

WGWAP Statement of concern with respect to proposed seismic activity on the Sakhalin shelf in 2015

8 May 2015

IUCN postponed WGWAP-16 because Sakhalin Energy had not delivered expected information and documents in a timely fashion or in some cases, at all. Instead, IUCN hosted an informal working group meeting at its headquarters in Gland from 27-29 April 2015¹ (comprising the Panel, IUCN, Sakhalin Energy staff, Lender representatives, and NGOs).

The Panel is very disappointed at this breakdown of communication since early 2015 and the absence of some essential information. This was particularly problematic with respect to the Panel's ability to provide final advice for monitoring and mitigation of Sakhalin Energy's planned 2015 seismic survey.

In the absence of complete information, a formal WGWAP-16 Panel meeting and hence a formal Panel report with recommendations, the Panel makes the following *Statement* based on the information that was available to it on 8 May 2015. As noted below, the basis for this includes some information provided by Sakhalin Energy during and shortly following the informal meeting. The Panel is also hoping to complete some additional modelling work that takes into account the new information but this is complex; if and when those results become available, this may necessitate an additional statement from the Panel.

Whilst the statement focusses on the 2015 seismic programme, the Panel notes that there are other activities that may disturb gray whales in the Sakhalin area, including possible entanglement in fishing gear and other non-seismic activities of the oil and gas companies. These should be included in any full assessment of cumulative impact but at present there is insufficient information to support such an assessment.

Background to the proposed 2015 seismic surveys

The Panel began working with Sakhalin Energy to develop a monitoring and mitigation plan (MMP) for the Company's proposed 2015 seismic survey in October 2013 (Noise Task Force meeting²) based upon the MMP that had been developed for a 2010 seismic survey and subsequently used as a case study to inform guidelines for responsible practices to minimise impacts of seismic surveys on marine mammals (Nowacek *et al.*, 2013). The total area of Sakhalin Energy's proposed 2015 survey is twice that of the Company's 2010 survey.

The primary mitigation measure advised by the Panel is for seismic surveys at Sakhalin is to ensure they are completed as early in the season as ice conditions allow and before peak numbers of whales have reached the Piltun feeding area. This was again the principal measure around which the MMP was developed for the 2015 survey, expected to begin around 10 June

¹ http://www.iucn.org/wgap/wgap/meetings/wgap_wm/

² Report available at https://www.iucn.org/wgap/wgap/task_forces/noise_task_force/

and last for about 30 days. Some relaxation of provisions in the 2010 MMP was justified given this mitigation objective to complete the survey before most of the whales had arrived.

In October 2014, when development of the MMP for the planned 2015 Sakhalin Energy survey was approaching completion, the Panel learned that Exxon Neftegas Ltd (ENL) was also planning a major seismic programme (including some work on behalf of Rosneft), part of which is near the 2015 Sakhalin Energy survey off Sakhalin. However, as ENL does not seek the Panel's advice, detailed information on that company's plans was not available. It was nonetheless clear that the combined level of planned seismic activity adjacent to and inside the primary gray whale feeding area off Sakhalin was greater than had ever before occurred and therefore that the Panel needed to take the ENL surveys into account when providing advice regarding the 2015 season.

The Panel has long been aware of the problem that only one operator among several participates in the WGWAP process, and of the difficulties this brings for Sakhalin Energy. The Company's continuing engagement in the WGWAP process, especially given these circumstances, is appreciated by the Panel as well as IUCN and other groups that are active participants and contributors (e.g. some Russian authorities, lenders and NGOs).

Advice provided at the end of 2014

After a final NTF meeting (NTF-8²) in November 2014, the Panel provided its advice in the WGWAP-15 report issued in December 2014³. In summary, the Panel concluded that from a precautionary perspective, it would not be appropriate for both companies' full proposed seismic programmes to take place in a single season given the predicted and prolonged ensonification beyond the threshold that has been shown to result in behavioural disturbance of almost the entire gray whale coastal feeding and especially nursery area. With the available information on the ENL surveys at that time, the Panel estimated that (1) the cumulative sound exposure of gray whales during the 2015 Sakhalin Energy survey would be greater than that during the 2010 survey (which could result in the whales moving away from their preferred feeding area) and (2) the cumulative exposure resulting from the 2015 ENL surveys would be considerably greater than that from the Sakhalin Energy survey. The Panel recommended that serious consideration be given to postponing either the Sakhalin Energy survey or the ENL surveys to 2016 (recommendations WGWAP-15/007 and 008). The Panel urged the companies to work together to develop a solution. The Panel also agreed on an MMP for the Sakhalin Energy survey *subject* to the provision of important information to show that the Company was prepared to implement the MMP successfully, and assuming that the seismic survey would start as soon as ice conditions permitted. It also recommended that other companies follow the same approach with appropriate modifications taking into account the details of their surveys.

The Panel's position on 7 May 2015

Through a meeting of the Biodiversity Group (BG) of the Environmental Council under Supervision of the Governor of Sakhalin Oblast on 4 March 2015, the Panel was first

³ Report available at: <https://www.iucn.org/wgwap/wgwap/meetings/>

informed, in broad terms, of the arrangement that had been agreed by the two companies. To avoid simultaneous seismic shooting (which could (a) make results uninterpretable from the business perspective; (b) ensonify the whole gray whale feeding area; and (c) create a more complex sound exposure context that could complicate and exacerbate behavioral reactions of whales), they had agreed to stagger the Odoptu ENL survey and the Sakhalin Energy Piltun-Astokh survey, such that the Sakhalin Energy survey would begin only once that portion of the ENL survey closest to the feeding area (known as ‘A’ lines) has been completed. This means that the Sakhalin Energy survey would begin about one month later than had been anticipated when the 2010 MMP was modified in collaboration with the Panel at the end of 2014. Part of the companies’ rationale for this approach was that it would avoid ensonification of the entire feeding area at a given time, and thereby allow the whales ‘quiet’ areas as potential refuge from high disturbance areas. To the Panel’s knowledge, no exposure modelling has been conducted by either company or both to examine the implications of the new joint agreement with regard to the timing and nature of cumulative acoustic exposure of gray whales. This is in spite of the Panel’s explicit reference in its WGWAP-15 report to the need for such modelling and its expressed willingness to assist in such modelling noted by IUCN/the Panel at the BG meeting in early March.

Sakhalin Energy 2015 survey

The Panel expected to receive detailed new information on Sakhalin Energy’s plans for the 2015 survey well in advance of the planned WGWAP-16 meeting in late April 2015; as noted above, the information did not arrive and IUCN postponed the formal meeting. At the working meeting, Sakhalin Energy provided additional information on some aspects of the survey, as follows:

(1) The sound source and particularly the configuration of the airgun array have been modified since the Panel’s meeting at the end of 2014 (WGWAP-15) with the aim of reducing the acoustic energy expected to enter the feeding area and the modelled estimates will be verified in the field. No information was available during the meeting on the effect this change would have on the cumulative modelling as performed by the Panel in 2014 (Cooke, 2014⁴;). The Panel nevertheless welcomed this new information and will attempt to complete some additional cumulative modelling based on the new sound source as soon as possible.

(2) The Company may shoot some ‘A’ lines at night for operational reasons due to tides (this possible need arises out of the changed start date). This would not be consistent with the agreed December 2014 approaches to 2015 MMP and no modelling results to investigate the implications for gray whales were presented to the Panel at this meeting. (3) Some information was provided informally on preparations for practical implementation of the MMP at the meeting. These have also been included in Sakhalin Energy’s recently updated response to the WGWAP-15 recommendations (ref). As noted above, the Panel had noted that its support for the 2015 MMP as of December 2014 was **conditional** upon timely receipt of certain information from the Company concerning implementation that satisfied its concerns

⁴ Appendix 1 in http://cmsdata.iucn.org/downloads/report_wgwap_15_15_dec_2014_final.pdf

(see NTF-8 and WGWAP-15 reports). This was stressed as being especially important given the much greater scale of the 2015 survey than the 2010 survey.

Given that the start of the Sakhalin Energy survey is only two months away, the Panel is extremely concerned by the limited information it has received thus far and also by the nature of some of that information. The company's proposed MMP was not received by the Panel until 5 May. While pleased finally to receive this document it is unclear why it was not completed and provided prior to the working meeting so that the Panel could have discussed it together. As it is, an initial review shows that it is not in complete accord with the WGWAP-15 recommendations, for example with respect to (a) now allowing for shooting of some A-lines at night and (b) the lack of application of restrictions to all animals, not just mother-calf pairs, after 15 July – although not yet in the revised Sakhalin Energy MMP seen by the Panel, the Company has recently confirmed that it will apply mitigation to all gray whales after 1 August in accord with its response to the WGWAP-15 recommendations⁵, not just mother-calf pairs. In terms of the practical implementation of the MMP in 2015, the Panel has a number of important difficulties in assessing the readiness of the company. The implementation of the MMP is complex as witnessed during the 2010 survey. Major challenges face the newly-appointed leader of the survey command centre, who did not participate in implementation of the 2010 MMP or in development of the 2015 MMP. The Panel remains concerned about: (a) the experience and capabilities of the leaders of the four behaviour observation teams (who are still unknown to the Panel); (b) the lack of advanced field testing of the new technology (e.g. night vision) and a protocol for such testing (this is not anticipated to occur until the Lunskeye survey early in the season); lack of information in the revised MMP on the role of the chase vessel in the proposed pre-dusk scans and whether MMOs will be on board and when; (d) installation of the 'Big-Eye' binoculars and training of the operators; (e) the ability of the MMOs on-board the vessel(s) to carry out their many duties and have adequate rest periods (while expected, the daily schedule for MMOs has not yet been received); and (f) the communication protocols – hardware and software to be used to integrate, visualise and archive data in the field and how a smooth communication process will be achieved among the various monitoring teams and platforms. The Panel recognises that operational matters are the responsibility of the Company. However, the Panel can only **conclude** at this time that it is not confident the outstanding logistical and practical issues can be resolved in the limited time available before the survey begins.

A positive point with respect to the proposed 2015 survey is that Sakhalin Energy has agreed to allow an Independent Observer (appointed by and reporting to the IUCN, acting in cooperation and under advice from the Panel) to monitor all aspects of MMP implementation during the survey and indeed the Company will provide all necessary support to allow this individual to carry out his responsibilities. The Independent Observer's report will be reviewed by the Panel and made publically available on the WGWAP web site.

⁵ <http://iucn.org/wgwap/wgwap/recommendations/>

ENL 2015 surveys

ENL has stated in a number of forums that its seismic survey MMP meets ‘IUCN guidelines’ (presumably meaning Nowacek *et al.*, 2013 and an associated brochure produced by IUCN in collaboration with the Panel⁶). Whilst we welcome ENL’s acknowledgement of the value of the approach that has been developed collaboratively by the Panel, Sakhalin Energy and IUCN, we stress that ENL has not provided the Panel with any detailed information on its MMP or on how it was developed (in spite of repeated requests that it do so). Therefore the Panel cannot verify whether ENL’s MMP does or does not conform to the ‘IUCN guidelines’. To the Panel’s knowledge, there is also no plan for an Independent Observer to be present.

Conclusions

The Panel is not in a position to evaluate the feasibility of either Sakhalin Energy or ENL modifying its MMP at this late stage. Nor can the Panel assess the consequences of any such modifications on gray whales off Sakhalin without the necessary information.

However, the Sakhalin Energy survey alone will result in considerably greater cumulative sound exposure of whales on the Piltun feeding/nursery area than previously estimated for this survey alone (Cooke, 2014), given the later start time for the survey. This also calls into question the decision to allow relaxation of some of the provisions in the 2010 MMP that was made when the Panel believed that the survey would take place one month earlier.

We recognise there are major business and financial implications for the Company in delaying the survey until 2016 and we acknowledge and appreciate the fact that Sakhalin Energy has demonstrated a great deal of co-operation and openness compared to other operators. Nonetheless, given the circumstances described above and from a precautionary scientific perspective, further to its recommendation WGWAP15/-008 that Sakhalin Energy ‘reconsider’ its plan to conduct the seismic survey in 2015, the Panel now **concludes** that from a precautionary perspective, Sakhalin Energy should not conduct the survey in 2015 but should postpone it to 2016. This would allow: (1) the survey to begin as early in the season as ice conditions allow; (2) more time to prepare fully for effective implementation of the MMP; and (3) less overall sound exposure of gray whales during the 2015 season (i.e. only the ENL surveys would occur).

The Panel **stresses** that this unfortunate state of affairs that major seismic activities from several companies can take place without an integrated environmental impact assessment should not occur again. The Panel **strongly believes** that the importance of more dialogue among the operators, the authorities, other stakeholders and the Panel on how to address the issue of cumulative acoustic impacts on gray whales off Sakhalin in a multi-operator context is greater than ever before.

⁶ https://www.iucn.org/wgwap/best_practices/