

OCTOBER 2008

Nova Scotia Offshore Renewal Plan



CONTENTS

2 Introduction

3 Background

GEOSCIENCE

4 I. Resource Analysis Project

II. Data Package Project

NEW POLICY

5 III. Access to Infrastructure Project

IV. Data Release Project

V. Rights Issuance Project

VI. Research and Development (R&D)
Incentives Project

VII. Global Competitiveness Project

REGULATION

6 VIII. Coastal Trading Act Project

IX. Frontier Offshore Regulatory Renewal
Initiative (FORRI) Project

X. Occupational Health and Safety
(OHS) Project

XI. Drilling Rig Pool Project

XII. Extended Rig Duty Relief Project

INVESTMENT ATTRACTION

7 XIII. Interim Investment Attraction Project

8 Conclusion

The Plan

The *Nova Scotia Offshore Renewal Plan (the Plan)* is a series of concurrent initiatives, which are essential elements to renewing exploration and development interest in offshore Nova Scotia.

Since 1998, significant increases in global exploration and production costs, competitive environments in many offshore jurisdictions, and NS offshore drilling results falling below expectations resulted in a reduction of offshore exploration licences. Early and aggressive action is required by the main public partners in the offshore to address the weaknesses and gaps in the areas of geological knowledge, regulatory efficiency, offshore policy and marketing.

Since 2007, Nova Scotia Department of Energy (NS Energy) has commissioned and participated in a series of external studies and reports, notably Wood MacKenzie, Gaffney and Cline, and PARAS.

The *Plan's* foundation is based on those studies and a multi-team project with input from many interests in the NS offshore which culminated in a report entitled "Discussion Report, The Nova Scotia Integrated Offshore Plan" (IOP Report), commissioned by NS Energy and completed by Martillac Limited in April 2008.

The *Plan* comprises four areas, each of which contains specific project work.

Geoscience

- i. Resource Analysis Project
- ii. Data Package Project

New Policy

- iii. Access to Infrastructure Project
- iv. Data Release Project
- v. Rights Issuance Project
- vi. Research and Development (R&D) Incentives Project
- vii. Global Competitiveness Project

Regulation

- viii. Coastal Trading Act Project
- ix. Frontier Offshore Regulatory Renewal Initiative (FORRI) Project
- x. Occupational Health and Safety (OHS) Project
- xi. Drilling Rig Pool Project
- xii. Extended Rig Duty Relief Project

Investment Attraction

- xiii. Interim Investment Attraction Project

As each of the 13 projects can have fundamental links to each other, much of the project work will progress concurrently. It is anticipated that by 2010, the project work of the *Plan* area will be largely complete. Along the way, opportunities will be developed to make new information, analysis and opportunities available and promoted.

The *Plan's* success depends upon the continued cooperation, engagement and support of other governments, departments and agencies. NS Energy's key partners are Natural Resources Canada (NRCan), the Canada-Nova Scotia Offshore Petroleum Board (CNSOPB) and the Atlantic Canada Opportunities Agency (ACOA).

The most essential element to reinvigorating exploration and development interest in offshore Nova Scotia is maximizing the value of the recently announced provincial government funding of approximately \$19 million to the Offshore Energy Technical Research (OETR)¹ Association to support offshore geoscience and data initiatives. OETR is expected to play a key role in assuring that the OETR funds are targeted towards studies and data acquisition that are complementary

to the ongoing study and policy initiatives of NS Energy, NRCan, the CNSOPB and ACOA.

This *Plan* has resulted from a number of studies and collaborative policy and technical work by NS Energy, NRCan, ACOA and the CNSOPB to examine the challenges that exist in attracting new investment to offshore Nova Scotia. The *Plan* is a series of coordinated and integrated projects with a two-year timeline.

It has been over 40 years since the first oil and natural gas exploration activity took place in Nova Scotia's offshore.

Over that time, Nova Scotia's offshore petroleum industry has generated thousands of jobs and contributed billions of dollars of direct royalties and tax revenues to the provincial and federal treasuries.

In the fiscal year ending March 31, 2008, Nova Scotia's treasury received approximately \$500 million direct revenues including royalties and forfeiture fees. Since the Sable Offshore Energy Project (SOEP) plans in 1996, offshore activity has created approximately \$2.5 billion of economic activity throughout Nova Scotia², and established broad capabilities in the petroleum services sector that today provides quality and competitive support locally and internationally.

The offshore oil and natural gas industry has been a very positive contributor to many aspects of Nova Scotia's society and economy. It is an important catalyst and funding contributor for science and technology research and development, and has facilitated the development of many training and education programs in its university and community college systems.

But it is clear that Nova Scotia's offshore industry is not as vibrant as in other parts of the world. Despite ongoing production from SOEP, expected first commercial gas from Deep Panuke in 2010, in-place offshore and onshore infrastructure, and recently updated resource assessment studies suggesting in excess of 40 tcf of gas potential and up to 5 billion barrels of oil potential, the overall offshore climate as seen by past, existing and potential investors is one of concern and caution.

Since 1998, there have been 53 offshore wells drilled (29 exploration and delineations wells and 24 development

wells). There are nine active exploration licences (EL), down from a peak of 59 in 2002. Two new ELs were recently granted but the number of active ELs could drop to two in less than five years.

More than \$1 billion of exploration capital has been spent, with two successes: EnCana's Deep Panuke and Marathon's Annapolis discoveries. Deep Panuke is the only discovery that has progressed to the development phase.

Today, Nova Scotia's third-largest own source of revenues comes from offshore royalties from SOEP. Depending on SOEP production performance and gas pricing over the coming years, it is possible that royalties will peak within the next two years before declining. As royalties from the much smaller Deep Panuke Project will be less than those being generated by SOEP, it is clear that actions must be taken to encourage new drilling activity which will bring forward new developments and the royalty and other economic benefits that comes with exploration success.

The IOP report correctly identifies that the provincial government, together with the federal government, the CNSOPB and related agencies need to make the recovery and rejuvenation of Nova Scotia's offshore petroleum industry a priority.

Coordinating Authorities

While Nova Scotians have the biggest social and economic stake in the success or failure of the offshore oil and gas sector, the roles and responsibilities of the federal government and the CNSOPB are very important. In addition, other provincial and federal governments must be actively engaged and supportive of the *Plan*.

¹ Association members are: Dalhousie University, Saint Mary's University and the Department of Energy

² Just under \$2 billion for the Sable Offshore Energy Project alone from project inception in the 1990's to the end of 2007 as referenced in the CNSOPB Annual Report, 2007

Geoscience

I. RESOURCE ANALYSIS PROJECT

In 2007, ACOA and NS Energy commissioned studies to provide advice on how to enhance the exploration attractiveness of offshore Nova Scotia. The main recommendation was that a better understanding of the geology of offshore Nova Scotia, particularly the shelf slope and deepwater areas in the vicinity of Sable Island, must be first developed.

In early 2008, NS Energy commissioned UK-based PARAS Ltd. to develop a geoscience gap analysis to identify the data and studies necessary to gain a better understanding of the offshore geology. The PARAS report recommends that new plausible theories as to the likely locations of hydrocarbons be developed with an end product being the industry standard play fairway analysis. That work is now being managed by OETR using grants from the Province.

OETR plans to release Requests for Proposals on this program in early October 2008. The required program management work is expected to be completed within 24 months of initiation.

II. DATA PACKAGE PROJECT

Globally, over the past five years or so, oil and gas exploration and production (E&P) companies have seen a significant decline in the number of experts capable of examining opportunities world wide. Other governments and seismic companies have responded to this shortage by performing regional geological assessments, making it easier for an E&P company to make acreage acquisition decisions. Some governments have funded the gathering and release of new data.

The PARAS Geoscience Gap Analysis recommends the preparation of supporting data packages that will provide enough information for exploration geologists to make a quick recommendation as to why company resources should be put to offshore Nova Scotia.

New Policy

III. ACCESS TO INFRASTRUCTURE PROJECT

In 2007, the Nova Scotia Department of Energy commissioned a study to examine whether the lack of regulatory policy governing access to all offshore infrastructure was a deterrent in attracting new investment to the offshore Sable Island area. The study identified that in offshore UK and offshore Norway, the ability for third parties to readily determine costs to tie smaller fields into existing offshore infrastructure became a significant policy issue over recent years. This came about due to a number of factors including the desire to minimize the impact on the marine environment as well as the economics of exploration and development of smaller oil and gas discoveries. These jurisdictions developed regulations and fostered an industry-created infrastructure code of practice.

An Infrastructure Code of Practice allows new investors to compute the risked economics of finding and developing small fields in the offshore Sable Island area and remove the uncertainty over the time and costs associated with accessing existing oil and gas infrastructure.

Ideally, both Atlantic Canada petroleum boards and the federal and provincial governments will work together to arrive at a Code of Practice. The federal government recently amended legislation in this area to enable common access in Northern Canada.

IV. DATA RELEASE PROJECT

Inexpensive access to offshore data, in its most useful format, is a fundamental policy in most offshore jurisdictions around the globe. The uncertainty over the format and timing of data access in offshore Nova Scotia must be resolved in a way that brings offshore Nova Scotia into the 21st century, without discouraging new investment in exclusive and speculative data.

The Resource Analysis and Data Package Projects will go a long way to adding value for owners for existing data and provide a better opportunity for data owners to understand the need for governments to place data into the public domain upon the expiry of the relevant confidentiality periods.

V. RIGHTS ISSUANCE PROJECT

Over the past 5 years, the CNSOPB, NRCan and NS Energy have worked together to examine ways in which the existing rights issuance policy can be amended to attract more exploration investment to offshore Nova Scotia.

In early 2007, the CNSOPB announced new rights issuance guidelines including changes that would introduce more flexibility, spur early activity and appeal to a wider investment audience. In August 2008, the CNSOPB issued two new ELs subject to these new guidelines and later issued another call for bids that was subject to the new guidelines.

The CNSOPB is working with NRCan and Energy as well as industry to further refine the new rights issuance guidelines.

VI. RESEARCH AND DEVELOPMENT (R&D) INCENTIVES PROJECT

R&D work by operators, or funded by operators, is an important priority for Nova Scotia. There may be an opportunity to enhance R&D spending, especially in the geoscience sector, through licensing incentives. Work on this issue has already begun.

VII. GLOBAL COMPETITIVENESS PROJECT

Overall fiscal regimes must be competitive, commensurate with the risks associated with finding and producing petroleum. NS Energy continues to work with industry, other departments and governments.

Regulation

VIII. COASTAL TRADING ACT PROJECT

The inclusion of seismic vessels within the jurisdiction of the Coastal Trading Act has long been an area of contention for many exploration companies, and in Atlantic Canada, has been directly linked by some to a decrease in offshore exploration activities.

Resolution of this difficult issue remains an important part of the NSORP.

IX. FRONTIER OFFSHORE REGULATORY RENEWAL INITIATIVE (FORRI) PROJECT

After the 2004 Atlantic Energy Roundtable, federal and provincial governments concluded that opportunities existed to modernize regulations governing frontier and offshore oil and gas. The Frontier Offshore Regulatory Renewal Initiative (FORRI) was launched in January 2005 to oversee this process.

FORRI is undertaking a comprehensive review of the regulations based on the principles of goal-oriented regulation, providing flexibility for operators to achieve regulatory objectives and building on the successful experiences of other jurisdictions like the United Kingdom and Norway.

NS Energy expects the new *Drilling and Production Regulations* to come into effect in 2009 and that certificate of fitness, diving, geophysical operations, installation and spills and debris liability regulations will be renewed over the coming years. This requires the agreement of the federal government, Nova Scotia and Newfoundland and Labrador, and extensive consultation with stakeholders.

X. OCCUPATIONAL HEALTH AND SAFETY (OHS) PROJECT

Currently, the Offshore Board appends draft requirements (a hybrid of Canada Labour Code and provincial OHS regulations) as a condition of approval to work authorizations. As a result, there is an administrative obligation on the part of the operators/employers to comply with these regulations and guidelines. The policy intention is to ensure the rights and obligations associated with OHS are embedded in the Accord Acts.

NS Energy and NS Labour and Workforce Development expect Canada will provide the Province of Nova Scotia and the CNSOPB with the language to implement the agreed policy directions in late 2008 or early 2009. Once governments are satisfied with the draft language, targeted stakeholder groups will be consulted before the bill is introduced in Parliament and the Nova Scotia legislature.

XI. DRILLING RIG POOL PROJECT

The creation of a drilling rig pool was noted in the IOP report as a means to incent current exploration licencees to drill. There have been recent examples of rig sharing in offshore Atlantic Canada. For example, in the late 1990s, a group of operators formed the Jeanne d'Arc Operators Group in Newfoundland and Labrador to share the risks and costs of a multi-year drilling program. Similarly, Statoil/Husky will have the drill ship Henry Goodrich under contract for approximately two years.

For the immediate future, since the drivers and decision-making levers reside outside of government, the Drilling Rig Pool Project will mainly involve continued assessment of means to encourage rig pooling through the regulatory process.

XII. EXTENDED RIG DUTY RELIEF PROJECT

Nova Scotia believes that the waiving of federal duties on the importation of drilling rigs – scheduled to expire in early 2009 – should be renewed because there is little likelihood that any drilling rigs capable of working in the North Atlantic will be built in Canada in the next five years.

Investment Attraction

XIII. INTERIM INVESTMENT ATTRACTION PROJECT

In this globally competitive environment, Nova Scotia cannot afford to wait until it better understands its geology, introduces new upstream policies and enhances its regulatory practice before it renews investment attraction efforts. It is essential that continued market opportunities are developed and implemented through the creation of an interim marketing strategy, as fundamental geoscience, policy and regulation work is completed.

This interim marketing work will showcase existing opportunities to smaller companies and entrepreneurs while building expectations in the larger investment community for the delivery of the Resource Analysis and Data Package Projects. It will also work to market new Calls for Bids as they are prepared by the CNSOPB. NS Energy will lead this Project in collaboration with ACOA, NRCan and others as it is part of the Department's responsibilities to promote offshore opportunities and attract investment.

An Interim Investment Attraction Plan is being developed.

C O N C L U S I O N

The NSORP is based upon a foundation that while progress needs to be made on a number of fronts, it is the geological uncertainty that is the major barrier to future investment. As a result, the Province has invested nearly \$19 million in 2008 for geoscience research.

The outcomes of that investment and the associated measures in this plan will provide a solid basis for opening new opportunities for additional private sector investment in an important part of our economy for the benefit of all Nova Scotians.

Nova Scotia Department of Energy

400-5151 George Street

PO Box 2664

Halifax, NS B3J 3P7

Telephone: 902.424.4575

www.gov.ns.ca/energy

