The application for the Ksi Lisims LNG project has now been filed and the public comment period will be open until December 1st. The Ksi Lisims project, proposed by the Nisga'a Nation and its partners Rockies LNG and Western LNG, is a proposal for a floating natural gas liquefaction facility and marine terminal at Wil Milit at the northern end of Pearse Island.

You can make a comment by going to <u>the EAO's project website</u>.

If you want to refer to the Ksi Lisims Detailed Project Description (680 pages), you will find it <u>here</u> If you want to refer to the project's technical material, you will find the index <u>here</u>

You may makes comments anonymously but better to identify yourself. You may attach files to your submission. Consider sending your comments to MLAs: nathan.cullen.mla@leg.bc.ca and Jennifer.Rice.MLA@leg.bc.ca

Possible Comment Themes:

- Climate Impacts. The International Energy Agency said in 2021 that *no new fossil fuel infrastructure can be built* if we are to meet our global climate goals. The Application claims that Ksi Lisims LNG will help reduce global GHGs by displacing higher emissions fuels in Asia, but it does not provide any evidence to support this. It also ignores the approximately 33 million tonnes of emissions that will be released each year when burning this LNG. However, it was difficult to pinpoint the emissions with the lack of info in the application. Will the EAO require the Application to substantiate its claims that Ksi Lisims will provide a global climate benefit? See more under "Emissions Test". The assertion that this project is net zero is not credible.
- Emissions Test. Under the new Environmental Assessment Process, there should have been an Emissions Test completed prior to putting this project out for public comment. It's difficult to provide comment when we don't know what the power source will be. The project description says it will burn natural gas in generators on floating barges to power the terminal or will use electricity from BC Hydro but that will need an upgraded grid and new lines and right of way to the terminal. How can an emissions test be completed if the power source has not yet been decided on or for how long each power source will be utilized? How can submissions be made without this critical piece of information? See more info under "Electricity".
 - Summary of how this relates to LNG & Climate Policy in BC here
- Upstream Emissions. The Application states that the upstream production of the natural gas required to supply the Project will produce 2.8-3.4 million tonnes of emissions per year. However, it relies on Environment Canada numbers, which have been shown to underestimate the emissions from natural gas production. Will the EAO require the Application to recalculate its upstream emissions using data from recent studies that have

measured (and not simply estimated) the fugitive methane emissions from natural gas production sites in BC and Alberta?

- Methane Emissions. Methane is a more potent GHG than carbon dioxide, with a natural life in the atmosphere of around 12 years. Measured over 20 years, it traps 84 times more heat than CO2. When calculating the Project's climate impact from methane, the amount of methane is multiplied by its "global warming potential" (GWP) to compare it to CO2. However, the Application uses incorrect GWP numbers that are lower than the IPCC's most recent GWP numbers, and also it measures the impact of methane over 100 years, disguising the real climate impact of the Project. Will the EAO require the Application to use the correct GWP for methane over both 20-year and 100-year time periods?
- Electricity. The Application states that it will use electricity from the BC grid to power the Ksi Lisims LNG terminal. It will require 4,700 GWh of power each year, which is just less than the amount that the Site C dam will produce. Even with Site C, BC Hydro has said it will need additional power in 2030, when the Project plans to be operational. Generating this additional power or diverting it from other users in BC who need electricity to decarbonize will have effects on the BC economy, and our ability to meet our emissions targets. These effects are not mentioned in the Application. Will the EAO require the Application to specify the effects on B.C. of drawing 4,700 GWh of electricity from the BC grid?
- Economics. If the global community does what is necessary to reduce emissions and address climate change, the LNG from this Project will not be required. This will leave the proponents with a "stranded asset" and will not contribute the type of economic benefits (jobs, taxes, revenue) that the Application promises. However, this scenario is not considered in the Application. Will the EAO require the Application to state the demand for this LNG in a world that achieves its climate goals, using credible sources?
- The Price of Natural Gas. Global demand for LNG may increase the global price of fracked gas. Will the EAO require the Application to consider the impact on natural gas prices for BC businesses and households?
- Impacts on Whales. Approximately 150 tankers will visit the LNG facility each year to transport LNG overseas. The shipping route for these tankers passes through waters frequented by a range of whale species, and runs close to critical habitat designated by the federal government for the Northern Resident Killer Whales. This is already a busy route for ships; what will be the additional impacts of vessel noise on the whales, and the risk of collisions with the LNG tankers?

- **Impacts on Salmon.** The Nass estuary, the the Ksi Lisims terminal is proposed, is the one place that all salmon and steelhead from across the entirety of the 8,335km2 of the Nass watershed, utilize as a necessity for survival. These anadromous fish use this place not once, but twice in their life cycle. This is where salmon and steelhead transform from being freshwater species to salt water (a process called smolting). It's the human equivalent of learning how to breathe on mars. Depending on the species, salmon and steelhead will stay in the estuary for several weeks to several months as they adjust from flowing freshwater water to tidal salt water, learning how to evade new predators and seeking new food sources. After spending 3-5 years migrating out to sea, they return to the estuary and wait there for the right conditions to begin their upstream migration. This makes the Nass estuary the single most, critical habitat for salmon and steelhead in the watershed. There is a study gap on the estuary as it relates to potential impacts to upstream salmon populations and fisheries. A review by DFO has determined that the Project will result in the destruction or harmful alteration of fish habitat, and therefore will require a *Fisheries Act* authorization with a habitat offsetting plan. You simply cannot offset impacts to an estuary. The estuary provides critical habitat that supports juveniles from diverse Nass salmon populations which support upstream fisheries, economies and ecosystem integrity. There is no alternate estuary.
- **Cumulative Effects.** We need a <u>strategic and regional assessment of cumulative effects</u> from the various industries impacting the bioregion. The Ksi Lisims EA process does not consider the impacts of the pipeline (including construction), compressor stations and fracking as part of the cumulative impact assessment nor does it consider the impacts from other industrial developments - existing and proposed. When assessed as individual projects, there is a massive failure to adequately consider the cumulative effects. This is negligent and irresponsible when so much is being put at risk.
- Impacts to Water. Most of the necessary information regarding water use, volume and disposal is missing, inadequate or incomplete. Water used for operations will be sourced from rain (which will, at best, provide less than 15% of the freshwater requirements) and from the estuary. The marine sourced water in the estuary is proposed to be desalinated which is an energy intensive process and the waste-water will be disposed of into the estuary at a much higher temperature. Local surface waters can have very low flow during certain periods of the month, and it is likely the project will withdraw water from these surface waters to meet needs. No Environmental Flow Needs assessments have been performed for these water bodies. Will this be done to ensure that flows necessary for maintaining local ecosystem function are preserved? Emissions from the plant will create local deposition of nitrogen and sulfur-based acids. Acidification studies from the application indicate multiple streams and lakes in the project region are sensitive or highly sensitive to acid inputs. Sewage from the plant is to be treated and also disposed of in the estuary, which contributes to local nutrient and thermal pollution as well as addition of pharmaceuticals and human-borne pathogens. Will large shipping vessels be permitted to

dump sewage in the region? Impacts of sewage on the estuary environment will likely locally reduce dissolved oxygen in the immediate vicinity of discharge.

• Impacts to Eulachon. There is insufficient data provided to ascertain potential impacts to eulachon.

Criticisms of Data Provided:

- Water quality data baseline is not properly determined at terminal location, assumed pipeline route the same but not enough info to properly assess or comment on impacts.
- All aspects of terminal construction are assessed as having *"Potential adverse affect of particular importance or concern"* for water quality, habitat, marine fish, marine mammals.
- Fish presence/absence/habitat utilization (pipeline route, terminal location) only evaluated during a few months which is considered insufficient, there are **many Species of Concern in marine environment, as well as all five species of Pacific salmon**.
- Terminal development will have "possible effects on fish, wildlife and their habitat" but application **does not address long-term effects**, for example shipping traffic or climate change interactions.
- Pipeline route concerns as it links to terminal and the changes this prequires to the PRGT EA and permitting groundwater/wetlands geohydrology (connectivity to streams). Just not enough info to provide comment or assess.
- While it is too early to determine the sensitivity of such juvenile salmon as they migrate from freshwater to saltwater, similar assessments of LNG development at Lelu Island for the previous proposed LNG terminal is an important precedent for understanding the significance of estuary habitat for juvenile salmon.
- The Application does not include detailed genetic data on juvenile salmon caught in the surveys described in the application. To better assess potential impacts, an improved understanding of salmon populations within the proposed Marine Terminal footprint area is needed. Tissue or scale samples collected to date, or in additional survey years (June 2024 e.g.) should be analyzed at the Department of Fisheries and Oceans ("DFO") molecular genetics laboratory. Results should be shared transparently with the First Nations and operators (fishing lodges, guide outfitters, etc.) with fisheries interests in the Nass River Watershed.
- The application indicates activities of production, marine transport, vessel loading, and shipping would have "no impact" on freshwater life stages of salmon, and so are not assessed. However, impacts on the marine life stage of salmon have direct implications for future freshwater life stages of salmon, therefore impacts should be considered.
- Water quality impacts of acidification due to emissions of nitrogen and sulfur compounds from the facility will have local impacts on water bodies sensitive to acidification. This includes multiple freshwater waterbodies containing fish, as well as the marine environment. However impacts to the marine environment are not assessed, for example how local acidification may impact prey species for juvenile fish in the estuary.

You can submit your comments to the EA process here <u>https://www.projects.eao.gov.bc.ca/p/60edc23bc69c5e0023a12539/project-details</u>