

**To:** Craig Martin, Associate Deputy Minister, Energy Development, NL

Tara Kelly, Assistant Deputy Minister, Environment, NL

Nena Abundo, Director, Economics and Benefits, Industry, Energy and Technology, NL

Chris Carter, (A) Director, Regulatory Affairs, Industry, Energy and Technology, NL

Susan Wilkins, Executive Director, Renewable Energy, Industry, Energy and Technology, NL

**Cc:**

Eric Landry (IAAC), Vice President, Operations, Impact Assessment Agency

Brent Parker, Director General, Review Panels and Regional and Strategic Assessment, Impact Assessment Agency

Stewart Lindale, Director, Regional and Strategic Assessment, Impact Assessment Agency

Jacinthe Belec, Manager of Operations, Regional and Strategic Assessment, Impact Assessment Agency

Abigail Lixfeld, Senior Director, Renewable and Electrical Energy, Natural Resources Canada

Jon Brady, Deputy Director, Renewable and Electrical Energy, Natural Resources Canada

**Date: January 18, 2024**

**Re: Further Information on the Committee's Decision to set a Focus Area for the NL Regional Assessment**

Dear Regional Assessment Partners,

We appreciate the Province organizing the January 10, 2024 meeting between the Committee for the Regional Assessment of Offshore Wind Development in Newfoundland and Labrador, and the Regional Assessment (RA) partners (i.e., Government of Newfoundland and Labrador, Impact Assessment Agency of Canada, and Natural Resources Canada).

During the meeting, the Province expressed concern regarding the focus area and requested further information on the Committee's decision to carry out the rest of the RA within a focus area. The Province also requested the Committee include Placentia Bay, Trepassey Bay, and the Jean D'Arc Basin in the focus area. The Province indicated that they had heard there was interest in offshore wind development in the two bays, and that offshore oil and gas operators are interested in using offshore wind to electrify platforms.

The Committee's rationale for and decision on the focus area are detailed in the attached document. This document was posted publicly on the Impact Assessment Registry on November 7, 2023 and circulated to all RA participants, including the Committee's point of contact at the Province. One of the agreed next steps at the January 10, 2024 meeting was that the Committee would provide a summary of the main points of discussion. A summary of the Committee's technical considerations and focus area decision is below.

## **Placentia Bay and Trepassey Bay**

The Committee is not further considering Placentia Bay or Trepassey Bay because of the results of the constraints analysis used to develop the focus area. The Committee found that both bays could be impacted by icebergs. The Committee is taking a precautionary approach and recommending that areas with iceberg presence not be further considered for offshore wind licensing at this time. The Committee has attached a map showing iceberg incursion in the Study Area including Trepassey Bay, and to a lesser extent, Placentia Bay.

The Committee has also included a map of Placentia Bay showing some of the many potential constraints to offshore wind development in that area. It is important to note that the map does not provide a complete picture of constraints to offshore wind development in Placentia Bay, but nonetheless illustrates a high level of marine spatial conflict. Even without the consideration of icebergs, the Committee would not consider Placentia Bay a good candidate for offshore wind development in the foreseeable future.

## **Summary of technical considerations**

This Committee is required to fulfill two deliverables during this RA, one of which is to provide information and analysis to inform and improve future offshore wind licensing by March 2024. To achieve this goal, the Committee began with research on technical limitations for offshore wind development within the Study Area and found that iceberg presence and water depth could be particularly limiting for foreseeable development. The Committee reviewed several examples of offshore wind in other jurisdictions and found no offshore wind farm has been demonstrated to safely operate in areas with icebergs. Furthermore, the deepest sites for turbines (fixed or floating) to date include a project operational since summer 2023 at 300 m, a demonstration project at a 200 m test site, and other pre-commercial or demonstration projects at depths no greater than 125 meters.

In consideration of these findings, the Committee conducted a constraints analysis to delineate portions of the Study Area where icebergs would be unlikely, and where depths do not exceed 300 m. The Committee used data from the Global Bathymetric Chart of the Oceans (GEBCO) 2023 and the International Ice Patrol Iceberg Sighting Database Version 1 (IIP) showing sightings from 2002-2021. The Committee excluded areas with at least one iceberg classified as medium to very large (as outlined in [Canadian Ice Service Manual, 2005](#)) in the last 20 years. The Committee identified the remaining area as the focus area for continuing the RA.

The Committee published the proposed focus area, and methods used to identify the focus area, on the Impact Assessment Registry on August 17, 2023 for public feedback. The Committee hosted virtual engagement sessions and accepted public feedback on our proposed focus area until September 22, 2023. All RA participants, including federal and provincial authorities, were notified of the August 17, 2023 report and of the virtual engagement sessions. After receiving and reviewing all submitted feedback, the Committee held additional sessions on the technical constraints with various experts to validate our work, including offshore wind developers and participants with expertise in iceberg management and monitoring.

Offshore wind developers considering Newfoundland and Labrador generally agreed with the Committee's constraints. These developers also indicated that sites suitable for fixed turbines or

concrete gravity-based structures are preferred in Newfoundland and Labrador. These types of turbines are currently suitable to depths up to 60 m, which is considerably more shallow than the Committee's applied 300 m constraint.

Conversely, some participants with expertise managing icebergs in Newfoundland and Labrador's offshore oil and gas industry disagreed with the Committee's conclusion about iceberg risk. They spoke of successful iceberg management in the offshore oil and gas industry, research on the dynamics of ice loads on offshore wind structures, and the potential interest for offshore oil and gas developers to use offshore wind to electrify platforms.

The Committee revisited the research on ice-turbine interactions and confirmed few projects with foundations that can withstand *sea ice* (not icebergs) are being demonstrated or planned, and that any work related to *iceberg*-turbine interactions is theoretical and based on modelling. As for electrification of offshore oil and gas platforms, offshore oil and gas developers have engaged with the Committee but have not come forward with any definitive plans in the foreseeable future.

The Committee is aware of two publicly available evaluation reports (referenced under Growler, 2022 and Paulin et al. 2022; refer to Committee's November 7, 2023 report) about options for electrifying platforms. Both conclude that additional research, engineering, and proof of concept work would need to be carried out to determine the efficacy of offshore wind facilities under depths and ice conditions at the platform sites.

Finally, it is worth noting the RA Agreement defines an offshore wind project as 10 turbines or more. The Physical Activities Regulations under the *Impact Assessment Act* (IAA) similarly lists wind power generating facilities in the offshore area with 10 turbines or more as those projects requiring assessment under the IAA. The Committee's work and recommendations therefore focus on potential offshore wind projects of 10 turbines or more.

### **Committee's decision on the Focus Area**

The Committee acknowledges that offshore wind technology is rapidly advancing to accommodate deeper waters and agrees that research and development for turbines in the presence of icebergs is and should continue to be a local priority. However, depth and iceberg constraints remain a challenge for current technologies.

The Committee concluded a precautionary approach should be exercised as work in these areas has not progressed to a degree where the Committee can confidently recommend full-scale offshore wind development at this time in areas where these constraints are present. The Committee advises interested parties to undertake a proof-of-concept or pilot project in areas outside of the focus area.

The Committee fully anticipates that this RA is not the only mechanism by which offshore wind areas can be identified. With the technology and research advances, identifying offshore wind areas should occur regularly, whether through federal and provincial government initiatives, RAs under the IAA, assessments by the Canadian Newfoundland and Labrador Offshore Energy Board, or through proposals from offshore wind developers.

Related to this understanding and our conclusions above, the Committee published the following recommendations in our November 7, 2023 report. All RA participants, including federal and provincial authorities, were notified when this report was published.

1. The Committee recommends regulators exercise a precautionary approach and do not recommend licencing areas for OSW development where icebergs may be present until the potential risk and implications of collisions with icebergs are better understood, and demonstration projects provide proof of concept.
2. The Committee recommends regulators revisit areas where waters exceed 300 meters when and if developers indicate interest in these areas.
3. The Committee recommends continued research and development regarding OSW turbines under these conditions.
4. The Committee recommends continued research and development be prioritized in areas where current/proposed offshore oil and gas platform operators confirm that they are considering OSW as an option for offsetting emissions. These areas will not be given further consideration in this RA as the Committee has no indication of any such projects (current or proposed).
5. The Committee recommends the Minister of Environment and Climate Change not exclude proposed OSW projects within the RA Study Area from future project-level impact assessments, including at sites beyond the Focus Area.

### **Next steps**

While the Committee appreciates the Province's perspectives, the Committee remains firm on the three key points outlined in the amendment request letter sent to the Ministers on October 12, 2023. Since three months have passed since issuing that letter and based on the meeting last week, , the Committee assumes the RA signatories are at least aware and accepting of the fact that the terms of the original Agreement will not be met.

The Committee recognizes that providing information and analysis to inform licencing by March 2024 is important for the Province and Natural Resources Canada. We intend to deliver an interim report, as described in the amendment request letter, to fulfill this objective. Based on last week's meeting, the Committee understands that the RA signatories are amenable to our request to complete the RA in January 2025 rather than September 2024.

The Committee remains confident in our interpretation of the Agreement, that it acknowledges the entire Study Area may not support offshore wind, and that the Committee is allowed to focus efforts in areas which are most likely to see future development interest. Please be advised that we intend to continue assessing environmental, health, social and economic components in detail within the focus area (as published in November 2024) only. It is important to note that the high-level nature of an RA will still result in effects information and mitigation recommendations largely applicable to the entire Study Area.

We again reiterate the importance of receiving a written response to our October 12, 2023 request for amendments. This response to this letter is crucial to our progress on this RA, and to maintaining a fair and transparent process for all participants.

Sincerely,

*Shayne McDonald (Chair), Glenn Blackwood, Leslie Grattan, Brian Power, Paul W. Saunders*

Committee for the Regional Assessment of Offshore Wind Development in Newfoundland and Labrador

**Attachments** – Committee Decision on a Focus Area – November 2023; Iceberg Incursion in the Study Area; Illustrative Map of Marine Spatial Conflict and Cumulative Effects in Placentia Bay.