Appendices

Table of Contents

Appendix 1 (a) Regulatory Issues Steering Committee Mandate	.ii
Appendix 1 (b) Industrial Opportunities Task Force Objectives and Responsibilities	V
Appendix 2 Summary of Three External Studies	.vii
Appendix 3 Working Papers	X
Appendix 4 Offshore Exploratory Well Costs	XXX

Appendix 1 (a)

Regulatory Issues Steering Committee Mandate

Background:

On November 22, 2002, the Atlantic Energy Roundtable was convened to identify challenges facing the offshore oil and gas industry in Atlantic Canada. Senior representatives from the oil and gas industry and local supply companies joined four federal Ministers and three provincial Ministers in Halifax. A consensus emerged around the need to improve regulatory efficiency and encourage increased investment and local involvement. The Roundtable agreed to establish committees to consider ways to improve the regulatory environment and to promote offshore oil and gas development, supported by a competitive Atlantic supplier community

Mandate:

The Regulatory Issues Steering Committee will bring senior decision-makers from governments, agencies, boards and industry together to identify policies and/or regulatory practices, which enhance the competitiveness of the offshore oil and gas industry in Atlantic Canada, and to prepare, for consideration by governments, recommendations for change.

The Committee will adhere to principles of sustainable development approach and will institute work to research matters and provide appropriate advice to the industry and the Ministers responsible for Energy.

Role:

The Committee is established as a partnership of the three governments under the direction of the Ministers Responsible for Energy in collaboration with industry and the Boards.

Responsibility:

The Committee will focus on the offshore areas of Nova Scotia and Newfoundland and Labrador.

The Committee is responsible for reporting its progress to the federal and provincial Ministers of Energy. Individual committee members are responsible for reporting progress within their respective organizations. The Committee will meet at least quarterly.

The Committee will re-assess its mandate following the next Roundtable scheduled for September, 2003.

Structure

- Chaired by Natural Resources Canada, Province of Nova Scotia and Province of Newfoundland and Labrador.
- Representatives at the senior executive level or designate
- Working groups will be appointed on an ad hoc basis for carrying out specified tasks and reporting results to the Committee.

Committee Functions:

- Identify priority issues with respect to the regulatory environment for offshore oil and gas activities in Atlantic Canada. The test for issues to be addressed will be that issues must be those for which Committee members agree that substantial progress can be made and which will have substantial impact on the competitiveness of the Atlantic oil and gas industry.
- Decide on the best way to address priority issues.
- Assign or commission necessary tasks or projects to address priority issues, including the necessary resources.
- Vet results of task assignments and make decisions about how to put such results into practice.
- Track the utility of results in addressing the original issues.
- Share information between participants and with other related initiatives. In this regard, task NRCan with the responsibility for serving as a conduit into the related activities of the federal family of agencies. (such as CEAA regulations)
- Report progress to Ministers responsible for Energy

Working Principles:

Formal Mechanism: The Offshore Oil and Gas Issues Steering Committee reflects the shared commitment expressed by the Atlantic Energy Roundtable to establish a formal structure within which issues can be introduced and analyzed.

Formal Approval and Reporting Requirement: There is a formal reporting relationship to the Ministers responsible for Energy and members of the Energy Roundtable

Does Not Fetter Statutory Decision-Making: The committee is a forum for information exchange. Participation by agencies must not fetter statutory decision making or place participants in a conflict of interest position with respect to the review of applications that are in progress or other matters that are before Ministers or regulators for decision.

Responsive/Flexible/Inclusive: Participation can expand and contract as a function of topic and at any time in the review of results. Issues drive participation: participation may vary, particularly on project teams, in response to the nature of the issue.

Interest-Based Approach: The Committee and the project teams it assigns take an interestbased approach to the work by having governments, Boards, agencies and industry work together toward a common understanding of problems and potential solutions, and by seeking consensus on these wherever possible.

Duplication: Working Groups will not be established where other mechanisms, including reporting and accountability, are in place to address an issue.

Resourcing: Participants on the Committee accept responsibility for jointly and adequately funding priority work.

Consensus: Recommendations will represent a consensus approach as much as possible

Communications: The process will be open and transparent.

Appendix 1 (b)

Industrial Opportunities Task Force Objectives and Responsibilities

Introduction

The goal of developing a petroleum-related strategy for industrial opportunities follows from the Atlantic Energy Roundtable (AERT), held in Halifax in November 2002. Federal and provincial Ministers met with a cross section of petroleum industry and other interested stakeholders to discuss and address current challenges facing the industry in Atlantic Canada.

Included amongst the recommendations generated by the Roundtable discussions were the establishment of two Task Forces, the Industrial Opportunities Task Force and the Regulatory Issues Steering Committee, struck to further review the broad topics of regulatory issues, and industrial opportunities. The Task Forces were to study these issues, with the objective of presenting findings and recommendations to another sitting of the AERT within a year.

The Purpose of the Industrial Opportunities Task Force

The Industrial Opportunities Task Force has devoted the past seven months to a collaborative process. The Task Force purpose was to address issues of continuous improvement and increased business capture of the resident supply and service companies in an effort to optimize economic impact on the Atlantic region and the country as a whole. The Task Force was to address the region's competitiveness and thereby improve the region's exploration attractiveness.

It should be clearly stated that the Task Force process itself has acted as an effective and transparent means of improving the knowledge and mutual understanding of the parties involved, federal and provincial governments, oil and gas operators, associations and supply and service sector. The organizations and individuals that devoted significant time and effort to the process are recognized in the accompanying acknowledgement.

The Vision and Goals of the Industrial Opportunities Task Force

A growing offshore oil and gas industry maximizing its contribution to the economic well-being of the region.

In considering its goals, objectives and strategies, the Task Force was committed to the following principles: sustainability, competitiveness, collaboration, coordination, cooperation, issue communication and resolution, and transparency. The goals of the Task Force are to

increase the investment in the region and to increase the level of local opportunities and activities related to the offshore oil and gas industry.

Three key sub-committees supported the work of the Industrial Opportunities Task Force. The Supplier Development Committee had as its purpose to better understand how: Atlantic Canadian businesses are currently engaged in the supply and service of the offshore; what opportunities exist in the future for those businesses; strengths and challenges inherent in Atlantic Canada's market place, and; to map out optimal regional capture. The Research and Development Committee focused upon identification of petroleum related research and development (R & D) priorities in Atlantic Canada and the development of a strategy for Atlantic Canada's petroleum related R & D. The Monitoring and Measurement Committee, the most recently formed sub-committee was tasked to prepare a report that identifies and documents various stakeholders issues with the current monitoring, reporting and measurement process together with the related information needs and to consider the best means of obtaining the information.

Appendix 2

Summary of Three External Studies

In response to the directive from the Roundtable, the Regulatory Issues Steering Committee commissioned three studies: a Benchmarking Study on Regulatory Cycle Time; a Report from the regulatory Lessons Learned Workshop; and an update of the Regulatory Roadmap and an analysis of opportunities for improvement. These studies informed the Steering Committee on both "where we are" and "where we want to be" in terms of an efficient, effective and internationally competitive regulatory regime.

1. Benchmarking Study: A Review of Regulatory Cycle Times in Certain Jurisdictions

The Regulatory Issues Steering Committee commissioned Gaffney, Cline and Associates (GCA), of Houston Texas, to perform a review of the regulatory approval cycle times for certain offshore petroleum areas. The areas studied are the United States' Gulf of Mexico, Australia and the U.K. and Norwegian sectors of the North Sea (the Reference Jurisdictions).

GCA noted that, "it is increasingly clear from the level of regulatory reform in the Reference Jurisdictions (as well as in other countries) that the way in which governments administer and regulate their petroleum sectors is an emerging frontier of competition – in particular because of the impact of a government's regulatory processes and procedures on both the cost and time of conducting exploration and production activities."

The study found that despite the increased attention given to environmental aspects and increasing involvement from sectoral stakeholders, there is evidence that cycle times are compressing and will continue to compress in the four areas studied. The reasons identified for this compression of regulatory cycle times are:

- Increased level of parallel (as opposed to serial) processing of applications (often in the context of a consolidation of the various regulatory bodies to a single or limited interface with the companies);
- As noted in the U.K., in particular, an increase in more frequent and informal communication such that most materials that are submitted for approval have already been previewed and commented on by the regulator;
- Increased reliance on the use of common international standards such as the international classification societies (Lloyd's Register, Det Norske Veritas, American Bureau of Shipping, among others) and auditing compliance (as opposed to supervising it).

GCA found that the length of the regulatory approval process varies with the complexity and characteristics of the project. The range and median duration of regulatory approval times in the Reference Jurisdiction are as follows.

	Range	Median Duration (Months)
Australia	8-24	14
Norway	8-15	13
United Kingdom	5-12	<9
U.S. Gulf of Mexico	6-12	10

In comparison the regulatory approval time-frames in Atlantic Canada ranged from 13 to 21 months (Hibernia 13 months, Terra Nova 17 months, Sable 18 months and White Rose 21 months) and the trend appears to be counter to compressing cycle times observed elsewhere.

Key measures to close this gap would include:

- an increased level of parallel processing of applications;
- increased dialogue and interaction with companies prior to application;
- increased orientation from rule-based towards outcome-based regulatory practices; and
- the increased familiarity and comfort that comes with practice.

2. Report from the Lessons Learned Workshop (June 2003 Halifax)

The Lesson Learned Workshop, moderated by Bob Walden (Bedford Consulting & Associates) and Bruce Smith (BLSmith Groupwork Inc.), brought together individuals from governments, regulators and industry to share regulatory approval process experiences and explore opportunities for process improvements. In separate working groups, workshop participants reviewed the issues of regulatory and legislative overlap and duplication, environmental assessment processes, and industry standards. An action plan was developed addressing each issue within these broad categories.

With respect to Environmental Assessment, the most significant issue continues to be the comprehensive study requirement for exploratory wells in areas not already assessed under CEAA processes. A sub-committee of the Canadian Environmental Assessment Agency's Regulatory Advisory Committee (RAC) is reviewing this matter. (Working Paper #6)

Other matters included: the use of regional environmental assessment as an early planning tool which reduces the environmental assessment requirements for projects (Working Paper #7); the standardization of the environmental review process by Responsible Authorities, the development of a shared RQF process (Working Paper # 8); matters related to rig certification (Working Paper # 15); and the opportunities to reduce duplication and overlap in areas such as offshore pipeline and gas plant approvals (Working Papers 9 and 10). These issues have been incorporated into the Workplan for 2004.

3. Challenges and Opportunities for Regulatory Effectiveness in the Offshore Accord Areas of Nova Scotia and Newfoundland and Labrador

This report by Erlandson & Associates and Petroleum Research Atlantic Canada (August 2003) documents the challenges and opportunities facing agencies, boards, and industry in the regulatory structure governing the offshore oil and gas jurisdictions of Atlantic Canada. The study builds on the work completed for the initial Regulatory Roadmap project - *Guides to Oil and Gas Approvals (2001)*.

The report lists: 1) differences or inconsistencies in the regulatory practices of the Offshore Petroleum Boards; 2) areas of duplication and overlap between mandates or procedures governing the offshore; and 3) other significant challenges or opportunities. Additionally the report provides analysis of the issues and details proposed solutions or approaches to improvement.

PRAC/Erlandson identify five issue areas of greatest significance where aligning policies or practices would positively impact cost and/or administrative and operational burden. These issues are:

- 1) reduction of well drilling costs through measures identified by evaluation of technical and policy elements (Appendix 4);
- harmonizing the standards and certification procedures for rigs and supply vessels (WP# 15);
- 3) rationalizing environmental assessment processes and providing parallel processing of environmental and regulatory assessments(WP #4 & 12);
- 4) managing the duplication of mandates for offshore pipelines and connected facilities(WP# 9 & 10); and
- 5) aligning benefits planning monitoring and reporting practices and administration (see Industrial Opportunities Task Force findings)

The study also identifies federal legislation which applies to the offshore area, such as the Accord Acts, the Canadian Environmental Assessment Act, the Oceans Act, and the Species at Risk Act. These do not represent overlap or duplication, but rather are Acts of general application, having distinct and separate objectives. However, they do contribute to the regulatory burden, therefore it is important that these Acts are managed in an efficient and co-operative way.

Appendix 3

Working Papers

Working Paper One Principles for Effective and Efficient Offshore Energy Regulation

The Governments of Canada, Nova Scotia and Newfoundland and Labrador are committed to the development of Atlantic offshore energy resources in a safe, economically competitive, environmentally and socially responsible manner to the mutual benefit of resource owners and industry. To help achieve this objective, the governments have adopted the following principles:

Sustainable Development: The development of non-renewable offshore oil and gas resources will be done in a manner that contributes to the wealth of our society without compromising either the environment or the ability of future generations to meet their needs.

Coordination: The Governments recognise that there are many diverse interests in the marine environment that are advanced and protected by legal obligations. In the exercise of these obligations, the Governments are committed to a process of smart regulation that would promote health, safety and sustainability, contribute to innovation and economic growth and reduce the administrative burden on business.

Consistency: The Governments are committed to the development of common offshore energy regulations and the application of these regulations on a consistent basis. Where circumstances require different approaches in different areas, these differences will be justified.

Process Predictability: The Governments are committed to developing clear standards, requirements and expected outcomes, which should result in predictable processes and timely decision-making.

Communication: The Governments recognise that a foundation of good regulatory practise is have an open dialogue between operators, governments and regulators early in the planning.

Transparent Decision-making: The Governments are committed to a process of regulatory openness and transparency. Where matters of public interest and concern are raised, regulatory decisions will respond to those concerns in an open and publicly accessible fashion.

Free Market: Fair and open competition is the cornerstone of Canadian market-based energy and trade policies. The governments are committed to use these policies to encourage development of Atlantic offshore energy resources in an economically competitive manner.

Working Paper Two

Communication between Regulators and Proponents

CONTEXT:

The Gaffney and Cline International Benchmarking Study partly attributes the efficiency in the United Kingdom regulatory system to a practice of good communication between regulators and project proponents prior to official entry into the regulatory system.

In a number of Canadian and American energy regulatory forums, issue resolution in advance of formal hearings is a common and effective tool to speed up decision-making.

In Atlantic Canada, projects have realised more efficient cycle times when dialogue took place. Examples are the CEAA workshops conducted prior to Terra Nova, the discussions between EnCana and Environment Canada with respect to the disposal system for H₂S, and discussions between regulators, governments and the Sable Offshore Energy Project prior to the public review process.

ISSUE:

Some legal impediments to preliminary issue-resolution discussion were identified during the EnCana Deep Panuke regulatory review. International and local experience have shown that a critical element of a well functioning and efficient regulatory system is the ability of the system to explore/address or resolve issues informally in advance of a formal submission.

It is explicitly understood that a process of dialogue and attempts to address issues informally is not intended to substitute for the formal, transparent public regulatory process nor is it intended to lengthen timelines. It is simply understood to be a well-established international best practice and provides an opportunity to achieve a clear understanding of requirements and expectations in advance, making the formal regulatory process more efficient.

It is recognized that having a dialogue between operators, governments and regulators can be an intensive activity and all sides need to allocate appropriate level of human resources.

WORKPLAN:

The Canadian Association of Petroleum Producers will work with the CNSOPB and the CNOPB to identify any legal and operational impediments to communications between regulators, government departments and project proponents. Potential solutions will be reported back to the Working Committee before the end of the year.

Working Paper Three Foreign Worker Approval Process

CONTEXT:

All operators and suppliers conducting activities offshore Atlantic Canada, must obtain approval from Human Resource Development Canada (HRDC) before a foreign worker may enter Canada to work Offshore. In Nova Scotia the CNSOPB foreign worker approval process also requires industry to receive approval from the Canada Nova Scotia Offshore Petroleum Board (CNSOPB). In offshore Newfoundland, approval of individuals for specific positions is given solely by HRDC. The Canada-Newfoundland Offshore Petroleum Board (CNOPB) and HRDC co-ordinate employment information at the Human Resource Plan stage and through regular human resource reporting by Operators.

HRDC, under its Foreign Worker Program receives its mandate from two pieces of legislation: Citizenship and Immigration Canada – Immigration and Refugee Protection Act and Regulations; and, Employment and Insurance Act and Regulations Part II

The CNSOPB and CNOPB receive their mandates for employment under the Accord legislation, section 45. This legislation is also grandfathered under the North American Free Trade Agreement.

ISSUE:

The parallel approval process for foreign workers conducted by HRDC and the CNSOPB in Nova Scotia is viewed as duplicative and time consuming, with inconsistency between Boards. There is also the potential for one organization approving a request while the other does not, resulting potential differences and delay.

WORKPLAN:

The CNSOPB, under its existing Memorandum of Understanding with HRDC, proposes to adopt a model for screening foreign workers similar to that used by the CNOPB. The CNSOPB plans to meet its regulatory responsibilities in respect of local employment by reviewing the general human resource plans proposed by operators. With respect to individual foreign worker applications, HRDC will administer the applications in consultation with the CNSOPB. The CNSOPB has already met with HRDC for discussions and is currently mapping out the process to be followed. It is expected that operators will be notified before year-end 2003.

Working Paper Four Environmental Assessment Coordination

CONTEXT:

The Canada-Nova Scotia Offshore Petroleum Board (CNSOPB) and the Canada-Newfoundland Offshore Petroleum Board (CNOPB) have recently come under the Canadian Environmental Assessment Act (CEAA) for exploration activities. This designation provides an opportunity to refocus the Environmental Assessment (EA) process for seismic and drilling exploration activities in the offshore.

Up until now, the CNSOPB, CNOPB and the National Energy Board (NEB) have been responsible for EAs of offshore exploration activities. The EAs for exploratory projects concluded to date by CNSOPB and CNOPB have been done using the respective Board's "CEAA like" process. Coordination efforts will be focused on the exploration phase of offshore oil and gas activities. Currently, two levels of assessment are used: screenings and comprehensive studies.

ISSUE:

Increased co-operation and co-ordination among Federal Authorities with respect to the EA of exploration activities offers the opportunity to increase process efficiencies, while ensuring that environmental protection standards are met.

Properly implemented, the initiatives proposed hold the promise of efficiency in time and resources, and increased predictability for stakeholders. Implementing these initiatives will result in application time-savings and a reduction in administration for all parties.

WORKPLAN

Coordination of federal authority involvement in the EA of exploration activities may be accomplished by means of an MOU. The CNSOPB is exploring this option by circulating a draft MOU for discussion.

The development of a generic scope for exploration activities will require agreement among federal authorities on the substance of the EA process (i.e., agreement on what outcomes should be respected). This initiative would engage all applicable stakeholders at a number of focused forums The plan would be to have a generic scope complete in 2004.

Development of a work plan regarding Comprehensive Studies needs to await the results of the CEAA RAC process, which is expected to be complete before the end of 2003. A progress report is expected for Roundtable III.

Working Paper Five Early Release of Environmental, Health and Safety Data*

CONTEXT:

Under the Offshore Accord legislation environmental, health and safety (EH&S) data that operators submit to the Offshore Boards are confidential for varying periods of time.

Operators submit detailed health, safety and environmental assessment plans for all offshore activity. These plans receive public scrutiny during the process through a number of regulatory vehicles. The Boards ensure that operators maintain compliance with their approved plans by having them submit raw data and summary reports.

According to the *Canadian Environmental Assessment Act*, environmental information submitted in support of applications and environmental effects monitoring data is available to the public. The information required under the Accord Acts is confidential without written consent to release it. Operators have provided that consent for Environmental Assessments but to date there has been limited consent given for early release of information about EEM and mitigation efforts.

Due to the costs and challenges associated with data collection activities, and the comparatively small data set available, environmental data have commercial value. Offshore operators and their partners have a range of individual policies on release of EH&S data. The Boards, CAPP and the Operators all share information through various progress reports, forums and summaries. Operators have also released EH&S data beyond their regulatory obligations on a case-by-case request basis.

ISSUE:

In recent years, there has been a move in Canada and other countries toward increased transparency in regulatory decision-making. A number of government departments and non-governmental organizations have asked for earlier public access to the EH&S raw data that operators submit to the Offshore Boards in Atlantic Canada.

WORKPLAN:

CAPP will work with the Offshore Boards to develop a better understanding of the Boards' needs and to address possible solutions to the perceived lack of transparency in the industry EH&S performance.

*Due to time constraints this Working Paper has not been discussed at the Working Group or the Steering Committee table.

Working Paper Six

Environmental Assessment Requirements for Exploratory Wells

CONTEXT:

The *Canadian Environmental Assessment Act (CEAA)* regulations require a comprehensive study of east coast offshore exploration wells located outside the study area of an exploratory well or production project previously assessed under CEAA.

Existing study areas, where a comprehensive study of exploratory wells would not be required, are those established during the environmental assessments of Sable Gas, Hibernia, Terra Nova, White Rose and Deep Panuke. While these areas cover large portions of the Newfoundland and Nova Scotia offshore, there are still large areas beyond the existing study areas for which exploratory wells would require a comprehensive study.

Comprehensive studies have additional process requirements as compared to environmental screenings, although the levels of technical detail and effort of the two can be similar, depending on the complexity of the issues.

Determining the appropriate level of environmental assessment for offshore exploration wells was a major issue during the first Atlantic Energy Roundtable, and work to resolve the matter is continuing outside the Roundtable forum.

ISSUE:

The petroleum industry and the provinces of Nova Scotia and Newfoundland and Labrador believe exploration wells in general should be subject to a screening level of assessment. These parties are also concerned that the CEAA regulatory amendments will result in an overall reduction in exploratory activity outside the well-established areas around the existing projects (Sable, Hibernia, Terra Nova and White Rose) - and that this could have a negative effect on the industry.

WORKPLAN:

Given divergent views by interested parties, the Federal Minister of the Environment's multistakeholder Regulatory Advisory Committee (RAC) is continuing to examine the regulations under the Canadian Environmental Assessment Act relating to offshore oil and gas activities, with particular attention to the requirements for comprehensive study assessments of exploratory wells. It is expected that this group will report by the end of 2003.

Working Paper Seven

Regional Environmental Assessments in the East Coast Offshore

CONTEXT:

Regional Environmental Assessment (REA) includes: assembling existing environmental baseline information on the marine ecosystem, determining the potential environmental effects, including cumulative environmental effects, and identifying potential mitigation for particular types of activities. This assessment would not be associated with a particular project proposal.

An REA would not replace the project EA, but complement it and potentially provide a framework within which the process for assessing projects within a region could be made more efficient, predictable and consistent. An REA could:

- deal with regional environmental issues in one forum;
- develop a cumulative effects assessment framework;
- establish mitigation approaches and requirements;
- provide a forum for stakeholder participation;
- establish a regional standing consultative body; and
- provide a basis for discussing equitable cost sharing.

Like regional planning, regional environmental assessment is a broad early planning tool used in other jurisdictions as a means of managing cumulative effects for a given area and simplifying environmental assessment requirements for individual projects. It holds the promise of offering efficiency and increased predictability for all stakeholders.

ISSUE:

It is not now certain how REA would fit within existing broader EA-related initiatives such as the Boards' Strategic Assessments or Integrated Management Planning under the Oceans Act.

WORKPLAN:

The Federal Minister of the Environment's Regulatory Advisory Committee (RAC) is continuing to examine the regulations under the Canadian Environmental Assessment Act relating to offshore oil and gas activities, with particular attention to the requirements for comprehensive study assessments of exploratory wells outside of existing study areas. The RAC review will make recommendations on the appropriate course of action with regard to REA.

Working Paper Eight

Sharing Regulatory Query Forms

CONTEXT:

Companies involved in offshore exploration, development, and production activities use the Regulatory Query Form (RQF) Process to seek clarification or interpretation or to seek exemptions from or alternatives to regulatory requirements or referenced codes or standards.

ISSUE:

The intent of the RQF process is to provide reasonable flexibility. It can, however, be both time-consuming and costly for operators to develop, and for regulators to review and approve. Many of the RQFs received are repetitive in nature because information submitted in support of an RQF by an operator to the Boards is confidential. At present the Boards cannot share it with other operators.

CAPP has been tasked with investigating the possibility of an industry-managed process to share RQFs among operators to reduce processing burden and cycle time for both operators and regulators. An industry-managed process for sharing RQFs would result in time and cost savings for operators and the Offshore Boards. It would also provide increased regulatory certainty.

WORKPLAN:

Operator sharing of RQFs will be facilitated through use of CAPP's member web site, MemberNet. By October 2003 the online repository of RQF information will be available for offshore operators to use in preparing RQFs on previously assessed issues. CAPP will continue to work with the Offshore Boards to determine the RQF application process using shared RQF material.

In the longer term, the Boards suggest further dialogue may be needed with industry on RQFs. They suggest that for purposes of transparency, it may be preferable to make all of the industry shared RQFs publicly available from the Boards' own registry of RQFs. This may be a requirement under the proposed OHS amendments.

Working Paper Nine

Overlap and Duplication of Regulation of Pipelines Offshore Nova Scotia

CONTEXT:

There is overlapping legislative responsibility for the approval and operation of offshore sub-sea transmission pipeline facilities in the Nova Scotia offshore area. The National Energy Board (NEB), the Nova Scotia Utility and Review Board (UARB), and the Canada-Nova Scotia Offshore Petroleum Board (CNSOPB) all have responsibility under respective federal, provincial and joint legislation.

When the Sable Offshore Energy Project emerged in 1996, an MOU was established which created a joint review panel process to cover all matters. Three approvals were subsequently issued on the sub-sea pipeline: the NEB; the CNSOPB; and the NS Energy Board (responsibility since transferred to the NS Utility and Review Board).

As the joint panel process was a one-time arrangement for SOEP, uncertainty exists on jurisdictional matters when it comes to future projects involving offshore sub-sea pipelines. The joint panel process illustrates how greater efficiency can be realized through collaboration and should be a model for the future.

ISSUE:

Overlapping legislative responsibility creates a lack of clarity and certainty regarding the scope, procedures, filing requirements and process for public reviews. There is also a risk of conflicting decisions or direction and concerns over extended timelines and higher costs for satisfying multiple regulators.

Legal authority exists for Nova Scotia to delegate administrative responsibility for offshore pipeline approvals and on-going regulation under the NS Pipeline Act. The Governments of Nova Scotia and Canada intend to establish a protocol that would ensure a consistent and predictable regulatory process on all future regulation of offshore pipelines.

WORKPLAN:

Nova Scotia will lead discussions with Natural Resources Canada, the NEB and the CNSOPB to establish a protocol for offshore pipeline and gas plant approvals in 2004 consistent with the objectives for a co-ordinated harmonized review process.

Each of the partners in the protocol will need to develop policy objectives and legal language establishing the framework for Offshore Pipeline approvals and monitoring. Original research may be required although SOEP already provides some guidance.

Working Paper Ten

Overlap and Duplication of Onshore Gas Plant Approvals and Operational Regulation in Nova Scotia

CONTEXT:

Both the National Energy Board (NEB) and the Nova Scotia Utility and Review Board (UARB) regulate onshore natural gas plants that are part of the facilities for an offshore pipeline. This overlapping responsibility has led to issues arising from the need for duplicate approvals to construct and operate a gas plant, and differences in the gas plant regulations administered by the NEB and the UARB.

The *National Energy Board Act* and its processing plant regulations place the onus on companies for ensuring the safety of people and the protection of property and the environment. Nova Scotia's *Gas Plant Facility Regulations* have been in place for several years and are more prescriptive in approach than those of the NEB.

The NEB and UARB were able to achieve an administrative solution for the Sable Offshore Energy Project gas plant that enabled coordinated decision-making on approvals but that solution has not been formalized for future gas plants. The matter of ongoing regulation has been administratively dealt with to some degree, but has not been formalized.

ISSUE

Duplicate authority results in more time and effort to satisfy regulatory requirements, higher costs, and can result in conflicting direction to applicants. This in turn can compromise the achievement of pubic policy objectives. A solution to this issue must respect both public policy and government objectives while at the same time resulting in an outcome that leads to clear, efficient and timely regulation of gas processing facilities.

WORKPLAN:

Regulatory burden, risk and uncertainty can be removed with a moderate level of effort that builds on the Sable Offshore Energy Project model. The Governments of Nova Scotia and Canada have agreed to pursue formalizing the current administrative practices on the regulation of gas plants to eliminate potential conflicts and uncertainty. This will require input from the relevant regulators. The more difficult issue of which laws of general application will be used would be part of a longer and more extensive discussion. Gas plant project approvals will be examined in connection with the protocol on offshore pipeline approvals.

Working Paper Eleven

Development Approval Process Models (Generic MOUs)

CONTEXT:

Every project approved offshore Canada has had a different form of regulatory approval. Each process was developed and custom designed to the project. The time for regulators to agree on a process has ranged widely but has taken as long as 24 months to conclude.

A range of options exists for the review of projects. The criteria used in deciding on the type of review the potential impact of the project, public interest, whether there has been a comprehensive study review in the same study area and similarity of project proposal to previous projects.

Some of the parameters for regulatory approvals are already being set in other initiatives. The need for guidance on regulatory models is particularly strong for small or "add-on" projects where the regulatory system could be perceived to be too onerous to have developers even consider submitting such proposals. A clear set of criteria in this area might encourage development.

ISSUE:

Designing a project specific offshore regulatory process has been a time-consuming and somewhat unpredictable process. These factors have lead to the suggestion that a generic MOU between the regulators to guide the project approval processes be established.

Until there is a common understanding of the regulatory process, project proponents will be uncertain as to the scope, scale and process to be followed. Better definition of the regulatory requirements, potential timelines and information needs will help reduce uncertainty and regulatory process lead time.

The discussions among regulators and federal authorities on models and criteria should build upon:

- the experience of the previous project approval process;
- the commitment to concurrency; and
- the experience of the NEB and CEAA for federal onshore energy matters.

WORKPLAN:

NEB-CEAA discussions are ongoing. Work on a Protocol for Offshore Pipeline and Onshore Gas Plant Approvals will follow This work would lay the foundation for future work on a Generic MOU and a number of approval models for small or add-on projects.

Working Paper Twelve

Reducing Cycle-times Through Concurrent Regulatory Approvals

CONTEXT:

International and East Coast experience has demonstrated that having an environmental and a development project application proceed concurrently rather than sequentially is a major tool to reduce cycle time for project approvals.

The Gaffney/Cline (G/C) International Benchmarking Study report on "Regulatory Cycle Times" concluded that the single most important factor in compressing of cycle times could be achieved by increasing the level of parallel/concurrent processes rather than conducting processes sequentially.

Regulatory cycle times in Australia, Norway, U.K., and the Gulf of Mexico range from 10 to 14 months, and have been trending downwards. The cycle time for the White Rose project offshore Newfoundland – where there was not a parallel regulatory process - was 21 months. The cycle time was shorter for the SOEP (Sable) project, where a single panel was convened to review two linked projects - an offshore natural gas development, and an international pipeline from the offshore.

ISSUE:

Parallel regulatory processes - and the consolidation of the various regulatory processes - have the potential to significantly shorten regulatory cycle times in Canada.

WORKPLAN:

Establish a workshop with key regulatory players including CEAA, the Offshore Boards, DFO, Environment Canada, NRCan, NSDOE, NL-Labrador DM&E, NEB and CAPP. The workshop would explore issues and elements of a coordinating MOU. It is necessary to gain support from all stakeholders for this initiative.

Working Paper Thirteen

Modernizing the Regulatory System

CONTEXT:

The regulatory system offshore Atlantic Canada is largely prescriptive in nature, meaning that regulations specify the means of accomplishing a regulatory goal, and precisely how it is to be accomplished. As such, the system is unable to quickly adapt to technological change and, in some cases, is unable to continually amend the regulations to accommodate best practices and lessons learned from other jurisdictions.

In other areas of Canada, the National Energy Board (NEB) has moved toward performancebased regulation (PBR) as a means of facilitating innovation and competitiveness. PBR specifies measurable outcomes or performance goals, leaving the detailed means of achieving those outcomes or goals largely to the discretion of the regulated firm or entity. International jurisdictions including the U.K., Norway and Australia have implemented PBR, resulting in increased industry and regulator efficiency and improved global competitiveness without diminishing the safety of operations.

ISSUE:

The current solution is to seek equivalencies to outdated technical requirements through a Regulatory Query Form (RQF) process. This process can be expensive and inefficient. It is thought that a move toward models that offer a greater flexibility and ability to adapt to technological change would be appropriate. PBR is an alternative to prescriptive regulation and while not necessarily suitable for all types of regulations, does hold promise of meeting those goals.

PBR will also likely require new skill sets and expertise within the Boards. Operators not familiar with international experience in this area may also need to make significant changes in their procedures and approaches. Accordingly, the implications of a move to PBR need to be more completely understood by all parties.

WORKPLAN:

The Steering Committee will assess the potential impact on governments, regulators, operators and the public of implementing PBR in the Atlantic Canada offshore, and will provide its recommendations to Atlantic Energy Roundtable III in 2004.

A first step in the process will be to review with the NEB the transition to performance-based regulations and the impact of doing so.

Working Paper Fourteen

Optimizing the Use of Certifying Authorities

CONTEXT:

Certifying Authorities (CAs) issue Certificates of Fitness for offshore installations, such as rigs and drilling platforms, in Atlantic Canada. Under the Accord Acts, the certificate must state that the equipment or installation involved in the activity "is fit for purpose for which it is to be used and may be operated safely without posing a threat to persons or to the environment in the location and for the time set out in the certificate."

At present, the Offshore Boards are not able to fully rely on CA authorization and commonly identify additional conditions and broadened scope of work for the applicant. Some overlap of work by the Offshore Boards and CAs, results in increased costs for the Board and the Operator and extended cycle time. In addition, CAs do not always supply all necessary assurances for the operators or the Boards. For example, an assigned CA would not comment on the competency of the dynamic positioning system of a new, deepwater, harsh environment rig recently deployed in the Newfoundland sector.

ISSUE:

As the Gaffney Cline benchmarking study shows, compressed regulatory cycle times in many competitive, foreign drilling jurisdictions result partially from increased reliance on common international standards such as the international classification societies or CAs. CAs have vast and specialized expertise they draw upon from their international organizations and activities.

Given the findings of this study, and the concerns of offshore boards and operators, there is support to investigate options and alternatives for improving the use and expertise of the CAs in Atlantic Canada. Enhanced use of the CAs would be in keeping with other jurisdictions and improve Atlantic Canada's competitiveness.

WORKPLAN:

Governments, CAPP, the Offshore Boards, and Canadian Association of Oilwell Drilling Contractors (CAODC) agree to form a Working Group to look at international regulatory practice, and determine how to enhance the use of CAs, and address opportunities to improve the effectiveness of the process offshore Atlantic Canada. The Working Group will first perform a gap analysis of what CAs are providing versus what all of the stakeholders need.

Working Paper Fifteen

Rig (MODU) Certification

CONTEXT:

Mobile offshore drilling units (MODUs) and seismic vessels operating in the Atlantic Canada offshore are required to be re-certified when they cross between the Nova Scotia and the Newfoundland and Labrador offshore areas. They are subjected to different standards, even though the content is virtually the same in both provinces. The re-certification process has costs and is time consuming for operators and regulators.

Work has been done between the local Boards and Transport Canada to streamline the process. For example, an MOU exists between CNSOPB and Transport Canada stating that CNSOPB is responsible for the inspection and certification of foreign-flagged MODUs, storage tankers, accommodation vessels, and helicopter facilities. Transport Canada has primary responsibility for other vessels.

ISSUE:

In both the Nova Scotia and Newfoundland and Labrador offshore areas, the objectives are to ensure the safety of vessels operating offshore as well as the protection of the marine environment. However, the procedures differ in each province. In Nova Scotia, the CNSOPB is responsible for certifying the rigs. In Newfoundland, this responsibility lies with Transport Canada. Therefore, in almost every instance, a rig moving from Nova Scotia to Newfoundland and Labrador or vice versa is required to re-certify.

Recent exploration and development patterns in Nova Scotia and Newfoundland and Labrador have resulted in distinct rig requirements (jack-ups and ultra-deepwater vessels in Nova Scotia and semi-submersibles in Newfoundland and Labrador) and few rig movements from one jurisdiction to the other. However, the recent deepwater interest in both provinces and the settlement of the boundary line is likely to result in more cross-jurisdictional movements in the future.

A certification process accepted by both jurisdictions (and in fact nationally) would allow for greater mobility between the jurisdictions; reduce the level of regulatory effort on the part of the Boards and Transport Canada; reduce costs for operators; and reduce regulatory cycle time.

WORKPLAN:

To advance this issue, it will be necessary for the Offshore Boards to discuss application of a common standard or regulation for rig and vessel certification, and to review the Development Plan Application (DPA) and Approval to Drill a Well (ADW) requirements to ensure process consistency. Commitment of time and people by Governments, CAPP and the Offshore Boards is required to complete this work.

APPENDIX 4

OFFSHORE EXPLORATORY WELL COSTS

CONTEXT:

The high costs of exploratory drilling are compromising the viability of exploration activity offshore Nova Scotia. The Canada Nova Scotia Offshore Petroleum Board (CNSOPB) recently studied the impact of deep-water exploration costs based on data supplied by offshore operators. High cost items identified during this process were wellhead abandonment, well testing, coring, electric logging and others.

ISSUE:

Although much of the high cost of offshore drilling can be attributed to difficult geographical and geological features, industry has also indicated that there are certain regulatory requirements that have an impact on drilling costs. Well costs notwithstanding, the CNSOPB, as the offshore regulator, is mandated to protect the interests of the resource owners and other stakeholders.

WORKPLAN:

In October 2003, the CNSOPB provided offshore operators working offshore Nova Scotia with a summary of 20 issues identified by the operators collectively. The report (below) details the Board's response/position with respect to each issue. The Roundtable will review the Board document and determine what further work is required to make exploration efficient and cost effective.

#	ISSUE RAISED	CNSOPB RESPONSE
1.	Wellhead Abandonment – The	The Chief Conservation Officer (CCO) will consider granting
	requirement of wellhead removal for	approval for wellheads to be permanently abandoned in place
	permanent abandonment of subsea	when the following criteria have been adequately addressed:
	wells.	
		1. The wellhead under consideration is in water with a
	Drilling regulations section 180 states	depth no less than 800m.
	that every operator shall ensure that on	2. The associated environmental assessment (EA) gives
	termination of any well the seafloor is	adequate consideration to issues related to the wellhead
	cleared of any material or equipment	remaining in place.
	that could interfere with other	
	commercial uses of the sea, unless the	The EA includes information on the following:
	Board or any person designated by the	 Justification for leaving the wellhead in place;
	Board, having been satisfied that no	 Details of the remaining wellhead structure;
	interference with the commercial use of	• Details of measures (if any) needed to secure the
	the sea is reasonably likely to result,	wellhead structure;

	otherwise approves.	 Up to date information on fisheries operating in the area; Details of plans for consultation with any fisheries operating in the area; Evidence of consultation with the Department of Fisheries and Oceans; Evidence of a low probability of interference with current and future fishing efforts; Evidence of a low probability of interference with other ocean uses; Details of plans for notifying the Canadian Hydrographic Service of the wellhead location. All conditions of a standard well abandonment program have been met.
2.	Well Testing – Section 170 of the Drilling Regulations requires formation flow tests of a well where there is an indication that the result of such a sample or test will contribute substantially to the evaluation of the formation The CNSOPB makes this decision at the TD of the well when all relevant information is available. This may not be consistent with Operator decisions with respect to the necessity to test.	Operators may apply to the Chief Conservation Officer (CCO) for a deferral of a formation flow test, to a later date or to the equivalent zone in a delineation well. Exemptions may be granted on an exceptional, case by case basis under Section 155(1)(b) of the Act where Operators can satisfy the CCO with the level of safety, protection of the environment and conservation that will be achieved without compliance with that regulatory requirement. The requirement under the Drilling Regulations to formation flow test for evaluation purposes is separate from the requirement to flow test a well for a Declaration of Significant Discovery, as covered under the Joint Guidelines Regarding Applications for Significant or Commercial Discovery Declarations and Amendments (May 2003) and decisions on one requirement does not affect the other.
3.	Coring – <i>The CNSOPB right to require</i> <i>full hole cores.</i>	Sufficient flexibility, as set forth in the latest revision to the Data Acquisition Guidelines, is exercised in evaluating an Operator's planned coring criteria. Additionally, coring requirements may be waived by the Chief Conservation Officer (CCO) if significant safety risks are encountered such as when drilling with a small overbalance and with significant potential for a kick.

		breaks, mud gas shows, etc.) are satisfied.
4.	Electric Logging – Requirement for electric logging evaluation.	The Chief Conservation Officer (CCO) will continue his practice of considering the acceptance of LWD logs in place of wireline logs in cases where equivalent quality is assured. This practice is detailed in the latest revision of the Data Acquisition Guidelines. Wireline will still be required for MDT. Sidewall core and formation imagining type tools as LWD tools are not yet available for these measurements.
5.	Electric Logging – Wireline logging of uphole sections is not always considered necessary by Operators.	The practice of the Chief Conservation Officer (CCO) in considering an exemption from requirements for logging uphole sections, on a case by case basis, will be continued where justification is provided on the basis of offset data.
6.	Casing Design – The Drilling Guidelines require casing strings to be designed with a burst rating to withstand full evacuation of casing to surface.	The CNSOPB maintains that it is prudent to require casing strings to be designed with a burst rating to withstand the lesser of the full anticipated formation fluid pressure (less the gas head), or the casing shoe fracture pressure (less the gas head). Using a less rigorous burst design is considered to present an unacceptable risk. Some wells that have been drilled offshore N.S. have been subject to full or near maximum pressure. Note: Relaxation to these requirements may be considered in certain situations, e.g. for production wells (especially oil wells) once the formation is better understood.
7.	Casing Pressure Tests – The Drilling Guidelines require pressure testing of casing to a pressure equal to the maximum anticipated surface pressure (MASP) regardless of mud weight being utilized during the test.	A revision to the Drilling Guidelines is contemplated in the near future. This requirement will be further deliberated at that time; industry views will be solicited and considered during the consultative phase of the guideline revision process.
8.	Pressure Testing BOP's – The Drilling Regulations require that the BOP be pressure tested to maximum working	The Chief Safety Officer (CSO) may grant exemptions to allow testing to maximum allowable working pressure (as opposed to maximum working pressure), and to defer timing of testing

	pressure, and that it be pressure tested before drilling out any casing installed in the well.	based on specific situations, as and when requested and justified.
9.	Back-up String(s) – The Drilling Regulations contains a requirement to have back-up casing strings and wellhead for purposes of drilling a relief well.	The Drilling Regulations require Operators to have acceptable contingency plans in place for situations requiring the drilling of a relief well. An Operator needs only to demonstrate that back-up casing strings and wellheads can be made available in a timely manner in case of the need to drill a relief well. The Regulations do not require that these back-up materials be located in Nova Scotia.
10.	Burner Booms – The Drilling Regulations require the use of burner booms during drilling operations. Some rigs do not have these and therefore the operator has to rent them.	The Chief Safety Officer (CSO) may grant exemptions to this requirement depending on the rig configuration.
11.	Standby Vessels – <i>The Drilling</i> <i>Regulations require a standby vessel</i> <i>that has sufficient capacity and</i> <i>equipment to evacuate all personnel</i> <i>from a drill site for a drilling operation</i> <i>as a means of evacuating personnel</i> <i>from the drill site. This requirement</i> <i>should be waived for wells being drilled</i> <i>from a drill ship.</i>	The Chief Safety Officer (CSO) will not consider a relaxation to this requirement as it applies to drill ships. Although a self propelled drill ship can drive off location quickly, there is still a risk of fire or explosion if hydrocarbons flow to surface prior to the rig leaving location (due to equipment failure or human error).
12.	Cuttings Discharge – The CNSOPB requirement to calculate oil – cuttings ratio on a 24-hour average basis as opposed to a per hole section basis.	The Offshore Waste Treatment Guidelines published in August 2002 underwent extensive review and consultation at that time. These Guidelines represented a relaxation from 0% to 6.9% oil on wet solids; a further relaxation in this regard is not considered prudent at this time.
13.	Certificate of Fitness – <i>The requirement</i> <i>for a drilling rig Certificate of Fitness.</i>	This is an integral part of the Regulations, and would require major regulatory reform which would have to be undertaken by governments.
14.	Personnel Training – The requirement to use Nova Scotians and other Canadians for skilled positions on vessels and drilling units for a singular	It is a legislative requirement to provide first consideration to Nova Scotians and other Canadians for training and employment. The legislation does not differentiate between exploratory and development activities, however, safety and

	exploration campaign.	experience is factored into evaluations of personnel. Any change to this policy would require an Accord Act amendment by the governments.
15.	Training Equivalencies – More emphasis on training equivalencies is required.	Training and Qualification Guidelines are prepared by industry, and endorsed by the CNSOPB and the C-NOPB. This issue should be raised with CAPP.
16.	Required Tendering – The cost of the tendering for both the operator and the vendor community is substantial.	It is a legislative requirement to provide full and fair opportunity and first consideration to Nova Scotian and other Canadian companies to participate on a competitive basis in the supply of goods and services. Any change to this policy would require an Accord Act amendment, which would have to be undertaken by governments.
17.	Regulatory Approval Process - <i>The</i> <i>current practice of not making RQFs</i> <i>public is inefficient.</i>	This matter is currently being acted upon by the Regulatory Issues Steering Committee.
18.	Environmental Assessment (CEAA) – Under CEAA, an offshore exploratory well will require a comprehensive study to be performed to assess the environmental impact for drilling each well.	This issue is outside of CNSOPB jurisdiction.
19.	Import Duty on Drilling Rigs – Import Duties is a Federal Responsibility but any support that can be provided in soliciting for the waiver of these duties on foreign MODUs.	This issue is outside of CNSOPB jurisdiction.
20.	Corporate Tax	This issue is outside of CNSOPB jurisdiction.