



**DRAFT**

# **Development Plan Guideline**

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## Foreword

The Canada-Newfoundland and Labrador Offshore Petroleum Board (the C-NLOPB) has issued this Guideline to assist *Proponents* in respect of submission requirements for a *Development Plan* and related subsequent amendments. This Guideline provides clarity in relation to the technical information required to be submitted by the *Proponent* in support of the *Development Plan*. This Guideline is intended to provide transparency, certainty and efficiency surrounding the review of a *Development Application*, which constitutes both the *Development Plan* and *Benefits Plan*.

Guidelines are developed to provide assistance to those with responsibilities (including the *Operator*, employers, employees, providers of service, suppliers, etc.) under the *Canada-Newfoundland and Labrador Atlantic Accord Implementation Act*, S.C. 1987, c. 3, and the *Canada-Newfoundland and Labrador Atlantic Accord Implementation Newfoundland and Labrador Act*, RSNL 1990 c. C-2 (hereinafter collectively referred to as the *Accord Acts*) and the regulations issued under those statutes<sup>1</sup>. Guidelines are intended to provide an understanding of how regulatory requirements can be met. In certain cases, the goals, objectives and requirements of the legislation are such that no guidance is necessary.

Generally, Guidelines outline the C-NLOPB's reasonable expectations on how those with responsibilities can achieve compliance with the *Accord Acts* and regulations. The onus is on those with statutory responsibilities to comply with the legislation and to demonstrate to the C-NLOPB the adequacy and effectiveness of the methods employed to achieve compliance.

As per subsection 139(2) of the *Accord Act*, the *Board* has the authority to prescribe the form and content of *Development Applications*. These Guidelines provide commentary outlining expectations associated with that authority. However, guidelines are not statutory instruments and as such, the information set out in guidelines does not prevent the *Board* from imposing additional requirements.

The authority to issue Guidelines and Interpretation Notes with respect to legislation is specified by subsection 151.1 of the *Accord Act*.

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<sup>1</sup> 1 Specific References to *Accord Act* and regulations in this Guideline will note the Federal *Accord Act* version.

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## 1.0 Acronyms and Abbreviations

<b>CEAA</b>	Canadian Environmental Assessment Act, 2012, S.C. 2012, c. 19, s. 52
<b>C-NLAAIA</b>	<i>Canada-Newfoundland and Labrador Atlantic Accord Implementation Act</i>
<b>C-NLOPB</b>	Canada-Newfoundland and Labrador Offshore Petroleum Board
<b>EEM</b>	Environmental Effects Monitoring
<b>EPP</b>	Environmental Protection Plan
<b>IAA</b>	<i>Impact Assessment Act</i> , S.C. 2019, c. 28, s. 1
<b>IAAC</b>	Impact Assessment Agency of Canada
<b>RMP</b>	Resource Management Plan

## 2.0 Definitions

In this Guideline, the terms of “authorization”, “field” and “pool” referenced herein have the same meaning as in Part III of the *Accord Act*.

In this Guideline, “installation” and “support craft” referenced herein have the same meaning as in the *Newfoundland Offshore Petroleum Installations Regulations*, SOR/95-104 and the *Newfoundland Offshore Petroleum Drilling and Production Regulations*, SOR/2009-316.

For the purposes of this Guideline, the following terms have been capitalized and italicized when used throughout this Guideline. The following definitions apply:

<b><i>Accord Act</i></b>	means the <i>Canada-Newfoundland Atlantic Accord Implementation Act</i>
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<b>Accord Acts</b>	means the <i>Canada-Newfoundland Atlantic Accord Implementation Act</i> (federal) and the <i>Canada-Newfoundland and Labrador Atlantic Accord Implementation (Newfoundland and Labrador) Act</i> (provincial)
<b>Benefits Plan</b>	means a “ <i>Canada–Newfoundland and Labrador benefits plan</i> ” as defined in section 2 of the <i>Accord Act</i> . Requirements are provided in section 45 of the <i>Accord Act</i>
<b>Benefits Plan Guideline</b>	means the Canada-Newfoundland and Labrador Benefits Plan Guideline as published by the <i>Board</i> and available on the C-NLOPB’s website
<b>Board</b>	means the Board members appointed pursuant to section 10 of the <i>Accord Act</i>
<b>Decision Statement</b>	means the decision statement issued by the Minister of the Environment and Climate Change Canada pursuant to section 65 of the IAA or under CEAA.
<b>Decision Report</b>	means the report issued by the <i>Board</i> following consideration of a <i>Development Application</i>
<b>Designated Project</b>	means a designated physical activity as per the <i>Physical Activities Regulations, SOR/2019-285</i>
<b>Development Application</b>	means an application for the approval of a <i>Development Project</i> which includes the proposed <i>Development Plan</i> and the proposed <i>Benefits Plan</i>
<b>Development Plan</b>	means a “ <i>development plan</i> ” as defined in section 2 of the <i>Accord Act</i> . Requirements are provided in section 139 of the <i>Accord Act</i>
<b>Development Project</b>	means the proposed development of a pool or field in the <i>Offshore Area</i>
<b>Drilling and Production Regulations</b>	means the <i>Newfoundland Offshore Petroleum Drilling and Production Regulations, SOR/2009-316</i>
<b>Energy Ministers</b>	means the federal Minister of Natural Resources and the provincial Minister of Industry, Energy and Technology

	(or the Ministers of any successor departments to whom the C-NLOPB is primarily responsible)
<b>Installation Regulations</b>	means the <i>Newfoundland Offshore Petroleum Installations Regulations, SOR/95-104</i>
<b>Offshore Area</b>	means the offshore area as defined by the <i>Accord Act</i>
<b>Operator</b>	means the holder of an authorization issued by the C-NLOPB
<b>Participant</b>	means a person, other than the <i>Proponent</i> , who makes an oral presentation or files a written submission to the <i>Public Review Body</i>
<b>Proponent</b>	means the entity that files the <i>Development Application</i>
<b>Public Review Body</b>	means the commissioner(s) appointed pursuant to paragraph 44(2)(b) of the <i>Accord Act</i>

### 3.0 Roles and Responsibilities

#### 3.1 C-NLOPB

The C-NLOPB is the joint federal-provincial regulatory agency responsible for the administration of the *Accord Acts* and associated regulations in relation to petroleum-related work or activity in the *Offshore Area*. In general, the C-NLOPB is responsible for:

- administering the *Accord Acts* and the associated regulations;
- advising industry of other agencies with responsibilities and authorities;
- coordinating authorizations and approvals using a one-window approach;
- providing interpretation regarding the requirements of the *Accord Acts* and regulations via a suite of regulatory instruments;
- assessing all applications for authorizations and approvals submitted in respect of planned works and activities;
- monitoring and verifying compliance with the *Accord Acts* and the associated regulations, as well as, any conditions and commitments made in authorizations and approvals; and
- taking appropriate action when non-compliances from the *Accord Acts* and the associated regulations or deviations from authorizations,

approvals and any associated commitments are identified, and addressing them in a timely manner.

With respect to *Development Applications*, the C-NLOPB specifically:

- reviews the *Development Application*;
- may conduct a public review;
- during a public review, may establish terms of reference and a timetable that will permit a comprehensive review of all aspects of the development;
- during a public review, may conduct public hearings in appropriate locations in the Province or elsewhere in Canada;
- cooperates and provides assistance to other government departments and agencies in carrying out their associated approvals;
- considers the recommendations from any public review;
- publishes the Decision Report, a fundamental decision, approving the *Development Application* which may include conditions, as applicable; and
- monitors and verifies that the *Proponent* meets commitments and conditions associated with the *Development Application* from initial concept to the final decommissioning and abandonment of the *Development Project*.

Further information on the mandate and authority of the C-NLOPB is provided on the website and in the *Accord Acts*.

### 3.2 Proponent

The *Proponent* is responsible for drafting and submitting a *Development Plan* and for working with the C-NLOPB and other regulatory authorities as necessary in order to advance its approval. The *Proponent* is responsible and accountable for complying with the requirements of the *Accord Acts* and regulations.

### 3.3 Operator

The *Operator* is responsible and accountable for complying with the requirements of the *Accord Acts* and regulations and any associated conditions or commitments made as part of any authorization or approval subsequent to the approval of a *Development Plan*.

## 4.0 Overview

The *Development Application* shall be comprised of a *Benefits Plan* and a *Development Plan* with supporting documents. There are also requirements for

an Impact Assessment as may be required by the IAAC, which may need to be considered.

**Formal review of a *Development Application* by the *Board* may commence only when a complete *Development Application* is received in the manner described in this Guideline and the *Benefits Plan Guideline*.**

Once a decision has been made by the *Board* respecting the need for and the form of a public review, the *Proponent* will be notified. It is only at that point that the C-NLOPB can forward the *Development Application* to the *Public Review Body*, if required, for a review of the *Development Application*, at which time the C-NLOPB will also commence its independent technical assessment. Details on the information to be provided in the *Development Application* and the Impact Assessment process are provided in the sections below.

#### **4.1 Pre-Application Consultation**

Pre-application consultation between a *Proponent* and the C-NLOPB is an essential element to efficient consideration of the *Proponent's Development Application*. The C-NLOPB encourages the *Proponent*, from the outset, to consult with C-NLOPB staff and involved stakeholders to heighten awareness of all relevant issues and complexities associated with the submission of a *Development Plan* and the *Benefits Plan*.

This consultation may assist the C-NLOPB and the *Board* in determining, at an early stage, the appropriate review process for the proposed development, and may reduce the period necessary for internal completeness review once the complete *Development Application* is received. As part of pre-consultation, design features may be discussed with the *Proponent* to ensure a complete application is filed in accordance with the Guideline.

#### **4.2 Notice of Intent to Develop**

Following pre-application consultation, the *Proponent* must provide written notice to the *Board* of its intention to develop a pool or field. The written notice should be accompanied with a description of the *Development Project* with sufficiently detailed information to assist the C-NLOPB and its regulatory advisory agencies in determining the appropriate level of public review required. The description of the *Development Project* should be consistent with the description of the *Designated Project* that is provided to the IAAC, as required. After the *Proponent* has provided written notice, the *Board* will determine whether a public review is required pursuant to section 44 of the *Accord Act*.

### 4.3 External Consultation

Recognizing that duplication of effort may arise in respect of the review of the *Development Application* or Impact Assessment, where efficiencies can be achieved, the *Board* may enter into agreements with IAAC and other agencies to create a more timely review process<sup>2</sup>. Input from federal and provincial government departments and agencies is sought in relation to approval of the *Development Plan*. This includes, but is not limited to, the following:

#### Federal

- Natural Resources Canada
- Department of Fisheries and Oceans
- Environment and Climate Change Canada

#### Provincial

- Department of Industry, Energy and Technology
- Department of Digital Government and Service NL, Occupational Health and Safety Division
- Department of Environment and Climate Change
- Department of Fisheries, Forestry and Agriculture

Input from federal and provincial government departments and agencies is also sought in relation to approval of the *Benefits Plan*.

Many physical activities proposed for the *Offshore Area* are subject to environmental assessment under the federal Environmental/Impact Assessment legislation. There are several opportunities for Indigenous governments/organizations to participate in IAAC Environmental/Impact Assessment processes, and in public reviews/public hearings conducted in the course of the *Development Application* process.

#### 4.3.1 Environmental/Impact Assessment Consultation

The C-NLOPB will use the outcome of the IAAC Environmental/Impact Assessment process to satisfy *Accord Act* requirements related to Environmental Assessment/protection, to the degree possible. C-NLOPB staff work closely with IAAC staff on all phases of the Environmental/Impact Assessment process.

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<sup>2</sup> C-NLAAIA, section 46

This federal Environmental/Impact Assessment process provides a number of opportunities for federal consultations with Indigenous governments/organizations in respect of proposed projects. During this Environmental/Impact Assessment process, the IAAC may:

- Require *Proponents* to consult with Indigenous governments/organizations prior to initiating the formal Environmental/Impact Assessment process with the IAAC.
- Once the Environmental/Impact Assessment process commences, the IAAC typically announces a Participant Funding Program to assist the participation of Indigenous governments/organizations and others in various phases of the assessment process.
- The IAAC initiates a number of consultation phases with Indigenous governments/organizations, stakeholders and the public related to the *Designated Project* to be assessed, as follows:
  - Summary of a Project Description;
  - Draft Environmental/Impact Assessment Statement Guidelines;
  - Summary of the Environmental/Impact Statement (including a dedicated engagement sessions with Indigenous governments/organizations); and
  - Draft Environmental/Impact Assessment Report and Potential Conditions.
- At the conclusion of IAAC Environmental/Impact Assessment process, the IAAC issues a *Decision Statement*, which includes a number of conditions. The C-NLOPB and the IAAC have agreed, via a [Memorandum of Understanding](#), that the C-NLOPB will have the lead role in compliance verification and enforcement of conditions in the *Decision Statement*.
- Typically, IAAC *Decision Statements* include a number of conditions requiring the *Proponent* to consult with Indigenous governments/organizations (and others) to achieve compliance. The *Decision Statements* also typically detail how the *Proponent* should consult with Indigenous governments/organizations, and the specific one(s) to be consulted. As noted above, in section 3.1, the C-NLOPB is responsible for monitoring and verifying that the *Proponent* meets commitments and conditions associated with the *Development Application*, including requirements outlined in an IAAC Decision Statement.

### 4.3.2 Development Application Consultation

Section 7.0 of this Guideline provides an overview of the Public Review Process, in cases where the C-NLOPB determines that a public review of a proposed *Development Project* is required.

There are opportunities for consultation with all interested parties during the *Development Application* process, as follows:

- The *Proponent* is encouraged to engage all interested parties prior to finalizing its *Development Application*; and
- Where a public review is to be conducted, all interested parties will be provided an opportunity to be heard and/or make submissions regarding the proposed *Development Project* (including the *Proponent's Benefits Plan* for the project being proposed).

### 4.4 Benefits Plan

The approval of a *Benefits Plan* is a prerequisite to approving the *Development Plan* pursuant to subsection 45(2) of the *Accord Act*. The *Benefits Plan* contains information to satisfy the *Board* that the provisions of section 45 of the *Accord Act* are respected. *Proponents* should refer to the [Benefits Plan Guideline](#) for guidance in the preparation of the *Benefits Plan*.

### 4.5 Impact Assessment

When a *Development Application* is submitted pursuant to subsection 139(2) of the *Accord Act*, the following conditions must be met prior to a *Decision Report* being issued by the *Board*:

Either:

- a *Decision Statement* has been issued under subsection 31(3) or section 54 of the *Canadian Environmental Assessment Act (2012)*; or
- an Impact Assessment completed pursuant to the Impact Assessment Act (IAA) by the IAAC with an associated *Decision Statement*.

Subject to section 44(2)(c) of the *Accord Act*, where the *Board* conducts a public review in relation to a *Development Application*, the *Board* may require an environmental impact statement and a socio-economic impact statement

to be submitted and made available for public distribution. The *Board* may also require other documents be made available.

Subject to the IAA and the associated *Physical Activities Regulations* (SOR/2019-285), *Designated Projects* require an Impact Assessment to be undertaken which should meet the requirements of the Environmental Assessment and the socio-economic impact statement referred to in paragraph 44(2)(c) the *Accord Act*. In accordance with its responsibilities under section 23 of the IAA, the C-NLOPB provides specialist or expert information or knowledge to the IAAC for *Designated Projects* requiring Impact Assessment triggered under the IAA, and for projects initiated under CEAA and continuing under the IAA. The C-NLOPB is fully involved in Impact Assessments led by IAAC and will endeavor to coordinate with IAAC to avoid duplication between the public review process conducted pursuant to the *Accord Acts* and any similar process conducted pursuant to IAA.

The following information is required to be submitted by the *Proponent* in respect of the Impact Assessment:

- Description of the *Designated Project*
- Engagement activities
- Description of the existing environment, including:
  - Geotechnical environment
  - Atmospheric environment
  - Oceanic environment
  - Sea ice and icebergs
  - Shoreline environment
  - Biological environment
    - Fish and fish habitat
    - Marine and migratory birds
    - Marine mammals and sea turtles
    - Species at risk
    - Special marine areas
    - Commercial fisheries
- Potential project interactions with the environment
- Assessment of potential environmental and socio-economic effects
- Cumulative effects assessment
- Assessment of impacts of potential accidental events
- Mitigation and monitoring measures
- Residual effects

*Proponents* are encouraged to review guidance available from the IAAC and engage staff of the IAAC and the C-NLOPB early in the Environmental/Impact Assessment process to determine the appropriate path for a coordinated Impact Assessment.

The *Proponent's* estimates of greenhouse gas emissions, along with the methods and practices the *Proponent* proposes to mitigate emissions, will be addressed in the IAAC Environmental/Impact Assessment process for *Development Projects*.

The C-NLOPB has a lead role in verifying that *Proponents* comply with all conditions in *Decision Statements* issued pursuant to the Environmental/Impact Assessment process, including any conditions that refer directly to mitigating greenhouse gas emissions.

Section 5.0 of this Guideline provides, at a high-level, the *Development Plan* requirements related to greenhouse gas emissions. Further details regarding submission requirements will be provided to *Proponents* by the C-NLOPB as part of pre-engagement sessions with the C-NLOPB prior to a *Development Application* being filed.

*Proponents* of *Development Projects* will need to have a thorough awareness of, and will need to comply with, various greenhouse gas emission commitments, targets and plans announced by the Governments of Canada and Newfoundland and Labrador.

Upon completion of a federal Environmental or Impact Assessment, the Minister of Environment and Climate Change will issue a *Decision Statement*. The *Board* must consider any *Decision Statements* before it can make a decision on the *Development Application*.

Throughout the lifecycle of a *Development Project*, the IAA or the *Accord Act* may require other assessments. There may be project proposals that include components such as pipelines that commence in an area under the jurisdiction of the *Accord Acts* and continue into provincial geographical jurisdiction. Under this circumstance, the province would conduct an environmental assessment under the *Environmental Protection Act* on those components of the project that lie within the geographical boundary of the province; or, would enter into an agreement with the government of another province, territory or of Canada to conduct an environmental assessment that satisfies the requirements of each jurisdiction.

#### **4.6 Concept Safety Analysis**

The *Proponent* should describe the Concept Safety Analysis, which is required pursuant to section 43 of the *Installation Regulations*. The purpose of the Concept Safety Analysis is to describe how the *Proponent* has integrated safety and protection of the environment into the design of the proposed development, the management systems, policies and procedures, planning

processes, personnel selection, training and management. The Concept Safety Analysis should also include the “Target Levels of Safety” the *Proponent* has set as acceptance criteria. The description should cover:

- all systems that are subject to major accident hazards including structures, topsides, pipelines, flowlines, subsea installations, loading facilities and risers, with particular attention paid to those systems that are important in mitigation;
- all major accident hazards that could result in loss of or serious threat to life, loss of structural integrity of an installation, equipment failure or uncontrolled or unauthorized discharges; and,
- all assumptions and measures proposed to mitigate damage or ensure the threat to life or damage to the environment will be reduced to an acceptable level, including contingency plans and monitoring procedures.

The complete analysis should be attached as an appendix and any key assumptions and criteria should be referenced in the *Development Plan*. The assumptions, criteria and results should be consistent with the associated Impact Assessment or Environmental Assessment, as appropriate.

#### **4.7 Development Plan Summary**

A summary of the *Development Plan* should be developed as a separate document that is intended for widespread public distribution. This summary should provide a sufficiently comprehensive overview of the *Development Plan* and its supporting documents to enable any non-specialist reader to understand the various aspects of the proposed development and to reach an informed opinion concerning the proposal.

Particular care should be taken in preparing this document to recognize that most of the readers will not be specialists. The *Proponent* is encouraged to avoid the use of overly technical language and to include a glossary to explain any technical terms.

The summary should mirror the organization of the sections of the *Development Plan*. Therefore, it should describe the proposed *Development Project*, including a discussion of safety, environmental, resource conservation and socio-economic impacts and the measures that will be implemented to avoid or to mitigate any adverse effects of the *Development Project*.

#### **4.8 Development Plan**

The primary purpose of the *Development Plan* is to provide the basis for the *Board* to decide whether to approve a *Proponent's Development Project*. A

secondary purpose is to make appropriate information available for public examination and consideration.

The *Development Plan* describes the general approach of developing a pool or field and includes information and supporting documentation relating to the scope, purpose, location, timing and nature of the proposed development as well as production rates, costs and environmental factors. Another key objective is to demonstrate adequate resource management and prevention of waste in accordance with good oil field practices and economics principles. Each *Development Project* may also have unique characteristics, which may require additional consideration. A digital copy of the *Development Plan* and associated supporting documents should be provided.

In accordance with subsection 139(3) of the *Accord Act*, the *Development Plan* must be submitted in two parts:

<b>PART I</b>	<p>This Part of the <i>Development Plan</i> should describe the <i>Proponent's</i> general approach for development of the pool or field, and in particular, information with respect to:</p> <ul style="list-style-type: none"> <li>i) the scope, purpose, location, timing and nature of the proposed development;</li> <li>ii) the production rate, evaluations of the pool or field, estimated amounts of petroleum proposed to be recovered, reserves, recovery methods, production monitoring procedures, costs and environmental factors in connection with the proposed development; and</li> <li>iii) the production system and any alternative production systems that could be used for the development of the pool or field.</li> </ul> <p>It should also contain a summary of all the information used by the <i>Proponent</i> in preparing the <i>Development Plan</i>, including, but not limited to, the information required and outlined in section 5 of this Guideline.</p> <p>This Part should also contain a discussion of the rationale for the selection of the proposed mode over other workable modes of development and any other information that has been prescribed to be included in this Part by the <i>Accord Act</i> and the regulations.</p> <p>Part I will be a public document available for review and comment.</p>
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<b>PART II</b>	<p>This Part of the <i>Development Plan</i> is typically not available to the public for review and comment as it contains commercially sensitive technical information.</p> <p>This Part of the <i>Development Plan</i> will consist of copies of studies, reports, proposals, etc., used by the <i>Proponent</i> in the preparation of the <i>Development Plan</i> and in the consideration of alternative modes of development and any other information that has been prescribed to be included in this Part by the <i>Accord Act</i> and the regulations. Subject to confidentiality and privilege provisions outlined in the <i>Accord Act</i><sup>3</sup>, the <i>Board</i> may make available to the public any information submitted by the <i>Proponent</i>, prior to and during the public review process. The determination of the confidentiality of material will be part of the completeness review of the <i>Development Plan</i> performed at the outset of this process and in consultation with the <i>Proponent</i>.</p> <p>Refer to section 6 of this Guideline for information that would be expected to be included in Part II.</p>
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Once a *Development Plan* is submitted, C-NLOPB staff will conduct a completeness review. The C-NLOPB acknowledges that the system designs are preliminary at the time the *Development Plan* is submitted.

Each *Development Project* is assessed on its merits, and depending on the complexities of a development, the C-NLOPB may require the *Proponent* to submit as part of the *Development Plan*, supporting documents to ensure all aspects of the development are reviewed. When submission of such information is required, specific direction to that effect will be given in a timely manner.

Early submission of information will ensure timely identification of issues that will need to be addressed by the *Proponent*. Except for the privileged information in Part II of the *Development Plan*<sup>4</sup>, all documents submitted in support of the *Development Plan* will be available to the public via the C-NLOPB's website ([www.cnlopb.ca](http://www.cnlopb.ca)).

Any information relating to safety or protection of the environment submitted by a *Proponent* in relation to the application for a development or by an *Operator*, once the development has been approved, may be released if it is deemed to be for the administration and enforcement of the *Accord Act*.

<sup>3</sup> C-NLAAIA, section 119.

<sup>4</sup> C-NLAAIA, paragraph 139(3)(b).

## 5.0 Part I of the Development Plan

Pursuant to paragraph 139(3)(a) of the *Accord Act*, Part I of the *Development Plan* should provide sufficient information to permit a comprehensive public review of the *Development Plan* and include the following:

- A description of the general approach to developing the pool or field;
- A discussion of the alternative exploitation schemes and the production systems considered, and the rationale for selecting the proposed approach;
- A description of the scope, purpose, location, timing and nature of the proposed development;
- A discussion of pertinent technical data and a summary of technical evaluations;
- Any information that has been presented or has been issued with respect to the Environmental/Impact Assessment; and
- A discussion and reference to detailed support studies that have been provided in Part II of the *Development Plan* (refer to section 6 of this Guideline).

### 5.1 Development Project Overview

An overall description of the proposed *Development Project* should include:

- the scope, purpose, location, timing and nature of the project;
- a brief history of the field from discovery to date;
- the partners and their respective interests;
- any applicable unitization or pooling agreements;
- maps showing the location of the field and tentative positions of planned platforms, subsea facilities, wells, flowlines, storage facilities and loading facilities;
- a schedule showing key events and decision points for the design and procurement stages of all major elements of the project;
- the proposed approach to project management for all phases of the *Development Project*;
- a listing of all reports and data used by the *Proponent* in the preparation of the *Development Plan*; and,
- a brief description of facilities, including those used for design, construction, installation, decommissioning, abandonment and removal.

## 5.2 Resource Management Plan

The *Development Plan* establishes a basis for the resource management of a field or a pool. More specifically, commitments for resource management and prevention of waste are key components of both Part I and Part II of the *Development Plan*.

Throughout each stage of development, new data is obtained through various activities such as geophysical programs, drilling, well evaluation, reservoir simulations and production. *Operators* are expected to ensure that this data is analyzed and used to revise the understanding of a pool(s) or reservoir(s).

Based on the latest geological, geophysical, petrophysical and reservoir engineering information available at the time of the application for authorization of a *Development Plan*, the RMP should fully describe how the field or pool is intended to be produced over its life, and should provide a detailed evaluation plan to address the main uncertainties, including sensitivities and alternative scenarios.

The RMP is valid for the life of a pool or field and must be modified as new information is acquired. Any updates or changes to the RMP must be provided as part of the Annual Production Report. Refer to guidance in section 86.4 of the *Drilling and Production Guidelines*.

Part I of the *Development Plan* should summarize by topic the following information contained in the Resource Management Plan that is submitted under Part II of the *Development Plan*. The following items should be included:

### 5.2.1 Geology and Geophysics

A summary of the geological setting and features of the field and of each pool or petroleum-bearing reservoir, including:

- a brief overview of regional geology;
- the structural and stratigraphic setting;
- a depositional and post-depositional history of the reservoir units;
- all structural and/or stratigraphic traps;
- a description of the source, generation and migration of hydrocarbons in the area;
- a trap description with an illustration showing a map of each pool aerially and stratigraphically;

- discussion of seismic data acquisition, processing and interpretations;
- details of the steps for seismic depth conversion;
- a representative set of fully labelled, interpreted seismic sections tied to wells (including dip and strike sections) 3:1 scale;
- a description of any anomalous fluid pressures encountered or predicted from seismic information; and
- any associated geochemistry, biostratigraphic interpretations, sequence stratigraphic interpretations, reservoir quality info such as petrology, and core logs and interpretations, etc.

The above descriptions for each pool or hydrocarbon-bearing reservoir should be illustrated by structural and stratigraphic cross-sections with lithostratigraphic and/or biostratigraphic correlations; and, for each reservoir unit, paleogeographical and structure maps. The fluid contacts and spill points should be noted on the structure maps. Each reservoir sub-unit should be illustrated by:

- isopach maps of gross and net pay;
- isoporosity map; and
- hydrocarbon pore volume maps.

A summary and reference to any associated models or other data provided in Part II should also be provided. Refer to section 6.1.1 of this Guideline for expectations on what should be submitted in Part II. This section should also discuss the information that may be updated in subsequent reports to the C-NLOPB in the future as additional data is obtained during well and production operations.

### **5.2.2 Petrophysics**

A summary of the petrophysical data and analytical procedures for each pool should be provided. This should include:

- a list of cored intervals;
- the methods used to adjust core analysis data to reflect subsurface conditions;
- assumptions and methods used in interpreting log data, including water resistivity values, porosity and permeability relationships, cut-off criteria used to estimate net pay, procedures to calibrate logs and to calculate porosity, permeability and water saturation;
- any comparison between data (i.e. porosity, permeability and water saturation) derived from logs or cores, and that obtained from formation flow tests and laboratory analyses; and

- the tabulation of reservoir parameters derived for each reservoir in each well, including gross and net pay, average porosity, permeability and water saturation.

A summary and reference to any associated charts, models or other data provided in Part II should also be provided. Refer to section 6.1.2 of this Guideline for expectations on what should be submitted in Part II. This section should also discuss the information that may be updated in subsequent reports to the C-NLOPB in the future as additional data is obtained during well and production operations.

### 5.2.3 Reservoir Engineering

As it is important for the C-NLOPB to ascertain the oil and/or gas production capacity for the life of the field, a summary of the reservoir data for each pool is required, and should include:

- formation flow testing results and analyses;
- reservoir fluids with a discussion of any differences between wells or intervals, potential for carbon dioxide and hydrogen sulfide corrosion, wax deposition, scaling, and associated plans for dealing with these concerns;
- details of any injection of fluids to be used, if applicable;
- associated reservoir pressures and temperatures;
- results of special core analysis including a discussion of parameters (i.e. residual oil and gas saturations, capillary pressure data, relative permeability and critical gas saturations) used in reservoir studies; and
- reservoir pressure/depth plots.

A summary and reference to any associated charts, models, maps or other data provided in Part II should also be provided. Refer to section 6.1.3 of this Guideline for expectations on what should be submitted in Part II. This section should also discuss the information that may be updated in subsequent reports to the C-NLOPB in the future as additional data is obtained during well and production operations.

### 5.2.4 Reserves Estimates

A summary of estimates of in-place resources and recoverable reserves for each pool, fault block and reservoir subdivision. This should include a summary of the following:

- assumptions and parameters used (the economic cut-off criteria for estimating the reserves should be clearly stated);

- volumetric estimates of oil and gas in place, distinguishing between solution gas, gas-cap gas and non-associated gas. The volumetric estimate should be presented for a downside, most likely, and upside case. For pools or hydrocarbon-bearing intervals containing a gas cap or non-associated gas, an estimate of the natural gas liquids, including condensate and liquids that may be produced during processing of the gas, along with an estimate of the gas-in-place remaining once these liquids are extracted, should be provided;
- sensitivity analysis reflecting uncertainty in the data and assumptions;
- expected recovery efficiencies with a discussion of the relative contributions of natural drive mechanisms and fluid injection plans, and sensitivities to various factors involved in exploitation of the pools; and
- recoverable reserves estimates for each pool and/or reservoir sub-unit. This should include an estimate, where appropriate, of the condensate and the natural gas liquids expected to be recovered from gas processing.

An assessment of the impact of alternative production systems on reserves should be provided. A summary and reference to any associated charts, models, maps or other data provided in Part II should also be provided. Refer to section 6.1.4 of this Guideline for expectations on what should be submitted in Part II. This section should also discuss the information that may be updated in subsequent reports to the C-NLOPB in the future as additional data is obtained during well and production operations.

### **5.2.5 Reservoir Exploitation**

A summary of the proposed reservoir exploitation scheme is required, including:

- a summary of proposed wells and contingent wells;
- an overview of alternative schemes considered and the rationale for choosing the proposed scheme;
- a clear statement of the principles and objectives that will be used when making field management decisions and conducting field operations, and in particular, how economic recovery of oil and gas will be maximized over the life of the field;
- development well requirements for production, injection, observation and disposal including;
  - any plans for use of existing wells;

- a tentative schedule and locations for drilling, production, injection, disposal or observation wells;
- typical tubing programs, including well inflow and tubing flow performance evaluation;
- a discussion of artificial lift requirements; and
- a description of future well workovers and an estimate of their frequency; and
- proposed activities for managing the development and production of the reservoirs, including:
  - a discussion of the rationale for data acquisition programs for coring, logging, fluid sampling and analysis, testing during drilling, and production. Where unattended installations or subsea facilities may impose restrictions on data gathering, these should be noted;
  - the potential for workover, re-completion, re-perforation and further drilling should be described;
  - where options remain for improvement to the proposed development or for further phases of appraisal or development, the criteria and timetable for implementing these should be provided;
  - for gas developments, the criteria for the installation of additional compression should be noted; and
  - a description of future reservoir studies to be undertaken.

Information supporting the proposed resource exploitation scheme should be provided and include:

- where a gas pool or gas cap contains condensate, an assessment of retrograde condensation and the possible need for gas cycling should be addressed;
- forecasts of the production and/or injection of oil, gas, associated gas liquids and water, on an annual basis, for each pool and each platform. Forecast of downside, most likely, and upside volumes should be provided;
- discussion of enhanced recovery scheme(s) that were considered and may be used to improve recovery;
- for each pool, a prediction of the average reservoir pressure over the pool's producing life; and
- gas conservation measures, including quantities involved and methods of utilization. An estimate of the total volume of gas to be flared, used as fuel, used for gas lift, and injected, as well as an annual forecast, should be provided.

Where wells may be used for waste management, pollution prevention measures, cuttings and/or produced water re-injection this should be described.

A summary and reference to any associated studies, charts, models, maps or other data provided in Part II should also be provided. Refer to section 6.1.5 of this Guideline for expectations on what should be submitted in Part II. This section should also discuss the information which may be updated in the future as additional data is obtained during well and production operations.

### **5.2.6 Deferred Development**

Where hydrocarbons have been identified in a portion of the development area for which development is not proposed, including zones deeper and shallower than the producing zone, a discussion of the reasons for not proceeding with development in those portions of the development area should be included, setting forth the following information:

- resource estimates;
- factors that might lead to future development and the possible timing of such development; and
- steps planned to obtain additional information concerning the hydrocarbon accumulation, if applicable.

Any information provided in Part II should also be summarized. Refer to section 6.1.6 of this Guideline for expectations on what should be submitted in Part II. This section should also discuss the information that may be updated in the future as additional data is obtained during well and production operations.

### **5.2.7 Development Drilling and Completions**

A summary of past drilling in the area related to the proposed development of the field or pool as well as the proposed drilling program and typical completion designs for the development wells should be provided. This should include a description of the following:

- drilling hazards and mitigative measures;
- casing and cementing programs;
- open-hole completions;
- well control and safety systems;
- type of completion methods anticipated; and
- typical wellhead equipment.

A reference to the detailed information provided in Part II is to be provided. Refer to section 6.1.7 of this Guideline for expectations on what should be submitted in Part II. This section should also discuss the information which may be updated in subsequent reports to the C-NLOPB in the future as additional data is obtained during well and production operations.

## 5.2.8 Production and Export Systems

The *Accord Acts* require that a *Development Plan* contain, in Part I, a description of the “production system and any alternative production systems” that could be used for the development<sup>5</sup>.

The mode of development and alternatives are an important part of the approval process. It is a given that an alternative must be technically feasible and these alternatives should be discussed with governments and the C-NLOPB. The *Proponent* should clearly include criteria that will be used to determine the maximum recovery and overall optimization of the economics of the *Development Project*. These criteria will also be important to the decision-making process of the *Board* and the governments, given approval of a *Development Plan* approval is a fundamental decision per the *Accord Acts*. Consequently, these criteria should be fully examined by the *Proponent* for each alternative in the *Development Plan*.

For the C-NLOPB and the governments, there are further criteria that should be fully examined by the *Proponent* for each alternative. The potential benefits to the Province’s and Canada’s economy including a projection of revenue flows to governments within the context of existing tax and royalty structures, will be important criteria for the *Board* and governments in their assessment of each alternative. Therefore, these criteria should also be examined and described by the *Proponent*.

The *Proponent* should provide an economic assessment of the preferred mode of development and alternatives. For alternatives, the assessment should present capital and operating cost information necessary to calculate each alternative’s net income contribution to the Province and Canada. This should include, for each alternative, a presentation of:

- the anticipated net income;
- the anticipated rate of return; and

<sup>5</sup> C-NLAAIA, paragraph 139(3)(iii).

- the anticipated royalty and taxes to be paid to the Government of Canada and the Government of Newfoundland and Labrador.

For the preferred development approach, a sensitivity analysis based on capital cost, operating cost, production forecasts and oil and/or gas price should be included.

A summary of the production and export systems related to the proposed development of the field or pool is to be provided and should include the following:

- Production Installation
- Topside Facilities
- Subsea Production System
- Export System

A clear statement of the facility's maximum oil, gas and water processing capacity should be included, as well as, a description of the production monitoring procedures. The plan should also include the scope and flexibility for future modification and expansion to address the potential for the proposed development, for any incremental development within the field or any satellite field development. This includes identifying any spare capacity designed into the facilities/pipelines to allow for future development or third party tie-ins. Guidance for the extent of detail to include in Part II is provided in section 6.1.8 of this Guideline. High level descriptions should be provided in Part I, whereas associated schematics, process flow diagrams and the functional design basis should be included in Part II. This section should also discuss the information which may be updated in subsequent reports to the C-NLOPB in the future as additional data is obtained during well and production operations.

### **5.2.9 Operability of the Proposed Development**

A summary of the expected overall operating efficiency and reliability of the proposed development of the field or pool is to be provided. A reference should be provided to any detailed information submitted under Part II. Refer to section 6.1.9 of this Guideline for expectations on what should be submitted in Part II. This section should also discuss the information which may be updated in subsequent reports to the C-NLOPB in the future as additional data is obtained during well and production operations.

### 5.2.10 Development and Operating Cost Data

A summary of the annual capital and operating costs for the major components of the proposed mode of development, and each alternative evaluated, should be provided. Part I should summarize the information, whereas, Part II should include additional details, assumptions or data used. Refer to section 6.1.10 of this Guideline for expectations on what should be submitted in Part II. This section should also discuss the information which may be updated in subsequent reports to the C-NLOPB in the future as additional data is obtained during well and production operations.

### 5.2.11 Organizational Chart

A summary of any key commitments with respect to the establishment of organizational charts for all activities to be provided along with reference to typical organization charts that are provided in Part II. Refer to section 6.1.11 of this Guideline for expectations on what should be submitted in Part II.

## 5.3 Design Criteria

The design philosophy for the production system should be described, with particular reference to any policies that have been adopted to ensure there will be due regard for safety and protection of the environment. Plans for incorporating this philosophy in design calculations should be described, identifying the rules, codes, standards and specifications to be used.

The design criteria for the production system should consider their construction, transportation, installation and operation phases. The criteria for the design of the systems should be divided into environmental, functional and geotechnical categories. In addition, if it is anticipated that the life of the asset will be extended, the *Proponent* should discuss this possibility and the measures that will be undertaken in preparation.

### 5.3.1 Physical Environmental Criteria

A summary should be provided of physical environmental criteria to be used in the design of the facilities, with reference to the review required under IAA, if applicable. The section should also include a summary of:

- the operating limits imposed by environmental factors on all phases of the development; and

- the methodology that will be used to determine the design and operational environmental loading on the principal installation(s), with particular attention to any non-standard methods.

Refer to the requirements for designing for the physical environmental conditions in which the installation is expected to operate in under sections 37 and 44 of the *Installation Regulations*.

### **5.3.2 Functional Criteria**

A description and list of the functional criteria to be used in the design of the production systems are required. This description should include component characteristics, system processing requirements, well fluid properties and product specifications.

### **5.3.3 Geotechnical Criteria**

A summary should be provided of geotechnical criteria to be used in the design of the facilities. In particular, the section should focus upon those factors affecting the construction, installation, operation, decommissioning, abandonment and removal of installations, and how these factors will be incorporated into the design of the installation.

Refer to the requirements for the design of an installation under sections 37, 42, 45, 46, 47, 48, 52 and 53 of the *Installation Regulations*.

### **5.3.4 Innovation**

If the design of the installation, including any associated equipment (surface or subsea) uses a design method, material, joining technique or construction technique that has not been used globally before in comparable situations or environments, the design must meet the requirements of section 41 of the *Installation Regulations*. The *Development Plan* should highlight any “innovations” and summarize the studies and programs undertaken or planned to be undertaken. This should also identify if there are any new technologies (e.g. digitalization) being proposed for the program.

## **5.4 Risk Assessments and Associated Studies**

A listing of the various specific risk assessments and studies that may be required as detailed design proceeds should be included. The risk assessments and studies should focus not only on design but include recommendations with respect to procedures, training, etc. A description

of the plan for the completion of these risk assessments and studies and an explanation of how this process is integrated into the design process should be provided. Finally, an explanation of the methodologies to be used and a discussion of their validity and relevance in the overall process should be provided.

### **5.5 Quality Assurance and Quality Control**

This section should contain a description of the approach the *Proponent* intends to follow for quality assurance and quality control during design, fabrication, construction, installation and operation of the proposed facility. This description should indicate how this process will be employed in connection with the Certificate of Fitness required pursuant to section 139.2 of the *Accord Act*.

Refer to the requirements of section 4 of the *Installation Regulations* and section 5 of the *Drilling and Production Regulations* and its associated guidance for quality management.

### **5.6 Construction and Installation**

An overview of the construction and installation of the production installation is to be provided. Where appropriate, this overview should include:

- a schedule including key events and decision points in the design, procurement and construction stages of all major elements of the development;
- the proposed approach to project management;
- temporary or permanent construction facilities including any associated port or marine terminal or equipment placed onboard until permanent systems are installed;
- special transportation or installation facilities and equipment and associated functional specifications;
- major construction materials and services; and,
- quantities and characteristics of any expected toxic wastes, debris, effluents and emissions, including noise associated with construction.

### **5.7 Operations and Maintenance**

This section of the *Development Plan* should describe the operations and maintenance associated with the *Development Project* in the manner indicated below. A discussion of proposed measures to maintain safety and protection of the environment during operations is required. The discussion should include:

- proposed safety zones around surface production installations, subsea production facilities and export facilities (Refer to section 71 of the *Drilling and Production Guidelines*);
- the roles envisioned for the standby vessel, and other support craft, rescue equipment and the equipment installed on the production installation; and
- an overview of facilities and equipment critical to safety and protection of the environment.

Specific details noted below should also be included.

#### **5.7.1 Management System**

The *Proponent's* proposed strategy for the management of the *Development Project* should be described. It should cover such issues as whether, and to what extent, the *Proponent* plans to use its corporate management system to manage its operations or to develop a project-specific management system.

With respect to management systems, refer to the requirements of section 5 of the *Drilling and Production Regulations* and its associated guidance. Refer also to requirements for management systems in Part III.1 of the *Accord Act* and the associated regulations.

#### **5.7.2 Safety Plan**

This section should explain the *Proponent's* approach to the development of the Safety Plan required by section 6 of the *Drilling and Production Regulations*, and how the assessments, analyses and studies will be utilized to form the basis for this plan. Refer to the *Safety Plan Guideline* for further guidance in this regard.

The *Proponent* should also submit a Safety Plan with each application for any construction, or any installation activity or group of activities, as appropriate (e.g. including dredging, heavy lifting, diving, etc.) associated with the *Development Project*, which takes place within the jurisdiction of the C-NLOPB and which takes into consideration any commitments made with respect to construction or installation activities.

#### **5.7.3 Environmental Protection Plan (EPP)**

This section should explain the *Proponent's* approach to the development of the EPP required by section 6 of the *Drilling and*

*Production Regulations*, and how the assessments, analyses and studies will be utilized to form the basis for the EPP. Refer to the *Environmental Protection Plan Guideline* for further guidance in this regard.

#### **5.7.4 Operations and Maintenance Procedures**

An overview should be provided of the scope and planned use of operation and maintenance procedures. This overview should cover system descriptions, operation, inspection, testing, maintenance, environmental monitoring, safe and environmentally sound work practices, etc.

The *Proponent* should indicate whether any special maintenance, testing, inspection and repair equipment or vessels are required, and whether the intention is to acquire such vessels or to hire them on an "as needed" basis. Functional specifications for such vessels should be specified.

#### **5.7.5 Training and Competency**

This section should describe the *Proponent's* plan for ensuring the qualifications, training and competency of all personnel to be employed in association with the proposed development. It should include, in so far as is possible, a description of the qualifications, training and competency required for each classification of production installation, transportation system and standby vessel personnel. This description should take into account all work practices and operation and maintenance procedures that such persons may be required to carry out, including emergency procedures. A discussion of the approach the *Proponent* will use to ensure that all personnel are qualified, trained and competent, and how certificates and other training information will be tracked, should also be included.

#### **5.7.6 Logistics**

A description should be provided of the anticipated logistics for the *Development Project*, including the onshore supply base, materials movement, personnel movement, support craft and diving requirements. The functional specifications of proposed support craft such as supply vessels, ice-clearing/shuttle tanker support vessel, standby vessel and helicopters, should be described.

Refer to section 69 of the *Drilling and Production Guidelines* for guidance on the scope of functional specifications for support craft. For

passenger craft, refer also to requirements in Part III.1 of the *Accord Act* and the associated regulations.

### 5.7.7 Physical Environmental Observations

A general description of the *Proponent's* program to gather physical environmental data during the life of the *Development Project* should be provided. Specifically, the policies regarding instrumentation and procedures to be used for the collection, collation, analysis and dissemination of weather, sea state, physical oceanographic, ice data and data concerning any other environmental hazard, should be described. In addition, a description of anticipated points of interface between this program and government measurement programs should be provided. Refer to guidance on physical environmental observation programs in the *Physical Environmental Guidelines*.

### 5.7.8 Forecasting Programs

The *Proponent* should provide an overview of the programs that will be used for the operational prediction of environmental conditions during the *Development Project*. This should include:

- the provision of site-specific and areal weather and sea state forecasts for both routine and emergency operations;
- the methods, including drift models, to be used for the prediction of pack ice and iceberg movement in the vicinity of operations; and
- the anticipated points of interface between these programs and government forecasting programs.

Refer to guidance on weather forecasting and ice monitoring in the *Physical Environmental Guidelines*.

### 5.7.9 Environmental Mitigation and Monitoring

As described in section 4.4 of this Guideline, an environmental assessment or Impact Assessment must be completed in respect of a *Development Project*. While full details on environmental mitigations and monitoring programs will likely not be available at the time the *Development Plan* is prepared, the *Proponent* will be expected to provide an overview of these plans and programs to indicate its conceptual approach to these matters.

The *Development Plan* should describe procedures and equipment proposed to reduce or prevent potential adverse effects of all activities on the environment, with reference to the mitigations identified in the

Impact Assessment and how those will be integrated into the EPP that will be submitted in support of an application for authorization. Where related equipment has been identified, it should be discussed in the *Development Plan*: a summary of the equipment type, design operating efficiencies and predicted quality of discharges or emissions should be given.

Where mitigations include compensation programs, including compensation that may be required pursuant to the *Accord Act* or other legislation, the *Development Plan* should include discussion of the provision of financial security for those compensation programs. As well, the *Development Plan* should include discussion of the financial resources available for the cleanup of spills, and programs to remediate any associated damage.

The approach to be taken by the *Proponent* for surveillance and monitoring of environmental effects associated with the *Development Project* should be described.

The *Development Plan* should include a description of any proposed components of a follow-up program, monitoring or surveillance measures identified in the Environmental Assessment and/or Impact Assessment and how those will be integrated into the EPP. These components may include, but not be limited to, the following:

**5.7.9.1. Compliance Monitoring**

The *Proponent* is expected to provide a summary description of its plans to monitor compliance with applicable regulatory requirements.

**5.7.9.2. Environmental Effects Monitoring (EEM)**

The *Proponent* is expected to provide a summary description of the proposed EEM program for both routine operations and accidental events, including the process by which these programs will be designed. Proposed parameters for monitoring and the rationale for their choice should be provided. Any site-specific baseline information that may be required to support the effects monitoring program should be identified.

### 5.7.9.3. Wildlife Observation Programs

The *Proponent* should provide a summary of any programs that are planned to undertake observation of wildlife (e.g. seabirds, marine mammals, reptiles and/or species at risk) during all phases of the *Development Project*.

### 5.7.10 Contingency Plans

An outline of the contingency plans (including emergency response procedures) that the *Proponent* intends to establish to deal with emergencies affecting the safety of personnel, protection of the environment or the integrity of the installation is required. The outline should include a description of:

- the types of emergencies for which contingency plans will be established;
- the proposed emergency response organization, chain of command and key areas of responsibility;
- the training of personnel, including provisions for emergency response exercises;
- the personnel and equipment requirements for different types of response, including logistics requirements, response timing and equipment requirements (e.g. for environmental emergencies this would include equipment for spill surveillance and tracking, and spill containment and clean-up; for a blowout this would include relief well drilling and alternatives to a relief well);
- the estimated response time for major classes of emergencies;
- internal and external notification and reporting procedures;
- the interface between the *Proponent's* plans and procedures and those of government organizations and other operators; and
- planned participation in initiatives to improve response efficiency or capability (e.g. research and development programs).

With respect to environmental contingency planning and countermeasures, this should also include consideration of the following:

- the estimate of the capabilities and/or limitations of countermeasures equipment and techniques and their implications for effects estimation;
- the capability of mounting a monitoring program in the event significant effects are anticipated; and
- the plans for the disposal of recovered pollutants and debris.

The *Proponent's* detailed contingency plans are submitted to the C-NLOPB as part of an application for authorization submitted pursuant to section 6 of the *Drilling and Production Regulations*. Refer also to section 6 of the *Drilling and Production Guidelines* for guidance on contingency plans.

#### 5.7.11 Ice Management Plan

A description of the *Proponent's* ice management and avoidance plan is to be provided, including:

- aerial, vessel and installation-based ice surveillance;
- ice data reporting, collation, quality control and presentation systems;
- local tactical ice forecasting capability, where applicable;
- integration with other operators in nearby fields;
- methods and facilities for iceberg deflection; and
- capabilities and limitations of the ice management plan and their implications for safety analysis and design considerations.

Refer to section 6 of the *Drilling and Production Guidelines* and the *Physical Environmental Guideline* for guidance on ice management plans. Ice management plans are submitted to the C-NLOPB as part of the contingency plan referred to in subsection 5.7.10 of this Guideline.

#### 5.7.12 Collision Avoidance

The equipment and procedures to be used for detecting and preventing collisions should be described in this section. Refer to section 6 of the *Drilling and Production Guidelines* for guidance on collision avoidance plans. Collision avoidance plans are submitted to the C-NLOPB as part of the contingency plan referred to in subsection 5.7.10 of this Guideline.

#### 5.7.13 Security

The *Proponent* should acknowledge its plan for security of the proposed installation, including cybersecurity. The Government of Canada has sharpened its focus on potential threats to the integrity of energy infrastructure. In this context, security is regarded as an aspect of safety; hence the necessity for an assessment of security measures in the *Development Application* process. Guidance for Security Plans are based on the International Maritime Organization (IMO) *International Ship and Port Security (ISPS) Code*, as amended from time to time. The *Proponent* is required to prepare a Security Plan for the

installation. The Security Plan will not be a part of any public review process. However, its review will include consultations with the federal government.

## 5.8 Decommissioning and Abandonment

In reference to section 42 of the *Installation Regulations* and subsection 6(k) of the *Drilling and Production Regulations*, this section of the *Development Plan* should include:

- a description of the provisions included in the design to facilitate decommissioning and abandonment of the installation at the end of its production life;
- an overview of the decommissioning and abandonment program, including how installations, pipelines and subsea infrastructure will be removed and how and when wells will be abandoned;
- a discussion of the feasibility of the proposed procedures;
- the forecasted costs of decommissioning and abandonment; and
- a description of the measures that would have to be taken to leave the site in a fishable and navigable state.

A “Decommissioning and Abandonment Plan” should be submitted as part of any application for authorization of a *Development Project*. This plan must reflect any commitments made as part of the *Development Plan* and be updated throughout the lifecycle of the project. Refer to section 6 of the *Drilling and Production Guidelines* for guidance.

## 6.0 Part II of the Development Plan

This chapter provides guidance for the preparation of Part II of the *Development Plan* and outlines requisites for review of this Part. Pursuant to paragraph 139(3)(b) of the *Accord Act*, Part II of the *Development Plan* should include all technical or other information and proposals, as may be prescribed, necessary for a comprehensive review and evaluation of the proposed development. Pursuant to section 16 of the *Drilling and Production Regulations*, Part II of the *Development Plan* relating to a proposed development of a pool or field shall contain a RMP. While Part II contains the detailed technical information, Part I of the *Development Plan* should summarize and discuss the information that has been provided in Part II.

### 6.1 Resource Management Plan

Section 16 of the *Drilling and Production Regulations* specifies that Part II of the *Development Plan* contain a RMP. The following should be included as part of the RMP:

### **6.1.1 Geology and Geophysics**

In addition to summary provided in Part I, if more detailed information is required to support the information provided in Part I, it should be included in Part II. In addition, the following should be included:

- the most recently processed seismic cube (time and depth) used as the basis for modelling, mapping and well planning; and
- static reservoir models for each pool, including any interpreted horizons, faults and fault polygons (consult C-NLOPB staff regarding requirements and format);

### **6.1.2 Petrophysics**

In addition to summary provided in Part I, if more detailed information is required to support the information provided in Part I, it should be included in Part II. In addition, the following should be included:

- mineralogical analyses of core samples noting any factors which could negatively impact production performance and mitigating measures proposed; and
- results of advanced studies undertaken and models built to support petrophysical interpretation (such as XRD, RockEval, SCAL, multi-mineral models).

### **6.1.3 Reservoir Engineering**

In addition to summary provided in Part I, if more detailed information is required to support the information provided in Part I, it should be included in Part II. In addition, if injection of fluids is proposed, details of the composition of injected fluids, compatibility studies, injectivity and/or pulse tests should be included in this section.

### **6.1.4 Reserves Estimates**

In addition to summary provided in Part I, if more detailed information is required to support the information provided in Part I, it should be included in Part II.

### **6.1.5 Reservoir Exploitation**

In addition to summary provided in Part I, if more detailed information is required to support the information provided in Part I, it should be included in Part II. In addition, the following should be included:

- dynamic reservoir models for each pool proposed for development (consult C-NLOPB staff regarding requirements and format). Models submitted should include:
  - cases conducted to assess the impact of well and pool production rate(s) on recovery;
  - cases that evaluate possible exploitation strategies; and
  - cases on any uncertainty analysis performed.
- studies conducted to assess the impact of well and pool production rate(s) on recovery;
- results of any model studies carried out to evaluate possible exploitation strategies, including the assumptions used; and
- an overview of the field hydraulic studies, including an assessment of the impact of the flow line sizes and production facilities location on recovery.

#### 6.1.6 Deferred Development

Any supporting information with respect to deferred developments should be provided in Part II.

#### 6.1.7 Development Drilling and Completions

The *Proponent* is not required to submit detailed equipment designs and operating procedures at this stage. Equipment designs and operating procedures may be reviewed when an application for authorization is submitted in relation to this activity and, in the case of individual well designs, through the well approval process pursuant to section 10 of the *Drilling and Production Regulations*. Approval of the *Development Plan* will not grant authority to conduct any well operations.

An overview of past drilling activities, the proposed drilling program and typical completion designs for development wells should be provided.

In addition to what was provided in Part I, the following should also be presented where appropriate:

- typical casing programs, including design criteria for production, injection and observation wells;
- typical completion methods and equipment. If smart well technology or down hole pressure gauges are not being used, justification should be provided; and
- completion and annulus fluids, including a discussion of corrosion control and fluid compatibility;

With respect to requirements for equipment, refer to Part 4 of the *Drilling and Production Regulations* and the *Installation Regulations*. Guidance on equipment is also provided in Part 4 of the *Drilling and Production Guidelines*.

#### **6.1.8 Production and Export Systems**

A description of the production and export systems related to the proposed development of the field or pool is to be provided.

##### **a. Production Installation**

A description of the configuration of the production installation, supported by schematics, is required. The description should include design criteria, the type of installation, and, where appropriate:

- the marine systems of a floating installation including the general utilities and facilities for mooring, propulsion and ballast;
- the safety systems including environmental monitoring systems, fire and gas detection systems, alarm and shutdown systems, communication systems, active and passive fire protection systems, blast protection, temporary refuges, escape routes, lifesaving appliances, ballast control systems, well control systems, emergency and rescue services and loss control equipment;
- the functional requirements for systems such as well conductors, J-tubes, risers, riser handling, sea water supply and discharge, shale chute, crude oil storage and utilities and produced water handling;
- a discussion of the visual inspections and instrumentation planned to monitor the integrity of the foundation and structure; and
- a discussion on the design considerations for the effect of sea ice and icebergs on the installation and associated escape, evacuation and rescue from that installation.

With respect to requirements for equipment, refer to the *Installation Regulations* and Part 4 of the *Drilling and Production Regulations*. Guidance on equipment is also provided in Part 4 of the *Drilling and Production Guidelines*.

## **b. Topside Facilities**

A description of the topside facilities, supported by schematics, is required. This should include a process flow diagram of the production facilities indicating the fluid analyses, operating pressures, temperatures and throughput volumes and capacities, and accompanied by material balance tables. The description should include the functional design basis, as appropriate, for:

- the production facilities, including production and test separators and associated crude oil treatment system, gas processing, compression, gas lift, fuel gas and gas flaring systems, produced water system, water injection system, control and monitoring system (including any onshore remote capability), and wellhead and production tree;
- the drilling systems or workover systems included;
- the facilities provided to deal with the discharge of substances potentially damaging to the environment;
- the facilities for the separation, collection, treatment and disposal of oily water, sewage, drilling mud and cuttings, and solid wastes;
- the conceptual approach to fluid measurement, sampling and allocation;
- consideration of sour or sweet corrosion, scaling, hydrates and produced sand; and
- single versus multi-train gas injection considerations.

A discussion of system bottlenecks and limitations that can give rise to production constraints and contingencies available to maintain production in the event of major equipment failure(s) should be provided. A clear statement of the facilities' maximum oil, gas and water processing capacity should be included. The scope of the Impact Assessment, as outlined section 4.4 of this Guideline should address the potential maximum oil, gas and produced-water rates.

## **c. Subsea Production System**

A description, supported by schematics, of the configuration of any proposed subsea components of the production system is required. The description should include:

- satellite wells, clustered wells or template wells;
- components such as well foundations, wellheads and trees, flowlines and end connections, production riser, controls, control lines and fluids, templates and manifolds, subsea

process systems, shutdown systems, materials and corrosion control;

- features incorporated in the system to detect and minimize the risk of oil leaks and spills;
- features incorporated to handle high wax content or pour point problems; and,
- discussion of the effect of the risk of iceberg collision and potential scour depth on the choice of the subsea system.

The scope and flexibility for future modification and expansion to address any potential for upside, incremental and satellite field development should be noted identifying any spare capacity designed into the system.

Refer to requirements for subsea production systems under section 61 of the *Installation Regulations*.

#### d. Export System

A description, supported by schematic drawings, of storage, loading and transportation components of the export system is required. The description should include:

- the capacity, efficiency factors and operational aspects for each component;
- the effect of sea ice and icebergs on the operating criteria for, and loads on, the export system;
- the features incorporated in any tanker loading, oil storage or support system to minimize the risk of an oil spill;
- ballast and, where appropriate, displacement water discharges from storage facilities and crude transport tankers; and,
- a description of any proposed pipelines to or from existing facilities, between facilities or for export to shore.

The scope and flexibility for future modification and expansion to address any potential for upside, incremental and satellite field development should be noted identifying any spare capacity designed into the system to allow for future development or third party tie-ins.

#### 6.1.9 Operability of the Proposed Development

The expected overall operating efficiency and reliability of the proposed development should be discussed in terms of the effects of:

- breakdowns in main power generation;
- equipment redundancy;
- scheduled maintenance, testing and inspection programs;
- downtime resulting from physical environmental conditions such as sea ice, icebergs, sea state and reduced visibility;
- well workover requirements; and,
- any potential impact on maximizing petroleum recovery.

Any associated details, assumptions or data used should be described.

#### **6.1.10 Development and Operating Costs**

This section should document past expenditures and provide an estimate of development and operating costs in sufficient detail to permit comprehensive financial and economic analysis of the *Development Project* in support of reservoir development and depletion throughout the life of the field. This information is necessary for monitoring and enforcement to ensure waste does not occur and to provide for maximum recovery of reserves. The cost data should be provided in constant dollars, accompanied by a description of the methodology, assumptions and basis for the cost estimates. A summary of the annual capital and operating costs for the major components of the proposed mode of development, and each alternative evaluated, should be provided. The cost information should include:

- pre-project costs for seismic, exploration drilling, delineation drilling and studies;
- drilling capital expenditure;
- facilities capital expenditure for each major component;
- decommissioning expenditure;
- field operating cost, excluding tariffs; and,
- tariff operating cost.

Any associated details, assumptions or data used should be described.

The *Development Plan* should contain a provision for providing and updating this information as necessary throughout the life of the field. Updated information should be provided as part of the Annual Production Report.

#### **6.1.11 Organizational Chart**

A typical organization chart showing the reporting relationships for personnel employed in the operation should be provided. The

expected size and composition of the associated onshore and offshore workforces should be indicated for the different stages of the lifecycle.

## 6.2 Studies, Analysis and Evaluations

Part II of the *Development Plan* should further consist of the studies, analyses and evaluations, or other information and proposals necessary for a comprehensive review and evaluation of the proposed development. In accordance with the *Accord Acts*, privileged information provided in Part II will not be disclosed without the *Proponent's* consent.

The *Accord Acts* also require that petrophysical, fluid, core and well testing data, analyses and evaluations, be provided to the C-NLOPB outside of the *Development Plan* process. If the *Proponent* wishes to rely on this material to support the *Development Plan*, the material should be referenced explicitly but need not be resubmitted. The public disclosability of such information will be determined in accordance with the relevant provisions of the *Accord Acts*.

The following are to be provided, where applicable, and when available:

- geoscientific (geological and geophysical) studies;
- geotechnical studies;
- petrophysical studies;
- reservoir engineering studies, including rock and fluid data and analyses, and reservoir simulation studies;
- original oil and gas-in-place and recoverable reserves studies;
- production engineering information and studies;
- field hydraulic studies;
- production and transportation systems studies;
- environmental studies and analyses;
- plans for waste treatment and disposal;
- development cost data and economic analyses of alternatives;
- information related to matters of conservation, safety of operations and pollution prevention; and,
- any other studies that were used in support of the *Development Plan*.

## 7.0 Public Review Process

Subsection 44(1) of the *Accord Act* states:

*“Subject to any directives issued under subsection 42(1), the Board shall conduct a public review in relation to any potential development of a pool*

*or field unless the Board is of the opinion that the public hearing is not required on any ground the Board considers to be in the public interest.”*

The *Board* recognizes that the scale of an individual *Development Project* may vary from a large-scale, stand-alone development, to a small satellite tie-in to existing facilities. The scale of the public review, if required, and the process required, may differ accordingly.

This section describes the process for conducting public reviews of *Development Applications* for *Development Projects* in the *Offshore Area* pursuant to the *Accord Act*.

*Development Projects* are also subject to an Impact Assessment pursuant to the IAA. If a *Designated Project* is referred to a review panel under the IAA, and this review is planned to be undertaken at the same time as the review of the *Development Application*, the *Board* will pursue with appropriate departments or agencies, the development of a joint review that will satisfy the requirements of both the IAA and the *Accord Acts*.

### **7.1 Requirement for Public Review**

The powers of the *Board* in relation to the public review are broad. The *Board* is required to conduct a public review of the *Development Application* unless the *Board* determines a review is not necessary in the public interest. Examples of typical *Development Applications* that may not be subject to a more formalized public review under section 44 of the *Accord Act* may include:

- an amendment to an approved *Development Plan* that does not change the conclusions of the corresponding environmental assessment or Impact Assessment, or does not substantively alter the mitigative procedures that it recommends;
- an application respecting a satellite pool or field that uses one or more existing production facilities and proven technology; or
- applications for fields that use proven production technology for an area which has been subjected to a previous public review.

Where a public review is required, the *Board* will either:

- Appoint a *Public Review Body* to conduct the review;
- Request a public review be undertaken by a third party organization; or
- Request a public review via the C-NLOPB's website.

With respect to the *Public Review Body*, this can either be a commissioner appointed by the *Board* or, in conjunction with governments, a panel of commissioners. Where there is more than one commissioner, the *Board* may appoint additional commissioners based upon nominations from the *Energy Ministers*<sup>6</sup>. When a formal *Public Review Body* is not used, the *Board* will provide guidance for the terms of those reviews.

The public review will not commence until the C-NLOPB has conducted its completeness review of the *Development Application* submitted by the *Proponent* against the requirements of this Guideline, and the *Benefits Plan Guideline*.

The *Board* will determine the timeframe of the review. If the review is undertaken by a *Public Review Body*, it is normally conducted and completed within 270 days following submission of the *Development Application*, or such shorter period as determined by the *Board*.

## 7.2 Scale and Scope

The scale and scope of the public review should be commensurate with the scale of the development and the degree to which new and innovative techniques and approaches are proposed. Consideration will be given to technology that has been previously assessed by the C-NLOPB and proven in the *Offshore Area* when determining the form of review necessary in the public interest.

## 7.3 Board Review

The *Board* will, in all cases, carry out its own evaluation of the *Development Plan*, including an internal technical review by C-NLOPB staff concurrently with the public review, and will ensure public distribution of Part I of the *Development Plan* and the *Benefits Plan*. The internal technical review will include consultation with government departments and agencies and such other experts as may be necessary. The *Board* will consider the Staff Analysis prepared by C-NLOPB staff and the written submissions by interested parties in making a decision to permit a *Development Project* to proceed. In addition, it will take into consideration any reports or submissions from the public review process and any associated *Decision Statements*. The *Board's* approval of Part I of a *Development Plan* is a fundamental decision.

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<sup>6</sup> C-NLAAIA, paragraph 44(2)(b)

## 7.4 Pre-Public Consultation

Where a public review is to be conducted, the *Proponent* is encouraged to consult with interested groups and individuals, as part of its *Development Application*. Such sessions may assist the *Proponent* to identify areas of potential concern or conflict prior to any formal regulatory process.

## 7.5 Public Review Body

The *Board* will give public notice of the appointment of the *Public Review Body*, if applicable, and thereafter file with it all documents to be reviewed in the process. The public review process is intended to provide all interested parties with an opportunity to become informed about a proposed development, and to make their views known.

Normally, the *Public Review Body* will be required to:

- conduct public hearings in accordance with the Terms of Reference (refer to subsection 7.5.1 of this Guideline) for the public review as established by the *Board*, and in accordance with the schedule established by the *Board*;
- examine and review the plans and statements referred to it by the *Board*;
- provide to all interested parties an opportunity to be heard and/or make submissions in accordance with suggested hearing procedures more particularly described in Appendix “A”;
- exercise those powers which may be granted to its members as commissioners under the provincial *Public Inquiries Act 2006* and the federal *Inquiries Act* (it would not be typical, however, to require the swearing-in of *Participants* or to require submissions to be made under oath);
- submit to the *Board* and the *Energy Ministers*, a report of its findings, including recommendations to the *Board* respecting the documents referred to it by the *Board*; and
- the *Public Review Body* will be given opportunity to present its report and findings to the *Board*.

### 7.5.1 Terms of Reference

Upon receipt of a complete *Development Application*, the *Board* will establish the Terms of Reference for the conduct of the public review by the *Public Review Body*. The *Board* recognizes that each *Development Project* will have unique characteristics, which may impact the scope of the review.

To ensure an efficient and effective public review, the *Board* considers the following areas to be essential to be included in the Terms of Reference:

- the mandate of the *Public Review Body* – that the *Public Review Body* undertake an analysis of the *Development Application* and make recommendations to the *Board* at the conclusion of the public review;
- the scope of the public review;
- the conduct of the public review;
- the advisors to the *Public Review Body*;
- any limitations on the mandate of the *Public Review Body* (as only the matters enumerated within the Terms of Reference shall be considered);
- the powers of the *Public Review Body* in the conduct of the public review; and
- the relationship between the *Public Review Body* and the *Board*, including the basis for participation of C-NLOPB staff at the public review.

## 7.6 Public Participation

Public submissions will be solicited and an opportunity will be provided to make a presentation to the *Public Review Body*. Request for submissions shall be made after the *Public Review Body* is appointed and before the first hearing. The notice will include the following information:

- the terms of reference for the *Public Review Body*, as well as the general purpose and objectives of the reviews;
- general instructions to *Participants*, including procedures for submissions; and,
- the address and name of a person from whom further information may be obtained.

This notice usually will not include specific times and locations for the public hearings. The *Public Review Body* will publish one or more notices providing these details in a timely manner at least ten days in advance of the first hearing.

### 7.6.1 Participants and Their Roles

During the public review, the *Proponent* will be responsible for all submissions and representations made on behalf of the *Proponent* within that process. *Proponents* should designate a contact person for liaison between the *Proponent* and the *Board*, and between the

*Proponent* and the *Public Review Body*, for the purpose of gathering and responding to requests for further documentation, etc.

Any individual or organization wishing to express an opinion or to make a recommendation respecting the *Development Application*, may participate in the review process. It is important to note that there is no authority in the *Accord Act* for the *Board* to provide funding for *Participants*. The *Board* is therefore, unable to provide such funding.

### **7.6.2 Components for Presentation**

At each location, the *Proponent* will be expected to present the *Development Application* in a component sequence. The order of presentation, although subject to change by the *Public Review Body*, should start with the *Development Plan*, and end with the *Benefits Plan*.

### **7.6.3 Submissions**

The submissions made by the *Proponent* will consist of the written information filed pursuant to section 4 of this Guideline and the *Benefits Plan Guideline*, together with any presentations made by the *Proponent* during the course of the public review.

Each *Participant* normally will be required to submit a written submission with the *Public Review Body* prior to the commencement of the public hearings, in accordance with the instructions to *Participants*. However, the *Public Review Body* may waive that requirement for individuals who wish to make a personal intervention at an individual hearing.

All written submissions filed with the *Public Review Body* by interested parties will be posted on the C-NLOPB's website ([www.cnlopb.ca](http://www.cnlopb.ca)).

### **7.6.4 Locations and Schedules**

The first public sitting of the *Public Review Body* will be held online and in-person in St. John's, Newfoundland and Labrador. Further sittings may be held in other locations depending upon public interest and accessibility to virtual resources. The total period allowed for hearings, and time for each sitting, will depend on the number of submissions. The *Public Review Body* will publish notifications with respect to the specific locations and schedules.

### 7.6.5 Conduct of Public Reviews

A sequential summary of a typical hearing is set out below:

- Chairperson's remarks and procedural matters;
- presentation of the *Proponent's* submission which may, at the discretion of the review panel, include more than one component at a time;
- questions from the *Public Review Body* concerning the *Proponent's* submission and the *Proponent's* response;
- presentation of each *Participant's* submission;
- questions from the *Proponent* or *Public Review Body* concerning the *Participant's* submission and the *Participant's* response;
- *Proponent's* reply to each *Participant's* submission; and,
- closing remarks by the Chairperson.

### 7.7 Public Review Body Report

No later than 270 days after its receipt from the *Board* of the complete *Development Application*, or such shorter period as the *Board* may establish, the *Public Review Body* is required to make a report of its findings, including any recommendations, to the *Energy Ministers* and to the *Board*. The *Public Review Body* will submit its report, setting forth its findings and recommendations. The *Board* will post the report on its website ([www.cnlopb.ca](http://www.cnlopb.ca)).

### 8.0 Decision by Board

The *Board* is required by the *Accord Act* to make two specific decisions in respect of a *Development Application*:

- approval of the *Benefits Plan*; and
- approval of the *Development Plan*, with approval of Part I being a fundamental decision to be approved or rejected by the *Energy Ministers* in accordance with the *Accord Act* and approval of Part II being solely a decision of the *Board*.

In its consideration of the *Development Application*, the *Board* will take into account the findings and recommendations of the *Public Review Body* (if established), the *Decision Statement* (if one has been issued), comments and advice received from federal and provincial departments and agencies, submissions from interested parties and the results of its own internal review.

As part of the recommendation for approval of a *Development Application*, a Staff Analysis and a *Decision Report* will be prepared. The Staff Analysis is a summary of the internal technical review conducted by C-NLOPB staff. The technical review

will commence upon satisfactory conclusion of the completeness review and will commence at the same time a public review is undertaken (if required). Barring any issues identified during the internal technical review and allowing appropriate time to assess and account for the outcome of the public review, C-NLOPB staff will prepare a Staff Analysis for the *Board*, recommending approval, or not, of a *Development Application*. For major *Development Projects*, a Staff Analysis is typically targeted for issuance within 30 days following the associated public review process. The *Board* will also produce a *Decision Report* respecting *Development Plan* approval. In its *Decision Report*, the *Board* may require the *Proponent* to submit additional information as a condition of approval. Where such information would typically be made public as part of a public review process respecting the *Development Application*, the information may be subject to public disclosure when the *Board* is satisfied that the condition has been met. Both the Staff Analysis and the *Decision Report* respecting *Development Plan* approval or subsequent amendment to a *Development Plan* will be made available to the public via the C-NLOPB's website ([www.cnlopbc.ca](http://www.cnlopbc.ca)).

The *Board* may, also, as a condition of approval of the *Development Plan*, require the *Proponent* to provide third party access to its processing, storage and/or transportation facilities.

Once a *Decision Report* has been issued, and the Operator proceeds with the related *Development Project* activities, the *Operator* is responsible for implementing the commitments or conditions of the *Development Plan* approval within its management system and in subsequent documentation submitted as part of the application for any authorizations issued in relation to the *Development Project*.

## 9.0 Amendments to Development Plan

After approving a *Development Plan*, pursuant to subsection 139(5) of the *Accord Act* no change to Parts I or II of the *Development Plan* can be made unless the *Board* approves it. In addition, any amendment to Part I of the *Development Plan* is a fundamental decision and as such must be approved by the *Energy Ministers* in accordance with the *Accord Act*. An amendment to the *Development Plan* is also required where the *following is proposed*:

- make substantial modifications or additions to the installation that are not described in the *Development Plan* (refer to subsection 9.1 of this Guideline)<sup>7</sup>;
- make significant changes in the nature or timing of development activities of the pool or field that is not described in the *Development Plan*;
- initiate, in the pool or field, a pilot scheme or reservoir depletion scheme that differs significantly from what has been described in the *Development Plan*;

<sup>7</sup> Pursuant to the *Installation Regulations*, the *Operator* is required to notify the *Board* of any proposed modification or addition to an installation.

- addition of a satellite development (refer to subsection 9.2 of this Guideline) or plans to pursue a deferred development that is discussed in the *Development Plan*;
- change recovery methods to achieve maximum recovery of petroleum reserves from the pool or field based on pool performance or new geological information; or
- adopt a new technology or methodology to increase the ultimate recovery of petroleum.

An application for an amendment to the *Development Plan* should address all information requirements outlined in this Guideline and the existing *Development Plan*. However, depending on the nature of an amendment, only selected information may be required. The *Proponent* should consult C-NLOPB staff prior to preparing an application for amendment to a *Development Plan*.

Depending on the activities associated with the proposed amendment, there may also be requirements from the IAAC to update the Impact Assessment.

### 9.1 Modifications or Additions

With respect to substantial modifications or additions to the installation, the following should be provided:

- a description of the proposed modification or addition including the estimated cost, materials, equipment and personnel requirements;
- a draft schedule to conduct the modification or addition;
- a discussion of the impact of the proposed modification or addition on the approved *Development Plan*, *Benefits Plan* and resource conservation;
- a discussion of the impact of the proposed modification or addition on the Safety Plan, EPP and Contingency Plan submitted in respect of an application for authorization; and
- any other information the *Operator* feels is relevant.

The C-NLOPB staff and the *Board* will review the information and advise the *Operator* if the proposed modification or addition will require an amendment to the *Development Plan*.

### 9.2 Satellite Developments

As the *Offshore Area* matures, it presents opportunities for satellite and marginal field developments<sup>8</sup> by increasing the potential to access smaller pools or fields, which could not otherwise be developed on their own

<sup>8</sup> Any *Development Project* that involves the use of a previously assessed and approved production installation in operation in the *Offshore Area*.

based upon cost. Using the existing infrastructure operating in the *Offshore Area* pursuant to approved *Development Plans*, a tie-in development may be attractive, or a marginal field may become viable.

A *Proponent* contemplating the development of a satellite pool or field in the *Offshore Area*, should inform the C-NLOPB as early as possible of its intentions, and should arrange for its representatives, and perhaps representatives of infrastructure owners likely to be impacted, to meet with the C-NLOPB.

If the *Proponent* of the satellite development and the operator of a host facility are not the same, both parties should agree on any modification to the host facility to accommodate the satellite development prior to submitting the *Proponent's Development Plan*. The operator of the host facility should provide access to any information, equipment or facilities to the *Proponent*. If the proposed modification to the host facility is not covered under the operator's existing *Development Plan* or Impact Assessment, the operator of the host facility will also be required to submit an amendment to their existing *Development Plan*. This should be submitted to the *Board* at the same time the *Proponent's Development Application* is filed.

The C-NLOPB and the *Board* recognizes that the scope of a satellite development is much smaller than larger stand-alone developments. The *Board* will give consideration to this factor in determining the review process and information requirements.

In addition to the documentation outlined in section 4 of this Guideline, the C-NLOPB or the *Board* may require the submission of any report relating to previously conducted Environmental Assessment and/or Impact Assessments, when reviewing an Application for a satellite development. The C-NLOPB or the *Board* may also require other documents in support of the *Development Application*, including any impacts on existing offshore operations that had previously been approved without contemplation of a satellite development.

## Appendix A: Suggested Guidance for the Conduct of the Public Review

### 1. Introduction

- a. This document outlines procedures for the Public Review to be conducted by the *Public Review Body* appointed to review the proposed *Development Project*. Subject to the requirements of these Terms of Reference and the *Accord Acts*, the review will include all relevant aspects of the proposed development.
- b. The public review will provide opportunities for individuals, organizations and the public to provide their views and opinions, and to present information on the effects of the *Development Project*. The *Proponent* may also actively participate in the hearing of the *Development Application*. These submissions will assist the *Public Review Body* in reaching informed and objective conclusions with regard to the *Development Project*, which will form the basis for its recommendations. These recommendations will be submitted to the *Board* and the *Energy Ministers*.
- c. A large number of *Participants* may wish to be present and be heard during the public review sessions. These procedures are intended to ensure that the review takes place in a fair and equitable manner, with maximum co-operation and courtesy. The *Public Review Body* will maintain order and efficiency in a structured but informal atmosphere. As the *Public Review Body's* conclusions and recommendations will not have legal force but will be advisory, the review will not be governed by the strict rules of procedure and evidence required by a court. However, the *Public Review Body* will conduct the review in a manner, which will require accountability for statements made by the *Proponent* and *Participants*.
- d. The *Public Review Body* may request a modification to these procedures. Such requests would be considered by the *Board* where there are reasons why the objectives of the public review can better be achieved by taking a different approach. However, the *Public Review Body* does not have the discretion to conduct the review outside of the scope of the Terms of Reference but may seek a change to the Terms of Reference or request further information outside the *Development Application*. The *Board* will consider such requests on a case-by-case basis. The *Board* will then decide whether to grant such requests.
- e. Any submission made relating to the IAA will be placed on the registry maintained by the IAAC and will be posted once received.

### 2. Public Sessions – Location and Scheduling

- a. The public review will provide the opportunity for all interested persons to make presentations to the *Public Review Body* on both technical and non-technical subjects. Sessions will be held online and in-person in St. John's and any other locations as may be determined by the *Public Review Body*.

- b. Specific topics that form an integral part of the *Development Application* may be the focus of certain sessions. If so, these topics will be announced before the public sessions begin.
- c. The *Public Review Body* may exercise discretion to include or limit presentations on other technical or non-technical matters, as time allows.
- d. The *Public Review Body* will publish notice of the specific sessions no later than ten days before the sessions commence. The notice will specify the dates, locations and focus of review. This and any other relevant information may also be made available by contacting the *Public Review Body's* office pursuant to section 8 of this Appendix.

### 3. Oral Presentations

Persons may present their views or information orally, in written form, or both. The following guidance is provided for persons who may wish to make oral presentations during the sessions:

- a. Anyone wishing to make a presentation at any session should register as a *Participant* by notifying the *Public Review Body's* office at least five days prior to the commencement of the public review session. Any person providing timely notice will be included as a *Participant* and will be given priority to speak. When registering, *Participants* should provide the information set out in paragraphs 4(b) below, unless such information will be included as part of a written presentation pursuant to paragraph 4(b).
- b. The order of presentations by *Participants* will be provided prior to each session.
- c. Persons wishing to make a presentation at any session and who are not pre-registered as *Participants* may make a request to the *Public Review Body* prior to or during the session. However, the opportunity to present will depend upon the time remaining after the pre-registered *Participants* have been heard.
- d. A *Participant*, including any other individual, group, organization or entity on whose behalf it is acting, will be allowed to make one presentation to the *Public Review Body* per session.
- e. A *Participant*, including any other individual, group, organization or entity on whose behalf it is acting, may make a presentation to the *Public Review Body* at more than one session, provided the *Participant* has registered to do so and presentations do not contain repetitive information.

- f. *Participants* shall prepare presentations so that they can be concluded within 30 minutes (including a question and answer period). A longer period may be granted at the discretion of the *Public Review Body* if such a request for more time is provided to the *Public Review Body's* office at the time of registration.
- g. More than one individual may participate in a presentation by a *Participant*. When several persons make a presentation on behalf of a *Participant*, the collective presentation should take place within the period assigned for that *Participant*.
- h. Any presentation, which refers to written material, including journal articles, studies, reports or a written submission under paragraph 4 below, should be limited to highlighting essential features of the material or responding to questions on it.
- i. Use of audio-visual materials to complement presentations is encouraged. If particular audio-visual hardware or software is required for a presentation, the *Participant* should inform the *Public Review Body's* office at the time of registration.
- j. Persons registered to make presentations of a general nature who intend to refer to reports, studies, texts or notes are requested to file with the *Public Review Body's* office at least five days prior to the commencement of the public review session, a copy of the texts or notes from which they plan to speak.
- k. Any *Participant* wishing to make a presentation, which will include detailed matters (e.g. scientific, technical, financing, etc.), should file a written submission with the *Public Review Body's* office at least five days prior to the commencement of the public review session. This allows the *Public Review Body, Proponent* and *Participants* the opportunity to review the information and prepare any questions.

#### 4. Written Submissions

- a. Anyone wishing to register a written submission with the *Public Review Body's* office should do so by filing the entire submission at least five days prior to the commencement of the public review session.
- b. All written submissions should include:
  - the name and address of the *Participant*;
  - the names of all individuals, groups, organizations, or entities on whose behalf the *Participant* is acting;

- the name of the person(s) who will present the *Participant's* submission at the public review sessions;
  - how the *Participant* wishes to make its submission, including preferred location for if they wish to make the submission in-person;
  - complete citations of all studies, reports or other documents used in support of the *Participant's* submission; and
  - the *Participant's* position and recommendations with respect to the *Development Project*.
- c. All written submissions received in accordance with this paragraph will be reviewed by the *Public Review Body* and made available on the C-NLOPB's website ([www.cnlopb.ca](http://www.cnlopb.ca)).
- d. The *Public Review Body* will not accept any information following the completion of the public sessions.
- e. The *Proponent* will be afforded the opportunity to publicly respond to any of the submissions.

## 5. Order of Presentation

The order of presentations to the *Public Review Body* during public review sessions will be as follows:

- a. The *Proponent* will make a presentation on the opening day of each session to explain the proposed *Development Project*. The *Proponent* will be allotted 30 minutes to make its presentation and to allow for a question and answer period.
- b. *Participants* who have pre-registered to make a presentation will be next to address the *Public Review Body*, followed by *Participants* who have not pre-registered, if time permits. Each *Participant's* presentation will be expected to conform to the time allotted and will be followed by a similar question and answer period.
- c. The *Public Review Body* will allow a reasonable opportunity for the *Proponent* to present a reply to any presentation or written submission.

## 6. Questioning During Public Review Sessions

- a. Persons making presentations may be subject to detailed questioning by the *Public Review Body*, the *Proponent* and by other *Participants* at the discretion of the Chair.
- b. The *Proponent* and *Participants* should pose their questions in a tone and style that are courteous to, and respectful of, others. Clarity and brevity are

encouraged. Questions should be asked in a non-confrontational manner for obtaining further information or explanations.

- c. Each presenter may be questioned immediately following the presentation. The order of questioning will be determined by the *Public Review Body*, but typically will be by the *Public Review Body* and the *Proponent* or *Participants* as appropriate. Should time permit, the *Public Review Body* may also invite members of the public who have not registered as *Participants*, to ask questions. The *Public Review Body* may ask questions at any time during the session.
- d. The following points provide general guidance for questioning during public sessions:
  - Questions should be directed to the *Public Review Body* which may invite the appropriate person(s) to respond to the question;
  - The *Public Review Body* may limit or exclude questions or comments which, in the *Public Review Body's* opinion, fall outside the mandate of the *Public Review Body* or are needlessly repetitive, irrelevant, confrontational, or immaterial; and
  - The *Public Review Body* may limit discussion that exceeds the time limit allocated.

## 7. Transcripts

Written transcripts will be made of all sessions, and will be made available digitally to the public within a reasonable period by application to the *Public Review Body's* office. To facilitate the making of transcripts, speakers should identify themselves when addressing the *Public Review Body*.

## 8. Representation by Agent

*Participants* who wish to make a presentation are encouraged to speak on their own behalf and ask their own questions at the public sessions, although representation by an agent such as legal counsel, or technical professionals, will be allowed. The sessions generally will be informal in nature and will not have the formality, tone or procedures of a courtroom.

## 9. Interpretation

The *Public Review Body's* Office will make every effort to accommodate requests for translation or sign language at a public session, provided the request is received by the *Public Review Body* in a timely manner, and where translation or sign language is required for the proper conduct of the session.