

3. BOEM attempts to rationalize and minimize the potential impacts of Alternatives E1 and E2 by highlighting “the substantial declines in oil and gas prices since mid-2014 will likely curtail oil and gas exploration activities, implying that G&G activities may decline in absence of Alternative E.” DPEIS at 4-391, 392. However, the economic impacts are an estimate of future activity comparing the potential impacts with and without the proposed policy, not a comparison to an activity level in the past or a speculation about future oil prices as drivers of exploration. This comparison does not justify not including potentially large impacts of lost drilling activity.
4. On pages 4-391 and 392, BOEM makes several statements regarding potential impacts of Alternative E that are not relevant to the economic analysis or are not justifiable. In particular, whether the impacts are “nominal or minor” relative to the overall economy of all the coastal states is irrelevant. The full economic impacts of the action, in and of itself, should be estimated. The statement that “the majority of workers that are displaced from the G&G industry would likely be able to find employment in the region” is neither justified nor plausible, especially in the case of non-maritime workers on seismic survey vessels.
5. The statement that United States production will depend “on the extent to which oil and gas companies divert capital from offshore oil and gas development to onshore development in the US” is highly misleading. DPEIS at 4-401 and 4-403. Capital will move globally, not just within the United States. Restricted offshore GOM capital expenditures will likely go to the best second alternative, which will not necessarily be in the United States. Certain offshore specific assets, such as drilling rigs, will definitely be deployed in foreign offshore markets, not U.S. onshore.

The analysis BOEM has provided for Alternative F is no better. The potential economic impact would be dependent on the number of quality oil and gas targets in the four areas. In addition, there are at least 5,350 active leases in these areas whose potential value would be greatly compromised. Any current investment in these areas would be essentially stranded and the value of lost revenue could be in the billions of dollars, yet BOEM has not provided estimates for these lost opportunities.

Finally, BOEM has determined that Alternative G – a complete halt to seismic surveys would only have a “moderate” socioeconomic impact. This is a stunning remark coming from BOEM, suggesting it does not grasp that offshore oil and gas exploration and development fundamentally require seismic data acquisition in order to pursue and support ancillary activities. Without seismic data, offshore oil and gas exploration and development would simply not be economically viable. The complete collapse of the offshore oil and natural gas industry in the GOM, including the loss of all direct, indirect and induced jobs and GDP contributions for operations in federal waters, would hardly be a “moderate” impact. The impacts of shutting down seismic surveys in the GOM are clearly “major” and Alternative G should be dropped from further consideration.

In sum, BOEM has failed to provide an adequate accounting of potential economic impacts for stakeholders to make an adequate assessment of the practicability or feasibility of the proposed alternatives. The Associations respectfully urge BOEM to conduct the required quantitative analyses and provide the findings for appropriate consideration going forward.

E. The DPEIS Fails to Use Recently Issued Acoustic Criteria and Presents an Unnecessarily Confusing Acoustic Analysis

In August 2016, NOAA issued its *Technical Guidance for Assessing the Effects of Anthropogenic Sound on Marine Mammal Hearing* (the “Guidance”). The Guidance establishes acoustic criteria for evaluating Level A harassment and TTS. Despite the availability of drafts of the Guidance and the scientific bases for the Guidance for many months prior to August 2016, the DPEIS’s exposure modeling analysis does not use the Guidance. See DPEIS at 1-17 and 1-20. The Associations assume that BOEM will use the Guidance in subsequent action-specific NEPA analyses.³⁶ However, even if this assumption is correct, BOEM must clarify and better explain the relevance of the Guidance in the DPEIS.

For example, the DPEIS states that “at a first glance, there are differences between the values [generated by the Guidance and by the DPEIS exposure modeling], but they do appear significant at a programmatic level.” DPEIS at 1-18. It is not clear from this statement whether BOEM intends to say that the differences are or are not likely to be significant at the programmatic level considered in the DPEIS. Additionally, the DPEIS states that “there is the potential for some fairly large differences in results from the modeling done by BOEM and the 2016 NMFS acoustic guidance” and cites an example for low-frequency (“LF”) cetaceans. However, this example makes a number of simplifying assumptions, such as “most of an airgun’s energy is produced in the 100- to 300-Hz frequency band.” *Id.* This assumption is not entirely correct because sounds produced by airguns contain substantial energy from 10 to 60 Hz. Additionally, the -13 dB difference between the two frequency weighting functions noted in the DPEIS are calculated by considering only the 200 Hz frequency band, while substantial differences between the frequency weighting functions are present from 30 to 1,000 Hz.

As another example, for mid-frequency (“MF”) and high-frequency (“HF”) cetaceans, the frequency weighting curves shown in the DPEIS are even more dramatically different across the 100 to 300 Hz band selected to represent airgun sounds. *Id.* However, the preliminary analysis in the DPEIS does not address how this may dramatically reduce the area or volume within which MF and HF cetaceans may be considered exposed above the criteria. Instead, the DPEIS goes on to address high resolution geophysical (“HRG”) sources and indicates they would be evaluated as non-impulsive sources. Treating HRG sources as non-impulsive would be a break from traditional assessments, yet this is not explained or justified in the DPEIS or its appendices.

³⁶ We also assume that NMFS will apply the Guidance in its evaluations of MMPA ITAs associated with GOM activities.