidance in undertaking their diversity planning. It outlines five topics that have shown to be important in delivering diversity: Information and Communications; Employee Recruitment and Selection; Employee Development; Working Environments; and Contracting Goods and Services. For each topic, it describes actions they may want to consider in their diversity planning.
- Section 5.0 provides a short summary statement of the planning goals and process.

Appendices provide additional materials designed to assist Husky and its White Rose Project contractors in implementing the Diversity Plan. These include:

- A checklist of diversity topics and appropriate actions;
- A list of community groups and government agencies able to provide advice and assistance in addressing diversity; and
- The Human Resources Development Canada designated group definitions.

2.0 Approach

The White Rose Project has some distinctive features that have shaped the design of this Diversity Plan:

- It has two main phases, construction and operations, each of which involves different activities, companies, working environments, skills and employees;
- The first of these phases involves engineering and construction companies and workers in relatively short-term activity, while the operations phase provides longer-term employment and business opportunities;
- In both phases, the great majority of workers will be employed by contractors, with relatively few working directly for Husky;
- The Project involves Canadian and non-Canadian companies and managers with different national and business cultures, which may result in them using different approaches to employment and contracting issues; and
- Some personnel work only part-time on the White Rose Project, combining it with work on other projects and initiatives.
- In response to these characteristics, the Diversity Plan is flexible in that it:
- Allows Husky and its main contractors to develop quantitative targets and commit to initiatives that are appropriate to their organization and activities, and to labour market constraints;
- Uses an iterative process whereby Husky and its main contractors establish diversity targets and monitor success in meeting them, with the monitoring leading to the establishment of new targets and initiatives; and
- Emphasizes collaboration between Husky, its main contractors, regulators and community groups, so as to access different networks and share expertise and lessons.

2.1 Diversity, not just Equal Opportunity

It is important to note that, consistent with the Atlantic Accord Implementation Acts and the Federal Employment Equity Act, this Plan is about more than just removing discrimination and bias in employment and contracting policies and practices. It is a proactive initiative that seeks to use a range of interventions to increase the representation of designated groups in the White Rose Project labour force and the involvement of corporations owned or co-operatives operated by them in White Rose related business.

2.2 A Diversity Culture

Just as it has been seen that occupational safety can only be achieved when the companies involved have a safety culture, so it is recognized that diversity can only be achieved if it is encouraged and supported at all levels of the different companies involved. This requires that they develop a 'diversity culture,' whereby diversity is the responsibility of all their personnel. The aim is to make diversity a normal part of doing business for Project companies.

2.3 Small Steps/Large Results

It makes sense to concentrate the effort in areas where the potential for change, measured quantitatively (for instance, in terms of the numbers of jobs or value of contracts), is greatest. However, implicit to the concept of a diversity culture is the idea that it has effects throughout the Project. This is very desirable, because even small initiatives can yield major benefits. For example, a small increment in any designated group's representation in all or part of a company can provide examples and role models that can have significant long-term effects.

2.4 Diversity throughout the Value Chain

As was noted above, this Plan applies to White Rose Project companies operating or hiring in Canada. This includes Husky itself and its contractors, whether involved in the development or operations activity. Husky has the lead responsibility for developing and implementing this Diversity Plan. However, this responsibility is shared with Husky's main contractors, which must both meet the requirements of the Plan, and seek to have their subcontractors meet them.

2.5 Working Together

Many of the companies involved in the White Rose Project can contribute experience in addressing diversity. Some are registered under the Federal Contractors Program and they and others have adopted employment equity or other diversity initiatives locally, nationally and globally. Other companies may be relatively small and inexperienced in addressing diversity concerns. Accordingly, the Plan includes a number of initiatives that facilitate an exchange of information among companies working on the Project, such that they can learn from each other.

2.6 Working with the Community

A number of community groups and government agencies represent the employment and business interests of the four designated groups. Their specialized information and networks allow them to advise and assist Husky and its contractors in achieving diversity throughout the White Rose Project. They have contributed to the development of this Plan and, through a number of specified initiatives, are critical partners in its implementation. A list of these agencies and groups is provided in Appendix 2.

3.0 The Diversity Planning Process

This section of the Plan describes the planning process that is used to advance diversity throughout the Project. It describes, first, the organizational requirements Husky and the main contractors[1] have to satisfy in order to integrate diversity into the way they do their White Rose business. It then outlines the Plan's target setting, monitoring and reporting process. Lastly, it describes the White Rose Project Diversity Committee and a number of Husky initiatives designed to support the diversity planning process.

3.1 Organizational Requirements

Integrating diversity into the way White Rose Project companies do business requires the leadership of senior management and the full commitment of all personnel responsible for employment, training, succession planning and the contracting of goods and services. In order to integrate diversity fully into the Project, Husky and each of the main contractors must:

- Assign overall responsibility for diversity to a senior manager;
- Assign specific areas of responsibility to key managers/personnel;
- Establish a budget and resources; and
- Establish targets and a monitoring mechanism.

3.2 Setting Targets

Targets are necessary if diversity initiatives are to be effective, and their effectiveness measured. Husky and each of the main White Rose contractors must assemble and review data on diversity and put in place and commit to annual targets to be achieved for the designated groups. The targets take the form of both process and outcome targets.

Process Targets*:* These are the actions that will be taken over the course of the year to support outcome targets. They include actions such as are described in Section 4.0, in the areas of Information and Communications, Employee Recruitment and Selection, Employee Development, Workplace Environments, and Contracting Goods and Services.

Outcome Targets*:* These are reasonable but ambitious numerical measures of change that will be achieved over the year ahead. Outcome targets for women, aboriginal peoples, visible minorities and persons with disabilities can take the form of measures of change in their shares of any or all of the following:

- Positions in the current workforce, as a whole and within specific occupational categories;
- Hires, including those hired for full time, part time and contract positions;
- Cooperative student work terms;
- Promotions;

[1] Husky will select the main contractors on the basis of the amount of work they are undertaking or subcontracting in Canada for the White Rose Project. This will normally be measured in terms of the person-years of employment involved.

- Special assignments or other forms of employee development; and
- Resumes in a company database.

Appropriate actions in setting targets include:

- Review current employment data and prospective hiring;
- Review current policies and practices respecting recruitment, selection and contracting;
- Identify and evaluate opportunities to implement actions to address diversity, and select and commit to those that will be implemented;
- Establish numerical outcome targets resulting from these initiatives; and
- Put in place a process to monitor the success in meeting targets.

3.3 Monitoring and Reporting

Husky and each of the main White Rose contractors must engage in internal monitoring so as to measure their success in meeting their targets. In addition, two mechanisms track diversity on the Project and report on it to the CNOPB and other stakeholders. These are quarterly and annual employment reports, and annual Diversity Reports.

3.3.1 Employment Data

The White Rose Human Resources Plan requires that White Rose contractors report gender-based employment data to Husky on a monthly and annual basis. These data are provided, in Quarterly and Annual Reports, to the CNOPB. They are also publicly available on the White Rose website and used in public information materials.

3.3.2 Diversity Reports

Husky and its main White Rose contractors must prepare annual Diversity Reports and submit them to Husky by December 31st of each year[2]. These reports build on the above-noted employment data, so as to review progress in achieving diversity over the past year, and set out diversity targets for the year ahead.

Progress in the Past Year: This describes the past year's trends and the current situation. It generally:

- Describes changes in the gender composition of the company's workforce as a whole, and components thereof, based on the monthly and annual employment data;
- Provides supplemental descriptive information, where possible, on changes in the numbers of aboriginal people, visible minorities and persons with disabilities;
- Describes changes in the composition of resume and contractor databases;
- Provides information on the awarding of contracts to supply goods and services; and
- Lists diversity initiatives implemented over the course of the past year.

[2] The initial, 2003, Diversity Reports must be submitted by July 31st 2003.

In each case this includes a comparison of the changes achieved over the past year, with the diversity targets set for it.

In some circumstances, the main contractors are encouraged to provide a supplemental report on actions that are not directly related to the White Rose Project itself. For example, some companies place Newfoundland and Canadian members of the designated groups in regular or coop positions on other projects and in other jurisdictions. Providing them with this experience and training can make an important contribution to diversifying the Canadian and Newfoundland workforces, and such initiatives should be listed in Diversity Reports.

Diversity Targets for the Year Ahead. These are reasonable but ambitious process and outcome targets (see Setting Targets, above) that the company commits to seek to achieve over the course of the year ahead.

3.3.3 Review Process

The Diversity Reports are subject to review by the Husky Benefits Group, which prepares, and provides the CNOPB with, an annual report summarizing diversity achievements and targets. In addition:

- The White Rose Project Diversity Committee (see below) reviews and discusses aggregate annual and quarterly information on diversity, including the overall achieved levels of diversity and diversity targets.
- Husky holds an annual Diversity Plan Workshop, as was described in the Benefits Plan (p.32) and noted in the Decision Report (p.34), which reviews diversity information and initiatives with its main contractors and other stakeholders, including community groups, the CNOPB and other government agencies. A summary report of the Workshop is submitted to the CNOPB and posted on the Project website.

3.4 The White Rose Project Diversity Committee

In order to facilitate the diversity planning process, Husky has established the White Rose Project Diversity Committee. It is comprised of the Regulatory and Administration Manager (Chair), the Manager, Corporate Diversity, the Husky Benefits Group, and a representative of each of the main White Rose Project contractors. This Committee:

- Reviews and discusses aggregate information on diversity, including the overall achieved levels of diversity and diversity targets;
- Provides liaison between Husky and the main Project contractors and co-ordinates their diversity initiatives; and
- Discusses the effectiveness of the Diversity Plan and related processes and, as appropriate, recommends change.

3.5 White Rose Diversity Initiatives

In order to support the process described above, Husky will also:

- Hold an initial meeting with representatives of the main White Rose Project contractors to introduce them to the Plan and its implementation;

- In partnership with community stakeholders, undertake a public information initiative to familiarize women with the Project and the types of employment, training and contracting opportunities associated with it; and
- Provide the main contractors with a range of baseline data and presentations on diversity in the population labour force, student population, etc.

4.0 Diversity Topics and Actions

This section of the Diversity Plan provides guidance to Husky and its contractors operating or hiring in Canada for the White Rose Project. It outlines five topics that experience on other large-scale industrial projects has shown to be important in delivering diversity:

- Information and Communications;
- Employee Recruitment and Selection;
- Employee Development;
- Working Environments; and
- Contracting Goods and Services.

These are topics that Project companies should consider in their own diversity planning. For each of them, this section of the Plan provides a description of appropriate actions, based on best practice experiences implementing diversity in Husky corporately, and in other companies and industries. (A Checklist of topics and possible actions is provided in Appendix 1.)

The scope and scale of actions required of each White Rose Project company varies according to such things as its size, activities and the policies and practices it has already implemented. For this reason, this Plan is not prescriptive, but instead indicates the topics that companies must address, and types of actions they have to take, in their diversity planning.

In implementing these actions, contractor representatives may wish to consult with Husky's White Rose Benefits Group, Husky's corporate Manager, Diversity, and representatives of the community groups and government agencies identified in Appendix 2.

4.1 Information and Communications

The content and means of provision of information has a major role to play in achieving employment diversity. Appropriate actions Husky and its contractors may take in addressing this topic include:

- Hold information sessions specifically targeted at designated groups;
- Have members of the designated groups represented in text and illustrations they use for promotional, motivational and information purposes, including handbooks, newsletters, posters and websites; and
- Review all text they use to see that it uses gender-inclusive and culturally sensitive 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 the current under-representation of the designated groups. There is, accordingly, a need to use recruitment procedures that actively encourage representatives of

designated groups to apply for all positions. This includes full-time, part-time, temporary and coop positions[3].

Appropriate actions Husky and its contractors may take in addressing this topic include:

- Establish guidelines for writing model job advertisements that aim to reach potential candidates from the designated groups;
- 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 designated group candidates in regular and coop student positions;
- Implement a system to document outreach recruitment initiatives;
- Establish relationships with community groups and work with them to identify and encourage designated group candidates;
- Implement a voluntary self-identification form for resumes and applications; and
- Implement a system to monitor the gender of persons with resumes on file.

4.3 Employee Development

It is important that representatives of designated groups be encouraged to, and assisted in, developing their capabilities and achieving promotion within White Rose Project companies. Appropriate actions Husky and its contractors may take in addressing this topic include:

- Consideration of diversity in the succession planning process whereby, over time, qualified Newfoundland residents and other Canadians replace non-Canadians;
- Consider the participation of designated groups 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

The work environment, and the presence of policies that address harassment and other concerns, can be critical to the retention in the workforce of representatives of designated groups. Appropriate actions Husky and its contractors may take in addressing this topic at White Rose Project workplaces include:

- Establish respectful workplace guidelines and a harassment policy;
- Designate a primary contact person for harassment inquiries;

[3] As was indicated in Section 1.0, the *Atlantic Accord Implementation Acts* provision that a collective agreement may not frustrate access to training and employment opportunities for residents of the Province, applies equally to disadvantaged individuals.

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

Special consideration should be given to workplace environments on the FPSO, rigs and support vessels, especially as they relate to the employment of women. This includes the development and implementation of policies that address gender in relation to personal privacy, recreation and leisure opportunities, the availability of appropriate tools and equipment, women's health and safety, and a respectful workplace free of harassment.

4.5 Contracting Goods and Services

The main White Rose Project contractors are required to make their subcontractors aware of their benefits obligations, including those relating to diversity. This includes obligations, further to the provisions of the Atlantic Accord Implementation Acts and the Decision Report, to enable members of designated groups, or groups or corporations owned or cooperatives operated by them, to participate in the supply of goods and services used in any proposed work or activity referred to in the Benefits Plan. Appropriate actions Husky and its contractors may take in addressing these contracting requirements include:

- Describe diversity requirements, respecting both employment and the supply of goods and services, in contracting documents (e.g., pre-qualification questionnaires, requests for expressions of interest, requests for proposals, and contracts);
- Encourage companies to liaise with community-based groups and government agencies regarding bidding opportunities; and
- Advise bidders that, as is the case with health and safety and environmental performance, diversity will be a criterion considered in scoring bids.

To facilitate scoring bids on diversity criteria, bidders should provide information on their diversity policies and practices, including:

- How they provide designated groups access to job and training opportunities arising from the contract activities;
- The number of women and persons from designated groups that they currently employ, in total and in different occupational categories; and
- How they ensure a supportive and respectful working environment for women and other designated groups.

5.0 Conclusion

Success in achieving diversity is important to the success of the White Rose Project and the future development of the Newfoundland and Labrador offshore oil and gas industry. This Plan establishes a non-prescriptive approach to diversity that involves, and addresses the needs of, all stakeholders. The planning process set out in the Plan requires that Husky and the main White Rose Project companies establish annual process and outcome targets, and provides guidance and sources of information respecting diversity issues and appropriate initiatives. The Plan includes a regular review process, involving regulators and community stakeholders, to monitor success in achieving diversity. It is anticipated that the review process will lead, not least, to a periodic updating of, and revisions to, the Diversity Plan over the life of the White Rose Project.

6.0 Appendices

6.1 Appendix A: Diversity Initiatives Checklist

6.2 Appendix B: Community Group And Government Agency Contacts List

6.3 Appendix C: Designated Group Definitions

6.1 Appendix A: Diversity Initiatives Checklist

This Checklist is designed to assist White Rose Project companies in identifying actions, and appropriate responsibilities for them, to achieve diversity. It should be noted that the actions described are not mandatory. They are the types of actions that have been found effective by other companies engaged in similar activities, and as such should assist White Rose companies in thinking about their own initiatives and process targets.

DIVERSITY INITIATIVES CHECKLIST 2003 - 2005

Four Quarters: (1) Jan-March (2) April-June (3) July-Sept (4) Oct-December

Indicate for each item selected the quarter/s in which they will be implemented and person responsible.

ACTIVITY	2003	2004	2005	Responsibility
ORGANIZATIONAL REQUIREMENTS				
Assign overall responsibility for the Diversity Plan to a senior manager.				
Include Diversity Plan as a standing item on agenda of project meetings.				
Assign specific areas of responsibility for Diversity Plan to key managers/personnel.				
Develop a list of competencies related to Diversity Plan and incorporate into management job descriptions.				
Prepare a budget and allocate resources for development and implementation of Diversity Plan.				
Establish 3-year projections for project training and employment opportunities.				
SETTING TARGETS				
Establish designated group targets in succession plan to replace non-Canadian workers.				
Establish designated group targets for all training and employment (full-time and part-time) opportunities.				
Establish designated group targets for promotions and special assignments.				
Establish designated group targets in filling student work terms.				
Establish separate targets to provide work terms for persons with disabilities.				
Establish targets re numbers of resumes on file (inventories) for designated group candidates.				
Establish process targets (qualitative) to support achievement of outcome targets (quantitative).				
Invest in long-term change through involvement with Techsploration and OTT Programs.				
Offer an apprenticeship program for designated group candidates in key occupational areas.				
Designate a number of junior project positions for designated group candidates.				

DIVERSITY INITIATIVES CHECKLIST 2003 - 2005

Four Quarters: (1) Jan-March (2) April-June (3) July-Sept (4) Oct-December

Indicate for each item selected the quarter/s in which they will be implemented and person responsible.

ACTIVITY	2003	2004	2005	Responsibility
MONITORING AND REPORTING				
Establish internal reporting mechanisms to capture recruitment and hiring data on women.				
Consult with Diversity Committee re reporting mechanisms for the other designated groups.				
Establish internal mechanisms to monitor success in achieving employment/training targets.				
Review participation levels for women quarterly and annually using Husky's data reports to CNOPB.				
Review participation levels for other designated groups based on narrative data.				
Prepare and submit to Husky a detailed annual Diversity Report.				
Attend the annual Diversity Plan Workshop to review project's overall progress.				
Review outcomes and, as necessary, revise internal diversity plans.				
WHITE ROSE PROJECT DIVERSITY COMMITTEE				
Assign a senior manager to represent company on the Project Diversity Committee.				
Have representative attend quarterly meetings of the Committee.				
Have representative provide ongoing input regarding internal successes and challenges re diversity.				
Establish a mechanism for representative to share information from Committee meetings internally.				
Maintain a Diversity Committee binder that is available internally to managers and staff.				
Participate in an annual review of the effectiveness of the Committee.				
INFORMATION AND COMMUNICATIONS				
Attend the Husky briefing session on implementation of the Diversity Plan.				
Develop an internal communication strategy to share information on the Diversity Plan.				

DIVERSITY INITIATIVES CHECKLIST 2003 - 2005

Four Quarters: (1) Jan-March (2) April-June (3) July-Sept (4) Oct-December

Indicate for each item selected the quarter/s in which they will be implemented and person responsible.

ACTIVITY	2003	2004	2005	Responsibility
Involve community-based agencies in dissemination of information on employment/training opportunities.				
Work co-operatively with training institutions in dissemination of information.				
Incorporate diversity component into all public information (websites, brochures, presentations, etc.).				
Provide information on the Diversity Plan to all employees.				
Obtain feedback from employees re work environments, work/life balance, and accommodation issues.				
Advise Diversity Committee of educational needs that may be more efficiently addressed through that body.				
Participate in industry initiatives to raise awareness of diversity (annual conferences, industry publications, etc.).				
Participate in White Rose information sessions targeted to women.				
EMPLOYEE RECRUITMENT AND SELECTION				
Planning				
Develop a policy of gender-balance for project opportunities, where availability supports this principle.				
Develop effective working relationships with key persons/agencies for the designated groups.				
Develop effective working relationships with training institutions re referrals of designated group candidates.				
Implement special measures to create inventories of candidates from designated groups.				
Review “Application for Employment” and recruitment procedures (including on-line) to eliminate bias.				
Access expertise on accommodation of persons with disabilities at the recruitment and hiring stages.				
Job Descriptions and Job Advertisements				
Review credentials and experience requirements for key positions to ensure they are not inflated.				
Review content of job advertisements to ensure information is provided in a clear, concise manner.				

DIVERSITY INITIATIVES CHECKLIST 2003 - 2005

Four Quarters: (1) Jan-March (2) April-June (3) July-Sept (4) Oct-December

Indicate for each item selected the quarter/s in which they will be implemented and person responsible.

ACTIVITY	2003	2004	2005	Responsibility
Review descriptive language such as mainstream personality attributes for adverse impact.				
Review advertisements for gender-inclusive and culturally appropriate language.				
State in ads that "We encourage applications from women, persons with disabilities, visible minorities, and aboriginal peoples."				
Work with community-based agencies to advertise jobs (phone,fax, newsletter, and web site links) .				
Access the expertise of Diversity Committee as a resource for reviewing job descriptions and job ads.				
Screening and Selection				
Implement a system to track and monitor all applications from designated groups.				
Interview all designated group candidates who meet the basic job criteria.				
Use consistent, well-documented, procedures to screen candidates.				
Assign responsibility at a senior level for reviewing candidate files before job offers are made.				
Prior to a job offer, assess the need for further recruitment of designated group candidates.				
Distribute a copy of the CHRC's "Guide to Recruitment and Screening" to personnel involved in hiring.				
Provide training for managers on bias-free selection practices and behaviour descriptive interviewing.				
Assign responsibility at senior level for reviewing all hires in relation to Diversity Plan targets.				
Provide training to managers on integration issues for women and the other designated groups.				
EMPLOYEE DEVELOPMENT				
Obtain input regarding obstacles to advancement in the oil and gas industry.				
Investigate and adopt best practices of other companies (e.g. mentoring programs).				

DIVERSITY INITIATIVES CHECKLIST 2003 - 2005

Four Quarters: (1) Jan-March (2) April-June (3) July-Sept (4) Oct-December

Indicate for each item selected the quarter/s in which they will be implemented and person responsible.

ACTIVITY	2003	2004	2005	Responsibility
Incorporate targets for women and other designated groups in the project's succession plan.				
Set targets re appointments to project committees, boards, work teams, etc.				
Assist women and designated group employees to access developmental opportunities and management training.				
Create junior management positions to create a bridge for women and designated groups to senior levels.				
Monitor progress and modify approaches to ensure achievement of desired outcomes.				
WORKING ENVIRONMENTS				
General				
Draft new (or review current) company policy on harassment and respectful workplace.				
Distribute a copy of the harassment policy and procedures to all managers and employees.				
Designate a primary contact person for harassment related inquiries.				
Ensure that policy is posted at all work sites.				
Provide training to managers and supervisors responsible for harassment policy.				
Provide information sessions for employees on respectful workplace and harassment.				
Conduct an exit interview with employees who voluntarily leave a position.				
FPSO, Rigs, Support Vessels				
Expand company policy to include guidelines that address gender issues specific to these environments.				
Obtain feedback on harassment, personal privacy, and respect for female managers and employees.				
Implement measures to deal effectively with complaints of harassment, disrespect, or gender bias.				
Obtain feedback from women regarding the quality of their down time (recreation and leisure).				

DIVERSITY INITIATIVES CHECKLIST 2003 - 2005

Four Quarters: (1) Jan-March (2) April-June (3) July-Sept (4) Oct-December

Indicate for each item selected the quarter/s in which they will be implemented and person responsible.

ACTIVITY	2003	2004	2005	Responsibility
Check on provision of tools, equipment, and clothing that are modified for women.				
Investigate and address health and safety issues specific to women working in these environments.				
Accessibility, Accommodation, Health and Safety				
Develop a policy on legal duty to accommodate through Diversity Committee.				
Communicate accommodation policy to all managers and staff.				
Conduct an accessibility audit of project work sites and place on file with Diversity Committee.				
Identify accessibility issues that are relatively easy to address and implement changes.				
Assess adequacy of women's washroom and change facilities at all work sites.				
Appoint women to Health and Safety Committees.				
Identify risk factors specific to women, including potential risks during pregnancy and following childbirth.				
Balancing Work and Family				
Assess the potential for flexibility in work schedules to assist employees with work/life balance.				
Develop guidelines to deal fairly and consistently with requests for flexibility in working schedules.				
Obtain feedback from employees on issues that affect work/life balance.				
Monitor for adverse impact on recruitment and retention of women in certain occupational areas.				
CONTRACTING GOODS AND SERVICES				
Involve community-based agencies in dissemination of information on contracts for goods and services.				
Implement special measures to attract bids from members of the designated groups.				

DIVERSITY INITIATIVES CHECKLIST 2003 - 2005

Four Quarters: (1) Jan-March (2) April-June (3) July-Sept (4) Oct-December

Indicate for each item selected the quarter/s in which they will be implemented and person responsible.

ACTIVITY	2003	2004	2005	Responsibility
Assign priority to bidders who indicate a commitment to providing employment opportunities for designated groups.				
Include the White Rose Project diversity policy statement in the information package provided to bidders.				

6.2 Appendix B: Community Group and Government Agency Contacts List

Information on diversity issues and initiatives is available from Husky's White Rose Benefits Group and its corporate Manager, Diversity. In addition, a number of community groups and government agencies have a wide range of information and expertise related to diversity in general and related to specific designated groups. These include the groups and agencies described below.

Women in Resource Development Committee (WRDC)
354 Water Street
Suite 427
St. John's, NL
A1C 1C4
Contact: Lorraine Michael, Executive Director
TEL: 709 738 3713
FAX: 709 738 3743
E-mail: lmichael@wrdc.nf.ca
www.WRDC.nf.ca

WRDC was created to foster an environment that will increase the participation of women in the trades and technology sectors in Newfoundland and Labrador. WRDC is committed to increasing women's participation in the oil and gas industry. It does so by raising awareness of career options among women, and by offering support to those seeking training and employment there. It encourages the establishment of partnerships with industry and training institutions to develop programming that decreases the barriers to recruitment and retention of women.

WRDC initiatives include the Orientation to Trades and Technology Program, on the Burin, Corner Brook, Happy Valley-Goose Bay, and Prince Philip Drive Campuses. (contact Francine Couture, Program Advisor – fcouture@wrdc.nf.ca for information on the OTT Program) and the Techsploration Program (contact: Jan Foley, Education Coordinator: jfoley@wrdc.nf.ca).

Women in Science and Engineering (WISE)
38 Pearson Street, Suite 293
St. John's
A1A 3R1

Contact: Kim Keating, President

TEL: 709 754-1435
FAX: 709 738-8840
Email: wise@calvin.stemnet.nf.ca
www.stemnet.nf.ca/WISE

Women in Science and Engineering (WISE) is a non-profit, volunteer organization which aims to increase the participation of women in science, technology, engineering and mathematics careers by increasing awareness that these professions are rewarding and exciting options for women. WISE also provides mentoring, professional development and networking opportunities to facilitate the success of women in these fields, and advocates for equitable workplaces.

Women's Policy Office
P.O Box 8700
St. John's, NL
A1B 4J6

Contact: Sheree MacDonald, Assistant Deputy Minister

TEL: 709 729 5098
FAX: 709 729 2331
Email: smacdonald@mail.gov.nf.ca

The Women's Policy Office is the central agency within government co-ordinating the development of programs and policies for the benefit of women in the province. It is a branch of Executive Council. The Assistant Deputy Minister (Women's Policy) reports directly to the Minister Responsible for the Status of Women. The mandate of Women's Policy Office is to achieve social and economic equality for all women in Newfoundland and Labrador.

Workplace Equity Program
Labour Program, Human Resources Development Canada
P. O. Box 8548
St. John's, NL
A1B 3P3

Contact: Helen Gosine, Workplace Equity Officer

Tel: 709 772-7355
Fax: 709 772-7356
Email: helen.gosine@hrdc-drhc.gc.ca

The Workplace Equity Program at Human Resources Development Canada (HRDC) consists of three programs: the Legislated Employment Equity Program (LEEP); the Federal Contractors Program (FCP); and the Equal Pay Program (EPP). Employers in sectors that fall within federal jurisdiction, as well as companies with 100 or more employees, who wish to bid on contracts of over $100,000.00 to provide goods and services to the government of Canada, are required to implement employment equity in their workplaces. The Workplace Equity Officer is available to provide assistance, guidance and support to employers in their quest to implement employment equity.

Association for New Canadians
P.O. Box 2031
St. John's, NL
A1C 5R6

Contact: Eileen Kelly-Freake, Program Co-ordinator / Counsellor

TEL: 709 579 1780
FAX: 709 579 1894
Email: ekf@nfld.net

The Association for New Canadians is a non-profit organization that provides settlement services and integration programs for immigrants and refugees throughout Newfoundland and Labrador.

The Association for New Canadians offers a targeted employment program that is aimed at assisting newcomers in a variety of career related activities, ranging from resume development and document assessment, to post-secondary access and labour market entry.

St. John's Native Friendship Centre
716 Water Street
St. John's, NL
A1E 3B4

Contact: Myrtle Blandford, Executive Director

TEL: 709 726-5902
FAX: 709 726-3557
Email: mail@friendshipcentre.nf.net
mblandford@friendshipcentre.nf.net
www.friendshipcentre.nf.net

The Native Friendship Centre is a service agency for aboriginal people. It acts as a liaison with educational facilities including elementary schools, high schools, and post-secondary institutions to ensure that aboriginal students receive adequate information and counselling regarding their studies and life in St. John's. The Centre organizes job skills training programs with employers in the St. John's area. These programs are usually of a short-term nature and involve on-the-job training so those individuals may obtain practical experience. A long-range goal is for trainees to qualify for positions in their own communities or to start their own business. The Centre also administers a Multiculturalism Scholarship program.

Labrador Inuit Association
95 LeMarchant Road, Suite 302
St. John's, NL
A1C 2H1

Contact: Lucy Brennan, Education Administrator

TEL: 709 754 2587
FAX: 709 754 2364
Email: lbrennan@nunatsiavut.com

The Labrador Inuit Association (LIA) represents approximately 5400 Inuit and Kablunangajuit of Labrador. The LIA has 11 basic aims and objectives, which include:

- Promoting Inuit aspirations through the democratic system with regard to all matters affecting Inuit of Labrador;
- Protecting the traditional hunting, fishing, Aboriginal and constitutional rights of the Inuit;
- Advancing the general welfare and well being of our people; and
- Negotiating the settlement of the land claim for the benefit of Labrador Inuit.

LIA is working very hard to ensure the Labrador Inuit get maximum benefits from the natural resources of our land and ocean and are currently working toward a land claim settlement. Until then, LIA will continue to represent the Labrador Inuit in all matters pertaining to education, health, housing, social justice, training and employment, language and culture.

Innu Nation
Sheshatshui, Labrador
A0P 1M0

Contact: Peter Penashue, President

TEL: 709 497-8398
FAX: 709 497-8396
Email: utshimau@innu.ca
www.innu.ca

The Innu Nation is the governing body of the Innu of Labrador and represents the collective rights and interests of approximately 1,700 Innu people in two communities, Sheshatshiu and Utshimassit (Davis Inlet). The Innu Nation's primary objective is to represent the Innu of Labrador in land rights (or comprehensive claims) and self-government negotiations. The Innu Nation works closely with the elected Band Councils in each community, supporting and assisting them in negotiations with governments to secure funding and local control over such vital services as health care, education, housing and social services programs.

Opening Doors Program
Employment Equity and Strategic Initiatives Division
Government of Newfoundland and Labrador
5th Floor, West Block, Confederation Building
P.O. Box 8700
St. John's, NL
A1B 4J6

Contact: Jim McDonald, Manager

TEL: 709 729-5881 TTY: 709 729 5441
FAX: 709 729-5446
Email: openingdoors@gov.nf.ca
http://www.gov.nf.ca/openingdoors/

The Employment Equity and Strategic Initiatives Division has as its mandate to increase the representation of persons with disabilities employed in the public service. The Division's programs and services include the **Opening Doors Program, Job Experience and Employment in the Public Service (JEEPS),** the **Opening Doors Wage Subsidy Initiative,** and an **Enabling Resource Centre.** As well, the Division maintains a large database of persons with disabilities and provides information, advice and training on issues related to employment.

Canadian Hard of Hearing Association-Newfoundland Chapter
(CHHA-NC)
Suite 103, 136 Crosbie Road
St. John's, NL
A1B 3K3

Contact: Leon Mills, Executive Director

TEL: 709 753-3224
FAX: 709 753 5640
Email: lmills@nfld.net
www.chha-nc.nf.ca

CHHA-NC is non-profit, charitable organization that strives to raise awareness of hearing loss and difficulties experienced by those living with this invisible disability. CHHA-NC has established an Employment Services program aimed at promoting and improving workplace accessibility for hard of hearing persons.

Canadian Paraplegic Association (CPA)
Newfoundland & Labrador - Head Office
280 Torbay Road, Suite W210
Bally Rou Place
St. John's, NL

A1A 5G6

Contact: Noel Browne, Executive Director

TEL: (709) 753-5901
FAX: (709) 753-4224

cpa.stj@canparaplegic.org

CPA is a non-profit organization promoting rehabilitation and socioeconomic well being, as well as providing vocational and employment counselling services to spinal cord injured and physically disabled individuals throughout the province of Newfoundland and Labrador.

Canadian National Institute for the Blind (CNIB)
70 Boulevard
St. John's, NL
A1A 1K2

Contact: Len Baker, Director of Rehabilitation - Atlantic Region

TEL: 754-1180
FAX: 754-2081
www.cnib.ca/divisions/nfllrd/index.htm

The CNIB is a national voluntary agency providing services to individuals across Canada to whom loss of vision is a central problem in personal and social adjustments. The CNIB also acts as a consultant and resource agency to the helping professions, government departments and private industry. Underlying all CNIB services and actions is the belief that blind or visually impaired individuals can be integrated into the mainstream of community life, according to their ability to function within that community.

Glenn Roy Blunden Centre
Student Affairs and Services
Smallwood Centre, Room 4007
Memorial University of Newfoundland
St. John's, NL
A1C 5S7

Contact: Ruth North, Student Affairs Officer

TEL: 737-2156
TTY: (709) 737-4763
Email: blundon@mun.ca

The Blundon Centre co-ordinates on-campus services and activities for students who have disabilities (or short-term illnesses or injuries) associated with learning, vision, hearing, mobility, chronic illnesses, and psychiatric conditions.

Note: A more complete listing of agencies that advocate on behalf of persons with disabilities and offer various types of support and services is included on the provincial government Web Site www.gov.nf.ca/openingdoors

6.3 Appendix C: Designated Group Definitions

According to the Employment Equity Act (amended 1995):

"Designated groups" means women, aboriginal peoples, persons with disabilities and members of visible minorities;

"Aboriginal peoples" means persons who are Indians, Inuit or Métis;

"Members of visible minorities" means persons, other than aboriginal peoples, who are non-Caucasian in race or non-white in colour;

"Persons with disabilities" means persons who have a long-term or recurring physical, mental, sensory, psychiatric or learning impairment and who:

- (*a*) Consider themselves to be disadvantaged in employment by reason of that impairment, or
- (*b*) Believe that a employer or potential employer is likely to consider them to be disadvantaged in employment by reason of that impairment,

And includes persons whose functional limitations owing to their impairment have been accommodated in their current job or workplace.

For further information on the Employment Equity Act and a list of resources and tools related to employment equity, see Labour Canada's Workplace Equity Web Site:

http://info.load-otea.hrdc-drhc.gc.ca/workplace_equity/home.shtml.

Appendix VI

PSN Local Fabrication Capacity and Labour Market Survey

Assessment of Newfoundland and Labrador Fabrication Facilities and Labour Capability to Develop the Husky Expansion Project

Prepared for:

Husky Oil Operations Limited
White Rose Field Development Project Team

Prepared by:

Production Services Network Canada Inc.

D1	July 25 2007	Issued to Client
D0	July 16 2007	Issued for Review
Revision	Date	Description

Confidentiality Statement

This report is considered private and confidential by Husky Oil Operations Limited and its partners in the White Rose expansion project. The industry information and labour data contained in the report are derived from various sources and estimates from the Proponents. The Proponents believe that the data and information are generally indicative of market conditions at the time of issuing this report. Information contained in this report is subject to change.

This report presents a broad discussion of fabrication capabilities and the associated labour capacity in Newfoundland and Labrador. The report is based on conceptual information provided by Husky Oil Operations Ltd. that is preliminary in nature and subject to change pending further engineering, design and project definition. Husky Oil Operations does not endorse or recommend any commercial services identified in this report. The views and opinions expressed by the authors of this report do not necessarily reflect those of Husky Oil Operations Ltd.

Executive Summary

Using the information provided from the fabrication companies who responded to the study questionnaire and communications with the Trade Union representatives, the Study Team has assessed the fabrication facility and labour capability to execute the scope of work for the Husky Expansion Project. Various factors have been included within the assessment including:

- Previous major project experience
- Past, current and predicted performance levels from fabricators
- Other major projects which fall within the Husky Expansion Project timeline
- Probability of the workforce returning to the province from other locations such as the Alberta Oilsands

Based on information received the study team concludes that there are sufficient fabrication facilities to execute the scope of work, the main facilities being Bull Arm fabrication facility at Trinity Bay, and the Marystown Shipyard and Cow Head Fabrication Site, with a number of smaller companies throughout the province.

With regards the availability of sufficient skilled personnel to execute the workscope, the Study Team have indicated potential shortfalls in Piping, Instrumentation, Mechanical, HVAC, Coatings and Insulation trades persons if all other identified major projects proceed as per the timelines developed from current information. Depending upon which other projects proceed as per the predicted timelines and the sequencing of activities during the construction and commissioning phases there may or may not be shortfalls, however vigilance is required throughout to ensure adequate levels of resourcesare available, particularly regarding the Piping and Instrumentation disciplines.

In summary it is the opinion of the Study Team that the activities identified within the outline scope of work for the Husky Expansion Project can be executed within the province, although one area of potential concern is the availability of adequate numbers of certain skilled discipline personnel to meet the project schedule. This will need to be monitored closely and necessary actions taken to ensure the project demands are met.

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Abbreviations

BASC	Bull Arm Site Corporation
bbl/day	Barrel per Day
CAW	Canadian Auto Workers
EPC	Engineering, Procurement and Construction
GBS	Gravity based Structure
ITT	Invitation to Tender
km	Kilometer
KOS	Kiewit Offshore Services
m^2	Square Meter
NC	Numerically Controlled
NDE	Non Destructive Engineering
NECL	North Eastern Constructors Limited
NL	Newfoundland and Labrador
NLBCTC	Newfoundland and Labrador Building and Construction Trades Council
NR	Non Response
PKS	Peter Kiewit and Sons
PM	Preventive Maintenance

1.0 Introduction

PSN Canada (PSN) is pleased to present "Assessment of Newfoundland & Labrador Fabrication Facilities and Labour Capability to Develop the Husky Expansion Project." The report was prepared on behalf of Husky Oil Operations Ltd. and its joint venturers, to investigate the extent to which Newfoundland and Labrador (NL) has the required fabrication and labour capacity to participate in the Husky Expansion Project, hereafter referred to as "the Project".

The assessment of future fabrication and labour capacity involves many variables. The Study Team has considered the best available information and developed a reasonable set of parameters for the capacity assessment. The results are not intended to be an absolute measure of fabrication or labour capacity, but provide a guide that can be used to support decision making for the development of Husky's future expansions.

1.1 Project Background

Husky Oil Operations as operator of the White Rose Field is proposing to develop adjacent pools by subsea tieback to the SeaRose FPSO. These developments will result in significant extension of the production plateau and life of the White Rose oil field. Fabrication of project components is anticipated to begin in 2008, with installation expected in 2010.

In the case of North Amethyst a development application is required in accordance with the provisions of the Atlantic Accord and C-NLOPB regulations. In accordance with the legislation a Benefits Plan must be submitted as part of the development application. In order to finalize this plan an assessment of the capability of local facilities and workforce to support the expansion project is required.

1.2 Study Objective

The objective of the study is to produce a report which assesses the capabilities of local fabrication facilities and workforce to carry out the following work scope in the province:

- Topsides modular pre-fabrication up to 2000 tonnes
- Integration and commissioning
- Brownfield topsides modifications
- Operations and maintenance turnaround scope such as tank cleaning, structural work, fabric maintenance, piping modifications, heavy rotating equipment maintenance and instrument testing
- Subsea equipment mechanical pre-fabrication and testing
- Subsea equipment site integration testing and field preparation

Note: The study has focused on Newfoundland only; Labrador facilities and capabilities are not included.

The study addresses the following issues:

- Description and inventory of suitable fabrication facilities including status of yards, major capabilities and operator/owner arrangements
- Description of local fabrication contractors, major strengths, past history and capacity to supplement capacity by joint venture with strategic partners
- Capability of contractors to deploy a work force in the current environment highlighting critical disciplines and potential limitations
- Description of previous project structures and utilization of fabrication facilities highlighting differences between the current environment and the past project environment
- Conclusion as to the suitability of local fabrication facilities and contractors to adequately address and liquidate the proposed scope

Essentially there are two primary questions to be answered:

- Is there fabrication capacity within the province to meet the demands of the Project as currently defined?
- Are there adequate skilled resources within the province to execute the scope of work within the specified period of time?

1.3 Report Structure

Section 1 outlines the study objectives and study scope of work.

Section 2 contains Husky Expansion background information, including a brief description of the scope of work for each phase of the Project.

Section 3 assesses the capacity of Newfoundland and Labrador (hereafter referred to as NL) to support the Project in terms of fabrication facilities.

Section 4 presents a detailed labour supply/demand analysis, which compares the estimated labour requirements by trade and by project component with the labour supply estimated for NL. An assessment of the impact of potential simultaneous projects is included.

Section 5 contains conclusions derived from the fabrication facility and labour capability assessment.

Appendices A and B of the report contain quantitative and qualitative data on the fabrication capacity and labour force capability resident within Newfoundland and Labrador.

2.0 Project Scope Definition

Husky Oil Operations proposes to develop adjacent pools by subsea tieback to the SeaRose FPSO. Fabrication of project components for the Project is anticipated to begin in 2008, with installation expected in 2010. Major work scopes are described below.

The following is a high level description of the proposed activities:

2.1 Module Fabrication

Module fabrication scope includes topsides module fabrication of up to 2000 tonnes. It is assumed that labour demand for the various trades will be distributed in a manner similar to previous module fabrication in the province.

2.2 Brownfield Topsides Modifications

Brownfield topsides modifications include work required to allow integration of the new topsides module. This may also include modifications to the turret and other areas as required.

2.3 Operations and Maintenance Turnaround Scope

Operations and Maintenance turnaround scope includes activities such as tank cleaning, structural work, fabric maintenance, piping modifications, heavy rotating equipment maintenance and instrument testing.
Although this scope is not developed at this stage it is not unusual for Operations to complete scopes of this nature when an FPSO is at the quayside.

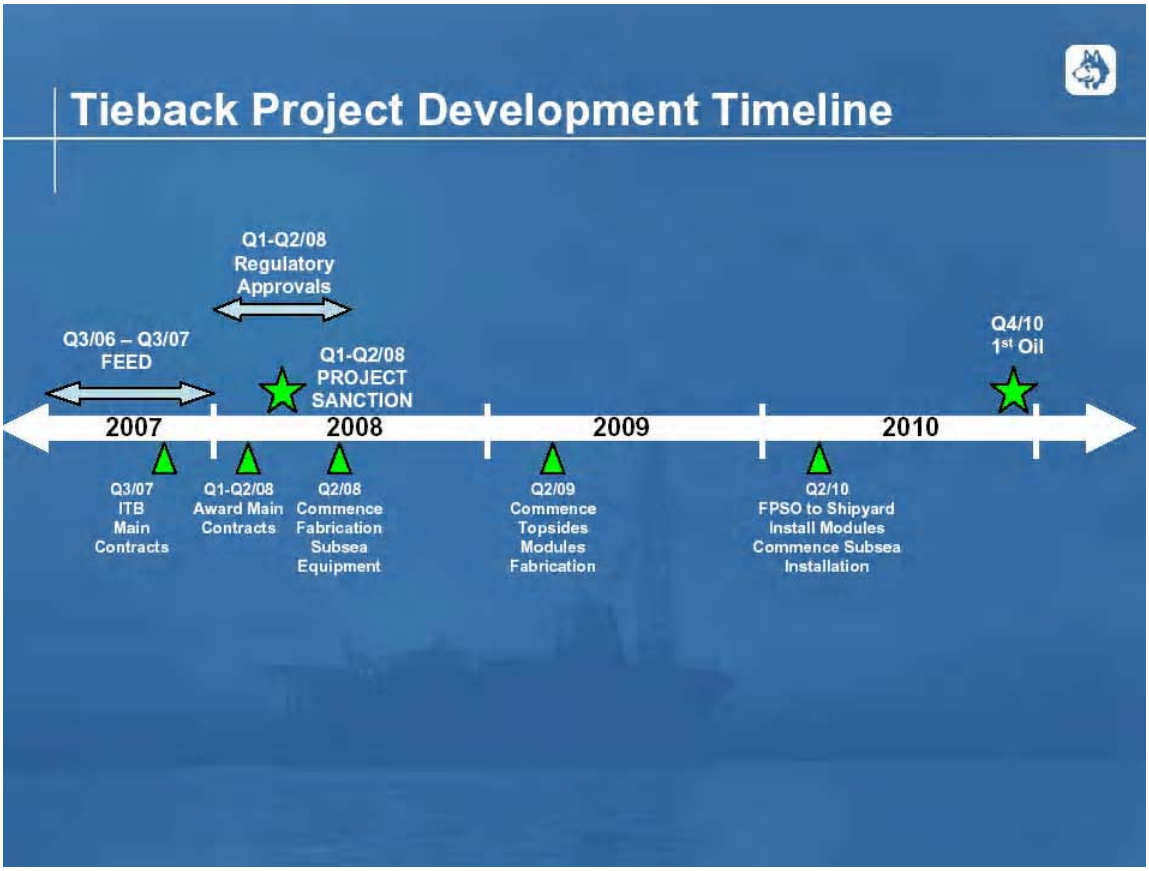
2.4 Subsea Tie-back

Subsea Tie-back scope includes fabrication, assembly and testing of subsea components.

2.5 Project Timeline

The project timeline is shown in Figure 2.1

Figure 2.1 Timeline for Husky Expansion Project



3.0 Fabrication and Construction Capabilities Assessment

3.1 Facilities

Newfoundland and Labrador has a range of facilities available for major construction and fabrication work. Construction sites and fabrication yards include world class fabrication and integration facilities built specifically for the development of offshore oil projects, greenfield sites, and abandoned military bases. Several sites and yards have deepwater access, and thousands of square meters of laydown and covered work areas. In many instances, sites are unionized, such as Marystown Shipyard and Cow Head Fabrication Facility, or have agreements in place, such as the Bull Arm Site, which in the past operated under a union agreement with the NL Building and Construction Trades Council. Some sites and yards have owner contractors while others provide access to outside contractors through leasing agreements. This study demonstrates that the capability, workmanship, experience and qualifications of facilities and contractors in NL have increased greatly over the past ten years and particularly since the development of the Hibernia, Terra Nova and White Rose projects.

For the purposes of this report, the fabrication facilities and yards have been classified into two categories:

1. NL Major Fabrication Yards
2. NL Mid-Size Fabrication Shops and Yards

3.1.1 Industrial Capability Methodology

The industrial capability within NL was assessed through:

- Identification of key fabrication yards and facilities
- Review of yard and facilities profiles from existing sources, including company-provided information, websites and other industrial capability analyses
- Survey of selected fabricators
- Comparison of the yard and facility data with project-specific requirements

3.2 NL Major Fabrication Yards

The major fabrication yards available in NL that have the potential to be used in support of the Husky expansion project are briefly profiled below (see Appendix A for additional information on the facilities profiled).

3.2.1 Bull Arm Fabrication Site

Contractor History

The Bull Arm Fabrication Site is located on the western side of Trinity Bay, 130 kilometers by road from St. John's. It is a world-class fabrication facility built in 1991 with capabilities for steel fabrication and concrete construction, outfitting installation, and at-shore hook-up and commissioning. The ice-free port, marine facilities and adjacent deep water allow for near-shore mating and hook-up. Major

fabrication, industrial or manufacturing projects can be performed at this one location with access to the worldwide marine transportation network.

The Bull Arm site encompasses 2850 hectares and has a 16-kilometer paved internal roadway connecting to the main highway. It has its own power supply and communications system, an onsite water system delivering drinking water, firefighting and industrial water, and a complete sanitary sewer system.

The facility comprises three major fabrication areas as outlined below

- FPSO Hook-up Quay
  The FPSO hook-up quay area is comprised of 9,000 m^2 of office, warehouse and fabrication buildings, and a 172 meter FPSO hook-up quay.

- Topside Fabrication Site
  The topsides fabrication site comprises over 13,000 m^2 of shop space (up to 40 meters under hook height) and 17,000 square meters of support and administration space

- Back Cove Industrial Area and Deepwater Site
  The back cove industrial area and deepwater site with 1,200 square meters of shop space, a ferry dock and 150 meters of water depth near shore.

Designed for the Hibernia project, one of the largest construction projects undertaken in North America, the Bull Arm site has the facilities and flexibility to accommodate offshore oil development, mining and other heavy industrial projects. It was also used by PCL Industrial Constructors Incorporated for fabrication and FPSO Integration work related to the Terra Nova project. In April, 2003, the topsides portion of the Bull Arm site was leased to North Eastern Constructors Limited (NECL) for fabrication work related to White Rose, the province's third offshore oil development project. In 2006 NECL completed an Additional Living Quarters module for the Terra Nova FPSO.

Quay Facilities

The Bull Arm site is equipped with a Topsides Assembly Pier that supported the 37,500 tonne Hibernia Integration, a Topsides Quay, an FPSO Quay that was used for the integration of the Terra Nova FPSO and a Ferry terminal used for access for the near-shore construction of the 900,000 tonne Hibernia concrete GBS and the integration of Topsides and GBS.

The Topsides Assembly Pier is constructed of concrete caisson and interconnecting concrete beams and has a bearing capacity of 10 tonnes per m2 with designated areas of up to 300 tonnes per m2. It is 140 meters in length and has a width of 47 meters. The water depth varies from 10 meters near shore to 14 meters at the pier end.

The Topsides Quay is comprised of two sections 165 meters and 25 meters long respectively with 10 meters water depth. It is fitted with 1 -100 tonne bollard, 7 - 25 tonne bollards, 1 - 50 tonne bollard, 13 - 50 tonne removable bollards and 1 - 195 tonne bollard. The assembly area immediately behind the Topsides Quay is 15,000 m^2 in area with a load bearing capacity of 5 tonnes per m^2. Fire water, potable water, lighting and electrical services are available at the Quay.

The FPSO Hook-up Quay is 172 meters in length with a water depth of 13.7 meters. There are a total of seven bollards including a 300 tonne bollard forward and one 400 tonne bollard aft of the quay. The water depth for the approach to the Quay is 16.5 meters minimum. There is a laydown area immediately adjacent to the Quay with a total area of 4,500 m^2. Fire water, potable water, lighting and electrical services are available at the Quay.

The Back Cove Deepwater site has a near shore water depth of 150 m, a ferry terminal and docking facility.

Fabrication Shops

Bull Arm has a history of large successful projects. Module M20 for Hibernia weighing 6500 tonnes was fabricated at Bull Arm. The Hibernia Topsides and Platform were integrated and commissioned at Bull Arm. The 900,000 tonne concrete GBS was constructed at the facility. The Terra Nova modules were all installed, integrated and commissioned at Bull Arm. The Terra Nova ALQ was constructed at the facility.

The material storage area just before the Cutting Shop is serviced with overhead Gantry Cranes. The Cutting Shop with dimensions of 40 meters x 40 meters and a height of 16 meters houses numerically-controlled plate cutting equipment and is serviced by two 20 tonne overhead cranes. The Assembly Hall is suited for the fabrication of sub assemblies and blocks with dimensions of 70 meters x 42 meters and a building height of 25 meters. This area is serviced with two 40 tonne OVERHEAD cranes. The Module Hall is used for the construction of super modules of up to approximately 8000 tonnes. The building is 122 meters in length x 44 meters wide with a building height of 51 meters. The area is serviced with two 75 tonne OVERHEAD Cranes with 40 meters under the hook each with 10 tonne auxiliary hoists.

The General Shops for electrical, instrumentation and mill work have a combined area of 3170 m^2.

Offices and facilities are on the level immediately above the General Shops with an area of 3170 m^2.

The pipe fabrication shop at the Bull Arm Topsides facility is of reasonable size at 40 meters by 31 meters with a building height of 13 meters. The facility is divided equally for ferrous and non-ferrous piping fabrication. Each bay is serviced by a 10 tonne overhead crane. An additional pipe shop/rebar shop is located at the FPSO Quay. This building comprises two sections with dimensions of 77 meters x 78 meters x 10 meters building height and 72 meters x 36 meters x 13 meters building height. Nine overhead cranes are located within the building, two 20 tonne, one 10 tonne and 6 five tonne. Access/egress to the building is available through two 9 m x 10 m doors and five 4 m x 4.5 m overhead doors.

The Blast and Paint Shop has overall dimensions of 40 meters x 65 meters x 19 meters high. Material movement through the blasting and painting shops is facilitated by the design of the shop. Materials move into the blast shop by way of a 19 meters x 13 meters vertical lift door. Materials move from the blast shop to the connected paint shop through a similar size door. Materials exit the paint shop, again through another door on the opposite side of the building. The blast shop is environmentally controlled. There is a grit recovery system and cyclonic dust control. The paint shop is environmentally controlled and the electrical services are explosion rated.

Warehousing and Material Control

Bull Arm has a warehouse 2080 m^2 in area. The warehouse is environmentally controlled complete with racking and is serviced with a 10 tonne crane. As well, there is ample laydown area within the yard.

As the yard is not currently operating an assessment of material control was not possible.

Figures 3-1 to 3-3 illustrate the layout of the Bull Arm Site.
Source information Bull Arm Site Corporation (www.bullarm.com)

Figure 3-1 Bull Arm Site

Figure 3-2 Bull Arm Site
Drydock Area

Figure 3-3 Bull Arm Site
Topsides Fabrication Area

3.2.2 Marystown Shipyard & Cow Head Fabrication Facility

Contractor History

Marystown Shipyard and the Cow Head Fabrication Facility are owned and operated by Kiewit Offshore Services (KOS) which is owned by Peter Kiewit Sons Co., the Canadian arm of Kiewit Construction Company, of Omaha, Nebraska, a diversified, employee-owned contracting corporation. Kiewit provides EPC and general contracting for onshore processing plants, offshore jackets and modules, and integrated offshore platforms, both steel and concrete.

Kiewit Offshore Services operates two well-equipped facilities located in the town of Marystown, on Newfoundland's south coast, approximately 300 km by road from the capital city, St. John's.

The shipyard facility, situated in an ice-free harbour, has 330 meters of water frontage with 8 meter water depth, and 9369 m^2 of in-house fabrication area. The combination of a Synchrolift and side transfer system provides handling and access for mid-size vessels.

The Cow Head Fabrication Facility is located 6 km north of Marystown. It has a land area of 81,000 m^2 with 14,000 m^2 of in-house fabrication facility. The load-out quay can accommodate 4000 tonne structures, making it a strategic service center for offshore vessels and semi-submersible rigs that can be floated to dockside.

Both the shipyard and fabrication facility can undertake steel fabrication and assembly under cover, allowing many fabrication activities to be completed in a temperature-controlled environment.

Cow Head was the designated facility for the fabrication of modules and the full topside integration for the SeaRose FPSO. KOS offers the facilities and skilled workforce to undertake rig upgrades and servicing, industrial fabrication both onshore and offshore and overall marine shipbuilding and repair.

Quay Facilities

The Cow Head facility has three quays; these are the Load-Out Quay, Quay No.1 and Quay No. 2 (FPSO Quay).

Load-Out Quay is primarily used for the longitudinal load out and load off of modules of up to 4000 tonnes. It has a width of 30 meters and a water depth of approximately 7 meters immediately at the Quay increasing to 15 meters further out. Bearing capacity is 10 tonne/m^2. It is fitted with four 100 tonne mooring bollards.

Quay No 1 is a concrete caisson construction and is 124 meters in length with a water depth of 15 meters. It is provisioned with five 100 tonne mooring bollards. Loadout capacity is 10000 tonnes, and bearing capacity is 10 tonne/m^2.

Quay No 2 (FPSO Quay) is constructed of two large circular caissons 110 m apart with substantial fenders. The water depth immediately adjacent to the caissons ranges from 12.6 to 13.7 meters. Internal to the caisson structures are two 100 tonne bollards on each caisson. On the shore there are two groups of three 150 tonne bollards, one group foreward and one aft of the FPSO quay. The quay is outfitted with two steel towers for access to a semi-submersible platform or FPSO. A base has been readied for tower cranes on the caissons. A Heavy Lift Slab is immediately adjacent to the FPSO Quay with a 25 tonne per m^2 capacity. During the SeaRose FPSO topsides lift campaign, modules of up to 1400 tonnes were lifted.

Contractor Equipment

The facilities are located in two distinct locations approximately 3 kilometers from each other by sea. The Cow Head facility is a multi-purpose facility primarily directed toward work related to offshore oil projects while the Shipyard has historically been a commercial marine repair facility. Both facilities are of significant size and are capable of considerable production.

KOS has presented a comprehensive equipment list in their response to the questionnaire. The complete listing is provided in Appendix A.

KOS has a 300 tonne Manitowoc 2250 Crawler Crane, one 110 tonne P&H Mobile hydraulic crane and a 50 tonne Grove RT hydraulic crane on site continuously as listed in the survey response.

Transportation of sub-assemblies and blocks within the yard and to the quayside is provided by way of a single 1200 tonne Goldhofer multi-wheel transporter. Other equipment such as a Taklift crane barge could be used to move sub-assemblies, depending upon their location. This alternate equipment is not listed as being available and would need to be hired and brought in if required.

The KOS preventive maintenance (PM) program is based on the parent company PKS PM system. KOS rigorously controls preventive maintenance as PM records are visible throughout the entire PKS network, which place great emphasis on the condition of their construction assets.

The KOS Cow Head facility has a well-equipped facility for new-build and re-fit operations. The equipment appears to be well maintained and is currently in operation. Facility equipment includes a 9-meter NC cutting table, NC multi-axis cutting and bevelling machine for tubulars, plate rolling and forming equipment and ample welding machines for various processes.

Equipment in the shipyard area of the KOS facilities does not appear to have been used recently. Prior to using equipment, an inspection and remedial action program may be required.

It is noted that the Synchrolift located in the shipyard area has been de-rated from 3000 to 1200 tons lifting capacity.

Fabrication Shops

The Cow Head Fabrication Facility is well prepared for the fabrication of modules for the offshore industry. The plate preparation shop of 1960 m^2 is connected to the main fabrication shop with an area of 3360 m^2. The facility has been used to fabricate modules and module sub-assemblies of approximately 1000 metric tonnes indoors. Larger modules have been constructed by completing sub-assembly fabrication within the fabrication shop, with the final module assembly occurring outside under hoarding. The material storage is immediately next to the upper end of the shop. Material transfer into the building is by way of overhead cranes (10 tonne; 2 off) and roller tables. The materials are conveyed to the NC cutting table for marking and preparation. Overhead cranes (one 18 tonne and two 10 tonne) move the materials to the work tables for fabrication work on sub-assemblies. Sub-assemblies can be mated into blocks in the more elevated end of the fabrication shop utilizing three 50 tonne cranes with a 17 meter hook height and one 20 tonne crane with a 12 meter hook height. Completed blocks can be moved through the 25 meter X 17 meter high sliding doors at the opposite end of the building.

On a single small module build (less than approximately 1000 metric tonnes), outfitting could occur inside the fabrication shop. For a suite of modules or a major build, outfitting would likely occur outside under hoarding. Build methods and hoarding, scaffolding and heating considerations must be clearly defined with KOS yard management during ITT clarifications.

Additional fabrication space is available in the Marystown Shipyard with an area of 3596 m^2 with a 30 meter wide x 15 meter high door. It is important to note restrictions of 1200 tonness on the Synchrolift should it be required.

KOS does not have a large electrical and instrumentation workshop within the Cow Head facility. If a workshop is needed the facilities at the Marystown Shipyard electrical shop (1056 m^2) could be reactivated.

The pipe fabrication shop (2725 m^2) at the KOS Cow Head facility is well equipped for spool pre-fabrication. For the White Rose build a considerable number of spools were contracted out. For a major suite of modules or for a large new-build it is advised to clearly define the break between sub-contracted pipe fabrication and that which is proposed to be done in-house. It is noted that the fabrication building at the Marystown Shipyard could be converted into a pipe shop should additional space be required. There is a bunker for NDE activities (300 m^2) within the Cow Head pipe shop, which although relatively small was adequate for previous project demands. Based on previous projects the Study Team consider the NDE bunker to be adequate for the demands of the Project.

The blasting and coatings facilities at KOS Cow Head are modern, environmentally controlled facilities with a mechanical grit recovery system with cyclone type cleaning. The blast shop has an area of 680 m^2. The module or sub-assembly enters and leaves through the same 17 meter x 17 meter door. The module or sub-assembly leaves the blast shop by way of a transporter, navigates around the building and enters the paint shop via a 25 meter x 14 meter door. The paint shop is a modern structural frame environmentally controlled facility that is 1095 m^2 in area.

The machine shop (1078 m^2) is located in the older Marystown shipyard facility. The equipment is of older vintage and currently unused. It is likely that, should a need arise for extensive machine work, the machine shop could be reactivated quickly. Alternatively, there are a number of machine shops in Newfoundland currently operating that could be contracted for custom work.

Warehousing and Material Control

Kiewit Offshore Services has a warehouse 2786 m^2 in area. The warehouse is environmentally controlled complete with racking. Observations at the yard indicate that the good material control is evident. There is ample laydown area within the yard with additional area available should it be required.

It is important to note that if modules of significant size are being built the laydown area will be reduced and therefore good space management is essential. Another important item to consider is that some of the potential additional storage area is a public island and if this is utilised, adequate security arrangements will be required.

3.3 NL Mid-Size Fabrication Shops and Yards

Profiles for mid-size fabrication yards and shops are based on responses to survey questionnaires completed by the respondents in June and July 2007. Refer to Appendix A for questionnaire.

A brief description of some of these companies including information provided by the Study Team based on existing relationships and experience is included below. In addition to each company description, the Survey responses are included in Appendix A

AMEIL Constructors Ltd.

AMEIL Constructors has been established since January 2006 and has completed one large (BORN/NARL Heater 1501) and several smaller (maintenance contracts at IMTT-NTL) contracts. The company has a 1500 m^2 building and a 1.2 hectare yard. In 2006 about 15 man-years of employment were created in AMEIL contracts. The company operates an ISO 9001:2000 registered Quality Management System and a COR-PRIME registered Occupation Health and Safety Program. The company's core business is process piping fabrication and testing however they also have capacity to perform small scale structural fabrication. They are currently pursuing ASME certification for pressure vessel fabrication and inspection.

C&W Offshore Ltd.

C&W Offshore, which includes the former Garland Systems Inc. fabrication shop, provides diversified aluminium and steel fabrication services to the offshore industry. Available services and facilities include: a 2800 m^2 covered area, a 1 hectare yard, a 9 tonne overhead crane, pipe bending and cutting equipment, lathes, specialty pipe coping and welding machines. Access to computer controlled laser cutting machine, plasma cutting machine. Complete design services include AutoCAD 2000 and SolidWorks, Metal Fabrication, Certified Welding Services to CWB and ASME (steel, stainless and aluminum), on-site fabrication / installation and Engineering Services. C&W Offshore is suitable for small scale structural fabrication (tertiary/outfitting steel) and sub-assemblies due to their shop size limitations and handling capability.

CSI Fabricators Ltd.

CSI Fabricators fabricates and installs structural steel / miscellaneous metals for buildings and industrial applications. CSI Fabricators also provides a steel sales division warehousing a broad range of structural steel and miscellaneous sections including hot dip galvanized items for exterior applications. CSI Fabricators has been incorporated since 2001. The plant is approximately 930 m^2 with 220 m^2 of office space and 0.8 hectares of yard space. The company offers all aspects of steel fabrication, from estimating and design to fabrication and erection. CSI Fabricators is certified with the Canadian Welding Bureau to CSA Standard / W47.1 in Division (1), implements a quality assurance program under ISO 9002, and a Safety Policy under Newfoundland & Labrador Construction Safety Association. Their main business includes conventional structural steel industrial and commercial buildings providing pre-fabricated beams and assemblies for installation on-site. They are often used by larger fabrication shops for detailing, fabrication and delivery of stairs, landings and handrail/handrail panelling.

D.F. Barnes Ltd.

D.F. Barnes Ltd. manufactures, fabricates, services and repairs a wide variety of products, machinery and equipment in the marine, shipbuilding, offshore and industrial sectors, and offer on-site and in-house installation and service. Facilities include fully equipped machine, welding and mechanical shops, complete with extensive array of portable equipment and a 0.3 hectare laydown yard and a 600 m^2 shop. DF Barnes provides machining and machine shop services to existing marine and industrial sectors. They have, over the last number of years, become more involved with structural steel fabrication particularly providing on-site services and installation/outfitting. They are more suited towards small to medium scale fabrication and sub-assemblies.

M&M Offshore Ltd.

M&M Engineering and subsidiary M&M Offshore Ltd. offer a wide range of services including industrial mechanical construction, structural and miscellaneous steel fabrication and erection, storage tank fabrication and erection, pressure vessel fabrication and erection, pipe spooling including duplex & titanium, and specialized welding services. M&M have a 4500 m^2 shop, and an 8 hectare yard. M&M have been providing fabrication services to the local offshore industry for many years. They are often used for pipe spool fabrication and testing and also for small to medium sized structural sub-assemblies, limited by what can be transported via road.

Metal World Inc.

Metal World Inc. is a wholly own Newfoundland and Labrador company offering a wide range of custom metal fabrication services including Structural Steel, Piping and Process Systems, Tanks, Pressure Vessels, Offshore Containers, and On Site Welding Services. Metal World has, over the last number of years, become heavily involved in the structural fabrication of offshore rated containers and baskets. They have typically been used in pre-fabrication for structural steel buildings and bridges and also provide on-site installation. They have 7500 m^2 of covered space and a 9.3 hectare yard. They are best suited for small to medium sized structures, limited by what can be transported via road.

North Eastern Constructors Ltd.

NECL is the heavy industrial and offshore fabrication arm of the Cahill Group, and was the most recent operator of the Bull Arm Fabrication Facility. NECL has undertaken module fabrication and assembly for the SeaRose FPSO, Terra Nova FPSO and Voisey's Bay Project. Experience on these projects has enabled NECL to develop and maintain state of the art project management systems and procedures for offshore and heavy industrial fabrication services contracts. NECL is CWB and ISO 9001-2000 certified. However, at the current time, NECL does not operate through any fabrication shop or yard.

St. John's Dockyard (NEWDOCK) Ltd.

NEWDOCK is an ISO 9001:2000 certified facility offering a full range of support services including fabrication, maintenance and service for the ship repair, heavy industrial and offshore industries. Services include welding, machining, inspection, overhaul, assembly, blasting and painting of various marine, structural and pressure retaining systems and components. NEWDOCK has 6550 m^2 of manufacturing area, and a 2 hectare laydown yard. NEWDOCK typically provide conventional repair services to the shipbuilding and marine industry. They also have experience with structural steel pre-fabrication for small to medium sized sub-assemblies, more or less limited by what can be transported via road.

3.4 Other NL Yards and Undeveloped Docks and Laydown Areas

Maher's Industrial Services Inc.

Maher's Industrial Services operates an industrial site at Long Harbour, Placentia Bay approximately 100 kilometers from St. John's. The site location is near a cluster of heavy industrial complexes ranging from the Bull Arm site to the North Atlantic Oil Refinery to Argentia. It is a brownfield site encompassing 30 hectares of open space that could be used to build the shops required for module fabrication. The site's primary asset is its 300 meter dock that can accommodate ships up to 70,000 Dead Weight Tonnes (DWT), with drafts over 10 meters. The site has seen variable levels of activity in recent years and is available to contractors on demand. The United Steel Workers maintain seniority rights to the site.

Argentia Management Authority

Argentia is a brownfield site. Formerly operated as the site of the U. S. Navy's Northwest Atlantic Operations, it is now under the jurisdiction of a local development agency called the Argentia Management Authority. Argentia has a land mass of 3700 hectares, including 450 hectares of developed land adjacent to a deepwater ice-free port. The proponents or its contractors would have the choice of locating in an existing structure or constructing new buildings on serviced lots.

Argentia is located 120 kilometers from St. John's and has access to a skilled workforce although most workers would likely come from outside the immediate area. In June of 2004, Metal World Limited opened a fully equipped 2,000 square meter fabrication shop in the former ship repair building adjacent to the dock. Sufficient space also exists for open fabrication and construction. The Argentia site has had limited involvement in hosting contractors involved in the offshore oil industry. The north side of Argentia is the location for the Voisey's Bay Nickel Company's hydrometallurgical demonstration plant.[1] Once operational, it is anticipated that a number of service companies will locate in the area.

Bay Bulls Marine Terminal Inc.

The Bay Bulls Marine Terminal is located approximately 30 kilometers south of St. John's. The site is relatively greenfield however the terminal is being developed as an offshore support centre. The terminal has an excellent 90-meter finger wharf, water access with 11 m water depth and a laydown area consisting of 3.6 hectares of open storage area as shown in Figure 3-4 below. Bay Bulls Marine Terminal is a privately-owned facility owned and operated by Pennecon that provides stevedoring, cargo marshalling, drill rig repair and shipyard services to the offshore oil and gas and general marine cargo industries. The company has provided facility services to firms involved in the offshore oil industry including Global SantaFe, Petro Canada and Husky Oil Operations Ltd.[2]

Figure 3-4 Bay Bulls Marine Terminal

[1] www.argentia.nf.ca/industrialpark.html
[2] www.pennecon.com/baybulls.asp

3.5 Estimated Production Capacity of Newfoundland and Labrador Facilities

Based on information compiled from a historical review of modules completed and the current capabilities and equipment of the yards, the Study Team prepared an estimate of the production capacity available in Newfoundland and Labrador. The capacity is presented in terms of module fabrication and hook-up and commissioning capacity.

3.5.1 NL Module Fabrication Capacity

Newfoundland and Labrador's integrated fabrication capacity is affected by several key parameters, including output capacity and load-out capability. Output capacity is defined as the volume of throughput, measured in tonnes per year, as determined by the physical attributes of the facility, production capacity and efficiency, production scheduling, the mix of the particular fabrication components (complex, precision components versus basic structural steel) and the availability of labour. Other factors affecting output capacity are the existence and quality of Quality Assurance and Project Management systems available at the facilities. Load-out capacity is defined as the ability of a yard to move a single module or component and is usually a function of lifting capacity, transport capacity, water depth, quayside transfer capacity, and fabrication hall size.

Table 3-1 below summarizes the offshore module fabrication and integration experience of selected yards and facilities in Newfoundland and Labrador.

Table 3-1 Newfoundland and Labrador Offshore Oil Projects Module Fabrication and Integration Summary

Project/Module	Company	Location	Weight (Tonne)	Duration (years)
White Rose				
M02 - HP, MP Separator & MP Crude Oil Heater	Kiewit Offshore Services	Cow Head Fabrication Facility	887	2.5
M03 - LP & Test Sep., Glycol & Prod. Water Degasser	Kiewit Offshore Services	Cow Head Fabrication Facility	1,282	2.5
M04/05 (M45)- Chemical Injection & Utilities	Kiewit Offshore Services	Cow Head Fabrication Facility	1,240	2.5
M06 - Aft Laydown Area	Kiewit Offshore Services	Marystown Shipyard	114	2.5
M08 - Forward Laydown Area	Kiewit Offshore Services	Marystown Shipyard	104	2.5
M09 - LER, HP Comp. & Suction Scrubbers	Kiewit Offshore Services and North Eastern Constructors	Cow Head Fabrication Facility and Bull Arm Fabrication Site	1,128	1
M10- LP/IP Flash Gas Comp. & Fuel Gas Skid	Kiewit Offshore Services	Cow Head Fabrication Facility	1,107	2.5
M11 - Water Injection Pumps & Seawater De-aeration	Kiewit Offshore Services	Cow Head Fabrication Facility	723	2.5
MI2 - MER, HVAC, Workshop and Lab	North Eastern Constructors	Bull Arm Fabrication Site	1,143	1
M13 - Power Generation Unit	Kiewit Offshore Services	Cow Head Fabrication Facility	1,191	2.5
M14 - Fiscal Metering Skid	Kiewit Offshore Services	Cow Head Fabrication Facility	210	2.5

Project/Module	Company	Location	Weight (Tonne)	Duration (years)
M16 - Flare Tower	Kiewit Offshore Services	Marystown Shipyard	374	2.5
OSU - Off Skid Units I Closed Drain Pumps & Vessels	Kiewit Offshore Services plus subcontractors such as M&M Offshore	Cow Head Fabrication Facility	85	2.5
Subsea Equipment	NewDock	St. John's Dockyard	400	1
Terra Nova				
M02 Water Injection	PCL Industrial Constructors	Bull Arm Fabrication Site	1,121	3
M04 Produced Water Glycol	PCL Industrial Constructors	Bull Arm Fabrication Site	1,495	3
M09 Power Generation	PCL Industrial Constructors	Bull Arm Fabrication Site	1,494	3
T08 Flare Tower	PCL Industrial Constructors	Bull Arm Fabrication Site	529	3
V30 Open Deck	PCL Industrial Constructors	Bull Arm Fabrication Site	1,100	3
V31 Poop Deck	PCL Industrial Constructors	Bull Arm Fabrication Site	153	3
Additional Living Quarters and Starboard Lifeboat Enclosure	North Eastern Constructors	Bull Arm Fabrication Site	900	0.5
Hibernia				
M20 Wellhead Module	PCL-Aker-Stord-Steen-Becker	Bull Arm Fabrication Site	5,000	2.75
Flare Tower	PCL-Aker-Stord-Steen-Becker	Bull Arm Fabrication Site	400	2
M81, M82 and M84 - Life Boat Stations/Helideck	PCL-Aker-Stord-Steen-Becker	Bull Arm Fabrication Site	800	2
M71/72 Derrick Sets*	Marystown Shipyard	Marystown Shipyard and Saint John New Brunswick	2,400	2
Hook-up M86**	PCL-Aker-Stord-Steen-Becker	Bull Arm, NL Bull Arm Fabrication Site	1,800	2

* Small amount of derrick sets done in Marystown; approximately 500 tonnes

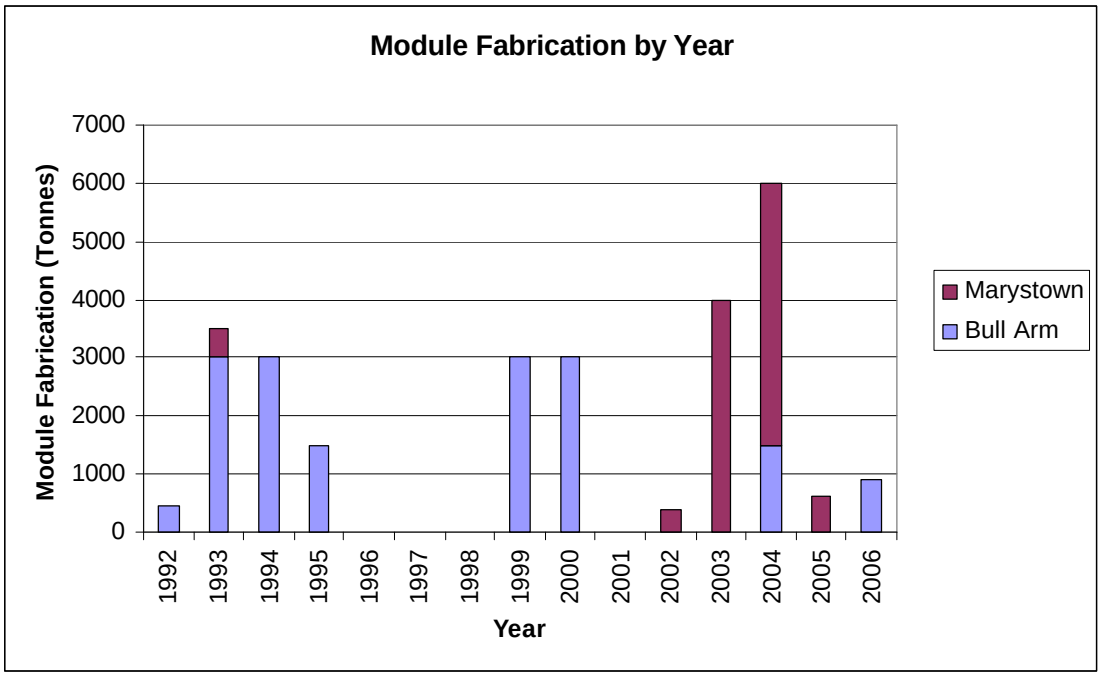
** Hook-up dry weight adjusted to allow for first fills

As Table 3-1 illustrates, NL yards have been involved with the construction of numerous modules of varying sizes and complexity.

The most significant offshore fabrication and construction work to date in NL has been associated with the fabrication of the M20 wellhead module for Hibernia and the modules for Terra Nova and White Rose as well as the construction of the concrete GBS for the Hibernia Project. This work was primarily carried out at the Bull Arm Fabrication Site, the Cow Head Fabrication Facility, and Marystown Shipyard. In addition, smaller fabricators such as NECL, Metal World and M&M Offshore have been involved with the fabrication of living quarters, lifeboat structures, pipe supports and mechanical skids.

Figure 3-5 below summarizes the major modules built in NL by weight and time.

Figure 3-5 Offshore Module Fabrication History in NL



While there is no consistent method for determining the full production capacity levels of the Newfoundland and Labrador yards identified, the Study Team has attempted to derive annual production capacities based on historical production of selected offshore modules. The annual estimated output in tonnes per year for the NL facilities profiled is summarized in Table 3-2.
Note that this is based on historical data; it does not represent the actual facility limit.

Table 3-2 Newfoundland and Labrador Fabrication Capacity Estimates

Yard Type/Yard	Estimated Annual Capacity (tonnes/year)
NL Major Yards	
Marystown Shipyard and Cow Head Fabrication Facility	4,000 to 5,000
Bull Arm Fabrication Site*	3,000 to 4,000
NL Mid-Size	
Newdock	500 to 1,000
Other Mid-Size Yards	1,000 to 2,000

* PCL Industrial Contractors fabricated 4,800 tonnes for the Terra Nova project over an 18-month period, thus implying an annual capacity of 3,200 tonnes.

Within NL, only major yards can be considered as potential sites for the fabrication of structures and equipment equivalent to a 2000 tonne module as outlined in Section 1.2 Study Objective. The reasons for this include:

- Weight of the module

- Complexity of the fabrication work
- Load-out capacity
- Sophisticated management system requirements, including work package methods
- Yard infrastructure
- Construction management
- Safety systems
- QA/QC procedures

Note that the final configuration may be a series of smaller skids or modules, and not one 2000tonne module.

It is critical to note that it is not generally possible to sum the annual capacity of the yards to accurately quantify the total NL capacity. The labour demand/supply analysis presented in Section 4 clearly indicates that the limiting factor for constructing major modules in NL is the availability of qualified labour.

Given that the weight of the topsides modules is up to a maximum of 2000 tonnes and that the fabrication of these components is expected to occur over a 12 month period, only the major fabrication yards, Bull Arm Fabrication Site (BASC) and Marystown Shipyard & Cow Head Fabrication Facility (KOS), have the capacity to fabricate the topsides modules in the allotted time.

3.5.2 Atlantic Canada Module Fabrication Capacity

Table 3-3 shows the fabrication and integration work that has been completed in Atlantic Canada for NL projects. This data indicates there is capacity within Atlantic Canada to provide additional fabrication for the Project if required.

Table 3-3 Atlantic Canadian Offshore Oil Projects Module Fabrication and Integration Summary

Project / Module	Company	Location	Weight (Tonne)	Duration (years)
White Rose				
M15 - Flare Pipe Rack Line	Irving Shipbuilding	Pictou, NS	217	2
M1 7 - Crane Boom Rest, HM & CM Exp. Vessels	Irving Shipbuilding	Pictou, NS	131	2
M18 - Central Main Pipe Rack	Irving Shipbuilding	Pictou, NS	581	2
Sable Offshore Energy Project				
South Venture Module	Irving Shipbuilding	Dartmouth, NS	2,400	2
Hibernia				
GBS Mechanical Outfitting	M&M Industrial	Halifax, NS	5,000	2
M71/72 Derrick Sets*	Cow Head Fabrication Facility Irving Shipbuilding	Marystown, NL Saint John, NB	2,400	2

* Small amount of derrick sets done in Marystown; approximately 500 tonnes

3.5.3 Hook-up and Commissioning

Hook-up and Commissioning for the Hibernia GBS project was successfully completed at the Bull Arm Site. Hook-up and Commissioning of the Topside Facilities for the Terra Nova FPSO project was also completed at this site. The KOS Cow Head facility in Marystown has recently completed the hook-up and commissioning of the White Rose FPSO. Based on this experience, in terms of facilities capability, the hook-up and commissioning scope of work associated with the Project, the Study Team considers that Project Hook-up and Commissioning can be undertaken in NL.

3.5.4 Fabrication by Mid-size Yards and Fabricators

The fabrication of smaller and less complex components can be completed at mid-size NL yards and fabricators. Based on responses to surveys, the maximum monthly output that can be delivered is summarized in Table 3-4 below.

Table 3-4 Fabrication Capacity of Mid-size Fabrication Yards and Shops

Mid-size Fabrication Yards and Shops	Pipe Spools per Month	Steel Tonnage per Month
AMEIL Constructors	100	NR
Bowringer Engineering	NR	NR
C&W Offshore	200	100
Central Fabricators & Machinists	NR	400
Corner Brook Fabrication and Steel	NR	75
CSI Fabricators	NR	NR
DF Barnes	100	NR
East Coast Marine	NR	NR
FASCO Industries Co Ltd	NR	60
G. Pelley Ltd	NR	NR
Land & Sea Welding	NR	100
M&M Offshore	200	NR
Metal World	NR	600
Newdock / St. John's Dockyard	NR	NR
North Eastern Constructors Ltd	200	250
Orphan Industries	NR	50
Universal Fabricators & Erectors Ltd.	NR	NR
Western Steel Works	NR	NR
TOTALS	800	1635

Note that Table 3-4 includes capacities only for those fabricators that provided fabrication data in the survey response. For completeness NR has been entered to reflect Non Response.

Adding 25% to allow for non-responses, the totals become:

1000 pipe spools per month
2045 tonnes structural steel per month

The fabrication capacity of mid-size fabrication yards and shops can be used to supplement the capacity of the major yards, by fabricating pipe spools and structural subassemblies. These smaller facilities in many cases do not have the workforce, management systems, or facilities to take on larger modules, and geographic location and module transport issues preclude larger modules. Also, many of the smaller yards and shops draw from the same union memberships as the major yards so any gain in fabrication from smaller fabricators may be at the expense of workforce levels at the major yards.

4.0 Labour Capacity Analysis

This section of the report provides an analysis of estimated labour demand for the expansion project and estimated labour supply, taking into account other projects that may potentially be ongoing in the same timeframe.

The expected available labour capacity in Newfoundland and Labrador has been determined based on the methodology outlined in the sections below. An overview of the demand-side and supply-side methodologies is presented below, followed by detailed trade-specific analysis, including identification of any gaps in the labour supply.

4.1 Project Labour Demand

Notional data for the study was provided by Husky Oil Operations Ltd. and reviewed by the study team. Labour demand data includes estimates of person hours required for Module Fabrication, Module Integration, FPSO Modifications, Operations & Maintenance Turnaround activities, Commissioning, and Subsea Production System fabrication. In the case of topsides module fabrication, a maximum of 2000 tonnes of module fabrication was used to develop labour requirements by trade. Labour totals by project component are shown in Table 4-1.

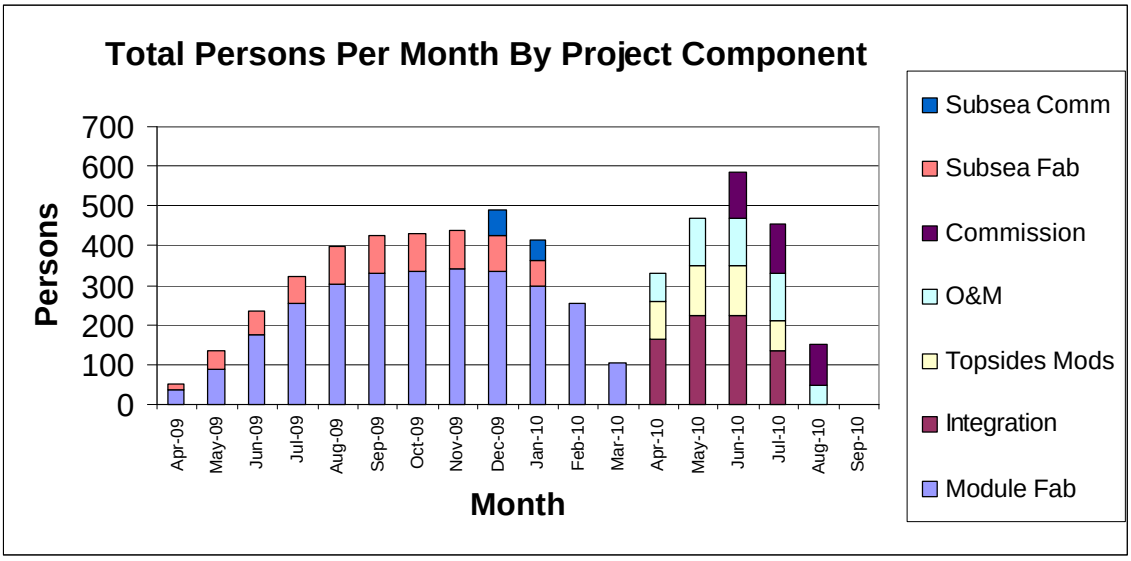
Table 4-1 Estimated Trades Demand by Project Component (Direct Person Hours)

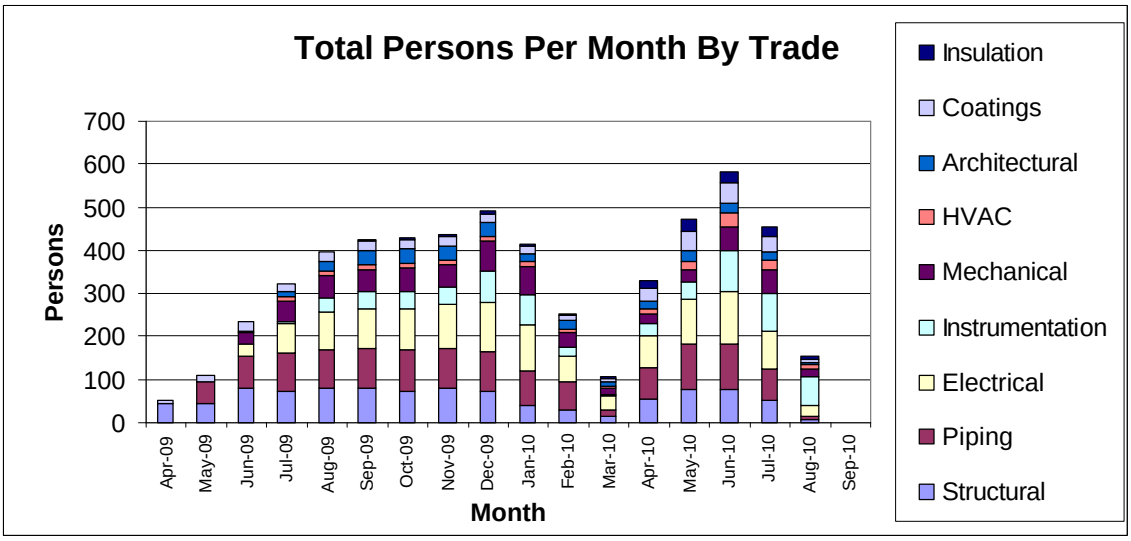
Project Component	Hours
Module Fabrication	599,000
Integration	156,000
Topsides Modifications	90,000
Operations and Maintenance Turnaround Scope	100,000
Commissioning	72,000
Subsea Fabrication	153,000
Subsea Commissioning	25,000
Total (Person hours)	1,195,000

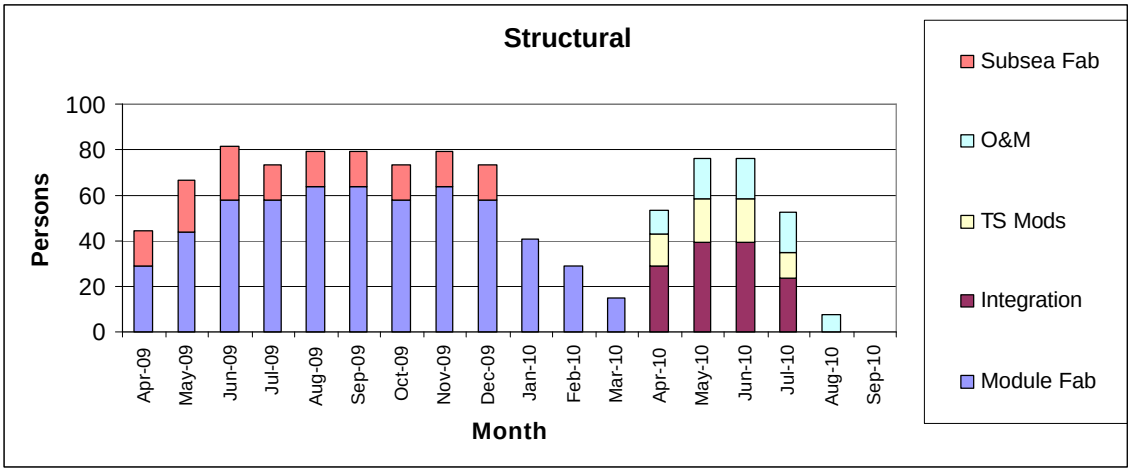
The figures and breakdowns used in creating demand curves have been developed by the Study Team based on their experience of similar projects. Following completion of FEED and detailed engineering the absolute values will inevitably change but the data as utilized produces a reasonable representation of capacity versus potential demand. For the purpose of this study activities related to Drilling and Completions have not been included.

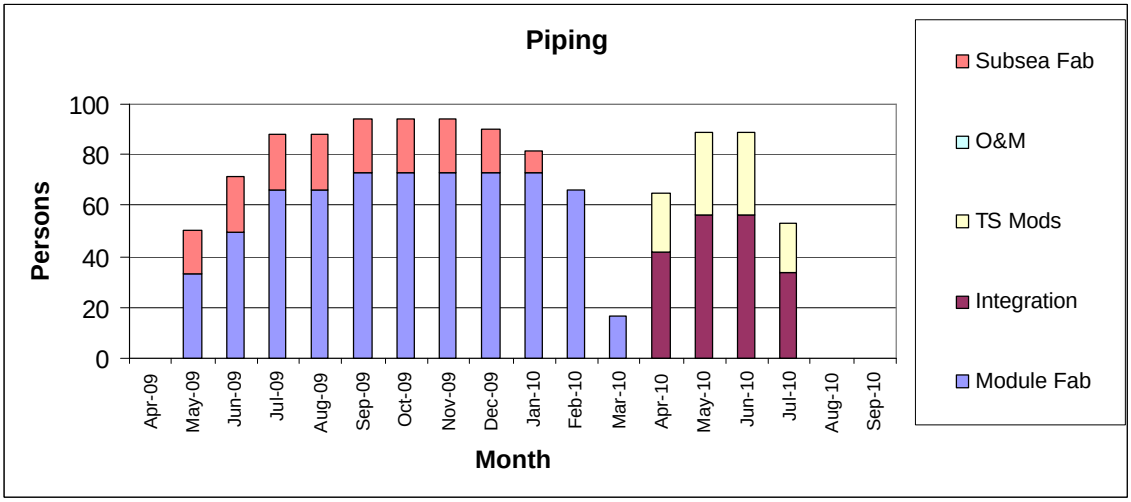
The labour hours have been broken down by trade discipline and allocated across the Project timeline based on past experience. The resulting series of monthly labour demand histograms are shown in Figure 4-1 below.

Figure 4-1 Summary Trade Labour Demand






Structural
Persons
100
80
60
40
20
0
Apr-09
May-09
Jun-09
Jul-09
Aug-09
Sep-09
Oct-09
Nov-09
Dec-09
Jan-10
Feb-10
Mar-10
Apr-10
May-10
Jun-10
Jul-10
Aug-10
Sep-10
Month
Subsea Fab
O&M
TS Mods
Integration
Module Fab


Piping
Persons
100
80
60
40
20
0
Apr-09
May-09
Jun-09
Jul-09
Aug-09
Sep-09
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Nov-09
Dec-09
Jan-10
Feb-10
Mar-10
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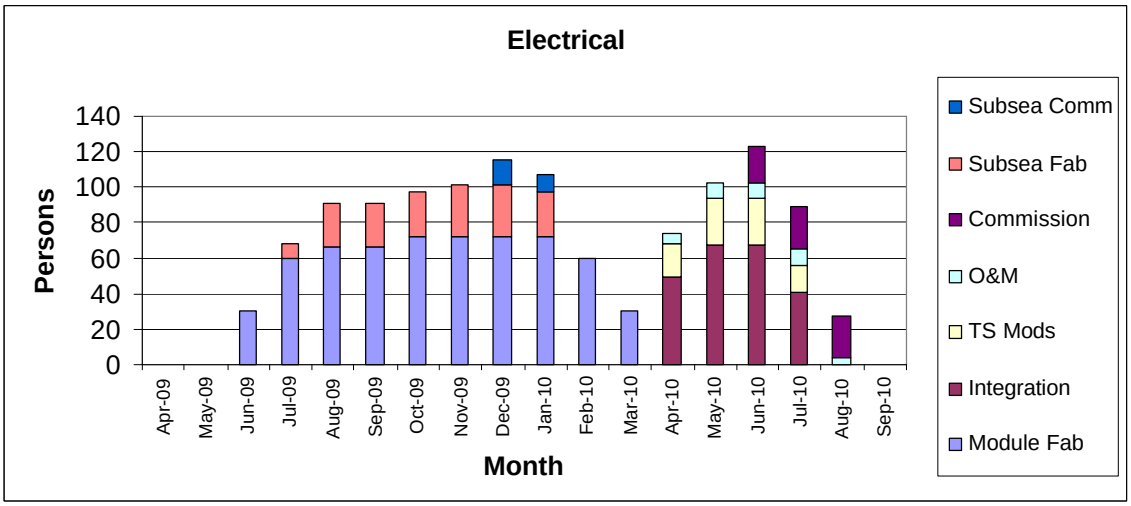
Aug-10
Sep-10
Month
Subsea Fab
O&M
TS Mods
Integration
Module Fab


Electrical
Persons
140
120
100
80
60
40
20
0
Apr-09
May-09
Jun-09
Jul-09
Aug-09
Sep-09
Oct-09
Nov-09
Dec-09
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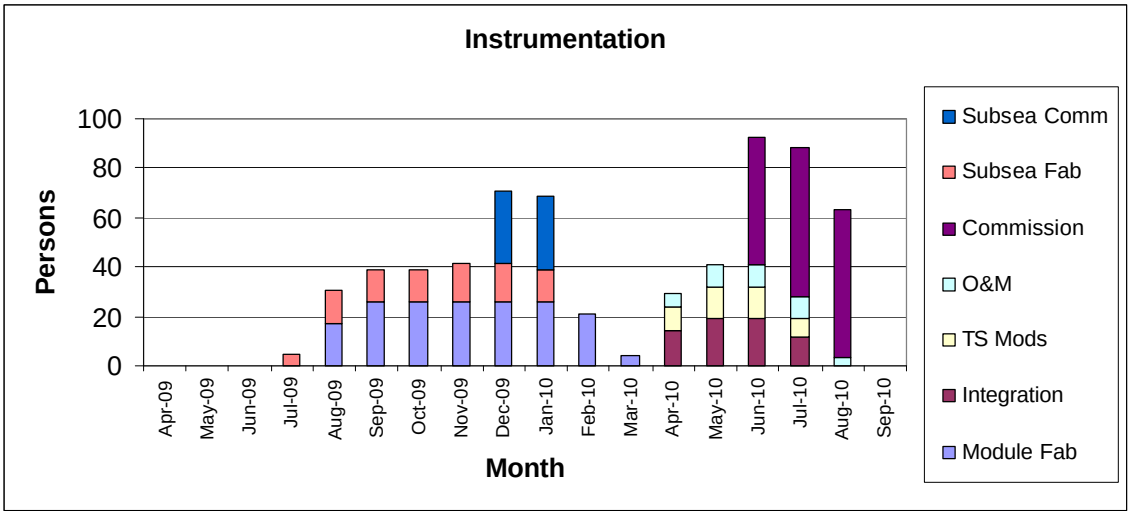
Month
Subsea Comm
Subsea Fab
Commission
O&M
TS Mods
Integration
Module Fab


Instrumentation
Persons
100
80
60
40
20
0
Apr-09
May-09
Jun-09
Jul-09
Aug-09
Sep-09
Oct-09
Nov-09
Dec-09
Jan-10
Feb-10
Mar-10
Apr-10
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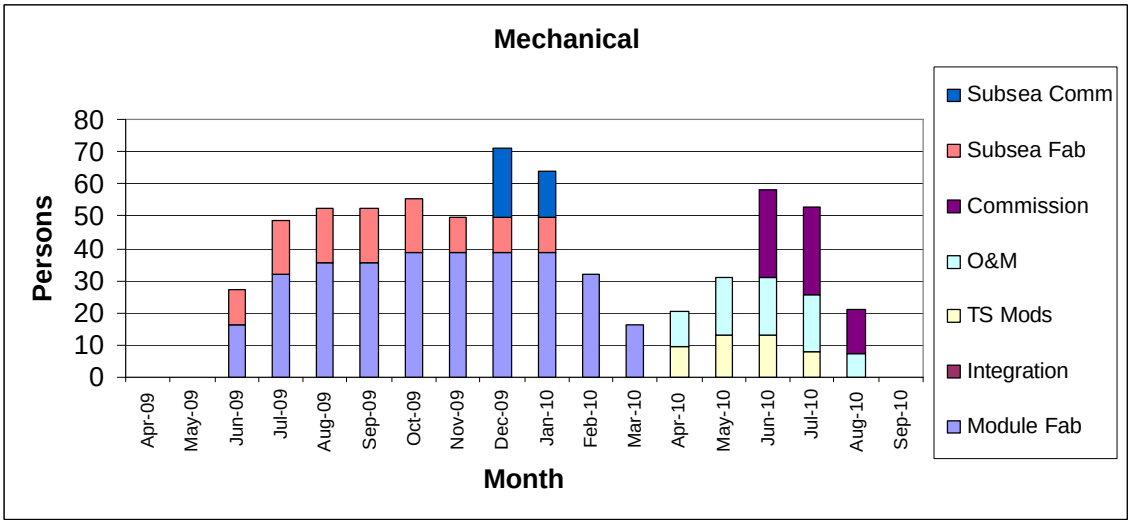
Sep-10
Month
Subsea Comm
Subsea Fab
Commission
O&M
TS Mods
Integration
Module Fab


Mechanical
Persons
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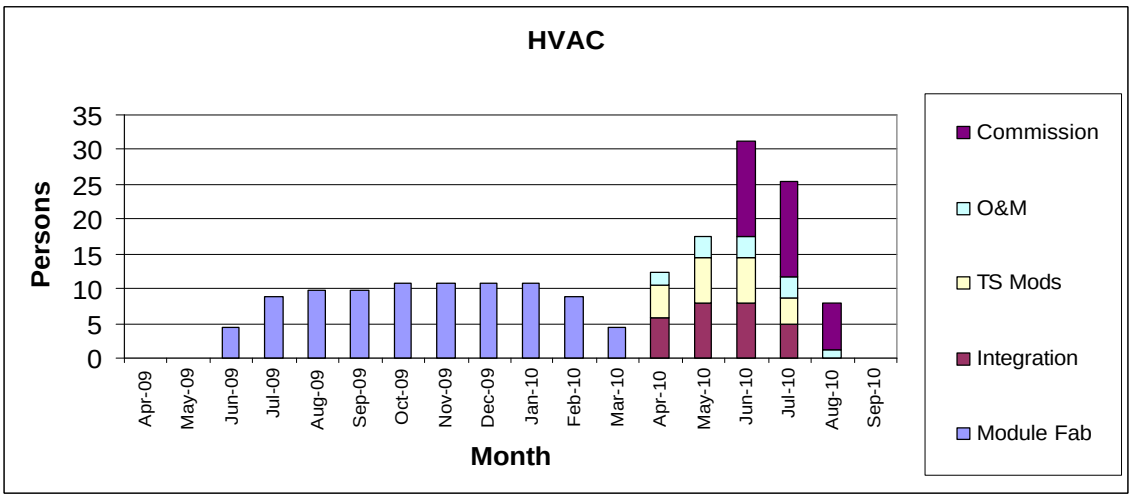
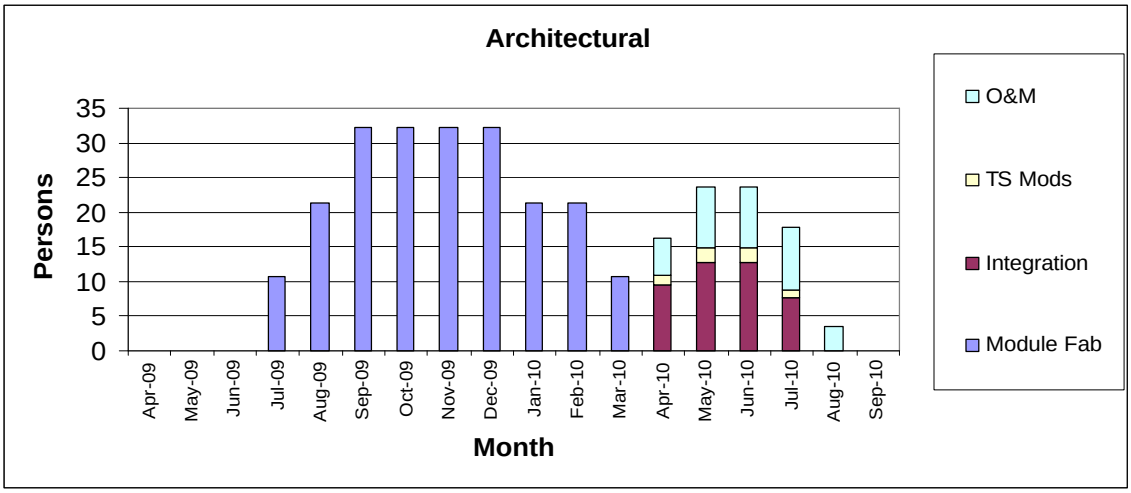
70
60
50
40
30
20
10
0
Apr-09
May-09
Jun-09
Jul-09
Aug-09
Sep-09
Oct-09
Nov-09
Dec-09
Jan-10
Feb-10
Mar-10
Apr-10
May-10
Jun-10
Jul-10
Aug-10
Sep-10
Month
Subsea Comm
Subsea Fab
Commission
O&M
TS Mods
Integration
Module Fab


HVAC
Persons
35
30
25
20
15
10
5
0
Apr-09
May-09
Jun-09
Jul-09
Aug-09
Sep-09
Oct-09
Nov-09
Dec-09
Jan-10
Feb-10
Mar-10
Apr-10
May-10
Jun-10
Jul-10
Aug-10
Sep-10
Month
Commission
O&M
TS Mods
Integration
Module Fab


Architectural
Persons
35
30
25
20
15
10
5
0
Apr-09
May-09
Jun-09
Jul-09
Aug-09
Sep-09
Oct-09
Nov-09
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Jan-10
Feb-10
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Apr-10
May-10
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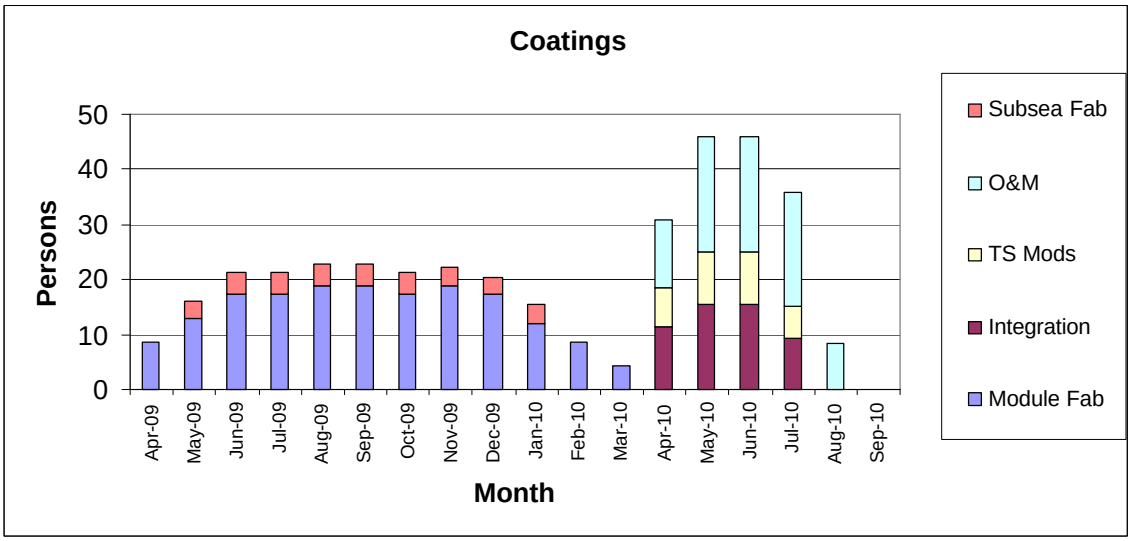
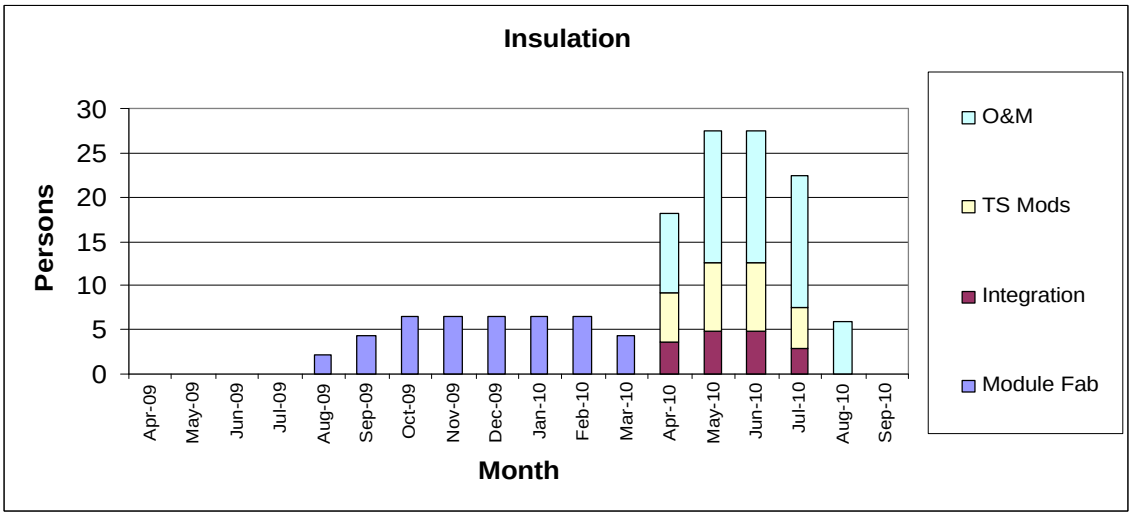
Jul-10
Aug-10
Sep-10
Month
O&M
TS Mods
Integration
Module Fab


Coatings
Persons
50
40
30
20
10
0
Apr-09
May-09
Jun-09
Jul-09
Aug-09
Sep-09
Oct-09
Nov-09
Dec-09
Jan-10
Feb-10
Mar-10
Apr-10
May-10
Jun-10
Jul-10
Aug-10
Sep-10
Month
Subsea Fab
O&M
TS Mods
Integration
Module Fab


Insulation
Persons
30
25
20
15
10
5
0
Apr-09
May-09
Jun-09
Jul-09
Aug-09
Sep-09
Oct-09
Nov-09
Dec-09
Jan-10
Feb-10
Mar-10
Apr-10
May-10
Jun-10
Jul-10
Aug-10
Sep-10
Month
O&M
TS Mods
Integration
Module Fab

4.2 Labour Supply

Analysis of labour supply involved developing an estimate of the total NL labour force for each required trade, and then factoring in other potential simultaneous projects that may compete for the same labour pool. The NL labour force was profiled with particular reference to the skills required by the Project.

The sources of information used to profile the NL labour force include:

- Union list totals from the Newfoundland and Labrador Building and Construction Trades Council (NLBCTC).
- Union list totals for the Canadian Auto Workers (CAW) at the Kiewit Offshore Services facility.
- Survey responses from fabricators and facilities. Note that where fabricators and facilities are unionized, the labour numbers have not been included in the totals, since in most cases they are already included in the NLBCTC numbers.

A summary of labour supply numbers is presented in spreadsheet format as Appendix B.

To account for a shift in workforce from NL to the Alberta labour market, the numbers received from the NLBCTC and the CAW have been factored by 0.8 to account for the expected 80% return of skilled labour to the province for one or more major projects. This factor has been derived based on the Study Team's knowledge of the local labour force and has been borne out by the response to labour demands for recent works at the KOS facilities in Marystown.

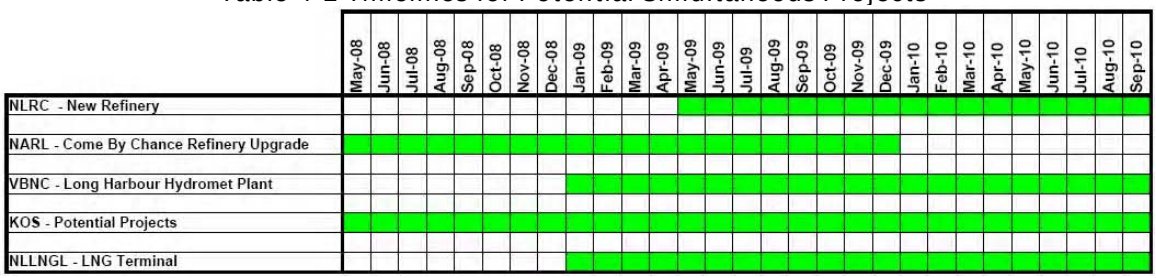
4.3 Potential Simultaneous Projects

Potential simultaneous projects that could impact the ability to deliver project components as per the Project timeline include:

- A new oil refinery in Placentia Bay is being proposed by Newfoundland and Labrador Refining Corporation (NLRC)
- Upgrades to existing North Atlantic Refining Limited oil refinery at Come By Chance
- Construction of a commercial nickel hydrometallurgical processing plant at Long Harbour, Newfoundland, by Voisey's Bay Nickel Company
- Newfoundland LNG Ltd. - Liquefied Natural Gas (LNG) Transshipment and Storage Terminal for Grassy Point, Placentia Bay
- The Lower Churchill Project being proposed by Newfoundland and Labrador Hydro Limited
- Hebron Development Project
- Newfoundland and Labrador Hydro – Domestic Natural Gas Transport and Onshore Storage
- Deep Panuke field development 250 km south east of Halifax
- Irving Oil propose to build a second refinery in Saint John New Brunswick
- Projects at the Kiewit Offshore Services facility in Marystown

The timelines for major potential simultaneous projects is shown in Table 4-2 below. Note that the timeline shown is the period in which the Project activities are expected to occur.

Table 4-2 Timelines for Potential Simultaneous Projects



A more detailed description of some potential projects is provided below.

Newfoundland and Labrador Refining Corporation (NLRC) Refinery

The NLRC refinery is in the early development phase with engineering studies ongoing by several Newfoundland companies led by SNC-Lavalin. The Environmental Impact Assessment will be submitted July 2007 and approvals are anticipated for the fall of 2007 with initial civil works commencing in January 2008. Mechanical completion of the refinery is anticipated for September 2011. The proponents expect a workforce of 3000 persons at peak construction. Considering projects of a similar nature, it is entirely possible that the workforce could increase to the 4000 to 4500 tradesperson level.

If this project follows the proposed schedule, the impact on the Husky Project could be significant. Construction activities requiring significant structural, piping, electrical and instrumentation tradesare planned to reach a peak in 2010, coincident with the Project. Competition for resources, especially in the area of electrical and instrumentation personnel, is likely.
However, financial backing must be secured prior to work commencing, and since the project is in direct competition with the proposed new Irving refinery in New Brunswick, in the Study Team's opinion it is probable that the major fabrication scope will be delayed by one year, and labour demand has been adjusted to reflect this.

The following table has been taken from the NLRC Web site and indicate a peak trade resource of approximately 3000 persons for the first phase of the construction through to 2010.

Table 4-3 Breakdown of Trades Anticipated for the Construction Stage of the NLRC Refinery

Occupation	# of People
Boilermaker	100
Carpenter	90
Concrete Finisher	30
Construction Management	280
Electrician	240
Equipment Operator	230
Insulator	200
Ironworker	90
Labourer	270
Millwright	280
Painter	140
Pipe Welder	200
Pipefitter	690
Sheetmetal Worker	90
Welder- Structural	70
Total	3000

Source: Newfoundland and Labrador Refining Corporation website http://www.nlrefining.com/

In addition, competition for facilities may well be an issue. Although the NLRC contracting strategy is unclear at this time, it is quite possible that a major portion of the Bull Arm Facility could be utilized for the construction of the new refinery through one of the major subcontractors. The significant reinforcing steel requirement for the civil/foundation work scope could easily tie-up the rebar/super pipe shop in the very early stages of the project. Major pipe work required for the refinery could be fabricated year-round under cover at the Bull Arm site using both the Topsides Pipe Shops and the rebar/super pipe shop in the FPSO Quay Area. Fabrication of the building structural steel and pipe racks could very easily be accomplished in the Topsides Assembly Shops and Blast and Coatings Facility, further limiting Bull Arm capacity for the Project.

Similarly, sub-contracted structural and piping work for the project could impact local fabrication capacity particularly M&M Offshore, DF Barnes, NECL/G.J. Cahill Limited and Newdock.

Voisey's Bay Nickel Company Hydrometallurgical Processing Plant at Long Harbour, Newfoundland

The Voisey's Bay Hydrometallurgical Processing Plant is a confirmed project, whether it is in the form of a hydrometallurgical process or conventional smelter. Construction is anticipated to start early in

2009 and be completed by 2011. The labour force is anticipated to be in the order of 1200 tradespersons at peak in 2010.

There exists a potential for a sub-contractor to use the Bull Arm Facility for offsite fabrication for structural steel and pipe-work. Tanks, pressure vessels and piping could require engagement of local fabricators competing for resources with the Project.

Newfoundland LNG Ltd. (NLNG) Liquefied Natural Gas Transhipment and Storage Terminal

NLNG, an independent energy services company based in St. John's, Newfoundland and Labrador, is proposing the development of a Liquefied Natural Gas (LNG) Trans-shipment and Storage Terminal for Grassy Point, Placentia Bay on the southeast coast of Newfoundland.

The proponent has indicated that commencement of operations will be 2010 which would suggest that peak construction activity would occur in 2009, again coincident with the Husky Sea Rose Upgrade.

This construction phase includes construction of three jetties, one tank and one re-liquefaction unit over three years.

The following table has been taken from the NLNG Web site and indicate a peak trade resource of approximately 400 persons for the first phase of the construction through to 2010.

Table 4-4 Breakdown of Trades Anticipated for the Construction Stage of the LNG Terminal

Occupation	# of People (Peak)
Pipefitter	20
Millwright	10
Construction Management	6
Scheduler	1
Labourer	80
Electrician	40
Equipment Operator	25
Pipe Welder	10
Insulator	30
Painter (Industrial)	6
Carpenter	20
Surveyors	4
Plumbers	2

Occupation	# of People (Peak)
Ironworker	20
Welder- Structural	20
Concrete Finisher	10
Drywall Installers	2
Heavy Duty Equipment Mechanics	2
Crane Operators	6
Drillers & Blasters	2
Water Well Drillers	2
Commercial Divers	4
Truck Drivers	6
Construction Supervisors – Electrical	2
QA/QC – Inspectors	12
Commissioning Personnel	12
Construction Supervisors – Pipefitters	2
Construction Supervisors – Carpentry	2
Construction Supervisors – Other Trades	2
Total	420

Source: Newfoundland LNG Ltd. Website
http://www.newfoundlandlng.com/main.asp

While the trade complement of 420 persons for the NLNG project is not on its own a significant impact to the project, it is additive to the overall competitive environment of 2009/2010.

The Lower Churchill Project (Newfoundland and Labrador Hydro Limited)

The Lower Churchill is another mega-project, currently in the project pre-FEED phase. The project is comprised of two hydro-electric developments, Gull Island and Muskrat Falls, along the Lower Churchill River system in Labrador. Civil construction work is anticipated to commence in the spring of 2009 on Gull Island with completion scheduled for 2014. Muskrat Falls is proposed to commence construction in 2012 with completion in 2016.

Tradesperson distribution is unknown at this time, although limited impact is expected to the Husky Sea Rose Upgrade due to the timing of the project and the anticipated trades required. There may be minor impact to the ironworker trades in Q3 2010, but this is not considered significant at this time.

Hebron Development Project

The Hebron Development is not currently active and in the event that bilateral discussions commence in 2008, and estimating an eighteen month development plan/ environmental plan/ engineering cycle for a GBS, it is considered unlikely that the Hebron Development would impact the Project. This notwithstanding, a project of this magnitude may likely preclude any other work being done at the Bull Arm Facility and the progress of the Hebron Development Project must be monitored closely.

Newfoundland and Labrador Hydro – Domestic Natural Gas Transport and Onshore Storage

Newfoundland and Labrador Hydro (NLH) has recently received a mandate to diversify its energy portfolio within the Province of NL, specifically in the area of offshore oil and gas. A Request for Quotation for engineering support for NLH studies related to Domestic Natural Gas Transport and Onshore Storage closed July 5th 2007. While it is considered unlikely that NLH projects will reach sufficient maturity to impact the Project, the progress of the Domestic Natural Gas Transport and Onshore Storage Project should be monitored closely.

Deep Panuke Field Development

EnCana have both Single Buoy Moorings and Modec in a Bid Competition Phase for Field Centre Lease and Operations contracts for the Deep Panuke field development. The project design consists of a jack-up mobile offshore production unit, tie back of subsea wells and installation of a subsea pipeline. Fabrication is expected to take thirty months with offshore installation and commissioning running in parallel with pipeline construction. The Operations phase is planned to begin in the third quarter of 2010. The project is still in the Bid Competition Phase and has not yet received Regulatory Approval or Project Sanction from EnCana Corporation. From the Study Team's understanding, the schedule has slipped from the original plan and as a result this project in not expected to occur within the Project timeline.

Irving Refinery - Saint John, New Brunswick – Eider Rock Project

Irving Oil is proposing to build a second refinery in Saint John, New Brunswick. The refinery will have capacity to process 300,000 barrels of crude oil per day. The proposed schedule shows the major construction phase running from late 2009 through to the end of 2011, with commissioning from 2011 to mid 2012 when it then enters the operational phase. It is the Study Team's understanding that the Environmental Impact Assessment phase has not yet been completed and as a result this project is not expected to occur within the Project timeline.

Marystown Shipyard and Cow Head Fabrication Site - Kiewit Offshore Services

In addition to the projects detailed above, KOS is currently tendering or considering the following projects:

- Joint Support Ship Project
  Kiewit and ThyssenKrupp Marine Systems Canada have partnered and are one of two companies in the bidding for the contract to supply three ships to the Canadian Navy. Contract award is scheduled for 2008 with the first ship to be delivered in 2012.

- Ro-Ro Vehicle Passenger Ferries
  The Newfoundland and Labrador Department of Transport require two vessels to be fabricated and completed in 2008. Since there has been no contract award it is unlikely that this timeline will be achieved.

- Midshore Patrol Vessels
  The Canadian Coast Guard has a requirement for eight patrol vessels with a possibility of an extra four to be fabricated and delivered during the period Q1 2008 and Q1 2010. Based on the fact that the contract is not awarded, it is envisaged that this project would slip by approximately one year.

- Dedicated Standby Vessels
  One Ulstein SX123 Dedicated Standby Vessel is to be fabricated and delivered in 2010 with an option for a second vessel in 2011.

- Anchor Handling Tug Vessels
  Two VS472 Anchor Handling Tugs are to be fabricated and delivered in 2010, with optional extra vessels in 2011.

- Irving Eider Rock Refinery Jetty
  Irving is planning to build a 300,000 bbl/day Refinery in Saint John New Brunswick. Site preparation is scheduled to commence in 2009 with Operations planned for 2012. For this project KOS interest is in the jetty construction which involves both onsite and fabrication shop activities.

- Cacouna LNG Terminal Jetty
  Construction work on the terminal is scheduled from 2007 to 2009. KOS interest is in the fabrication shop work for the jetty construction.

- Rabaska LNG Terminal Jetty
  Major construction on this project is scheduled to start in 2008 and run through 2010. KOS interest is in the offshore jetty construction and the onshore fabrication work associated with the two LNG tanks and re-gasification process system.

It should be noted that although KOS are tendering for the above projects, they may not secure all contracts and therefore may have the capacity and resources to undertake elements of the Project.

4.4 Labour Capacity Analysis Summary

The labour capacity has been analyzed by trade and the results are presented in the following sections.

For each trade, three labour supply levels have been developed:

- Supply OSP0
  Supply level with no other simultaneous projects occurring at the same time as the White Rose Expansion Project. This level is plotted as a green line on the histograms below and is labelled “Supply OSP0”.

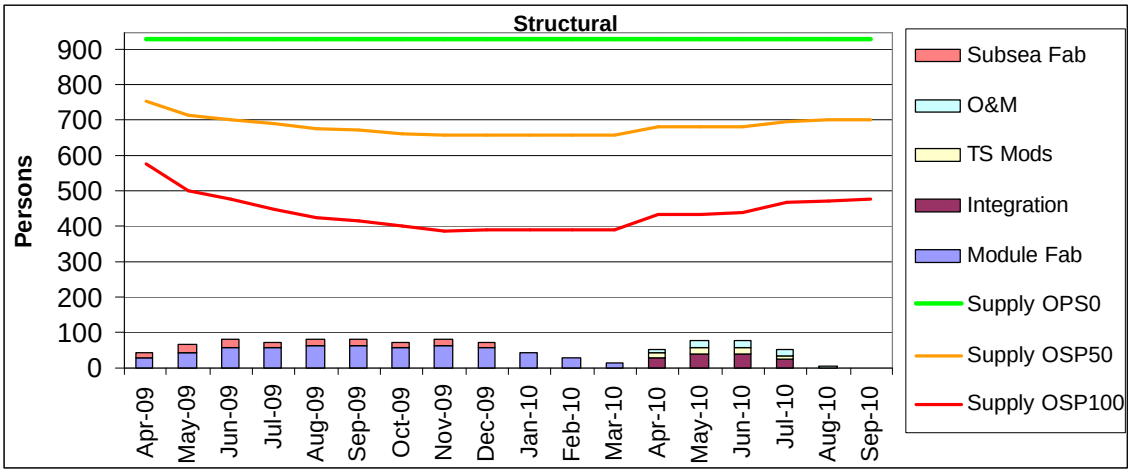
- Supply OSP100
  Supply level with all other simultaneous projects occurring at the same time as the White Rose Expansion Project. This level is equal to the Supply OSP0 level minus the demand from the other simultaneous projects. This level is plotted as a red line on the histograms below and is labelled “Supply OSP100”.

- Supply OSP50
  Supply level with a labour demand, for other simultaneous projects, of 50% of the Supply OSP100 level. This level is plotted as an orange line on the histograms below and is labelled "Supply OSP50".

The expected supply estimates are made and plotted against the demand graphs over time to determine if and when any gaps in the labour supply can be expected. Each trade is summarized in terms of what the demand/supply analysis indicates, especially with respect to any major gaps in the NL labour force.

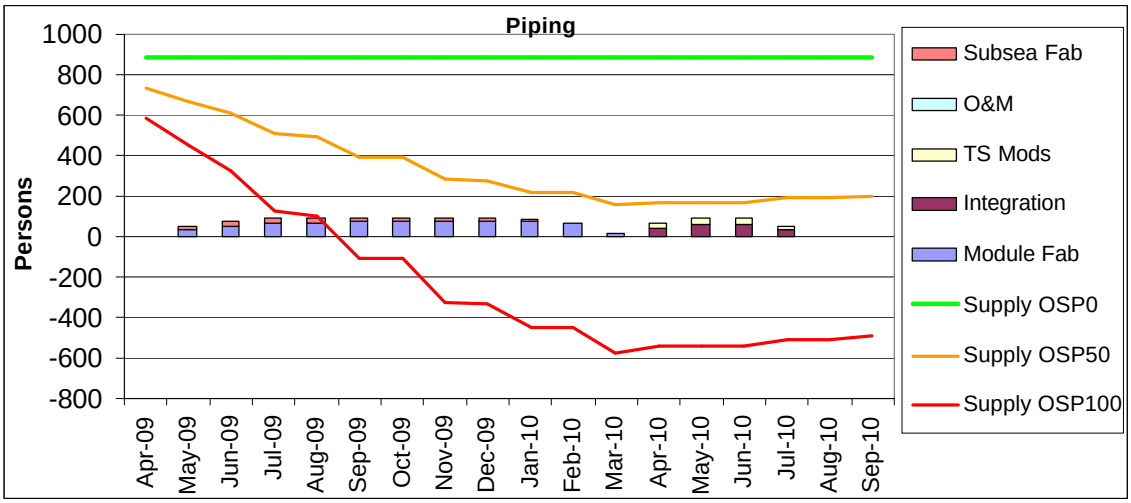
The trades/disciplines reviewed include Structural, Piping, Electrical, Instrumentation, Mechanical, HVAC, Architectural, Coatings and Insulation.

4.4.1 Structural



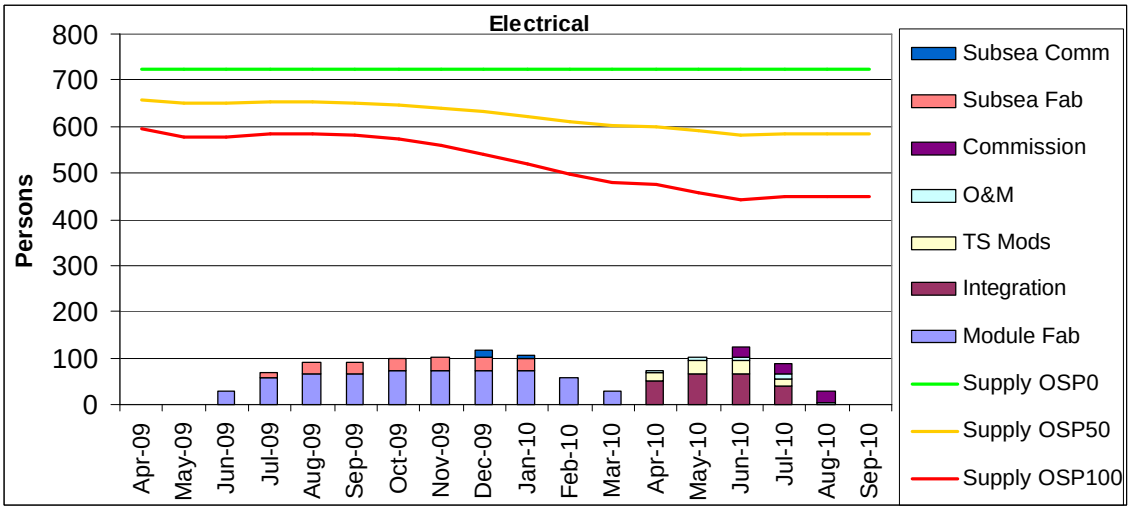
Peak project demand for Structural is 81 tradespersons.
There are not expected to be any shortfalls under the OSP0, OSP50 or OSP100 cases.

4.4.2 Piping



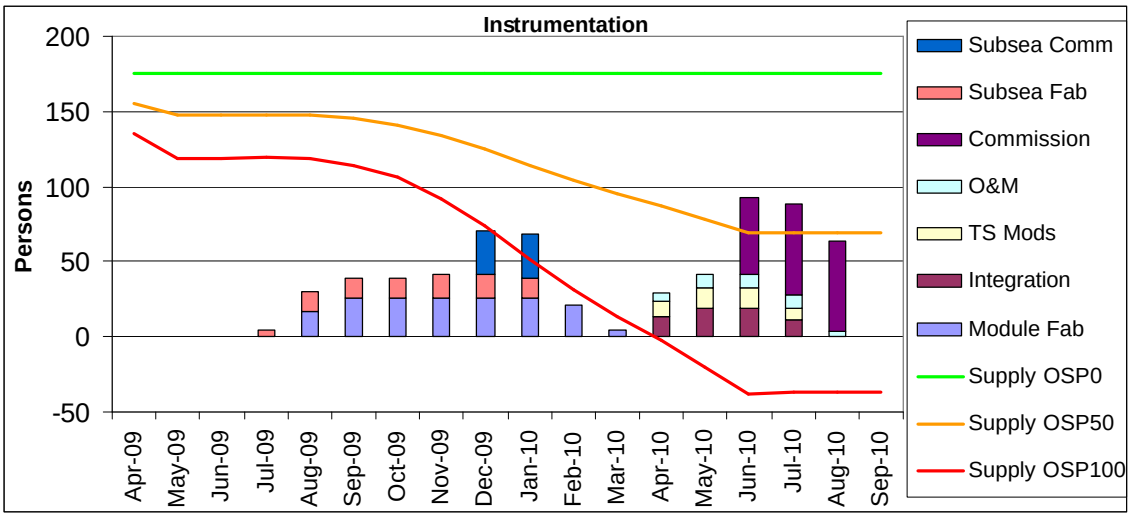
Peak project demand for Piping is 107 tradespersons.
There is not expected to be a shortfall under the OSP0 case. The OSP50 case does not indicate a shortfall, however project schedules and the labour market need be monitored closely as the supply is close to the demand during the Integration phase. In the OSP100 case, there will be a significant shortfall in the piping trades.

4.4.3 Electrical



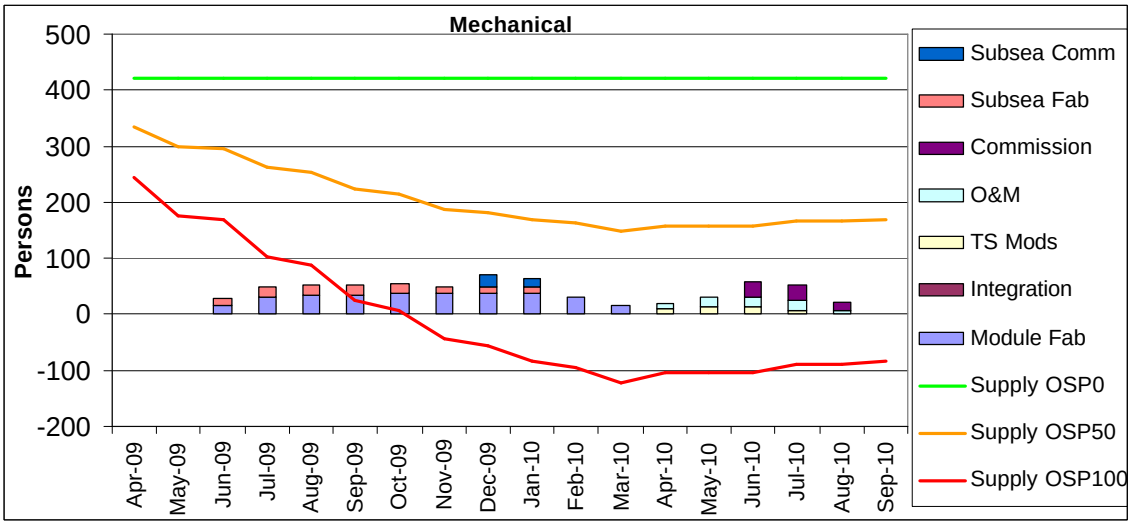
Peak project demand for Electrical is 123 tradespersons.
There are not expected to be any shortfalls under the OSP0, OSP50, or OSP100 cases.

4.4.4 Instrumentation



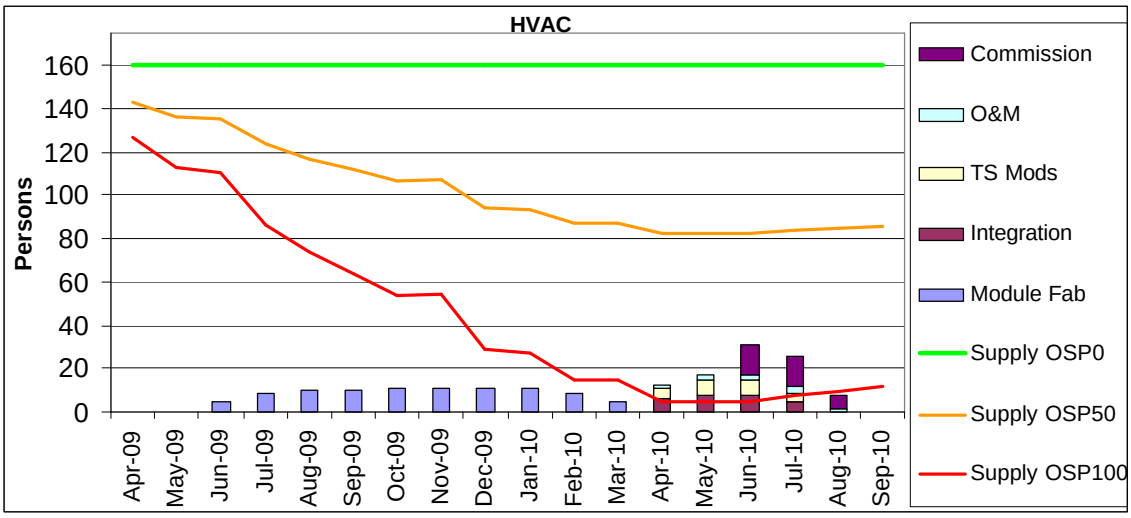
Peak project demand for Instrumentation is 93 tradespersons.
There is not expected to be a shortfall under the OSP0 case. However in the OSP50 case a shortfall is predicted during the commissioning phase of the project. The OSP100 case shows there will be a significant shortfall in the instrumentation trades during the Integration and Commissioning phases.

4.4.5 Mechanical



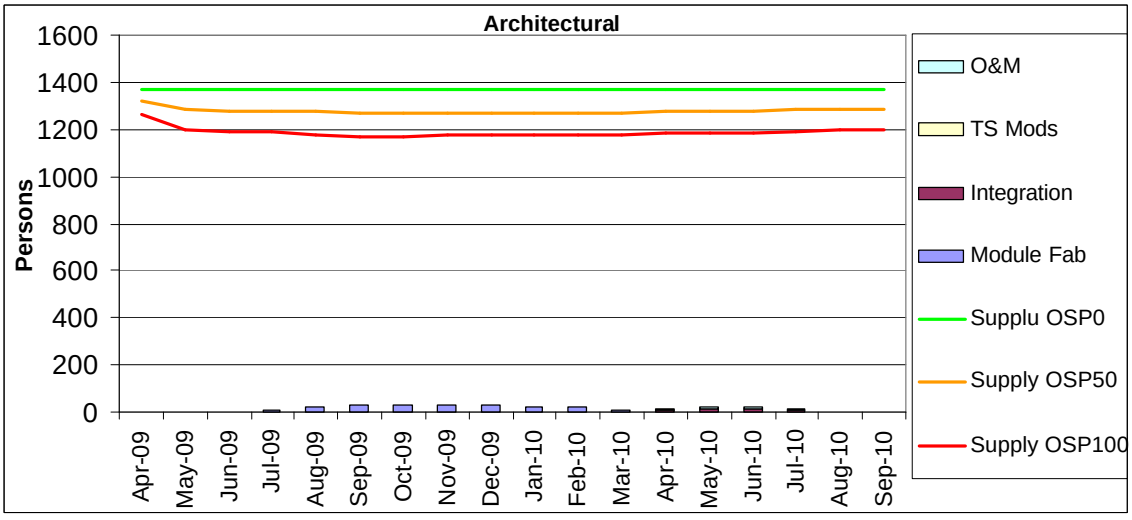
Peak project demand for Mechanical is 71 tradespersons.
There are not expected to be any shortfalls under either the OSP0 or OSP50 cases. However the OSP100 case shows there will be a significant shortfall in the mechanical trades.

4.4.6 HVAC



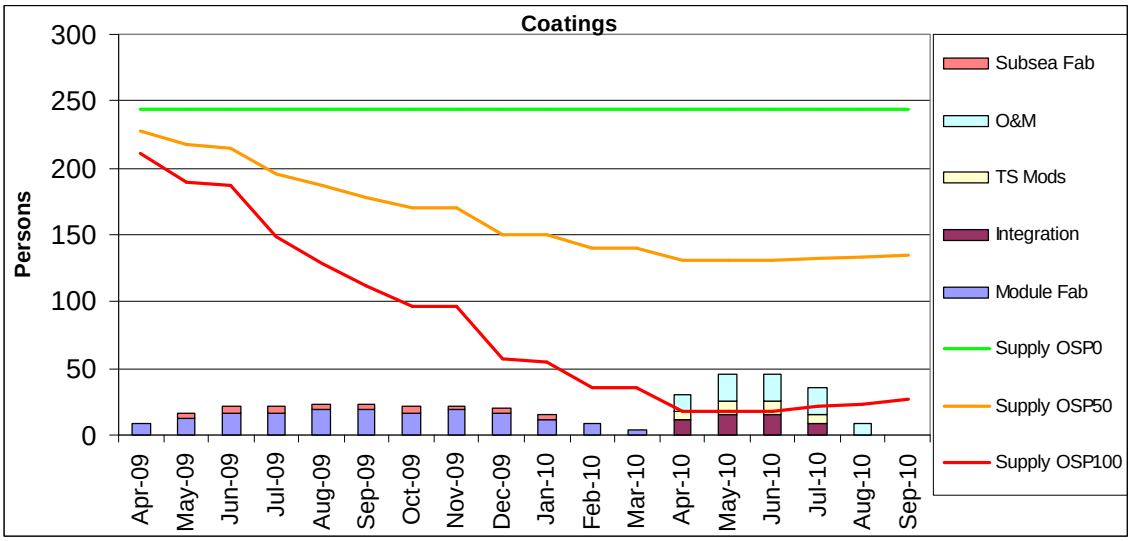
Peak project demand for HVAC is 31 tradespersons.
There are not expected to be any shortfalls under either the OSP0 or OSP50 cases. However the OSP100 case shows there will be a shortfall of HVAC workers in the Integration and Commissioning phases of the project.

4.4.7 Architectural



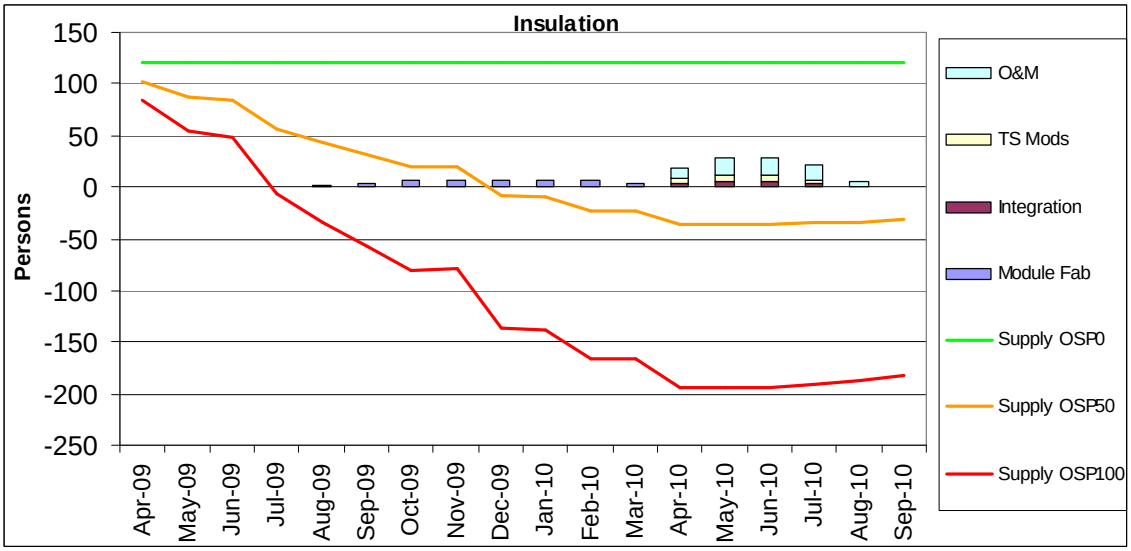
Peak project demand for Architectural is 32 tradespersons.
There are not expected to be any shortfall under the OSP0, OSP50 or OSP100 cases.

4.4.8 Coatings



Peak project demand for Coatings is 46 tradespersons.
There are not expected to be any shortfalls under the OSP0 or OSP50 cases. However the OSP100 case shows there will be a shortfall of coatings trades during the Integration phase.

4.4.9 Insulation



Peak project demand for Insulation is 27 tradespersons.
There is not expected to be a shortfall under the OSP0 case. However both the OSP50 and OSP100 cases indicate there will be a significant shortfall in the insulation trades.

Note: Despite there being predicted shortfalls in some disciplines the overall supply inall three cases OPS0, OSP50 and OSP100, exceeds the project demand. This could be skewed by the high number of Architectural persons accounted for in the Supply numbers. Close attention to the disciplines which indicate potential shortfalls is essential during project execution.

5.0 Previous Projects Structures

A brief description of major previous project structures, including utilization of fabrication facilities and the differences between the environments at the time versus the current environment is provided below:

5.1 Hibernia GBS Platform

Major scope of work executed in province:

- Construction of gravity-based structure
- Fabrication of wellhead module
- Fabrication of flare tower
- Fabrication of some production modules
- Fabrication of lifeboat stations and helideck
- Fabrication of drill derricks
- Load out and hook-up of all modules onto GBS

Major Fabrication Facilities used:

Bull Arm Fabrication Site, Trinity Bay and Cow Head Fabrication Facility, Marystown

Period: 1993 to 1997

Main Contractors:

PASSB, who were a consortium made up of the following companies PCL, Aker, Stord, Steen and Becker.

Other Significant Projects:

At the time of the Hibernia platform construction there were no other significant major projects ongoing within the province.

Environment:

Hibernia was the first platform to be built and was the largest project undertaken in the province. As such, the economy was structured around this project with new locally-based companies being formed along with international companies setting up in Newfoundland to execute the work. Other than the planned shutdowns at the Come by Chance Refinery there was no other major draw on resources.

5.2 Terra Nova FPSO

Major scope of work executed in province:

- Fabrication of two process modules
- Fabrication of flare tower
- Load out and hook-up of modules onto vessel

Fabrication Period: 1998 to 2001

Main Contractor:

Consortium of companies consisting of Daewoo SBB, Shawmont, Brown & Root, Sofec, PCL & Barmac.

Fabrication Facilities used:
Bull Arm Fabrication Site, Trinity Bay

Other Significant Projects:
At the time of the Terra Nova FPSO construction there were no other significant major projects ongoing within the province.

Environment:
Local companies that were created to support Hibernia construction and operation were able to provide skills and resources for the Terra Nova construction and commissioning. There was a gap of approximately twelve months between the Hibernia project and the Terra Nova project during which time some of the workforce took jobs in Labrador, Ontario and Alberta, some found jobs locally and others took time off. However, for the Terra Nova project the majority returned to employment on this major project. Since there were no other major projects impacting on the project, the environment was ideal for the project schedule.

5.3 SeaRose FPSO

Major scope of work executed in province:
- Fabrication of all modules
- Load out and hook-up of all modules onto vessel

Fabrication Period: 2002 to 2005

Main Contractor:
AMKC, which was a partnering agreement between Aker Maritime and Kiewit Contractors.

Fabrication Facilities used:
Cow Head Fabrication Facility and Marystown Shipyard, and to a lesser extent Bull Arm Fabrication Site and St. John's Dockyard.

Other Significant Projects:
At the time of the SeaRose FPSO construction there were no significant major projects ongoing within the province.

Environment:
The SeaRose FPSO construction followed the Terra Nova FPSO build after a gap of approximately eighteen months. As with the gap between Hibernia and Terra Nova the workforce took other employment or time off but returned in the majority for the SeaRose project. Other than planned shutdowns and routine operations for the Come By Chance refinery, Hibernia and Terra Nova there was no significant resource drain which impacted the SeaRose FPSO construction.

5.4 Terra Nova FPSO Additional Living Quarters & Starboard Lifeboat Enclosure

Major scope of work executed in province:
- Fabrication of accommodation module and lifeboat enclosure
- Load out onto barge for installation on the vessel in Rotterdam

Fabrication Period: 2005 to 2006 (6 month period)

Main Contractor:
Production Services Network as part of EPC contract with Petro-Canada contracted fabrication scope to North Eastern Constructors Limited (NECL). Equipment supplied by Emtunga Finland.

Fabrication Facilities used: Bull Arm Trinity Bay

Other Significant Projects:
At the time of the Terra Nova ALQ construction there were no other significant projects ongoing within the province which impacted on the project.

Environment:
Although there were no other significant projects in the province which impacted on the ALQ construction scope, the gap between projects resulted in a large percentage of the skilled labour force moving to the oil sands industry in Alberta. However the project was able to secure the work force required to execute the workscope.

Note: Although the ALQ is a much smaller project than the construction related to the three offshore facilities, the Study Team included it because it is the most recent sizeable scope of fabrication work for the oil industry within the province. The total weight for the ALQ and Starboard Lifeboat Enclosure was approx 900 tonnes.

5.5 Comparison between Environments

With the Hibernia, Terra Nova and SeaRose projects running in sequence the workforce moved from one project to the next despite the breaks in between projects. The main fabrication yards and shops were able to provide the output required to meet the demands of the project schedules with work being distributed among the facilities. The environment was very conducive to the success of the projects as there were limited external demands on resources or fabrication facilities.

However, the current environment is different in that there are a number of projects within the province that are in various stages of development, some of which have the potential to impact on the resource and fabrication capability for the Project based on timeline information currently available. Details of these projects were discussed in Section 4.0.

As well, due to a downturn in oil-related construction projects in NL and the upturn in work in the oil sands industry in Alberta, a large number of skilled resources have taken employment in Alberta. Due to a shortage of resources in Alberta, companies are paying premium rates to attract labour from all provinces as well as overseas.

Although the environment has changed from when the earlier major offshore projects were in progress in NL, the opinion of the Study Team is that should there be a major project within the province, a large percentage of the workforce would return from Alberta and elsewhere.

5.6 Potential Partnering Agreements

Partnering agreements have the potential to allow work to occur in parallel at multiple worksites to mitigate bottlenecks such as limitations in fabrication throughput.

Partnering agreements may take various forms including those listed below:

- Partnership between major fabrication yards and specialized subcontractors
- Partnership between major fabrication yards and fabrication shops to allow offsite fabrication e.g. pipe spools
- Partnership between specialized subcontractors to undertake module fabrication at a leased site
- Partnership between major fabrication yards and Atlantic/Eastern Canadian subcontractors

From the data received from the fabrication companies who responded to the survey questionnaire we are able to outline some existing partnering arrangements as listed in the table 5-1 below:

Table 5-1 Partnering Arrangements

Company	Existing Partnering Arrangement Response
Bowringer Engineering Ltd.	Sprialco, Montreal Quebec Maritime Welding New Brunswick
C&W Offshore Ltd.	C&W Industrial
Central Fabricators & Machinists Inc.	Central Fabricators has alliances that it can call upon for major projects
Corner Brook Fabrication & Steel Ltd.	Western Metalwork Network
CSI Fabricators Ltd.	Cherubini Group of Companies
DF Barnes	Penney Energy Orphan Industries
Kiewit Offshore Services	KOS has subcontracted and joint ventured on numerous mega projects in the past and are open to opportunities for new mega projects
Land & Sea Welding Ltd.	None listed but willing to partner
M&M Offshore Engineering Ltd.	Newfoundland Service Alliance
Metal World Inc.	McNulty Offshore
NECL	Subsidiary of G.J. Cahill
Orphan Industries	Member of DF Barnes Group of Companies
Newdock / St. John's Dockyard Ltd.	Penney Energy

As can be seen from the above table 5-1 there is a number of existing alliances in place between various companies. In general for major projects one of the major fabrication contractors will subcontract elements of work to smaller approved companies as required in order to meet schedules.

It is the opinion of the Study Team that strategic alliances could be formed for the fabrication and integration scopes.

6.0 Conclusions

As stated in Section 1.2 Study Objectives there are two primary questions which need to be answered:

- Is there fabrication capacity within the province to meet the demands of the Project?
- Are there adequate skilled resources within the province to execute the scope of work within a specified period of time?

6.1 Conclusions – Fabrication Facilities

Taking each question in turn and assessing the data provided in the report we are able to draw conclusions as detailed below:

Is there the fabrication capacity within the province to meet the demands of the Husky project?

Within the province there is capacity to perform the required fabrication works for the project. It has been demonstrated that both large and medium sized projects have been executed locally.

There are two main fabrication yards which are suitable for the integration and commissioning work when the vessel comes into dock: Kiewit Offshore Services facilities at Marystown, which incorporate the Marystown shipyard and Cow Head Fabrication Facility; and the Bull Arm Fabrication Site at Trinity Bay.

Each of these facilities may be used for other projects/contracts which may be in progress during the same time as the Project and as such a further study and negotiations will need to take place to identify the most suitable facility prior to placing contracts. The equipment within the yards will need to be inspected and an assessment made on how much work is required to ensure all equipment is operational, serviced and certified for use. Some of the older equipment at KOS Marystown may need overhaul, and the Bull Arm facility although considerably newer has not been operational for a period of time.

KOS is tendering for a number of contracts as detailed in Section 4.3. Depending upon how successful KOS is at winning contracts they may have a complete order book and may not be able to provide the facilities and resources required. However early negotiations may secure areas of the facility and a commitment on resources.

The Bull Arm Facility is likely to be utilized extensively should the new refinery, proposed by Newfoundland and Labrador Refining Corporation (NLRC), commence on schedule. However based on the Study Team's understanding of the project status, the new refinery may slip by a year if in fact it goes ahead. Should the Hebron Project go ahead it is envisaged that the GBS will be constructed at the site, based on the Hibernia GBS having been constructed there. For schedule purposes the Hebron project has not been classed as a simultaneous project and should not impact on the Project.
The Bull Arm facility at present is currently inactive; they have no projects ongoing at this time. The Bull Arm Site Corporation is receptive to discussions relating to companies taking on the role of site operator for various sections of the site to execute project work. This was the case in late 2005 and 2006 when the Terra Nova Additional Living Quarters was fabricated there. NECL were contracted to Production Services Network Canada and operated necessary sections of the Bull Arm facility.

In addition to the main fabrication yards, there are a number of fabrication companies within the province that perform fabrication services for the offshore industry. Although they cannot undertake the major project they are able to fabricate pipe spools, supports, structural subassemblies, and

discrete packages in skid form which can be supplied to the fabrication yards for integration and load out onto the vessel. Most of the companies have the willingness and ability to work on a sub-contract basis to the major fabricators.

To conclude, there is the capability and capacity within the province to meet the demands of the Project.

6.2 Conclusions – Labour Capability

Are there adequate skilled resources within the province to execute the scope of work within a specified period of time?

There exists a high probability that there will be elevated competition for skilled trade labour in 2009 through to 2011. Depending on which projects proceed on schedule there will be a competition for labour. Within Section 4.4 we have provided histograms per discipline to show estimated resource supply and demand based on no other simultaneous projects, a 50% level of demand for simultaneous projects, and all known simultaneous projects running as per schedule. From these we can conclude the following:

- There should be sufficient resources to execute the work with no other projects running simultaneously.
- At a 50% level of demand for simultaneous projects, there will be shortages in Instrumentation and Insulation trades. This will depend on which projects are proceeding as per the outlined schedules.
- If all projects run simultaneously there will be shortages in Piping, Instrumentation, Mechanical, HVAC, Coatings and Insulation trades. Resource levelling to mitigate these shortfalls may not be possible, due to the magnitude of the shortfalls and the discrete nature of the phases of the Project.

Considering the volume of upcoming work, labour rates may escalate considerably. Currently, the NLCBTC is in negotiations with representatives of NLRC on rates. Considering the shorter duration with respect to other projects competing for the same workforce, attracting a well-qualified labour force for the Project may be an issue.

To conclude, the availability of suitable resources within the province to execute the scope of work within the time period will depend on which other projects are ongoing at the same time. All projects will be drawing from the same labour resource pool and as such close monitoring of the situation along with measures to attract key skilled labour resources will need to be considered.