March 4, 2016 – Appendix VI - PNWLNG Comments on Appendix 11.5 Proponent's Proposed Mitigation Measures.

Preamble to Appendix 11.5: With respect to the last sentence: *"Note that these do not include the additional measures identified by the Agency, which are described in Appendix 11.4."*

PNWLNG General Comment: There is overlap between those mitigations proposed by PNWLNG and the draft Conditions proposed by the Agency.

Valued Component	CEAA Draft Sec 11.5 – Committed	PNW LNG Response and Suggested Edit
	PNWLNG Proposed Mitigation Measure	or Action
Vegetation	P. 191, 1 st bullet:	A wetland compensation plan is required; however, it is our understanding that
	Develop and implement a wetland	Prince Rupert Port Authority is the lead
	compensation plan in consultation with	federal agency as they are the federal land
	Environment and Climate Change Canada	manager.
	(Canadian Wildlife Service) and Aboriginal	
	Groups.	
	P. 191, 1 st bullet 2 nd sub-bullet:	It is our understanding that the legal agreement will be between PNWLNG and
	Secure, restore or create 120 ha of	the Prince Rupert Port Authority.
	wetlands through a legally binding	
	agreement between Pacific Northwest	
	LNG and Ducks Unlimited Canada.	
	P. 191, 1 st bullet 3rd sub-bullet:	This PNWLNG Proposed Mitigation
		measure is no longer valid.
	Fund the immediate research and	
	restoration priorities of the Burns Bog	The concept has been removed from the
	Management Plan and Burns Bog	current compensation plan at the request
	Ecological Conservancy Area	of the Prince Rupert Port Authority.
	Management Plan.	

		Wetland offsets and restoration programs are to occur as close to those Lelu Island wetlands impacted by the Project as practical.
	P. 193, 3 rd bullet: Speed limit of 16 knots for all LNG carriers, tugs, and barges within the local assessment area. Ensure construction, operations, and decommissioning vessels will adhere to speed limits of 5 knots in Prince Rupert Harbour and Porpoise Channel and Harbour to reduce potential for marine bird collision or disturbance from vessel wake and underwater noise.	PNWLNG believes draft condition 6.17 and the associated wording in Appendix 11.4 (3 rd bullet – page 186) has been endorsed by the Coast Pilots and PRPA as more appropriate than setting defined vessel speed limits.
Marine Fish and Fish Habitat and Marine Mammals, including species at risk and marine plants – Changes to Sediment/Water Quality	P. 194, 5 th bullet: Use tugs with less powerful propulsion systems (i.e., Voith Schneider tugs).	PNWLNG's commitment to the use of tugs that limit propeller scour of seabed sediments was developed and meant to apply to the safe maneuvering of LNG Carriers during operations. Draft Condition 6.16 captured this comment. PNWLNG has suggested a change to this wording accompanied by a rationale.
Marine Fish and Fish Habitat and Marine	P.195, - Underwater Noise – 5 th bullet:	PNWLNG suggests an amendment to this

Mammals, including species at risk and marine plants – Direct Mortality/Physical Injury to Fish and Marine Mammals	Use pile within pile installation techniques should monitoring suggest that the use of bubble curtains is not sufficient mitigation during pile installation.	PNWLNG Proposed Mitigation Measure. Suggest rewording to " Use of bubble curtains <u>or other mitigations</u> are not sufficient during pile installation."
Marine Fish and Fish Habitat and Marine Mammals, including species at risk and marine plants- Injury or mortality from Vessel Collisions	 P. 196, Injury or Mortality From Vessel Conditions, 1st bullet, 2nd sub-bullet: The Proponent Expects: Speed profiles will be established for different route segments. Vessel speeds expected to be reduced during transit to and from the pilot station to reduce the likelihood of serious injury to large cetaceans from a vessel collision. 	After further consideration, PNWLNG does not support the development of speed profiles and agree with the CEAA that: "the speed of the vessel is ultimately at the discretion of the pilot" (CEAA Draft EA Report, Section 6.7.3, page 75).
Marine Fish and Fish Habitat and Marine Mammals, including species at risk and marine plants- Change in Behavior of fish or marine mammals	 P. 196, Change in Behavior of Fish and Marine Mammals, 2nd bullet, 1st sub- bullet: The Proponent Expects: LNG carriers, tugs and barges will not exceed a speed of 16 knots within the local assessment area for LNG carriers, tugs, and barges. 	PNWLNG believes draft condition 6.17 and the associated wording in Appendix 11.4 (3 rd bullet – page 186) has been endorsed by the Coast Pilots and PRPA as more appropriate than setting defined vessel speed limits.
Human Health - Noise	P. 197, Noise, 1 st bullet:	The wording in the Proposed PNWLNG

	Schedule most construction activity between the daytime hours of 7:00 AM to 10:00 PM. Limit nighttime construction activity to low noise activities (no impact type pile driving or blasting activities).	Mitigation Measure is somewhat arbitrary. Suggest deleting first sentence and go with: Limit nighttime construction activity to low noise activities as required by the BC Oil and Gas Commission LNG Export Facility permit.
Effects of the Environment of the Project	P. 203, 3 rd bullet: Ensure that LNG carriers undertake transit, maneuvering and berthing activities only within the environmental limits established specifically for the Project. Environmental limits include criteria for wind and significant wave height as applicable to each activity type.	This PNWLNG proposed Mitigation Measure is redundant to the PNWLNG Mitigation Measure which precedes it herein (correction added since PRPA does not specify pilotage areas): In accordance with Pacific Pilotage Authority regulations,-each LNG carrier will be piloted between Triple Island and the marine terminal berths. This increases the safety associated with transit in fog and conditions of reduced visibility. Bring LNG carriers into the marine terminal only in safe weather conditions, and in compliance with Terminal operations limits that will be set for wind and wave height.
	P. 203, 7th bullet:	PNWLNG will not be implementing the former PNWLNG Proposed Mitigation

Refuse pilotage to LNG carriers that do	Measure and request deletion
not have the capability to let go and	
retrieve their anchor because of ice	
formed on the LNG carrier deck or bow.	