Electromagnetic Geoservices (EMGS) Canada Inc. Environmental Assessment East Canada CSEM Survey, 2014-2018: Amendment (LGL February 27, 2017)

GENERAL COMMENTS

Fisheries and Oceans Canada (DFO)

Based on the project EA Amendment the proponent has proposed to increase the source output from 1,250 A to 10,000 A. This may subsequently increase the magnetic and electric fields by 8 fold to 80 µT at 100 m for magnetic field and 144 mV/m (1,440 µV/cm) at 30 m for electric field. Modelling the EM field results using these thresholds is mentioned in the Amendment and the original EA and notes a zone of influence (ZOI) of 400 m and 800 m for magnetic and electric fields respectively for the original source, and 500 m and 800 m magnetic and electric field for the new proposed source. It is not clear why the 800 m radius has not changed given the 8 fold increase in source output nor is it clear whether this changes the level of confidence in the overall significance of effects prediction.

Environment and Climate Change Canada (ECCC)

ECCC's previous comments during the review of the original EA Report and Addenda are still applicable.

Fish, Food and Allied Workers (FFAW)

The amendment advises that there will be an increase in source output from 1,250 A to 10,000 A (with the new Deep Blue Source System) but yet this does not change any of the EA conclusions such that there will be no significant residual environmental effects caused by the new source system. We do not feel the impacts of an eightfold increase in current have been adequately explained in this report to justify this conclusion.

The update report advises that the new Deep Blue Source System can transmit from 0 Hz to 25 Hz. It also states that operations are currently planned for 0–10 Hz (same frequency range as the conventional source). The update appears to discuss impacts based on the use of a 10 Hz deep-towed source. For example, the update discusses modeling with a 10 Hz source but not a 25 Hz source. It is unclear in this report if there would be any impacts on an increased frequency transmittal (from 10 Hz to 25 Hz) by the source. I am also wondering if authorization by the Board would enable the company to use up to 10 Hz of sound or the maximum of 25 Hz that the system can transmit.