Environmental Assessment of Multiklient Invest Labrador Offshore Seismic Program, 2018 - 2023 (LGL January 2019)

GENERAL COMMENTS

Nunatsiavut Government (NG)

Proponent Response: The Scoping Document issued by the C-NLOPB does not require a performance review of passive acoustic monitoring (PAM). Such a review would not be within the scope of an EA document but would typically be required by and occur in conjunction with DFO and/or the C-NLOPB. MKI used a PAM system provided by Seiche which integrated PAMGUARD software on two of its seismic vessels (Ramform Hyperion and Ramform Sterling) in 2018. In addition, each of the two vessels had a dedicated and trained PAM operator. Details of the PAM system, the number/type of acoustic detections, and a review of the efficacy of the system will be provided in the EA mitigation and monitoring report. This report can be made available upon request. The EA mitigation and monitoring report will be provided to the C-NLOPB and if and how it becomes incorporated into the Labrador Shelf SEA is in the purview of the C-NLOPB.

NG Response

PAM is classified as a mitigation for seismic impacts. Any environmental assessment is expected to show why a specific mitigation will be effective and to what degree. Therefore it is important to include the results of the efficacy of the system in the EA. This is a good example of how monitoring programs can lead to improved practices. Regarding the mitigation and monitoring reports, their incorporation into the SEA is the purview of the co-chairs of the Labrador Shelf SEA, the C-NLOPB and the Nunatsiavut Government. The quality of CEA practice can only be improved with effort and collaboration from proponents. It would be beneficial for monitoring programs to be spelled out in EAs instead of requiring a request from the regulator. Monitoring programs from project-based EAs are an important contributor to the strengthening of Strategic Environmental Assessments as well as to assessing their own project-based cumulative effects. It would be beneficial to work with regulators, other operators and industries and enable access to monitoring results so that other proponents may improve upon their environmental assessments as well.

Proponent Response: The following project "Multiklient Invest Newfoundland Offshore Seismic Program, 2018–2023" should be added to the list of projects considered in the cumulative effects assessment. Regardless, the MKI EA for Labrador, did consider the potential of three concurrent 3D surveys and a 2D survey being conducted by MKI. In reality, this concurrent survey scenario will most certainly not occur offshore Labrador. MKI will likely only conduct one seismic survey per year offshore Labrador, particularly given the shorter survey window (with limited potential for a 2D and 3D seismic survey occurring at the same time). However, there is potential for other operators to conduct seismic surveys offshore Labrador and for seismic survey sound from areas south of and particularly adjacent to the southern boundary of the Labrador

EA Project Area to cumulatively affect VECs that occur offshore Labrador. Given the EA process in place, MKI still contends that a more representative cumulative effects assessment is best captured in annual EA Updates when the details of seismic surveying (number of surveys, location, and timing) in a given year will be known. MKI suggests that the following text should be inserted as a new section of the EA.

NG Response: A cumulative effects assessment, by its nature, should encompass the entire temporal and spatial scope of the project as well as the effects of other known and foreseeable activities, such as those mentioned by the proponent in the above statement. The proponent has claimed to have assessed cumulative effects throughout the Revised EA (July 31, 2018, p. 194), however it only assesses the impacts of its own project on the VECs in the majority of the document. The minimal cumulative effects assessment lists the known and foreseeable activities, but does not quantify their impacts, nor assess the impacts together. Each of the activities' impacts are only assessed with the project activities, not with each other in a cumulative manner.

CEA best practices often include the creation of a table outlining effects of each component of the known and foreseeable projects on the VECs identified in the EA, the causes of that effect, the cumulative effect, and indicators that can monitor the effect(s). The low quality of this type of assessment in Section 5.8 calls into question the quality of monitoring and assessment that the proponent is suggesting can be done on an annual basis. For example, Section 5.8.2, Marine Transportation devotes only four sentences to its assessment. As this project expects to assess a 6-year time span, an assessment of whether or not shipping routes may see an increase or decrease in traffic, as well as any mention of the impacts of shipping on specific VECs would be appropriate. This information should be combined with the impacts of known and foreseeable projects to estimate cumulative impacts on each of the VECs. As of now, it is unclear how assessments such as Section 5.8.2 could lead to a robust monitoring of cumulative effects.

Proponent Response: The reference to Duinker et al. (2012) was intended to highlight the inherent problems with conducting a cumulative effects assessment. The references provided by the NG in response to the Seitel seismic EA (i.e., the letter from the NG dated September 2016) actually support conclusions made by Duinker et al. (2012). Bidstrup et al. (2016) state that cumulative effects assessment is lacking quality in impact assessments throughout the world. They indicated that more resources, data, collaboration, leadership and legislation can facilitate better cumulative effects assessment. Noble (2015) point out that current research on cumulative effects is focused largely on the development of frameworks and methodologies to advance cumulative effects assessment and management from individual projects to broader regional scales, and on the development of science and tools for assessing and

monitoring cumulative effects. Noble (2015) added that interdisciplinary approaches and sustained funding are required to ensure that scholarly research continues to shape cumulative effects practice in the future.

NG Response: The NG is not disputing the conclusions of the cited literature. However, none of the authors argue against completing a quality cumulative effects assessment. Cumulative effects assessments are not required to be perfect – they are carried out to manage uncertainty over the entire project. Therefore the argument of performing a CEA annually is not tenable. CEA practice does not require the exact future projects to be known; only those that are known and reasonably foreseeable should be assessed. This assessment would then provide an estimated baseline of impacts that could be compared to annual monitoring programs and data.

Fish, Food and Allied Workers (FFAW)

The FFAW-Unifor looks forward to direct consultation on any planned annual seismic program in Labrador going forward. It is important to reiterate that there are harvesters throughout Newfoundland and Labrador who fish in the study area (i.e., not just harvesters living in Labrador). Therefore, depending on the area of interest, additional consultation may be warranted.