

NRDC SHOULD ACCEPT NOAA/NMFS' REJECTION OF NRDC'S SEISMIC COMMENTS

The Council on Environmental Quality is reviewing the Bureau of Ocean Energy Management, Regulation and Enforcement's ("BOE") NEPA practices and procedures that are relevant to Outer Continental Shelf oil and gas leasing. The Natural Resources Defense Council submitted comments on CEQ's review ("NRDC's Comments").

NRDC's Comments argue, *inter alia*, that the oil and gas industry's offshore use of seismic airguns poses significant risks to marine mammals and fisheries. NRDC's Comments further argue that these risks must be addressed through changes in NEPA procedures. NRDC's requested changes include rules and legislation that require BOE to defer to NOAA on seismic issues.¹ The National Marine Fisheries Service is the NOAA entity most directly involved with seismic issues.

NOAA/NMFS recently rejected NRDC's arguments against seismic in another proceeding. This other proceeding is the Incidental Harassment Authorization ("IHA") that NOAA/NMFS issued to Statoil under the Marine Mammal Protection Act ("MMPA").² NRDC and others were critical of this seismic IHA for Alaskan waters, and argued against it on many grounds, including potential harm to bowhead whales. NOAA/NMFS rejected these arguments and concluded that, as currently regulated, seismic doesn't pose much of a risk to anything at all.³

NRDC's Comments repeatedly urge CEQ to promulgate regulations and seek legislation that requires BOE to consult with and defer to NOAA/NMFS during BOE's NEPA analysis of seismic impacts. For example,

"[CEQ should] Require through regulation that MMS prepare programmatic and project-specific NEPA reviews on the acoustic impacts of OCS activities on marine wildlife, to

¹ NRDC Comments, pages 1, 2-3, 5, 6-8, 13. NRDC's comments are available online at <http://www.whitehouse.gov/sites/default/files/webform/CEQ%20MMS%20Review%20comments%203Jun10.pdf>

² <http://edocket.access.gpo.gov/2010/2010-19962.htm>. NOAA/NMFS provided essentially the same decision and response to NRDC's comments on an IHA issued to Shell under NEPA and the MMPA. 75 FR 49709 (August 13, 2010), <http://edocket.access.gpo.gov/2010/2010-19950.htm>. We will generally cite the Statoil decision and responses in the interests of brevity.

³ NOAA/NMFS' Federal Register notices at 75 FR 49760, <http://edocket.access.gpo.gov/2010/2010-19962.htm> (NMFS issues Incidental harassment authorization ("IHA") for seismic surveys by Statoil, USA E&P Inc.), and at 75 FR 49709 (August 13, 2010), <http://edocket.access.gpo.gov/2010/2010-19950.htm> (NMFS issues IHA for seismic surveys by Shell Offshore Inc.).

consider a ‘worse-case’ scenario for acoustic impacts on wildlife populations, and to consult with NOAA on both its impact methodology and alternatives analysis.”

“[CEQ should]Strengthen NOAA’s role in EIS preparation beyond the status of a co-operating agency, such as by adopting regulations requiring MMS to justify, in the Federal Register, its derogation from any recommendations made by its sister agency; and suggest that Congress amend OCSLA to accord NOAA further deference, particularly at the planning and leasing stages of OCS review.”⁴

Given NRDC’s deference to NOAA/NMFS on seismic, and given NOAA/NMFS’ decisions on the Statoil and Shell IHAs, we assume that NRDC no longer opposes oil and gas seismic as currently regulated. Consequently, we assume that many of NRDC’s Comments are now moot.

We next provide some of NOAA/NMFS’ statements on seismic from the Statoil IHA. Most of these statements respond to and reject NRDC’s comments on the IHAs:

“NMFS has determined that an IHA is the proper authorization required to cover Statoil's survey. As described in other responses to comments in this document, NMFS does not believe that there is a risk of serious injury or mortality from these activities. The monitoring reports from 2006, 2007, 2008, and 2009 do not note any instances of serious injury or mortality (Patterson et al. 2007; Funk et al. 2008; Ireland et al. 2009; Reiser et al. 2010).”⁵

NOAA/NMFS reiterated that

“To date, there is no evidence that serious injury, death, or stranding by marine mammals can occur from exposure to airgun pulses, even in the case of large airgun arrays.”⁶

“NMFS believes that the required monitoring and mitigation measures are effective and are an adequate means of effecting the least

⁴ NRDC Comments, pages 2-3,

<http://www.whitehouse.gov/sites/default/files/webform/CEQ%20MMS%20Review%20comments%203Jun10.pdf> . NRDC’s Comments still use the old name, Minerals Management Service, for BOE.

⁵ 75 FR 49766, <http://edocket.access.gpo.gov/2010/2010-19962.htm>

⁶ 75 FR 49795-96, <http://edocket.access.gpo.gov/2010/2010-19962.htm>

practicable impact to marine mammals and their habitats. The monitoring reports from 2006, 2007, 2008, and 2009 do not note any instances of serious injury or mortality (Patterson et al. 2007; Funk et al. 2008; Ireland et al. 2009; Reiser et al. 2010).”⁷

With regard to the contentious issue of effects on bowheads, NOAA/NMFS explained that these whales are not in danger from seismic:

“The Biological Opinion concludes that the proposed marine and seismic surveys by Shell and Statoil in the Beaufort and Chukchi Seas during the 2010 open water season are not likely to jeopardize the continued existence of the endangered fin, humpback, or bowhead whale. No critical habitat has been designated for these species, therefore none will be affected. In addition, the population of the Bering-Chukchi-Beaufort Sea stock of bowhead whales is increasing at a rate of 3.5% (Brandon and Wade 2004) or 3.4% (George et al. 2004), despite whales being harvested by the Alaska natives (Angliss and Allen 2009). The count of 121 calves during the 2001 census was the highest yet recorded and was likely caused by a combination of variable recruitment and the large population size (George et al. 2004). The calf count provides corroborating evidence for a healthy and increasing population (Angliss and Allen 2009).”⁸

NOAA/NMFS are convinced that, as currently regulated, seismic poses no risk of physical harm to marine mammals. Only behavioral effects may occur, and they will not cause any “biologically significant effects”:

“Therefore, NMFS believes that potential impacts to marine mammals in the Chukchi Sea by seismic surveys would be limited to Level B harassment only, and due to the limited scale and remoteness of the project in relation to a large area, such adverse effects would not accumulate to the point where biologically significant effects would be realized.”⁹

“For issues regarding behavioral change and masking by the proposed Statoil seismic surveys, NMFS does not believe that received SPLs from the airgun arrays would cause drastic changes in behavior or auditory

⁷75 FR 49795-96, 75 FR 49778, <http://edocket.access.gpo.gov/2010/2010-19962.htm>

⁸ 75 FR 49784, <http://edocket.access.gpo.gov/2010/2010-19962.htm>.

⁹ 75 FR 49773, <http://edocket.access.gpo.gov/2010/2010-19962.htm>.

masking in marine mammals outside the safety zones. Unlike military sonar, seismic pulses have an extremely short duration (tens to hundreds of milliseconds) and relatively long intervals (several seconds) between pulses. Therefore, the sound energy levels from these acoustic sources and small airguns are far lower in a given time period. Second, the intervals between each short pulse would allow the animals to detect any biologically significant signals, and thus avoid or prevent auditory masking. Although airgun pulses at long distances (over kilometers) may be “stretched” in duration and become non-pulse due to multipath propagation, the intervals between the non-pulse noises would still allow biologically important signals to be detected by marine mammals. In addition, NMFS requires mitigation measures to ramp-up acoustic sources at a rate of no more than 6 dB per 5 min. This ramp-up would prevent marine mammals from being exposed to high levels of noise without warning, thereby eliminating the possibility that animals would dramatically alter their behavior (i.e. from a ‘startle’ reaction).”¹⁰

NOAA/NMFS also reminded NRDC and other commenters that not all behavioral effects constitute “Takes” for purpose of regulation:

“A ‘take’ by Level B harassment [under the MMPA] is defined as ‘any act of pursuit, torment, or annoyance which * * * has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering’ (emphasis added). A brief startling response without subsequent change of the animal’s ongoing behavioral pattern, for example, does not constitute a ‘take’ under the definition of MMPA. Therefore, marine mammals that briefly respond to certain received noise levels may not be ‘taken,’ as long as there is no disruption of their behavioral patterns.”¹¹

In granting the Statoil and Shell IHAs, NOAA/NRDC concluded that

“In regard to impacts, there is no indication that seismic survey activities are having a long-term impact on marine mammals. For example, apparently, bowhead whales continued to increase in abundance during periods of intense seismic activity in the Chukchi Sea in the 1980s (Raftery et al. 1995; Angliss and Outlaw 2007), even without

¹⁰ 75 FR 49799 , <http://edocket.access.gpo.gov/2010/2010-19962.htm>.

¹¹ 75 FR 49773, <http://edocket.access.gpo.gov/2010/2010-19962.htm>.

implementation of current mitigation requirements. As a result, NMFS believes that seismic survey noise in the Arctic will affect only small numbers of and have no more than a negligible impact on affected marine mammal species or stocks in the Chukchi Sea. As explained in this document and based on the best available information, NMFS has determined that Statoil's activities will affect only small numbers of marine mammal species or stocks, will have a negligible impact on affected species or stocks, and will not have an unmitigable adverse impact on subsistence uses of the affected species or stocks.”¹²

In sum, NOAA/NMFS’ conclusions directly rebut and reject NRDC’s seismic comments on the IHAs. They indirectly rebut and reject most of NRDC’s seismic comments to the CEQ. NRDC argues that NOAA/NMFS should be given deference with regard to regulating seismic in the OCS. Consequently, since NOAA/NMFS conclude that seismic as currently regulated poses no significant risks to any OCS life form, we assume that NRDC no longer requests NEPA reforms for seismic.

We also assume that NRDC will retire from the list of plaintiffs in the case *NRDC v. Salazar*, 2:10-cv-01882 (E.D. LA). This case involves allegations against BOE’s regulation of seismic. These allegations conflict with NRDC’s deference to NOAA/NMFS’ recent conclusions about seismic.¹³ For example, NRDC’s complaint argues that the Brazilian Engel study shows that seismic causes whales to strand.¹⁴ NOAA/NMFS disagree.¹⁵

This is the first of a series of articles about NRDC’s comments to CEQ. Our next article is about NRDC’s comments on seismic effects on fisheries.

¹² 75 FR 49766, <http://edocket.access.gpo.gov/2010/2010-19962.htm>

¹³ A copy of NRDC’s complaint is available at http://thecre.com/theipd/2010/20100708_soundings.html

¹⁴ See http://thecre.com/theipd/2010/20100708_soundings.html

¹⁵ 75 FR 49767, <http://edocket.access.gpo.gov/2010/2010-19962.htm>