To: The Committee for the Regional Assessment of Offshore Oil and Gas Exploration Drilling East of Newfoundland and Labrador

I would like to thank the Committee Members and staff for addressing this important and controversial issue. The oil and gas industry is an important part of the Newfoundland and Labrador economy providing needed government revenues, employment and industrial development opportunities in addition to other benefits to local business. All Newfoundlanders and Labradoreans value our environment and want to see our oil and gas resources developed in an environmentally responsible manner.

I have in excess of 30 years experience in the oil and gas industry, mostly in a regulatory capacity in the Newfoundland and Labrador offshore area. Over this period, I have been involved with the approval process for most of the oil development projects offshore Newfoundland and many of the exploration drilling programs. In addition, I have participated in development of the oil and gas regulations and guidelines and enforcement of the legislation and guidelines.

I have reviewed the Regional Assessment of Offshore Oil and Gas Exploration Drilling East of Newfoundland and Labrador Draft Report January 2020 and offer the following comments and observations.

Directive of the Committee

The Committee notes that "The Directive was to facilitate a more effective and efficient assessment process for exploratory drilling projects in the defined offshore Study Area, while also ensuring that the highest levels of environmental protection continued to be applied and maintained". This suggests the current process is not effective and efficient. It is worth considering how we got to where we are today.

For oil and gas activities in the Newfoundland and Offshore Area, the Atlantic Accord, among other items, established the CNLOPB to administer environment, health and safety, resource management and industrial benefits. The CNLOPB is staffed by personnel with expertise to deal with these administrative areas. Before an operator conducts any oil and gas related work or activity in the offshore area, they must get approval of the CNLOPB. Prior to the CNLOPB approving any work or activity, the environmental, health and safety, resource management and industrial benefits are assessed, as appropriate, for compliance with the legislation and guideline. This arrangement, in conjunction with the guidelines and processes developed by the CNLOPB, provide an efficient and effective mechanism to administer oil and gas activities in the Newfoundland and Labrador offshore area.

In addition to administration of the oil and gas legislation under the Accord Acts, the CNLOPB was provided special status under the Federal Environmental Assessment Act to conduct environmental reviews. This was consistent with the spirit of the Atlantic Accord and the role of the CNLOPB.

The CNLOPB is transparent in relation to environmental issues and public reviews. All spills, no matter how minor, are required to be reported and information on the spills can be accessed by the public on the CNLOPB's web site. All development plans and amendments for oil fields were subjected to public

review. All relevant documents, except commercial sensitive documents, are made available for the public review process. The CNLOPB was instrumental in establishing "One Ocean" to promote communication between the Fishing and Oil and Gas Industry.

In relation to exploration drilling programs, the CNLOPB has developed robust procedures/guidelines to administer environmental matters related to the programs and to mitigate adverse environmental impact. These have evolved over time incorporating experience and new technology. The CNLOPB has never required a formal Environmental Assessment of exploration drilling programs. To my knowledge, there was no evidence to suggest that any significant adverse environmental effects were attributed to exploration drilling. This is not surprising given the relative short duration for drilling a well the nature of the activity and mitigating measures employed. In 2002, the CNLOPB introduced Strategic Environmental Assessments. These assessments, cover a large area, enable environmental issues to be identified early and considered in posting of lands for oil and gas exploration. These assessments are similar to this regional assessment conducted by the committee. In general, I believe, on an international basis, that exploration drilling operations conducted offshore Newfoundland and Labrador are among the best in class for minimizing environmental impacts.

While experience with explorations drilling activity to date have not identified any significant adverse environmental effects, in 2012 the Canadian Environmental Assessment Act came into effect which required a formal Environmental Assessment (EA) of exploration drilling programs. It is my view that the requirement for exploration drilling programs to be subjected to formal Environmental Assessment was not warranted as the information gathered from the 162 exploration and delineation wells drilled over the last 47 years have not suggested any significant adverse environmental impacts. In general, these assessments were taking up to two years to complete. This is excessive given that the most Exploration Licenses are for a term of nine years with a well required to be drilled within the first five years in order to extend the license a further four years. Understandably, given there is no compelling evidence to suggest adverse environmental impacts from exploration drilling, and the excessive times and resources to complete EAs caused concern within the oil and gas industry.

I note on page X of the Executive Summary of the Regional Assessment Report the Committee state the following "On the matter of mitigation measures, the Committee has found that, based on the experience gained from earlier EA reviews, there are a number of typical and fairly standard mitigation measures applied to exploratory drilling projects in the Study Area. Indeed, there has been a high degree of commonality across projects and assessments, as documented in their Impact Statements (EISs) and in the various EA decision statements issued by government. The Committee was encouraged that the Newfoundland and Labrador offshore oil and gas industry works within internationally accepted standards for environmental protection,..." This verifies that the guidelines, procedures and measures put in place by the CNLOPB and the oil and gas industry to mitigate environmental impacts for exploration drilling are effective and there is no need to conduct a formal Environmental Assessment for exploration drilling.

I understand that, among other initiatives, the Regional Assessment approach is meant to facilitate a more effective and efficient assessment process for exploratory drilling projects in the defined offshore Study Area. The CNLOPB had come to this conclusion almost 20 years ago with the introduction of Strategic Environmental Assessments. The assessments were conducted prior to issuance of Exploration licences. Exploration drilling programs were not subject to an EA but they were reviewed for compliance

with the Accord legislation and CNLOPB guidelines. The approach used by the CNLOPB is effective and efficient and well understood by industry. It is my understanding that the CNLOPB's is very similar to the Regional Assessments. I believe conducting two assessments if not effective use of tax payers resources. In this regard, I suggest that one assessment be conducted, preferable by the CNLOPB who have being conducting the Strategic Environmental Assessments as part of their environmental review process for some time. Any difference with the Regional Assessment can be incorporated in the CNLOPB's Strategic Environmental Assessments.

I observe, since 2012, in essence, there are two agencies, the CNLOPB and Impact Assessment Agency of Canada (IAAC), administrating oil and gas environmental matters In the Newfoundland and Labrador Offshore Area. This doesn't appear consistent with the Atlantic Accord which among other matters established the CNLOPB for joint management of the oil and gas activities in the Newfoundland and Labrador Offshore area. The EA process for review of exploration drilling programs is not effective or efficient. I suggest that the CNLOPB be the single authority for administering environment aspects of exploration drilling programs as they have the technical expertise, established processes and procedures, the regulatory authority to approve environmental programs, oversee execution of programs, take direct action when required and conduct investigations. The CNLOPB has been performing this role for the past 35 years and their processes are effective and efficient.

GIS Tool

I concur with the committee's view respecting the GIS component. This is long overdue. I believe the information contained in the GIS will benefit the oil and gas industry, CNLOPB, IAAC, researchers and others and lead to efficiencies and quality improvements in conducting environmental assessments and administration of environmental programs in general. The challenge will be to get quality information and data to populate the GIS. I note the review Committee's view that a Regional Assessment Oversite Committee be established for future development and use of the GIS and regulation. Rather than establishing a new oversite committee, I suggest the CNLOPB be responsible for the GIS or consideration be given to working with One Ocean in this regard.

Vertical Seismic Profiling and Well Testing

I reference sections 4.2.1.3 and 4.2.1.4 dealing with vertical seismic profiling and well testing respectively. These activities are part of a comprehensive data acquisition program for an exploration well. It is important to acquire as much information as possible to optimize future drilling and exploration programs and evaluate any oil or gas discovery. Optimizing data acquisition in exploration and delineation wells can lead to a reduced number of wells being drilled.

Well testing is only conducted in exploration wells that have encountered significant quantity of oil or gas. These tests are conducted in the minority of the exploration wells drilled. Of the 106 exploration wells drilled there has been 26 significant discoveries offshore Newfoundland and Labrador i.e. 1 in 4 exploration wells drilled is tested. Due to the safety and environmental risk associated with testing the CNLOPB have rigorous requirements for the approval and conduct of testing programs. Test duration is limited to the time necessary to acquire the information to evaluate the oil and gas accumulations

encountered in the well. In most cases, testing is conducted during day time. While there has been suggested that seabirds are attracted to the flare, during my time as a regulator I am not aware of any reports of interaction of birds with flaring.

Marine bird Interaction and Monitoring

The Committee notes in Section 4.2.1.1 (Presence and Operations of Drill Rigs) page 102 2nd paragraph the following "For Marine birds in particular, platform and vessel attraction associated with lighting and increased foraging opportunities can lead to increased potential for mortality or injury due to collisions, disorientation and potential predation, particularly in the spring and fall migration periods and during particular meteorological conditions such as fog or inclement weather. Any future exploration activities within the Study Area will be situated at least 50(and in most cases, several hundred) kilometers offshore, which is far from coastal breeding sites and other identified special and sensitive coastal area for birds. This is also well beyond the ranges of most species that nest in Newfoundland and Labrador and of migrating birds which tend to fly closer to land. There are also some species that spend considerable time in the offshore marine environment and are therefore particularly vulnerable to disturbance. While the attraction of birds to offshore platforms and resulting injury and mortality has been identified as an important area of concern, it is often noted in EAs that the short-term nature of a drill rigs presence and operation at a particular site, and localized zone of visibility of such lighting (typically up to 5 km, see Module 8), reduces the potential for interaction and resulting effects...." . Also in Section 5.1.2 Marine and Migratory Birds on page 126 of the Committee's report the following is noted "In general, the populations of most marine -associated bird species occurring off Eastern Newfoundland are considered stable overall (Section 3.2, Module 5), although the Leach's Storm -Petrel, for example, has seen considerable decline in recent years (Wilhelm et al 2015) as have some other species. That species is thought to be in particularly vulnerable to the effects of offshore activities through attraction to artificial light sources resulting in collisions and strandings". In relations to sea birds, the Committee in Section 8.1.1 (Recommended Requirements for Future Projects) of the report recommendations 2, 5, 6 and 7 deal with marine bird monitoring and mitigation efforts. I believe that these measures are excessive and not necessary based on experience to date from offshore drilling and production operation. During my 25 years working, in a regulatory capacity in the Newfoundland and Labrador Offshore area, there were not significant reporting of interaction and death of birds in relation to oil and gas drilling and production activities. You only take the recommended measures if there is creditable information to justify them. Also, the CNLOPB, in conjunction with ECCC and CWS, have measures in place to protect and monitor seabirds.

Ministerial Regulations

In Section 1.4 (Use of the Regional Assessment) 2nd paragraph states as follows "It is understood that the federal Minister may make a regulation that would exempt future offshore exploratory drilling projects from federal impact assessment requirements if they are proposed in the area where the Regional Assessment was carried out and they meet the conditions for exemption established by the Minister in such a regulation. The development of that regulation would be informed by the findings of the Regional Assessment and would set out the conditions which a future exploratory drilling

project offshore Eastern Newfoundland would need to meet in order to be exempt from federal impact assessment requirements". I would like the Minister to consider removing exploration drilling as one of the activities requiring impact assessment. The review conducted by the Committee has not identified any significant adverse environmental impacts from exploration drilling. Also, this activity is currently well managed by the processes, procedures and guidelines used by the CNLOPB.

On the matter of mitigation on page X of the Executive Summary of the Regional Assessment Report the Committee state the following "On the matter of mitigation measures, the Committee has found that, based on the experience gained from earlier EA reviews, there are a number of typical and fairly standard mitigation measures applied to exploratory drilling projects in the Study Area. Indeed, there has been a high degree of commonality across projects and assessments, as documented in their Impact Statements (EISs) and in the various EA decision statements issued by government. The Committee was encouraged that the Newfoundland and Labrador offshore oil and gas industry works within internationally accepted standards for environmental protection, and the Committee has recommended that various mitigation and follow-up measures identified in and required under EAs become regulatory requirements for all future exploratory drilling projects in the study area." I note that the Committee's observation that the Newfoundland and Labrador oil and gas industry works within internationally accepted standards for environmental protection. For the mitigation and followup measures, I assume that when the Committee refers to "become regulatory requirements", it doesn't mean new regulations will be enacted for these mitigation and follow-up measures. I don't believe any new regulations are necessary in this regard as the current legislation is robust. It is much better, administratively, to put such measures and requirements in guidelines.

Offshore Newfoundland and Labrador Environmental Performance GHG

I have had the pleasure of been involved with the offshore Newfoundland and Labrador oil and gas industry at the early stages and I'm proud of the environmental record. The environmental aspects were always a high priority within the CNLOPB. The CNLOPB took many actions, early in oil and gas operations to reduce adverse environmental impacts particularly from GHG emissions. These include requirements to reinject gas rather than flaring, reduce test time for flow testing, introduction of gas flaring limitations on production facilities. The CNLOPB in conjunction with Alberta EUB put together Canada's country plan for the Global Gas Flaring Reduction Initiative. Canada was the first country to submit a plan to this Initiative.

The GHG reduction initiatives were taken at very early stages of oil development before any national reduction targets were in place. It is my opinion in regards to environment management of GHG, oil and gas operations offshore Newfoundland and Labrador are among the best in class on a world basis. I am concerned, that while oil and gas operations offshore Newfoundland and Labrador are operating with environmental performance much better than average, there is an expectation that the industry can further reduce emissions. In essence the industry could be penalized for good performance.

Consultation and Communication

I acknowledge the need for effective consultation and communication. The engagement of the indigenous communities is important. I believe One Ocean can play a role in this regard. Consideration should be given to having indigenous representation at One Ocean.

Socieconomic Impacts

It is well known that the oil and gas industry make a substantial contribution to the Newfoundland and Labrador economy. It provides many high paying jobs to residents throughout the province. While the Province faces difficult times, the oil and gas industry provide an opportunity to assist the Province through these times. Scientific and resource assessments conducted by Nalcor Oil and Gas Substantial has identified potential to discover significant oil and gas resources in the Newfoundland and Labrador offshore which may lead to commercial developments. Development of these resources will also benefit Canada in general. This comes at a time when the world is attempting to move away from reliance on oil and gas. I believe this is going to be a long slow process and new oil and gas production will need to be brough on production to meet demand, both in Canada and world wide. I believe offshore

Newfoundland and Labrador is well positioned to meet part of future oil and gas demand in an environmentally responsible manner. To recognize this potential timely exploration drilling is critical.

Resolving environmental issues well in advance of offering lands for exploration drilling is critical. I believe this can be done through the CNLOPB's Strategic Environmental Assessment process. After going through this process, there is no need for a formal EA. The CNLOPB's current process and procedures should be sufficient.

Wayne Chipman PEng(Retired)