December 20, 2024

Regional Assessment of Offshore Wind in Nova Scotia
Re: October 31, 2024 Draft Regional Assessment Committee Report

Please accept the following submission on behalf of the Groundfish ITQ Association (GITQA).

GITQA represents <65' mobile-gear groundfish licences holders in the Maritimes. Our members have a long-standing history in the groundfish fishing business and have been contributing to Nova Scotia's (NS') seafood sector for generations. They continue to promote the wise use, development, and conservation of groundfish resources. Our members harvest, process, and bring to market a wide range of groundfish resources including cod, redfish, haddock, silver hake, pollock, and flounders.

Our Association is involved in and support the work of the Nova Scotia Fisheries Alliance for Energy Engagement (NSFAEE), whose mandate is to unite the Nova Scotia fishing industry; ensuring the renewable offshore energy sector is developed in a manner that respects fisheries, coastal communities, and the marine environment.

We are supportive of the NSFAEE submission to the Committee on the latest RA draft report. GITQA is providing this submission as supplemental information, as the current RA report considers the broad scope of potential impact to the fishing industry and does not capture impacts on a fishery-specific basis. Particularly, we are providing additional insights on our members' silver hake fishing activity on the Scotian Shelf given recent expansions in the RA report of Emerald Bank (as a Tier 1 Potential Development Area (PDA)) and the addition of LaHave Basin as a Tier 2 PDA since the previous interim draft report was released.

<u>Potential Development Areas</u>

A key focus of the NSFAEE was the self-identification of areas in the marine environment that could be considered low conflict (Figure 1), which were previously submitted to the Committee.

Identification of these LCAs was the culmination of taking publicly available data as well as detailed fishery by fishery consultations where the harvesting sector, including GITQA members, brought forward information about their fishing footprints that may not have been captured in the commercial data set from the Department of Fisheries and Oceans (DFO).

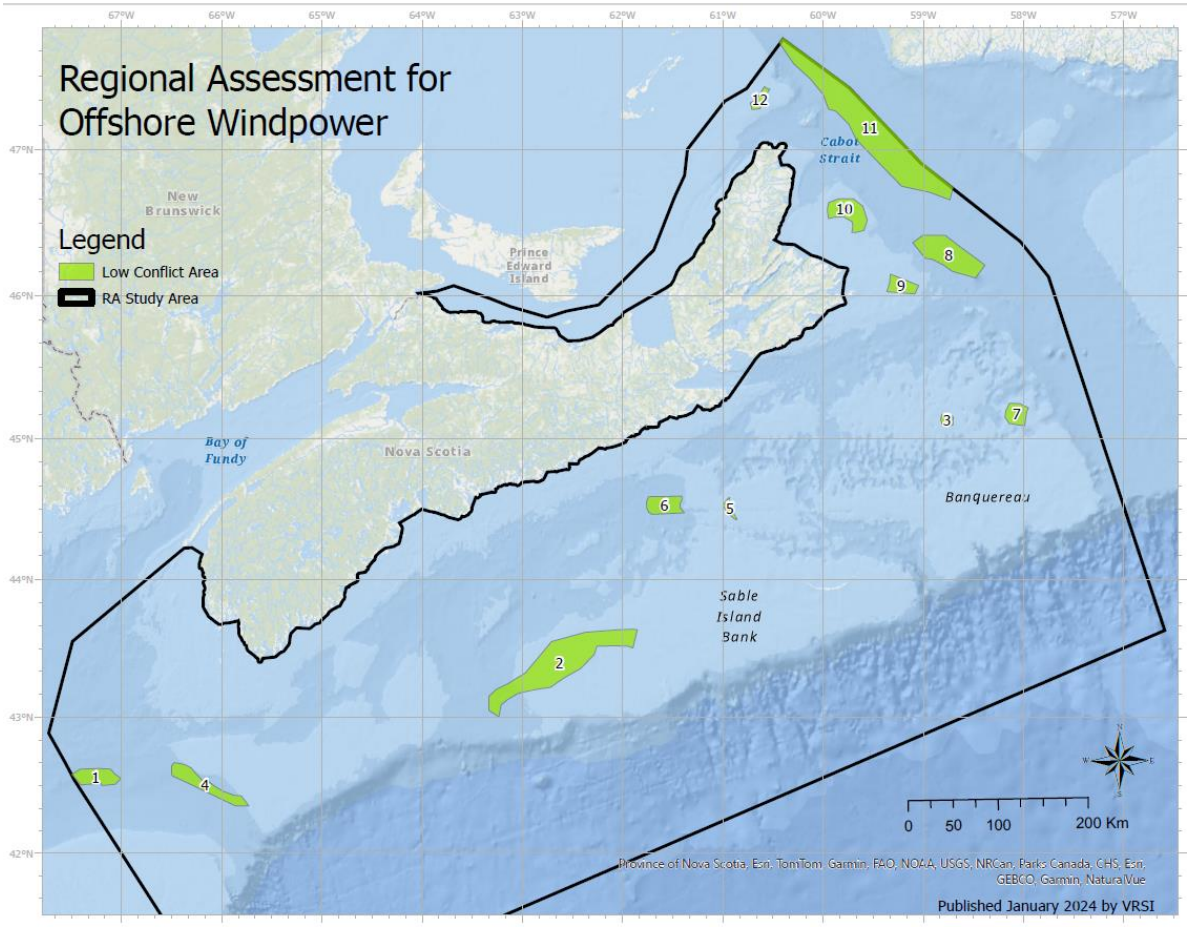

Figure 1: NSFAEE Identified Low Conflict Areas (LCAs)

GITQA remains supportive of the NSFAEE identified LCAs and strongly support that any future offshore wind development be considered first and foremost for these areas. We highlight that expansions and additional areas in the latest draft RA report PDAs in comparison to these LCAs is concerning. Specifically, the addition of LaHave Basin as a Tier 2 PDA, as well as the large expansion of the Emerald Bank PDA. These areas are critically important to the silver hake resource residing in Northwest Atlantic Fisheries Organization (NAFO) Divisions 4VWX (within the RA study area).

While the overall fishing footprint on Emerald Bank may be considered lower compared to other locations in the study area, and the NSFAEE identified a LCA within Emerald Bank, the latest draft RA report's identified Tier 1 PDA on Emerald Bank is significantly larger than the NSFAEE identified LCA (Figure 2) and has expanded greatly from that of the March 28, 2024 RA Committee Report (Figure 3).

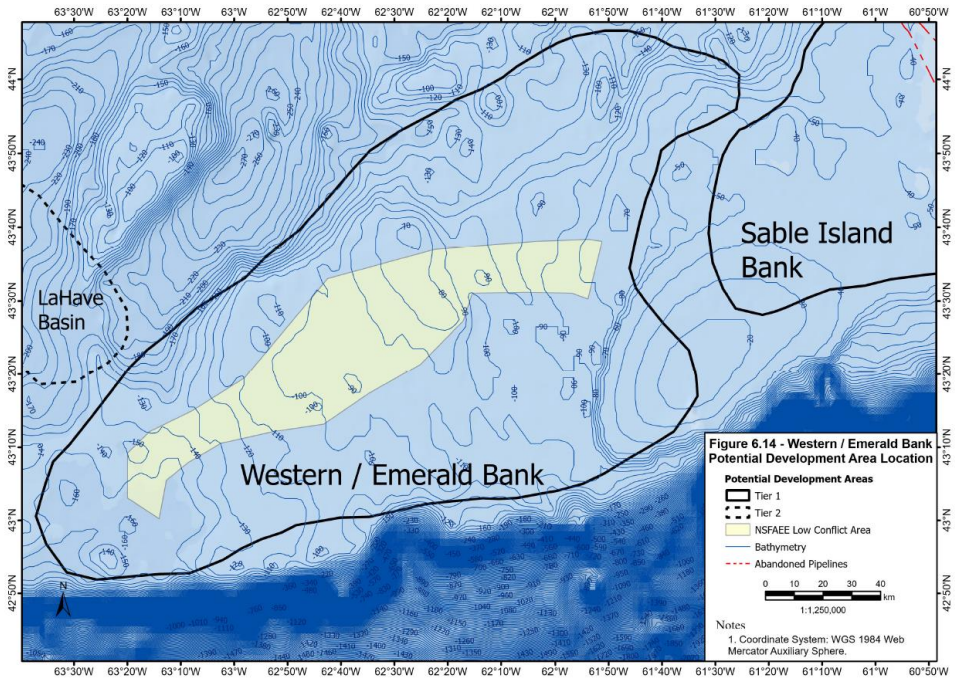

Figure 2: Western / Emerald Bank PDA Location from October 31, 2024 RA Committee Report (Solid Black Line) Compared to the NSFAEE Identified LCA (Beige).

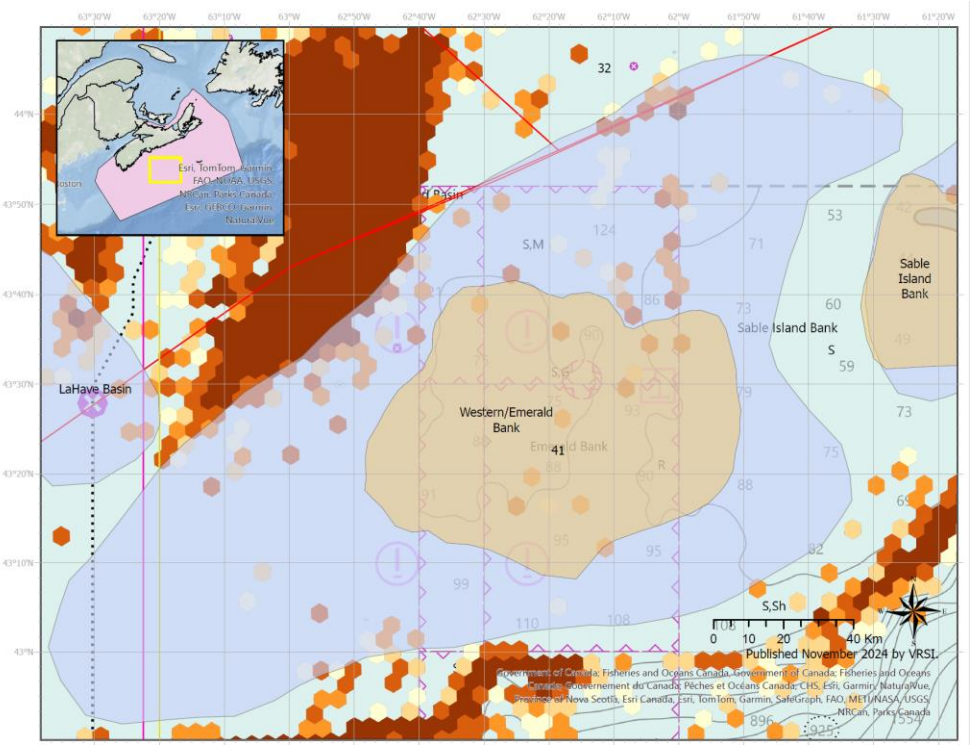

Figure 3: RA Committee PDA in the March 28, 2024 Draft Report (light brown), RA Committee's Expanded PDA in the October 31, 2024 Draft Report (purple). Brown Hexagons Indicate Hake Fishing Footprint Data.

The expansion of the Emerald Bank PDA is now dangerously close to important silver hake fishing grounds, in particular on the northern edge of the boundary which is quite near the Emerald Basin (one of the few areas silver hake harvesters are permitted to catch their quotas). Additionally, LaHave Basin, is now identified as a Tier 2 PDA, another one of the few areas that the current silver hake fishery is permitted to operate within.

Given these changes, GITQA is providing the Committee with additional context on the silver hake fishery and the potential implications for offshore wind developments on this fishery below.

Description of the Silver Hake Fishery

Silver hake are a widely distributed fish, ranging from Cape Hatteras to the Grand Banks, including the Gulf of St. Lawrence. The population occurring on the Scotian Shelf includes NAFO Divisions 4VWX. Historically, silver hake have predominantly aggregated along shelf waters and inside the Emerald and LaHave Basins. While landings have decreased in these areas in recent years, it is expected that silver hake distribution may have begun shifting due to temperature changes.

Silver hake distribution has been closely linked with bottom temperatures between 5-12 °C and may shift as temperature increases beyond their preferred range. It is also known that from July-September, silver hake migrate to shallower waters around Emerald and Sable Island Banks for spawning purposes (Refer to DFO's 2023 stock assessment report). The Silver hake resource remained in a healthy state for several decades, with the latest stock assessment showing that from 1993–2022, silver hake has remained in the Healthy Zone of DFO's Precautionary Approach Framework.

The Canadian silver hake fishery in 4VWX is conducted by the mobile gear groundfish fleet. This fishery is currently only permitted to operate in the Emerald and LaHave Basins and the edge of the Scotian Shelf seaward of the Small Mesh Gear Line (Figure 4). Figure 6 shows a depiction of the recent silver hake fishing footprint, garnered from harvesters to support this submission. It is evident from this map that the recent PDA boundary adjustments have encouraged on key silver hake fishing grounds.

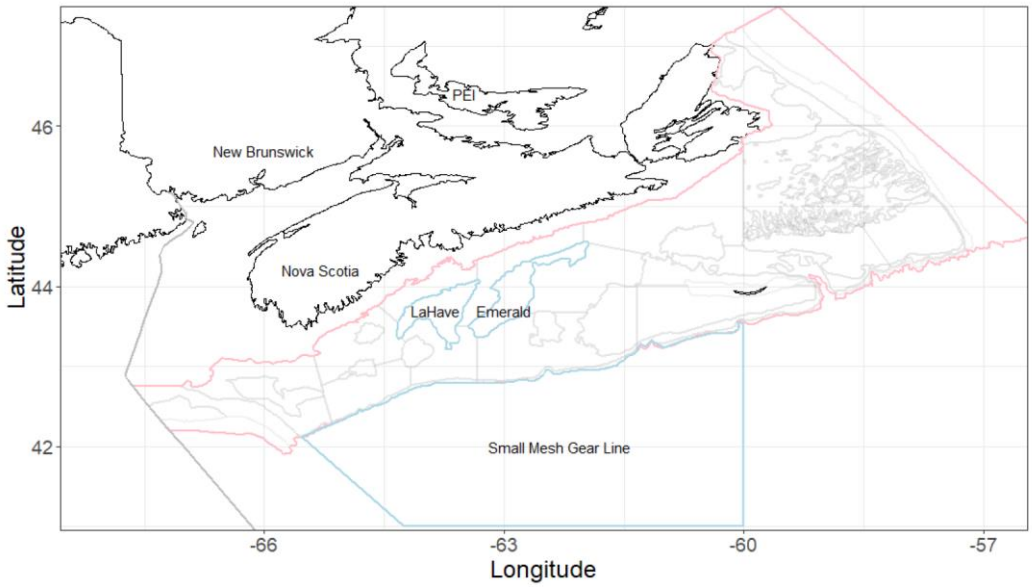

Figure 4: Spatial Restrictions for Silver Hake Harvesters (restricted to within the blue lines).

One of the main sources of scientific information for the silver hake fishery comes from the long-standing DFO Research Vessel (RV) survey that has been conducted in a large area of the Scotian Shelf annually since 1970 (Figure 3). Not only does this survey collect critical scientific data used in the assessment of the silver hake stock but also informs stock assessment and fisheries management decisions for a long list of commercial fishery species, as well as ecosystem assessments, species at risk, marine conservation monitoring, and a variety of other research programs.

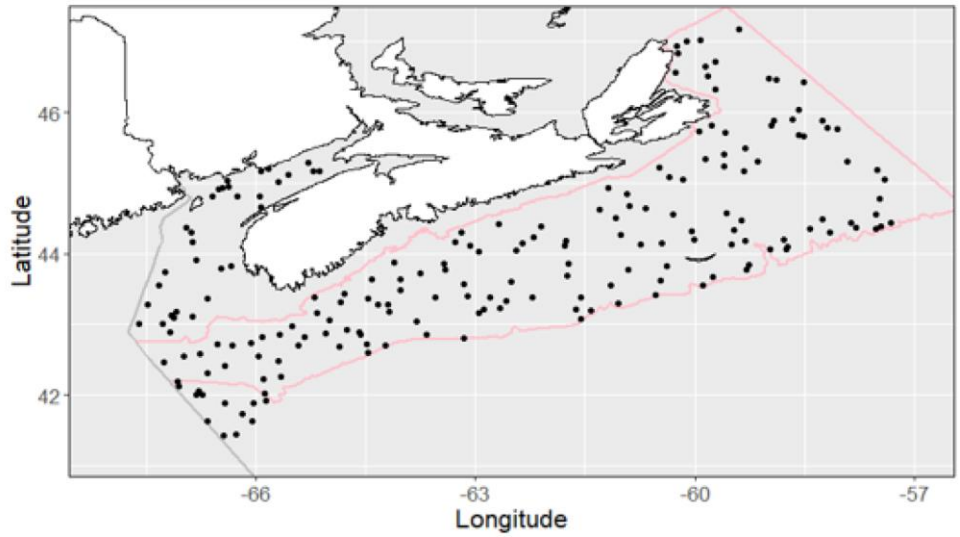

Figure 5: Stations Sampled During the 2020 Summer RV Survey – Areas Within the Pink Lines Represent the Stock Area for 4VWX Silver Hake.

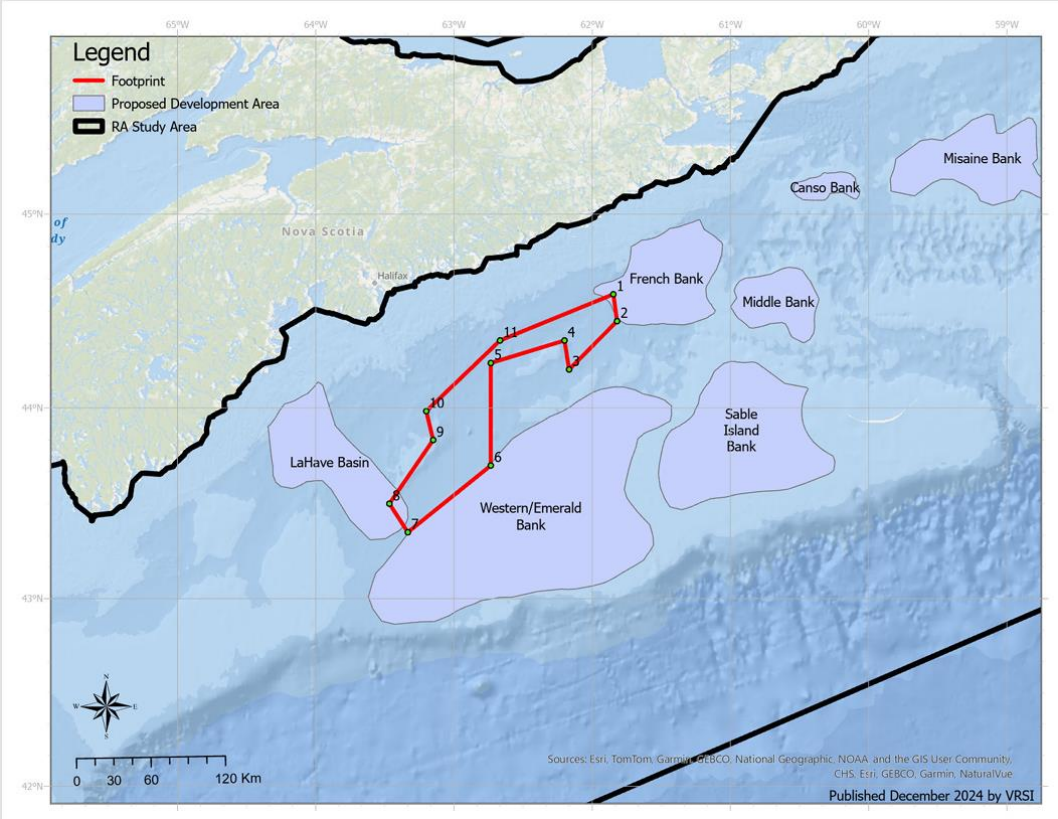

Figure 6: Recent Silver Hake Fishing Footprint (Red) in Relation to the RA Committee Report PDAs.

Potential Impacts from Offshore Wind Development

The most obvious and direct implication for the silver hake fishery from development of offshore wind infrastructure in these areas is the displacement of their harvesting activity. However, our members also have significant concerns about the indirect implications which may be less obvious to those without a detailed account of this fishery.

As an example, offshore wind operations (which pump water in from the surrounding marine environment and expel it back out at a higher temperature), could lead to water temperature changes. Given the close linkage of silver hake to thermal habitat, additional increases in water temperature surrounding wind farms stands to push the silver hake resource to other areas as temperatures reach and exceed their preferred range. Since the silver hake fishery is restricted to harvesting in specific areas, changes in silver hake distribution as a result of changes in water temperature, or otherwise, could preclude harvesters from accessing this resource and therefore, take away their livelihood.

Further, we know that the marine environment is shifting due to climate change, with water temperatures continuing to warm. This is already beginning to have an impact on the

distribution of groundfish resources, including silver hake. Offshore wind turbine development in these areas is likely to compound these changes.

As mentioned above, there is a long-standing DFO RV survey that occurs in the RA study area each year, which feeds critical data directly into a large number of commercial fish species stock assessments, including silver hake. Exclusion of scientific survey vessels from areas of offshore wind farms is another less obvious, indirect impact that can result from offshore wind development. Exclusions of scientific survey vessels from sections of the ocean may result in the inability for the survey to sample stock biomasses within that area and can risk underestimation of fish stock biomass levels. This could directly result in reductions in total allowable catches and quotas for the fishing industry.

Project-Level Impact Assessments

GITQA recognizes the extensive work of the RA Committee to date. We acknowledge that the latest draft report is a good starting point to the much-needed analyses of potential impacts to NS's long standing, renewable resource based, seafood industry. However, at this stage, the nature of the report is macro in scale with respect to capturing the intricacies of various fishing businesses and operations occurring in the waters off NS. GITQA stresses that project-specific impact assessments, informed by extensive consultations with the fishing industry, must occur for all potential future offshore wind projects.

As specific areas are considered by potential wind energy proponents, direct input from the fishing industry will be critical to properly assess suitability for development and potential impacts to the fishing industry. This assessment is crucial, as it will underpin the development of avoidance and mitigation measures, as well as compensation options for instances where avoidance and mitigation are not sufficient in preventing negative impacts to the fishing industry.

We thank you for the opportunity to provide feedback on this important issue. We will continue to remain engaged in ongoing processes related to the potential development of offshore wind in NS.

Sincerely,

<Original signed by>

Vanessa Byrne
Executive Director, GITQA