

From: [REDACTED]
Sent: Fri, 7 Mar 2025 03:26:01 +0000
To: [REDACTED]
Cc: [REDACTED]
Subject: NOPSEMA/CGG meetings next week
Attachments: Regia MSS - Meeting 4 Prep - Marine fauna management.docx

Good morning [REDACTED]

Please find attached some preparatory questions for Meeting 4 on Wednesday next week.

With regards to Meeting 3, at this stage we believe that we have found and understood the deficiencies with regard to the commercial fisheries (and spawning) assessments. As such, we'd like to postpone the meeting on Monday. We're still working through the changes so we might request the meeting on this topic at a later date, but for now we don't have any pressing clarifications or questions.

Have a great weekend.

Kind regards,

[REDACTED]

Meeting 4: Marine mammal assessment and protection

12 March 2025

Topic	Marine mammals
Letter Items	2.5
CGG Queries	<p>Deferment of the definition was to:</p> <ol style="list-style-type: none"> 1. Allow an expert to make the call on the number. 2. To respect interannual variation because what 'low numbers' would differ every year. <p>Options would be:</p> <ul style="list-style-type: none"> • Creating a definition of 'low numbers' be a better pathway forward for addressing this item; or • Reframe the EPS for pre-survey monitoring to be "Pre-survey aerial surveillance and spotter vessel scouting confirm no: <ul style="list-style-type: none"> ○ BW in the Active Source Area + 23 km; or ○ Fin and Sei whales in the Active Source Area + 5 km."
Letter Items	3.1
CGG Queries	<p>Are NOPSEMA querying the application of the 160 dB thresholds or just its application to pregnant females, mother/calf pairs, or calves only?</p> <p>What are the uncertainties from NOPSEMA perspective that have not already been covered in the assessment in E7?</p> <p>Is 3.1(b) indicating that we need to use a SEL cum 24hr threshold as well as the SPL in our assessment? Clarification is required to understand what is being asked.</p> <p>On 3.1(c), the analysis cannot be completed due to insufficient data on the exact timing of previous surveys. We only have EP records from 2012, and even then, this only gives us design windows, not actual acquisition timings. Therefore, we propose to remove this analysis.</p>
Letter Items	3.5
CGG Queries	<p>Are NOPSEMA still comfortable with the multiple lines of evidence approach to marine fauna detections and the fact that no one control measure by itself is 100% effective in detecting marine fauna?</p> <p>Appendix F5 occurred after completion of Appendix E7 and was commissioned to support, but not complete, the ALARP analysis. CGG can assess all the technologies (items of equipment) in the ALARP assessment noting that our case was that we've already adopted extensive measures such that further analysis itself was gross disproportionate meaning that analysis everything in Appendix F5 was grossly disproportionate and not required. Is it necessary to ALARP every conceivable measure or could a case that further analysis is grossly disproportionate be accepted by NOPSEMA?</p> <p>CGG acknowledges that our detection measures are weakest at night and at distances beyond visual observation. Would NOPSEMA agree that any</p>

	<p>further measures to be adopted should fill this gap, rather than duplicate existing control measures?</p> <p>CGG are studying whether the spotter vessel can be fitted with PAM technology. We are also studying the application of 'scouting' and 'sentry' procedures as control measures for the spotter vessel. We are also working with providers of infrared cameras.</p>
Letter Items	3.5
CGG Queries	<p>CGG currently has not locked in a vessel contractor so cannot confirm some of the details of the PAM technology that will be used.</p> <p>What level of detail is NOPSEMA expecting to see about the PAM / ADM systems?</p> <p>Can NOPSEMA point to any other EP that may have required similar level of detail being requested in the letter?</p> <p>What relevance does the type of detection and classification software have as to whether the measure is effective?</p> <p>Is it that NOPSEMA want more detail on the control measure itself?</p> <p>NOPSEMA have queried the consideration of "extrinsic factors" in understanding the effectiveness of PAM / ADM systems. Given that these measures have been adopted (despite concern about low or no vocalisation), and the case being based on multiple lines of evidence approach, why is it necessary to consider these matters in such detail?</p>
Letter Item	3.5 – Whale expert panel
	How much detail would NOPSEMA need to sufficiently understand the function of the whale expert panel and CGG's reliance on them?
Letter Item	3.5 – ADM System (Tethered Buoy Trail)
CGG Query	This activity is not part of a petroleum activity. Thus, whilst it is relevant to raise in the context of understanding the effective of the system, CGG proposed not to provide any further detail about the trial in the EP. Can NOPSEMA confirm it understands why CGG proposed to take this approach?
Letter Item	3.5
CGG Query	<p>What relevance does the effectiveness of a control measure have in a demonstration that impact and risks are of an acceptable level? Isn't this about ALARP demonstration?</p> <p>In relation to the ALARP demonstration, CGG removed content from the previous submission (old Appendix F2) about the effectiveness of adopted control measures based on NOPSEMA feedback. Would NOPSEMA like to see this content reinstated and would it be sufficient to address these letter items?</p>

	<p>Could NOPSEMA advise on the degree of detail required to describe the effectiveness of control measures if they have been adopted versus if they have been rejected.</p>
Letter Item	3.5
CGG Query	<p>The NOPSEMA letter states “The overall fauna detection strategy (i.e. all acoustic and visual techniques, individually and collectively) requires further consideration of the relevant intrinsic and extrinsic factors to understand how effective the monitoring techniques will be to inform mitigation decisions and demonstrate that impacts will be reduced to an acceptable level.”</p> <p>Can NOPSEMA advise what this means, and the level of detail expected in the resubmission? Again, would the content removed from old Appendix F2 be sufficient to meet this expectation?</p>
Letter Item	3.5
CGG Query	<p>NOPSEMA appear to assume that the ADM systems are part of the petroleum activity.</p> <p>Pending advice from NOPTA, CGG is currently of the view that they are not part of the petroleum activity and thus communication or study of the impacts and risks arising from detection technologies would not be discussed in the EP. Can NOPSEMA confirm its understanding of CGG’s position?</p>
Letter Item	5.3
CGG Query	<p>CGG has reviewed other EP’s and is considering adding the following information:</p> <ul style="list-style-type: none"> • 1x Lead Marine Fauna Observer: Minimum of 2 years’ experience and a minimum of 12 months experience working in Australia. • 4x (1 of which will be relief) Marine Fauna Observers: Minimum of 12 weeks experience. • 1x Lead PAM Operator: Minimum of 2 years’ experience and a minimum of 12 months experience working in Australia. • 1x PAM Operator: Minimum of 12 weeks experience. • 1x ADM Operator: Minimum of 12 weeks experience. <p>The Whale Expert Panel will consist of a minimum of four experts and will have the following experience:</p> <ul style="list-style-type: none"> • 1x SRW expert with experience with SRW in southern Australia: Will have a PhD in Southern Right Whales in Australia and have experience in Southern Right Whale detections and observations. • 1x BW expert with experience with BW in southern Australia: Will have a PhD Blue Whales in Australia and have experience in Blue Whale detections and observations. • 1x Marine mammal expert with experience with whale observations/detections in southern Australia: Will have formal

	<p>qualifications in marine science with a focus on marine mammals and have experience in observations and detections of marine mammals in Australia.</p> <ul style="list-style-type: none"> • 1x CGG representative will have experience and understanding of seismic surveys, and EP requirements. <p>There may be other competencies listed if further positions are added because of the review work underway e.g. PAM on the spotter vessel and onshore observers.</p>
Letter Item	Editorial 16
CGG Query	<p>Given that CGG have worked based on the largest threshold exceedance distances and that clarification is only possible from JASCO, is it critical that the large ranges are explained? JASCO have indicated a long lead time for them to complete this work.</p>