



WHITE ROSE EXTENSION PROJECT DEVELOPMENT APPLICATION

CANADA-NEWFOUNDLAND AND LABRADOR OFFSHORE PETROLEUM BOARD

DECISION REPORT 2015.07

Introduction

The Canada-Newfoundland and Labrador Offshore Petroleum Board (the Board) met on June 19, 2015 to consider the White Rose Extension Project Development Application (Development Plan and Benefits Plan) and its supplementary information.

The Board was guided in its deliberation by a staff analysis of both the Benefits Plan and the Development Plan.

Benefits Plan Decision

In accordance with section 45(2) of the Accord Acts¹, it is the decision of the Board that the White Rose Extension Project Benefits Plan is approved subject to the following conditions:

Condition 2015.07.01

Staff recommends that approval of the Benefits Plan Amendment is conditional upon the Proponent submitting a detailed plan within 60 days of project sanction, to the satisfaction of the Board, outlining a strategy to monitor potential traffic problems, and mitigation of any potential traffic issues in the Argentia area.

Condition 2015.07.02

Staff recommends that approval of the Benefits Plan Amendment is conditional upon the Proponent submitting a detailed plan within 60 days of project sanction, to the satisfaction of the Board, outlining a strategy to ensure workers have appropriate accommodations in the Argentia area should the local market not be able to provide adequate housing.

Development Plan Decision

It is also a decision of the Board that the White Rose Extension Project Development Plan is approved subject to the following conditions:

Condition 2015.07.03

The Proponent submit to the Board a schedule of activities and decision points, including schedule of model tests, associated with the detailed design of the Wellhead Platform. The Proponent will submit selected test and study results to the Board as directed. The Board, in consultation with the Chief Safety Officer, will establish the date by which submissions must be made.

Condition 2015.07.04

The Proponent submit to the Board its plans for reconciling the differences in design life for the Wellhead Platform, the *SeaRose FPSO* and the related subsea infrastructure. The Proponent must also include information, inclusive of a description of the related analysis and measures, that demonstrates to the satisfaction of the Chief Safety Officer, the rationale for any extension in the

¹ Canada-Newfoundland and Labrador Atlantic Accord Implementation Newfoundland and Labrador Act, R.S.N.L. 1990, c. C-2. Canada-Newfoundland Atlantic Accord Implementation Act, S.C. 1987, c.3.

design life, including details of related verification activities by the Certifying Authority. The Board, in consultation with the Chief Safety Officer, will establish the date by which submissions must be made.

Condition 2015.07.05

The Proponent submit to the Board a summary of the Functional Design Criteria that will be the basis of the detailed engineering design work. The Board, in consultation with the Chief Safety Officer, will establish the date by which submissions must be made.

Condition 2015.07.06

Prior to the conclusion of detailed design, the Proponent submit a report, that is to the satisfaction of the Chief Safety Officer, which describes the scope, extent and outcome of environmental load model testing associated with the Wellhead Platform and also demonstrate that the outcome of this model testing has been appropriately dealt with in the structural design of the facility.

Condition 2015.07.07

At least six months prior to the issuance of any authorization related to the Wellhead Platform, the Proponent submit an Ice Management Plan that is to the satisfaction of the Chief Safety Officer and that defines observable criteria for categorizing if an approaching iceberg meets an L2 or greater classification upon which shutdown and downstaffing procedures will be implemented.

Condition 2015.07.08

The Proponent submit information, that is to the satisfaction of the Chief Safety Officer, that provides a more comprehensive understanding of the wellhead arrangements and layouts being proposed, a quantitative comparison of risk between the proposed wellhead layout for dual conductor arrangement versus mono conductor arrangement, clarity of the enhancements in protocols for managing wellbore collision avoidance and detail on design and slot management considerations resulting from a review of good industry practice of using such technology in the North Sea. The Board, in consultation with the Chief Safety Officer, will establish the date by which submissions must be made.

Condition 2015.07.09

Prior to completion of detailed design of the Wellhead Platform gas detection system, the Proponent submit information, that is to the satisfaction of the Chief Safety Officer, that provides a more comprehensive understanding of the approach to H₂S gas detection for the Wellhead Platform and that demonstrates compliance with the *Newfoundland Offshore Petroleum Installations Regulations*.

Condition 2015.07.10

Prior to completion of the Accommodations Module detailed design, the Proponent submit, to the satisfaction of the Chief Safety Officer, its criteria and rationale for the minimum timeframe that the temporary safe refuge (TSR) must continue to function as a safe haven and remain unimpaired as a result of any of the credible design events.

Condition 2015.07.11

Prior to completion of the Evacuation System detailed design, the Proponent submit a report that is to the satisfaction of the Chief Safety Officer which demonstrates that the best practicable evacuation technology is being employed on the Wellhead Platform.

Condition 2015.07.12

The Proponent submit information, that is to the satisfaction of the Chief Safety Officer, which provides a more comprehensive understanding of the layout of the facility including the layout and features of the accommodations and the lifting systems that will be employed on the facility. The Board, in consultation with the Chief Safety Officer, will establish the date by which submissions must be made.

Condition 2015.07.13

Prior to bringing live the modified systems on the *SeaRose FPSO*, the Proponent submit updated information on people, processes and equipment, that is to the satisfaction of the Chief Safety Officer, in respect to the associated *SeaRose FPSO* Operations Authorization.

Condition 2015.07.14

Prior to tow out of the Concrete Gravity Structure (CGS) from the dry dock, the Proponent submit a report, that is to the satisfaction of the Chief Safety Officer, which demonstrates that the proposed approach to Topsides-CGS mating and integration activities is the lowest risk option in respect to safety of activity.

Condition 2015.07.15

At least one year prior to the Wellhead Platform operating under an authorization from the Board, the Proponent submit a Training and Competency Plan associated with operation and maintenance of the Wellhead Platform that is to the satisfaction of the Chief Safety Officer.

Condition 2015.07.16

At least one year prior to the Wellhead Platform operating under an authorization from the Board, the Proponent submit to the Board its strategy for the development and documentation of the detailed operations and maintenance procedures and contingency plans necessary for the safe operation of the installation. The Proponent must also ensure that its contingency plans address, to the satisfaction of the Chief Safety Officer, the possibility of simultaneous occurrence of an accidental event on the Wellhead Platform in combination with adverse environmental conditions and that these contingency plans provide clear detail of the risk reduction measures that will be undertaken when such adverse environmental conditions are forecast and/or realized.

Condition 2015.07.17

The Proponent submit a plan, that is to the satisfaction of the Chief Safety Officer, to document and track the suite of safety studies required for detailed design. The plan is to include a schedule for satisfying the recommendations provided in the Proponent's Concept Safety Analysis. The Board, in consultation with the Chief Safety Officer, will establish the date by which submission must be made.

Condition 2015.07.18

Prior to submission of any application for conducting activities under an authorization from the Board, the Proponent demonstrate, to the satisfaction of the Chief Safety Officer, that the recommendations from the Concept Safety Analysis have been addressed in a manner that brings risk to as low as reasonably practicable (ALARP).

Condition 2015.07.19

The Proponent submit information to the Board that details the Quality Assurance Program and Quality Control Program that will be applied throughout all pre-operation phases of the project. The Board, in consultation with the Chief Safety Officer, will establish the date by which submissions must be made.

Condition 2015.07.20

The Proponent submit, to the satisfaction of the Chief Safety Officer, the Scope of Work for the Certifying Authority. The Board, in consultation with the Chief Safety Officer, will establish the date by which submission must be made.

Condition 2015.07.21

The Proponent will be required to submit to the Chief Conservation Officer, no later than 12 months prior to the scheduled commencement of offshore drilling activities associated with the Project, an amended Environmental Effects Monitoring (EEM) Plan design that incorporates drilling and production activities associated with the proposed activities, and tie-back to the *SeaRose FPSO*. The amended EEM Plan should be consistent with the strategy in the Husky EEM Design Report, discuss any changes that may be required to existing sampling stations, and consider the necessity for collection of baseline data at any or all of the new drill centre and CGS locations. Drilling operations associated with the Project will not be authorized until an acceptably amended EEM Plan is in place. Drill cutting dispersion model predictions will be validated in situ by monitoring the thickness of cutting piles on the seafloor once the White Rose EEM program is revised to accommodate operation of the WREP.

Condition 2015.07.22

The Proponent will be required, prior to commencement of offshore construction activities, to collect any field data required to inform the design of its EEM program.

Condition 2015.07.23

That prior to drilling of any cuttings re-injection well, the Proponent must provide a report suitable to the Board describing the feasibility of injection, the impact on reservoir management and the impact on production accounting. The report must be submitted at least six months prior to ADW submission.

Condition 2015.07.24

That prior to initiating a gas flood or WAG scheme in the West Pool or any other pool to be developed from the WHP, the Proponent must provide simulation modelling or some other form of technical analysis which demonstrates that such a scheme will not be detrimental to oil recovery.

Condition 2015.07.25

That the Proponent submit to the Board, within three years following initiation of production from the White Rose wellhead platform:

- An updated evaluation of the White Rose Asset gas resources along with a description of activities to be undertaken to evaluate the resource; and
- A report on the advances and limitations of technologies such as compressed natural gas, floating liquefied natural gas, pipelines, associated onshore liquefied natural gas terminals and any other currently existing commercial offshore gas technologies and how these technologies relate to the White Rose Asset gas resources.

Condition 2015.07.26

That the Board, in consultation with the Chief Conservation Officer, will evaluate the commitments as outlined in the Application at six-month intervals commencing from the date of the Decision. If during such evaluation the Board determines the commitments are not being met, production and injection from the E-18 10 and E-18 11 wells shall cease. In such circumstances, no further production or injection from the West Pool shall be permitted until a new Development Plan Amendment for such activity has been approved.