

Economics Legislation Committee
ANSWERS TO QUESTIONS ON NOTICE
Industry and Science Portfolio
Additional Estimates 2014-15
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AGENCY/DEPARTMENT: NOPSEMA

TOPIC: Scientific merit and objectivity of NOPSEMA's assessments

REFERENCE: Written Question - Senator Wright

QUESTION No.: AI-45

NOPSEMA recently stated (Regulator 5/2014, p. 11) that it impartially assesses Environment Plans in accordance with acceptance criteria designed to focus NOPSEMA's decision making on 'scientific merit'. Yet four Environment Plans approved by NOPSEMA will each operate within 100-150km of key Australian sea lion foraging habitats:

- 1) Nerites Season 2 Multi Client 3D Marine Seismic Survey, TGS-NOPEC Geophysical Company Pty Ltd Region: Ceduna sub-basin South Australia; 190km west of Eyre Peninsula; 270km sw from Ceduna; 180km from mainland coastline; water depths ~750-3500m; total survey size approx 22,000skm. Accepted: 23/10/2014
- 2) Ceduna Multi-Client 3D Marine Seismic Survey, PGS Australia Pty Ltd Region: Survey area covers approx 13,800skm and is located 180km from mainland SA, 475km west of Port Lincoln and 295km south-west of Ceduna in the Bight Basin, Ceduna Sub-basin. Accepted: 23/09/2014
- 3) Lightning 3D Marine Seismic Survey Environment Plan, Bight Petroleum Pty Ltd Region: The Lightning MSS area is located approximately 104km west of Kangaroo Island and 68km south of Cape Carnot (Eyre Peninsula). Accepted: 06/06/2014.
- 4) Nerites Multi Client 3D Marine Seismic Survey, TGS-NOPEC Geophysical Company Pty Ltd Region: Great Australian Bight. Accepted: 07/01/2014.

In a best case scenario, at 100km, it could be expected that a 230db (re water) source may have reduced by 50db (re water), bringing the sound intensity to levels that will still be significant enough to cause strong behavioural responses in Australian sea lion (*Neophoca cinerea*).

In considering protected species that are Matters of National Environmental Significance: Significant Impact Guidelines 1.1, and based on the information provided, not-for-profit organisation Wild Migration has assessed that any offshore seismic surveys carried out within 150km of the feeding habitat of Australian sea lion have a high risk of:

- a) "reducing the area of occupancy" and "adversely affecting habitat critical to the survival" of The Australian sea lion;
- b) "disrupting the breeding cycle" of The Australian sea lion;
- c) "modifying an area of important habitat" and "disrupt the lifecycle (feeding)" of The Australian sea lion; and
- d) "disturbing an important or substantial area of habitat such that an adverse impact results" within the Bunda, Nuyts, Eyre and Kangaroo Island Regions.

The South West Marine Bioregional Plans directs that “actions with a real chance or possibility of increasing the ambient noise levels within female [Australian sea lion] foraging areas to a level that might result in site avoidance or other physiological or behavioural responses” have a high risk of a significant impact on this species. All attempts should be made to avoid biologically important areas, particularly waters surrounding breeding colonies and foraging areas.

Yet, all four of these proposals have been approved with erroneous and at times missing information about this EPBC listed species. Sound intensity levels transmitted into sea lion foraging habitat should not be approved in excess of 160db (re water). None of these plans will monitor sea lion activity or sound intensity levels within the sea lion habitat.

Given the above information, can NOPSEMA demonstrate the scientific merit of the Environment Plan acceptance in these four cases?

ANSWER

All of the above-mentioned environment plans were assessed by an independent and competent team of environmental experts against the requirements of the Environment Regulations and were found to meet the acceptance criteria listed under Regulation 10A. NOPSEMA took into account scientific evidence presented in the environment plans as well as relevant published information including that contained within plans of management. The decision making process, based on scientific evidence, is demonstrated in NOPSEMA regulatory records.

Titleholders are required to provide stakeholders with sufficient information and a reasonable timeframe to make an informed assessment of the potential consequences a petroleum activity may have on their interests, functions or activities. Stakeholders who require specific information for example, relevant science about potential impacts to a particular species or sound exposure profiles should inform the titleholder as part of the consultation process.

A titleholder must submit an environment plan that contains a report on all consultations undertaken with relevant stakeholders. This report must include a copy of all correspondence between both parties and an assessment of the merits of any claims or objections made by a stakeholder. NOPSEMA then makes an assessment of the information that has been provided in the report to make a judgement based on its expertise about whether or not the consultation has been appropriate.