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July 22, 2011

File No.: 4572-10

Ms. Elizabeth Young
Canada Newfoundland Offshore Petroleum Board
Fifth Floor, TD Place
140 Water Street
St. John's, NF A1C 6H6

Dear Ms. Young:

**RE: Hebron Development Project – EC review of Proponent Information EAS 2009-056K
Response #2 Part A**

As requested in your e-mail of June 20, 2011, Environment Canada (EC) has reviewed the second proponent response to Part 1 review comments for the Hebron Project. Our comments are provided below.

EMCP Comment 24: EC 10 Regarding Sea ice & Icebergs

Environment Canada is satisfied with the Proponent Response.

EMCP Comment 28: EC 14 Regarding Offshore Wind Climate

14a: The response was satisfactory. There is one additional request (sorry this was not noted earlier): Please clarify in the CSR (3.2.2.6) that the adjustment of one-hour means to 10-minute mean wind speeds is an adjustment for the peak one-hour mean to the peak reported 10-minute mean wind speed.

14b: The response clarifies that the wave radar data were not used directly. However, ExxonMobil URC (2009) estimates of design wave criteria for the Hebron Project were developed using a calibration equation based on the MIROS data, which cannot be independently assessed. It is regrettable that the Hibernia MIROS data are not generally available to the offshore environmental/scientific communities. These data could be used to enhance the understanding of differences or similarities between wave radar, wave buoy, and wave modelled data, and to improve knowledge of wave climatology in the area.

The response to the EC 14 request for indication of the level of uncertainty or confidence interval for the extreme wave criteria (Section 3.2.2.1 and 3.2.2.6) was not satisfactory. The ExxonMobil URC (2009) 100-year return period estimate was 14.8m. The Oceans Ltd (2010) analysis included estimates of 15.1 m and 15.8 m, depending on the method. The response indicated that differences in results arising from differences in approach do not affect the overall environmental assessment. However the request concerned estimates used for engineering design. An example of what was requested is the 95% upper limit given in Table 3-

41 for extreme storm surge. Could the CSR include confidence intervals or at least some description of how the differences/range of results might be accounted for in the final design process?

EMCP Comment 61: EC30 Regarding Catastrophic Failure Emissions

Environment Canada is satisfied with the Proponent Response.

EMCP Comment 129: EC 46 Regarding Attraction of Seabirds to Platforms

Environment Canada is not fully satisfied with this response, however, the Proponent's recognition of the need to develop a scientifically defensible program regarding seabird attraction to platforms is encouraging and we are eager to work with the Proponent to better define the key elements of such a program as a means to resolve this issue.

I trust that this information will be of assistance in your review of this proposal. If you wish to discuss these comments or have further questions, please do not hesitate to contact me at your convenience.

Yours truly,

Original Signed by Glenn Troke

Glenn Troke
Environmental Assessment Coordinator
Environmental Protection Operations Directorate/NL

cc Ian McCracken