ADDITIONAL ROUND II INFORMATION REQUIREMENTS FLEMISH PASS EXPLORATION DRILLING PROJECT OCTOBER 9, 2018

INFORMATION REQUIREMENT IR-16/16a-2b

Additional information on potential habitat use by Atlantic Salmon

The response to IR 16/16a states that Indigenous groups' comments and additional references were incorporated into the updated discussion of potential use of the project area by Atlantic Salmon. Wolastoqey Nation in New Brunswick (WNNB) has advised that unpublished information included in their submission was not addressed. This research has since been published, and WNNB suggests that it presents further evidence of potential use of the project area, not only as a migratory corridor, but also an important foraging area and nursery habitat for Atlantic Salmon. The applicable reference is:

Soto DX, Trueman CN, Samways KM, Dadswell MJ, Cunjak RA (2018) Ocean warming cannot explain synchronous declines in North American Atlantic salmon populations. Mar Ecol Prog Ser 601:203-213. https://doi.org/10.3354/meps12674

Sea-surface temperatures - link to Atlantic Salmon presence

Both the EIS and IR-16/16a response emphasize that sea-surface temperatures in the project area limit the potential for interaction between Atlantic Salmon and the projects.

However, WNNB noted that there are competing statements in the response to IR 16/16a. Part 1 of the response states that low sea-surface temperatures in the project area, especially over winter, will limit the potential for interactions with the projects. Part 3 states that increasing sea-surface temperatures will lower habitat suitability in the project area and limit the potential for interaction. WNNB noted that this would only hold true if sea-surface temperatures increased to and/or above the thermal tolerance of Atlantic Salmon, and that based on EIS Figure 5-71, mean water temperatures in the project area are projected to increase by as much as 2 degrees Celsius, putting water temperatures in the preferred thermal range for Atlantic Salmon.

WNNB further noted that although it has been shown that water temperature has been linked to declines in Atlantic Salmon, more recent studies (i.e. Soto et al 2018) have shown that climate change, and in particular increasing ocean temperatures cannot explain the declines in North Atlantic Atlantic Salmon.

Specific Follow-up Question/Information Requirement:

Taking into account the newly published information submitted by WNNB, provide a discussion of the results of this research in the context of the potential use of the project area by Atlantic Salmon. Update the environmental effects analysis, mitigation and follow-up, as applicable.

Provide clarification on contradictory information regarding sea-surface temperatures in the project area and the potential contribution this may make to current and future habitat use trends, taking into consideration the newly published research on sea-surface temperatures and Atlantic Salmon distribution.

INFORMATION REQUIREMENT IR-59-2 (KMKNO)

IR-59 required a discussion of the economic and technical feasibility of options for decreasing capping stack response times, taking into consideration: the potential to use other capping stacks, establishing a capping stack facility in eastern Canada, or having a capping stack available on a vessel for rapid deployment. In their response, the proponents indicated that locating a capping stack in Eastern Canada would not reduce the overall installation time. However, the proponents did not refer specifically to the RapidCap TIM Air Mobil Capping Stack, a lighter capping stack that can be transported via aircraft and apparently flown from Houston within 24 hours.

Specific Follow-up Question/Information Requirement:

Discuss any recent or ongoing innovations in capping stack technology and availability, including the Rapid Cap TM Air Mobil capping stack, and their potential application to the projects.

INFORMATION REQUIREMENT IR-90

Since the EISs were prepared in 2017, additional, reasonably-foreseeable projects and activities have been proposed in the eastern Newfoundland offshore region, including Equinor's Bay du Nord Development Project. The analysis of cumulative effects provided in the EISs and in IR-86 requires updating taking into account new projects and activities.

Specific Information Requirement

Update the assessment of cumulative effects, taking into account taking into account projects and activities that have been proposed since the EISs were prepared.

INFORMATION REQUIREMENT IR-91

Clarification is required on the number of exploration wells and delineation wells associated with each Designated Project. In the event that the projects are approved by the Minister, the Decision Statement for each project will clearly state the maximum number of wells included in that Designated Project. Wells that could be drilled outside the specific exploration licences (ELs) associated with each Designated Project would not be included in the Decision Statement and Ministerial approval, nor the in Agency's analysis of potential environmental effects.

The Environmental Impact Statements (EIS) indicated a total of 35 wells for ExxonMobil's project and 30 wells for Equinor's project. The EISs defined a large project area that encompassed not only the ELs associated with each Designated Project, but also other licences held by both proponents where drilling may take place over the course of the Designated Projects. This other drilling activity would be outside the scope of CEAA 2012 and thus approved under other regulatory processes. The portion of the 30 or 35 estimated wells that could be located on these other licences was not defined; hence the Agency issued IR-66 and IR-71 to clarify the number of exploration wells and delineation wells that could be drilled within and outside of the ELs associated with the Designated Projects.

The IR-66 and IR-71 responses estimated a maximum of 5 exploration wells per EL for ExxonMobil, and likely one to two exploration wells per EL for Equinor. Neither response specified a number or location for delineation wells, owing to the speculative nature of such estimates.

In the recently submitted EIS Addendum from ExxonMobil, the following statement was made regarding number of wells:

"The total number of *exploration/delineation* [emphasis added] wells that could be drilled in the Eastern Newfoundland Offshore Drilling project is 35. These 35 wells would include up to 5 on each of EL 1134, EL 1135 and EL 1137 (for a total of 15). The additional 20 wells were included in the event that ExxonMobil were to become operators of EL's in which they are co-venturers but do not operate or in the event that additional ELs were acquired in this project area. Should either situation occur ExxonMobil may request that CEAA consider an addendum to the Eastern Newfoundland Offshore drilling Project. By including the maximum number of 35 wells, ExxonMobil believes it would not be changing the number of wells for the initial scope of the Project."

This indicates that 20 of the wells included in ExxonMobil's EIS analysis are actually outside the scope of the Designated Project, since they would be drilled on licences other than EL 1135, 1137 and 1134. It also characterizes the potential 15 wells on EL 1134, EL 1135 and EL 1137 as exploration/delineation wells, rather than specifically exploration wells. As the IR responses pointed out, the two types of wells have identical environmental effects; however, this distinction is of importance to the Agency from a procedural perspective rather than an environmental one.

Specific Request

With respect to ExxonMobil, the Agency requests confirmation that the Designated Project for Eastern Newfoundland Offshore Exploration Drilling Project on ELs 1134, 1135 and 1137 would include up to 15 wells. The Agency also requests clarification on whether this 15 well estimate includes delineation wells, as the response to IR-66 is inconsistent with the information cited above from the EIS Addendum.

With respect to Equinor, the Agency requests clarification on whether the 30 well estimate in the EIS would include wells that could be drilled outside of ELs 1139, 1140, 1141 and 1142. The Agency further requests confirmation that the Designated Project for the Flemish Pass Exploration Drilling Project on ELs 1139, 1140, 1141 and 1142 would include up to 8 exploration wells (1-2 per EL as indicated by the IR responses).