

91 Percy Street Warwick, QLD 4370aus_staff@ieefa.org

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To: Department of Industry, Science and Resources

Re: Clarifying consultation requirements for offshore oil and gas storage regulatory approvals: consultation paper

Thank you for the opportunity for the Institute for Energy Economics and Financial Analysis (IEEFA) to provide input into the Department of Industry, Science and Resources (DISR) consultation Clarifying consultation requirements for offshore oil and gas storage regulatory approvals.

IEEFA is an independent energy finance think tank that examines issues related to energy markets, trends, and policies. The Institute's mission is to accelerate the transition to a diverse, sustainable and profitable energy economy.

Regards,

Kevin Morrison – Energy Finance Analyst, LNG/Gas Sector Joshua Runciman – Lead Analyst, Australian Gas





Executive summary

Exploration and development of offshore oil and gas reserves carries with it a multitude of environmental, financial and economic risks (including those stemming from climate-related impacts).

The potential for environmental impacts creates financial risks for industries that rely on the preservation of marine and coastal environments, most notably fisheries, aquaculture and tourism. These risks also have the potential to impact on other parties, including local residents and traditional owners. The negative impacts of oil spill events overseas have demonstrated the potential materiality of these risks, which can be severe and long-lasting.

Proposals to expand the use of carbon capture and storage (CCS) adds another layer of risks, including from the potential inadvertent leakage of carbon dioxide (CO_2) into marine environments. In practice, offshore CCS will require monitoring for many years, a responsibility that could ultimately fall to governments.

These risks underscore the need for robust approval processes that adequately consider the multitude of risks. For this reason, IEEFA is of the view that consultation requirements should be sufficiently broad to capture all risks, and that there should be no narrowing of the current consultation requirements.

In addition, IEEFA believes that the current framework is appropriate as very few oil and gas projects have been halted as a result of consultations undertaken as part of the approval process.

IEEFA also notes that recently proposed reforms to the Offshore Petroleum and Greenhouse Gas Storage (OPGGS) Act 2006 could potentially result in inconsistencies with other environmental approvals processes. This in turn could create regulatory uncertainty and complexities that undermine the efficacy and efficiency of the approvals process for offshore oil and gas projects.



Offshore oil and gas projects present a number of risks

Offshore oil and gas exploration and development carries various environmental risks, including:

- Discharge of 'produced water' (water that is a by-product of oil and/or gas extraction and that contains hydrocarbons).
- Discharge of chemicals used in the extraction process (including plastics and microplastics).
- Release of naturally occurring radioactive materials.
- Discharge or inadvertent release of drilling fluids and cutting piles (rock and mud extracted as part of well drilling).
- Installation of pipelines and other infrastructure.
- Accidental spills.
- Atmospheric emissions.
- The impact of noise on marine organisms.
- The storage of CO₂ in depleted oil and gas reservoirs and saline aquifers.¹

Illustrating some of these risks, recent notices from the National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA) indicate some offshore Australian operations are leaking hydrocarbons and methane. For example, NOPSEMA issued a notice to Beach Energy and its partners in the Yolla facility, in the Gippsland basin off Victoria, for consistently exceeding hydrocarbon concentration limits in produced water discharges, posing unacceptable risks to marine life.² Another notice was issued to Woodside for its continual failure to preserve and then remove infrastructure, leading to navigation hazards, vehicle collisions and hydrocarbon leakages that may have a widespread, long-term impact.³ Exxon Mobil's Australian subsidiary Esso Australia was issued with a notice from NOPSEMA for repeatedly failing to properly prepare for an 'oiled wildlife' incident, as promised in its Environmental Plan.⁴

The potential for environmental impacts in turn creates financial and economic risks for industries that rely on the preservation of marine and coastal environments, most notably fisheries, aquaculture and tourism.

For fisheries, the risks and potential impacts include closure of fishing grounds and reductions in harvesting rates and fishing stocks (including due to mortality of marine organisms and impacts on reproductive behaviour).⁵ Exposed underwater oil and gas infrastructure also poses risks for fishing vessels, with the potential for entanglement of trawling nets or other equipment risking crew safety and equipment damage.⁶

Tourism operators can also face risks of economic losses stemming from impacts of oil spills on recreational activity, but also from longer-term shifts in public perception about tourist areas following oil spill events.⁷

¹ OSPAR Assessment Portal. <u>Assessment of impacts of the offshore oil and gas industry on the marine environment</u>. Accessed 1 March 2024.

² NOPSEMA. Environmental Improvement Notice. Notice number: 761.

³ NOPSEMA. Environmental Improvement Notice. Notice number: 775.

⁴ NOPSEMA. Environmental Improvement Notice. Notice number: 738.

⁵ European Parliament. Directorate-General for Internal Policies. <u>The Impact of Oil and Gas Drilling Accidents on EU Fisheries</u>. December 2013, Pages 31-32.

⁶ ICES Journal of Marine Science. <u>Commercial fisheries losses arising from interactions with offshore pipelines and other oil and gas infrastructure and activities</u>. Page 1150. *Rouse et al.*

⁷ ITOPF. Economic effects. Accessed 1 March 2024.



The high-profile Deepwater Horizon explosion and associated oil spill in the Gulf of Mexico illustrates the risks, with an estimated economic cost, including from losses related to tourism and fisheries, of several billion dollars and the loss of more than 25,000 jobs.⁸

The proposed use of CCS adds another layer of risks with respect to offshore oil and gas activity. While CCS remains an unproven technology with a history of underperformance and failure, it also creates financial and environmental risks.

Most CCS projects have significantly underperformed CO₂ capture targets, which could expose CCS operators to higher than anticipated costs per tonne of CO₂ captured. Other risks include those from subsea infrastructure (similar to those associated with hydrocarbon extraction), but also the risk of CO₂ leakages, including over long horizons. This will require monitoring over centuries to ensure that injected CO₂ does make its way back into the atmosphere or into the ocean (which could contribute to acidification of seawater).^{9,10} This could potentially see the ongoing burden for monitoring fall to governments.

These risks are likely to become more material if Australia's planned significant expansion of its offshore CCS capacity eventuates.¹¹ This underscores the need for greater scrutiny to assess the possible negative financial and economic consequences of CCS.

CCS also requires ongoing seismic testing in both the initial stage to help identify suitable storage sites, and during the operation phase to monitor the movement of CO₂ within reservoirs and potential leakages.¹² To date there is little scientific evidence on the impact of seismic testing for CCS on marine life.¹³

The passing of the Environment Protection (Sea Dumping) Amendment (Using New Technologies to Fight Climate Change) Bill 2023 could potentially see more CCS projects developed in Australian waters to store CO₂ imported from other countries. ¹⁴ This may also create risks given the uncertainty about the future liability for CO₂ leakages arising from an international trade in CO₂ – liability that could ultimately fall to Australian taxpayers.

Current consultation requirements should not be weakened

The development of offshore oil and gas reserves is complex and, as noted above, carries a range of risks. Many of the projects that have sought approval in recent years are complex in both their construction and extraction phases, and have significant potential impacts on the terrestrial and marine environments that need to be considered.

Given the risks associated with offshore oil and gas development, as well as CCS projects, it is crucial that oil and gas companies continue to be required to meaningfully consult with relevant and impacted groups. This is particularly important given that approvals processes do not

⁸ Deep Oil Spills. Effects of the Deepwater Horizon Oil Spill on Human Communities: Catch and Economic Impact. 29 June 2019. Court et al.

⁹ IEEFA. <u>Carbon capture: a decarbonisation pipe dream</u>. September 2022.

¹⁰ Procedia Engineering. Consequence Study of CO₂ Leakage from Ocean Storage. 2016. Page 1082.

¹¹ Minister for Resources and Minister for Northern Australia. <u>New offshore greenhouse gas storage acreage to help cut</u> emissions. 29 August 2023.

¹² Journal of Rock Mechanics and Geotechnical Engineering. <u>Carbon capture and storage, geomechanics and induced seismic activity</u>. December 2016.

¹³ The Conversation. Whales stop singing and rock lobsters lose their balance: how seismic surveys can harm marine life. 8 September 2023.

¹⁴ Parliament of Australia. Environment Protection (Sea Dumping) Amendment (Using New Technologies to Fight Climate Change) Bill 2023.



explicitly consider the value of alternative uses of marine environments, both now and into the future.

Potential impacts (including financial and non-financial impacts) to other parties such as commercial fisheries, tourism operators, traditional owners and local residents (including from heritage impacts and loss of amenity) mean that consultation requirements should be broad to ensure the views of all relevant stakeholders are received (and adequately considered). The Australia State of Environment 2021 report highlighted many cases of the loss of cultural heritage sites of traditional owners from resource and other development, which may also impact on future tourism in these regions.¹⁵

IEEFA notes that many fossil fuel projects have been approved under the current regulatory regime. Since the Environment Protection and Biodiversity Conservation Act (EPBC Act) came into effect in 1999, 740 fossil fuel projects have been given the green light in Australia. ¹⁶ Of these, 447, or about 60%, were offshore oil and gas-related, including seismic surveys. Moreover, 185 were approved by the Australian government after a full environmental assessment process, but another 555 projects were approved without any requirement for a detailed environmental impact assessment.

Given the broader risks of offshore oil and gas development, and the fact that many projects have been approved under the existing framework, IEEFA is of the view that the consultation requirements under the existing framework should not be weakened.

Offshore oil and gas approval processes should be consistent with other environmental protection and emission reduction frameworks

This consultation, which is intended to inform the federal government review of consultation requirements for offshore oil and gas projects, coincides with a proposed amendment to the OPGGS Act (the Legislation Amendment (Safety and other measures) Bill 2024) that could change the offshore oil and gas environmental planning process.¹⁷

Under the current regime, the offshore regulator, NOPSEMA, has the authority to approve offshore petroleum and greenhouse gas activities in commonwealth waters under section 146B of the EPBC Act. ¹⁸ In addition, NOPSEMA's environmental assessment processes consider matters protected under Part 3 of the EPBC Act, which covers the principles of ecologically sustainable development. ^{19,20}

The proposed amendments to the OPGGS include a new section 790E to "preserve the effect of the Offshore Petroleum and Greenhouse Gas Storage approval".²¹ This appears to be a fundamental change to the environmental planning process for offshore oil and gas projects.

¹⁵ Department of Climate Change, Energy, the Environment and Water (DCCEEW). <u>Australia State of the Environment 2021.</u> <u>Recent indigenous heritage protection issues.</u>

¹⁶ Climate Council. <u>Beating around the bush: How Australia's national environment laws fails climate and nature</u>. 27 September 2023.

¹⁷ Parliament of Australia. <u>Offshore Petroleum and Greenhouse Gas Storage Legislation Amendment (Safety and other measures) Bill 2024.</u> 15 February 2024.

¹⁸ Australian Parliamentary Library. Offshore Petroleum and Greenhouse Gas Storage Amendment (Miscellaneous Amendments) Bill 2018 [and] Offshore Petroleum and Greenhouse Gas Storage (Regulatory Levies) Amendment Bill 2018. 11 September 2018. Page 8.

¹⁹ NOPSEMA. NOPSEMA EPBC Act Program

²⁰ Parliament of Australia. <u>Environment Protection and Biodiversity Conservation Act 1999: a quick guide.</u> 8 May 2019.

²¹ Parliament of Australia. <u>Offshore Petroleum and Greenhouse Gas Storage Legislation Amendment (Safety and other measures)</u> Bill 2024 Explanatory Memorandum. 15 February 2024. Page 75.



The Australian government previously proposed, through the Nature Positive Plan, establishment of an independent national Environmental Protection Agency (EPA) to undertake regulatory and implementation functions of the EPBC Act.²² The EPA would oversee the introduction of the proposed National Environmental Standards, proposed to be included in the EPBC Act.²³

These proposed new environmental standards were planned to be adopted into the environmental plans that oil and gas project proponents must submit to NOPSEMA, which has the authority to approve offshore petroleum and greenhouse gas activities in commonwealth waters under section 146B of the EPBC Act.

However, the proposed legislative amendments to the OPGGS Act could effectively mean that the approval process for offshore oil and gas projects will not have to abide by these new environmental standards. The current OPGGS Act approval processes for environmental management, though different to processes under the EPBC Act, provide for the same environmental outcomes as the EPBC Act.²⁴ In contrast, the proposed amendments could allow subsequent changes to the regulations without any further oversight, which could see different standards applied to environmental approvals processes for different industries and sectors.²⁵

IEEFA is concerned that the proposed changes to the OPGGS Act, to the extent that they lead to changes in the consultation requirements for offshore oil and gas projects, could result in environmental approval processes that do not consider all direct and indirect risks related to these projects, particularly where those risks would be borne by key Australian industries (such as fisheries).²⁶

Further, IEEFA submits that inconsistencies in environmental approval processes for offshore oil and gas projects could create regulatory uncertainty and complexity for relevant stakeholders, leading to more onerous and less effective regulatory approval processes. This could also impact on costs faced by oil and gas producers seeking approval for offshore projects, particularly if streamlined consultation processes lead to further legal challenges – in recent years, legal action related to offshore projects has seen projects delayed, leading to higher costs for producers.²⁷ In particular, IEEFA submits that any futures changes to the EPBC Act through the Nature Positive Plan should be reflected in changes to the OPGGS Act to ensure consistency with approval processes in other sectors.

²² DCCEEW. Nature Positive Plan: better for the environment, better for business. December 2022. Page 28.

²³ Ibid. Page 11.

²⁴ Ibid. Page 7.

²⁵ Environmental Defenders Office (EDO). <u>Memo: Offshore Petroleum and Greenhouse Gas Storage Legislation Amendment (Safety and Other Measures) Bill 2024 - Provisions relating to EPBC Act accreditation.</u>

²⁶ The West Australian. Offshore gas: Resources minister Madeline King to introduce new rules for offshore gas development. 14 February 2024

²⁷ Australian Energy Producers. <u>Media Statement: Australian Energy Producers responds to Federal Court decision about NOPSEMA's approval of Scarborough gas project.</u> September 2023.



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Conclusion

There are a range of risks associated with offshore oil and gas development. These risks have the potential to affect a wide range of parties, directly and indirectly, including fisheries and tourism operators.

Given the potential for these risks to have serious and long-lasting impacts on other industries and on other parties (such as local residents and traditional owners), it is vital that consultation requirements remain broad enough to capture the views of all potentially impacted stakeholders.



Appendix A – Detailed responses

Consultation questions		IEEFA response
1.	What do you think works for offshore consultation processes and should be kept?	IEEFA considers that the current framework should not be weakened and that current consultation requirements should be retained. Any subsequent changes to the EPBC arising from the Nature Positive Plan should be reflected in the approvals process for offshore oil and gas projects.
2.	What doesn't work for offshore consultation processes and how could it be changed?	N/A
•	If you have participated in consultation processes for proposed offshore resources activities: do you feel like you were given enough information? was the information provided helpful to understand the activity being proposed and the implications? was information given relevant to the consultation and your functions, activities or interests?	 IEEFA has provided submissions to a number of offshore project consultations based on the information to hand, which was sufficient. Yes Yes
4.	What information should titleholders provide to relevant persons so they: are aware of the purpose of consultation? can make an informed assessment of the possible consequences of the activities on their functions, interests, or activities? What aspects of consultation processes have you experienced that you would want to encourage?	 N/A Information about the full physical impact of the proposed project on the local area and how this will impact the local natural environment, as well as the built environment through onshore processing facilities, pipelines, jetties, and changes to the local built harbour. The option to speak to the regulator to seek further information or clarification about the approval process.
5.	What examples are there of consultation processes under other regulatory frameworks that you have participated in that have worked more effectively?	N/A
6.	Titleholders should respond to relevant persons on how they have considered the information provided. How is this best done?	N/A
7.	How should titleholders manage sensitive information given to them during consultation?	N/A
8.	How could the consultation process account for verbal consultations?	Consultation should be recorded, or extensive notes taken for the record.

Consultation questions	IEEFA response
9. How much time should a titleholder reasonably give relevant persons to engage and provide information as part of a consultation process?	Additional time should be provided to those living in remote communities, where internet access may not be reliable.
10. If titleholders and NOPSEMA get information after the consultation is over, how should they consider it during the assessment process?	It must be determined whether that information is significant enough to determine the outcome of the consultation, or change what communities may have written in their submissions.
11. What is the best way for titleholders to engage with Traditional Owners who are able to speak for sea country?	N/A
12. How can titleholders ensure they consult appropriately and effectively with First Nations people to adequately communicate project information?	N/A
13. How can titleholders make sure First Nations people are able to express their views on a proposed offshore resources activity in line with their preferences?	N/A
 14. What is the best way to manage accessibility of information in the consultation process? For example, should relevant persons be supported by the use of qualified, neutral interpreters during consultations, if required? 	N/A
 15. Is there a benefit to greater coordination among multiple titleholders on certain issues that are common to many proposed offshore activities? For example, would it be useful for a group of titleholders to consult together on activities in a region that are planned to happen in a set time, or should titleholders consult on each specific offshore resources activity individually? 	N/A
16. What can titleholders do to address consultation fatigue?	N/A
17. What opportunities are there to clarify the process for identifying who a proposed offshore resources activity may affect?	N/A





Consultation questions	IEEFA response
 18. What type of communication methods and processes should titleholders use to make relevant persons aware of consultation for a proposed offshore resources activity? Should there be a difference in communication methods for identifying relevant persons who may be directly impacted by a proposed offshore resources activity, as opposed to being indirectly impacted by the proposed activity? 	All forms of communication should be considered particularly for remote communities, such as on community notice boards, postages to community addresses, messages on local radio, the internet and local newspapers.
19. Is it preferable for some relevant persons to be engaged via representative bodies or industry associations, instead of individually? For example, this could include fishing associations in the case of consultation with the fishing industry.	Both associations and individuals should be consulted – not all fishermen may be part of the local fishing association, for example.
 20. Should people and organisations have an opportunity to self-identify as relevant persons? If so: how should offshore resources industry communicate the opportunity to self-identify? what timeframe should be in place for self-identification? should there be an appeal process for someone who is excluded or determined to not be a relevant person following self-identification? 	 Yes, people and organisations should have the opportunity to self-identify as relevant persons. N/A The time taken should reflect cultural behaviour and the remoteness of communities where a lack of access to communication technology such as telephones and the internet is a significant barrier to being alerted to a consultation on a resource project. Yes, an appeal process should be open to those that have a case for inclusion or if there was an incorrect ruling on their self-identification.
20. How could the Offshore Environment Regulations clarify what is meant by a person or organisation that 'may be affected' by an offshore resources activity?	All people will be impacted by climate change as a result of new fossil fuel projects being approved and developed through greater CO ₂ emissions from oil and gas being combusted when used. These impacts could include direct financial impacts to affected industries as well as broader impacts.
21. When assessing whether consultation has been undertaken that is appropriate for the proposed offshore resources activity, how should NOPSEMA consider the likelihood and consequence of an impact on relevant persons?	Same answer as for 21, all relevant and non- relevant people will be impacted by the increased CO ₂ emissions from oil and gas projects approved for development by the Australian government through its ministers and its regulatory agencies.