ATTACHMENT:

Federal Authority Advice Record

Response due by August 30, 2021.

Please submit the form to: KsiLisimsLNG @iaac-aeic.gc.ca

Ksi Lisims LNG - Natural Gas Liquefaction and Marine Terminal Project Nisga'a Nation, Rockies LNG Limited Partnership and Western LNG LLC

Agency File: 005806

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1. Is it probable that your department or agency may be required to exercise a power or perform a duty or function related to the Project to enable it to proceed?

If yes, specify the Act of Parliament and that power, duty or function.

Based on the information provided to date, NRCan is not likely to be required to exercise a power or perform a duty or function pursuant to the Department's regulatory role under the *Explosives Act*.

2. Is your department or agency in possession of specialist or expert information or knowledge that may be relevant to the conduct of an impact assessment of the Project?

Specify as appropriate.

Based primarily on its diverse scientific research programs, NRCan possesses the following expertise that may be relevant to the conduct of an impact assessment for this Project:

- Economic impacts of LNG projects, including impacts on employment, royalties, and taxes.
- Seismicity: Seismic hazard analysis, codes and standards, mitigation measures.
- Sea-level rise/changes.
- Marine geoscience.

NRCan may further revise its areas of expertise related to the Project's impact assessment as more information becomes available during the subsequent phases of the review process.

3. Has your department or agency considered the Project; exercised a power or performed a duty or function under any Act of Parliament in relation to the Project; or taken any course of action that would allow the Project to proceed in whole or in part?

Specify as appropriate.

NRCan has not taken any course of action, or exercised a power or performed a duty or function that would allow the Project to proceed.

4. Has your department or agency had previous contact or involvement with the proponent or other party in relation to the Project? (for example, enquiry about methodology, guidance, or data; introduction to the project)

Provide an overview of the information or advice exchanged.

NRCan has not had previous contact or involvement with the proponent regarding this project.

Does your department or agency have additional information or knowledge not specified, above?
 Specify as appropriate.

Based on the information available, NRCan does not possess any additional information or knowledge that has not been specified in this document.

6. From the perspective of the mandate and area(s) of expertise of your department or agency, what are the issues that should be addressed in the impact assessment of the Project, should the Agency determine that an impact assessment is required?

For each issue discussed, provide a concise, plain-language summary that is appropriate for inclusion in the Summary of Issues and Engagement.

From the perspective of NRCan's mandate, areas of expertise, and the related issues that should be addressed in the impact assessment of the Project are summarized below:

- The overall costs and benefits of the project to the province and Canada as a whole, not just the local study area.
- Potential for the project to displace emissions from coal (and other energy sources) in countries that would be expected to purchase the LNG exports, and the likely impact on global GHG emissions.
- Seismic hazard assessment is the study of expected earthquake ground motions on the earth. In
 Canada, the development and evaluation of earthquake hazard models for applications in the
 National Building Code (NBC) is the responsibility of NRCan's Lands and Mineral Sector (LMS),
 including the Geological Survey of Canada (GSC). The Proponent should address the issues of
 seismicity: seismic hazards/NBC standards during the project activities, effects of the environment on
 the project, and their seismic design provisions for the infrastructure.
- Sea-level rise is the increase in global mean sea level that occurs over time as a consequence of melting glaciers and ice sheets, and warming and expansion of the surface layer of the ocean. The

Proponent should explain how they will ensure continuing operation in light of project sea-level change to at least the year 2120 and beyond.

• Marine geoscience is the study of marine geology and marine geological hazards as they relate to the structure, dynamics and stability of the ocean floor and coastal zones. The impact of project activities (construction/operation etc.) as it relates to marine geoscience issues and their mitigation strategies should be addressed by the proponent. These would include geotechnical investigations, pile driving and dredging. Coastal processes such as storm surge, waves, sediment stability and transport, landslides and active fault structures should be taken into consideration. A Tsunami hazard assessment, including from both seismic and landslide generated sources, should also be covered.

Kathy McPherson
Name of Departmental / Agency Responder
Environmental Officer
Title of Responder
September 1, 2021
Date