

August 12, 2024

Mr. Andrew Walter
Project Manager, Atlantic Region
Impact Assessment Agency of Canada / Government of Canada
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Re: Committee for the Regional Assessment of Offshore Wind Development in Nova Scotia (Committee): Request for Information

Dear Mr. Walter:

The Nova Scotia Department of Fisheries and Aquaculture (NSDFA) thanks the Committee for the opportunity to inform the ongoing regional assessment process for offshore wind development through the completed questionnaire below.

NSDFA supports the province's economic, environmental and social development for the benefit and long-term well-being of all Nova Scotians. With a vision to be a global leader in fisheries and aquaculture, NSDFA is the province's lead agency for the development, promotion and support of our seafood sector.

In 2023, as Canada's number one seafood exporter, Nova Scotia seafood industry contributed \$2.5B to the provincial economy. Approximately 19,000 people are employed in Nova Scotia's seafood sector, predominantly in rural, coastal communities which rely on the seafood industry for their livelihoods and prosperity. Considering the great socio-economic importance of the seafood sector to Nova Scotia, NSDFA welcomes the opportunity to participate in the Committee's consultation activities regarding offshore wind development, with the trust that a balanced approach will prevail, one that benefits all Nova Scotians, and not to the detriment of long-established sectors that are entwined into the fabric of this province.

1) Potential positive and adverse effects (including cumulative effects) of offshore wind energy development during all phases.

NSDFA's purview lies within several acts and regulations, including the *Fisheries and Coastal Resources Act*, the *Fish Harvester Organizations Support Act*, the *Fish Buyers Licensing and Enforcement Regulations*, *Fish Inspection Regulations*, the *Aquaculture Licence and Lease Regulations* and the *Aquaculture Management Regulations*. Although we support the development of the province's seafood industry, the

department's authority and expertise does not lie within the dynamics surrounding energy exploration and development.

One concerning adverse effect by offshore wind energy development would be the potential displacement of fish harvesting activity. Continued access to fish stocks remains a major issue for the harvesting sector. By its very nature, the marine environment, and fish stocks, are dynamic, requiring harvesters to adapt to these spatial changes. Harvesters are already challenged with a shrinking map, including ongoing federal marine conservation initiatives. In 2020, Canada joined the Global Ocean Alliance, committing to protect 25% of Canada's coastal and ocean spaces by 2025, and 30% by 2030. In concert with this, DFO – Maritimes Region has recently initiated feedback on their proposed Draft Network Design, increasing the current level of protection from 14.88% to 26.5% of the Scotia Shelf-Bay of Fundy Bioregion. The cumulative effect of reducing useable fishing area threatens the continued success Nova Scotia's seafood production and its contribution to the province's economy.

As global wild harvest fisheries plateau, increases in seafood production are attributed to rapid growth in aquaculture. One strategy used by many nations to sustain global aquaculture output is using offshore farming platforms. As noted in 'Supporting the Development of Offshore Aquaculture in Nova Scotia (CMAR, 2022), developing aquaculture further offshore has the potential to significantly increase production while avoiding some of the environmental issues and conflicts currently faced by coastal aquaculture. The development of this offshore seafarming technology is gaining momentum globally, including nations such as Norway and the USA. Nova Scotia is well positioned to implement this technology, with efforts underway to lay the groundwork for future initiatives. OSW presents both challenges and opportunities to offshore aquaculture development. Although there is the potential to collaborate with OSW infrastructure in the establishment of these offshore farms, aquaculture may face similar challenges that the wild sector faces with limited access to sites due to OSW leases.

NSDFA recommends the Committee seek input on this matter from experts found within the responsible provincial and federal agencies. Also, NSDFA strongly encourages the continued involvement of seafood industry representatives for their perspectives, as well as their support industries.

2) Mitigation and/or monitoring that should be considered to address potential adverse effects.

Considering the possible displacement of fishing activity, as noted in Question 1, areas of greater fishing effort and possible conflict areas with OSW development, such as

George's Bank, should be identified using past and present fishing history data, incorporating knowledge from the seafood sector. Through this, possible restricted or moratoria areas could be identified and established to mitigate conflict and minimize overlap with established fishing areas. In cases where this is not possible and overlap does occur, a process for compensation should be established. Additionally, in the occurrence of overlap and displacement of fishing activity, opportunities for retraining and employment in the OSW sector should be created for people employed in the fishing and seafood sectors.

NSDFA does not consider itself an expert in this field, and defers to the responsible provincial and federal agencies, as well as private sector experts. Again, seafood industry representatives should be included within this list. To ensure true collaboration and coordination with the fishing industry, NSDFA recommends that a position is created/funded by the Committee whose sole responsibilities would entail working with and representing the fishing industry as the OSW regulatory regime is developed.

NSDFA would also encourage the Committee to draw upon information gained from other jurisdiction's experiences and knowledge regarding mitigation and monitoring best practices for the development of offshore wind infrastructure.

3) The contribution of the commercial seafood industry to the economy of Nova Scotia and how has it changed over the past 10 years?

Nova Scotia's seafood industry creates new wealth each and every year by harvesting and processing seafood, as well as aquaculture. Workers in the seafood industry are found in every county and most communities around the province. In 2022, Nova Scotia landed 220,239 MT of seafood, or 32% of total landings for Canada. In the same year, Nova Scotia produced 15M kgs of farmed seafood, worth approximately \$158M.

According to a recent economic impact report (*Making Waves: The Economic Contribution of the Seafood Industry to Nova Scotia, Pisces Consulting Ltd., 2022*), international export sales in 2021 were a record \$2.5B, up from the prior record of \$2.3B in 2019. The seafood industry generated \$1.6B in direct, indirect and induced gross domestic product (GDP) for the province in 2018.

Since 2008, the growth in the seafood industry output (89%) has outpaced the growth of the provincial output (21%) [as of 2022]. From 2008 to 2018, the seafood industry's GDP increased by 109%, driven by a 129% increase in the harvesting sector and a 50% increase in seafood processing. In comparison, nominal GDP for the province, over the same time period, had increased by 25% and the goods sector by 2%. Regarding

harvesting jobs, employment increased by 51% between 2008 and 2021. (Statistics Canada)

4) Any recommended monitoring programs or research projects to address current data gaps or uncertainties related to how fisheries and aquaculture could be impacted by the OSW development?

Again, NSDFA recommends the Committee look to other jurisdictions that have or are currently undertaking similar initiatives to identify best practices that could be implemented within the identified development areas. Responsible federal and provincial authorities, in collaboration with academia and stakeholders, including the seafood industry, should look to tailor these practices and protocols to best fit our region.

Continuing from Question 2, DFO science and management should be responsible to ensure high fidelity in marine stakeholder data, including georeferenced large and small fishing vessel activity data. DFO Science and other responsible federal agencies are best positioned to investigate initial and ongoing potential ecosystem impacts, again in collaboration with industry.

5) Given innovative programs in other jurisdictions to encourage and facilitate coexistence between the fisheries, including aquaculture, what initiatives are being investigated and/or promoted by the DFA to further coexistence?

Currently, NSDFA does not have initiatives in place to address this issue. This is a novel challenge to NSDFA, which defers to responsible federal and provincial authorities and experts regarding this question. Appropriate measures and resourcing initiatives taken to ensure the coexistence of these sectors is ultimately the responsibility of the regulatory bodies. However, NSDFA again strongly recommends that any solutions should involve collaboration with industry stakeholders and their representative organizations NSDFA should be included in these discussions as well, especially those that pertain to OSW and offshore aquaculture development.

6) The importance of the fishery to local and national food security in the light of climate change.

The socio-economic importance of the Nova Scotian seafood sector, both to the province and country, has been highlighted in Question 3.

According to the FAO, in 2022, global fisheries and aquaculture landings reached 223.2M MT. Eighty-nine percent of the total aquatic animal production from fisheries and aquaculture was used for human consumption, compared to 64% in the 1960's. Between 1962 and 2021, the consumption of aquatic animal foods rose by 483%, or an annual growth rate of 3%. This is reflected in an increase in per capita consumption from 9.1 kg/yr in 1961 to 20.6 kg/yr in 2021.

It is noteworthy that the Nova Scotian seafood industry, with many challenges, continued as an essential service during the recent pandemic. Climate change is a dynamic and evolving issue. However, the seafood sector will always play a pivotal role in its continued supply of high-quality protein to the local and global food network. As fish stock populations continue to fluctuate due to a host of issues, including climate change, so must the seafood industry adapt to ensure its role in food security and the continuity of supply. Part of that adaptation would include spatial access; to be able to harvest where the fish are, not where they used to be. This highlights the importance of continued collaboration with other marine users, including the seafood sector, in the planning and development of this new, promising energy resource.

Yours sincerely,

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Adam Muiridge
Director, Marine Services