



# MARINE MAMMAL COMMISSION

7 September 2016

Ms. Jolie Harrison, Chief  
Permits and Conservation Division  
Office of Protected Resources  
National Marine Fisheries Service  
1315 East-West Highway  
Silver Spring, MD 20910-3225

Dear Ms. Harrison:

The Marine Mammal Commission (the Commission), in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the application submitted by Neptune LNG LLC (Neptune) seeking authorization under section 101(a)(5)(D) of the Marine Mammal Protection Act (MMPA) to take small numbers of marine mammals by harassment. The taking would be incidental to maintenance, repair, and decommissioning of its liquefied natural gas (LNG) deepwater port off Massachusetts during a one-year period. The Commission also has reviewed the National Marine Fisheries Service's (NMFS) 25 August 2016 notice (81 Fed. Reg. 58478) announcing receipt of the application and proposing to issue the authorization, subject to certain conditions.

Since 2009, Neptune's LNG port has been used for delivery of re-gasified natural gas in waters off of Massachusetts. Due to changes in the natural gas market, Neptune plans to decommission its port. Operators could conduct maintenance and repair activities for up to 14 days prior to decommissioning the port. Decommissioning activities could occur for up to 70 days between 1 May and 30 November 2017. Maintenance, repair, and decommissioning activities would employ vessels that use a dynamic positioning system.

NMFS preliminarily has determined that the proposed activities could temporarily modify the behavior of small numbers of up to 14 species of marine mammals, but that the total taking would have a negligible impact on the affected species or stocks. NMFS does not anticipate any take of marine mammals by death or serious injury and believes that the potential for temporary or permanent hearing impairment from the proposed activities would be at the least practicable level because of the proposed mitigation measures. The proposed mitigation, monitoring, and reporting measures include—

- prohibiting decommissioning activities<sup>1</sup> from occurring from 1 December through 30 April;
- using delay and shut-down procedures;

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<sup>1</sup> Maintenance and repair activities would be considered unplanned or emergency activities and could be conducted year-round.

- using qualified vessel-based protected species observers to visually monitor for the presence of marine mammals;
- requiring all vessels approaching, departing from, or docked at the port to take appropriate actions to minimize the strike of whales by obtaining sighting information, reporting their activities, reducing vessel speed, and taking other vessel strike mitigation measures as specified in the proposed incidental harassment authorization;
- using four near real-time autonomous recording units to monitor for whale calls and record and analyze background and project-related sound levels;
- reporting injured and dead marine mammals to NMFS, the U.S. Coast Guard, and the Northeast Marine Mammal Stranding Coordinators using NMFS's phased approach and suspending activities, if appropriate; and
- submitting a final report to NMFS.

### Estimation of takes

The method NMFS used to estimate the numbers of takes<sup>2</sup> during the proposed activities, which summed fractions of takes for each species across days, does not account for and negates the intent of NMFS's 24-hour reset policy. Instead of summing fractions of takes across days and then rounding to estimate total takes, NMFS should have calculated a daily take estimate (determined by multiplying the estimated density of marine mammals in the area by the daily ensonified area) and then rounded that to a whole number *before* multiplying it by the number of days that activities would occur. For species in which estimated daily takes would round down to zero, NMFS should use the average group size as a proxy for the estimated number of takes, as has been done for other incidental harassment authorizations (80 Fed. Reg. 75380, 81 Fed. Reg. 23144). NMFS appears to have taken a similar tack in the proposed authorization for North Atlantic right whales, sei whales, Risso's dolphins, and killer whales, even though there is no mention of this in the *Federal Register* notice. If NMFS believes any of those species could be taken on multiple days, NMFS should multiply the average group size by the number of days of activities.

In response to Commission comments, NMFS recently indicated that it generally does not round take calculations to derive a daily take estimate prior to summing values across total project days (81 Fed. Reg. 56598). Rather, it applies standard rounding rules at the end of its calculations, which NMFS believes results in a more accurate estimation of takes over the duration of the project and authorization (81 Fed. Reg. 56598). The Commission reviews all of NMFS's proposed incidental harassment authorizations, and notes that, in fact, NMFS has used the method of rounding on a per day basis for more than 50 percent of the relevant authorizations<sup>3</sup> in the last year. The issue of mathematical accuracy is distinct from the fact that NMFS inconsistently abides by its own 24-hour

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<sup>2</sup> The Commission also notes that, even if one uses NMFS's approach of rounding after summing fractions of takes, the numbers of takes provided in Table 2 are greater than what a simple calculation yields for 10 of the 14 species. For example, long-finned pilot whale takes are estimated to be 6 using NMFS's method, not 8 as stated in Table 2 of the *Federal Register* notice. In addition, gray seal takes would be 85 based on NMFS's method, but 1,586 takes were included in Table 2 of the notice.

<sup>3</sup> Which used the ensonified area, species-specific densities, and number of days of activities to estimate the numbers of takes.

reset—a policy decision that NMFS made many years ago and which continues to be applicable, if not always implemented<sup>4</sup>.

NMFS also indicated that it concurred with the Commission that a consistent approach to estimating potential takes, where appropriate, is important and that it would consider the Commission's recommended methodology on an action-specific basis (81 Fed. Reg. 56590). This response essentially means that NMFS would determine how to estimate takes on a case-by-case basis rather than implement a consistent approach, which was presumably a reason the policy was established. Therefore, the Commission again recommends that NMFS (1) follow its policy of a 24-hour reset for enumerating the number of each species that could be taken during the proposed activities, (2) apply standard rounding rules before summing the numbers of estimated takes across days, and (3) for species that have the potential to be taken but model-estimated or calculated takes round to zero, use group size to inform the take estimates—these methods should be used consistently for all future incidental take authorizations. The Commission discussed this matter with NMFS a number of months ago and has been awaiting further discussions to resolve this matter.

The Commission trusts these comments will be helpful to NMFS. Kindly contact me if you have any questions concerning the Commission's recommendation.

Sincerely,



Rebecca J. Lent, Ph.D.  
Executive Director

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<sup>4</sup> See the Commission's [18 August 2016 letter](#) for more details on this issue and *Federal Register* notice regarding NMFS's technical guidance for assessing the effects of anthropogenic sound on marine mammal hearing—underwater acoustic thresholds for onset of permanent and temporary threshold shifts (PTS and TTS, respectively; 81 Fed. Reg. 51694).