Appendix G.2
Marine Resources
Information Request #4, 5, 6 and 7

Pacific NorthWest LNG

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Catherine Ponsford
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410-701 Georgia Street West
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Dear Ms. Ponsford:

Reference: Marine Resources Information Request # 4,5,6 and 7

This letter responds to the request for Outstanding Information received from the Canadian Environmental Assessment (CEA) Agency on August 14, 2014.

Information Request #4:

Government of Canada - Outstanding Information

DFO: *For the majority of marine mammal species the proponent provides general statements regarding utilization and timing within the PDA and indicates a level of dependence derived from a methodology based around assumption with little to no location specific data to support the claim. For the majority of the species, abundance within the PDA and LAA has not been reported. Similarly the proponent has not indicated why marine mammals frequent the PDA and LAA. It is important to understand the seasonal fluctuation of occupancy within the PDA and LAA to understand if the current proposal has the potential to disrupt a seasonal occupancy vital to the species in question. For example; if juvenile harbour porpoises are found in abundance within the PDA during a specific period in comparison to surrounding areas this may indicate that the PDA during that period is of specific importance to the local porpoise population. This type of species utilization information (timing, abundance, etc.) has not been provided in sufficient detail to determine residual effects on marine mammals. Please provide this information.*

Information Request #5:

Government of Canada - Outstanding Information:

DFO: *The response only addresses potential impacts to marine mammals for noise generated from blasting and pile driving. The request was to identify measures that would mitigate direct mortality, physical injury, or behavioral changes in marine mammals. It is anticipated that noise and sediment plumes derived from dredging and disposal at sea can result in direct mortality, physical injury, or behavioral changes in marine mammals. Although some mitigation has been proposed, adequate mitigation to avoid significant effects of this nature has yet to be presented. Please provide this information.*

DFO: *The sections listed display general areas where species have been found. Why species utilize these areas and why they are suitable alternatives to the PDA and LAA has not been discussed. Marine mammals are predatory species that occupy areas where prey concentrate. The PDA and LAA are known to inhabit large concentrations of prey species during various periods of the year. Marine mammals are known to be found in conjunction with concentrated prey. If marine mammals are deterred from feeding on the prey found within the PDA and LAA from noise or water quality, are there other abundant prey sources (suitable habitat) in the area that the species can feed on? Please describe this suitable alternative habitat (location, species of prey and timing).*

Information Request #6:

Government of Canada - Outstanding Information:

DFO: *The information presented is general and does not present information or supporting evidence from surveys specific to the PDA and LAA. Please provide detailed information regarding Humpback whale utilization of the PDA and LAA, specifically the timing of, and abundance during, the various occupations throughout the year.*

Information Request #7:

Government of Canada - Outstanding Information:

DFO*: The proponent has provided information on the increase in vessel traffic and probability of a vessel strike but has not indicated marine mammal abundance within the LAA and therefore has not provided a numerical estimate of impacts to marine mammals from vessel strikes. A population reduction estimate is required to determine if residual impacts on marine mammals will be significant. In addition, the probability of vessel strike was derived from a literature review of studies conducted along other shipping routes. Please confirm from what data set the probabilities were derived.*

The prediction of marine mammal vessel strikes is directly related to marine mammal utilization along the shipping route. It is DFO's understanding that the proponent has not conducted marine mammal surveys along the shipping route and therefore the prediction of vessel strikes is not well supported. To determine potential effects from shipping on marine mammals, strike prediction should be derived from marine mammal survey data collected along the shipping route.

Please also refer to Scope of Assessment and Methodology IR #2 for details on conducting a cumulative effects assessment for Marine Resources.

Pacific NorthWest LNG Limited Partnership (PNW LNG) - Response:

Please review the Preliminary Draft Marine Mammal Monitoring and Protection Plan (MMMPP) for responses to the information requests IR # 4, 5, 6 and 7 (Appendix G.3 and and Appendix 1 of Appendix J.8 of the EIS Addendum). The MMMPP presents a framework for managing potential adverse environmental effects based on the Environmental Impact Statement (EIS) for the Project and subsequent feedback from government agencies, Aboriginal groups, stakeholders and the public. The MMMPP consolidates information from the EIS concerning potential project related effects into a single location and expands upon the details of mitigation programs and future survey initiatives. In addition to addressing potential adverse environmental effects resulting from underwater noise caused by marine pile installation, dredging, blasting, other marine construction activities, and project related vessels, the MMMPP also addresses the potential for marine mammal collisions from project vessels.

Closure

This letter provides the Outstanding Information requested by the Government of Canada. If you have any questions, please contact PNW LNG.