INUVIALUIT ENERGY SECURITY PROJECT

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Ramona Sladic
Secretary of the Commission
Canada Energy Regulator
Suite 210, 517 10th Avenue SW
Calgary, Alberta T2R 0A8

14 October 2022

Re: Inuvialuit Energy Security Project Additional Written Evidence - Public Hearing MH-002-2022

Dear Madam Secretary,

On September 1, 2022, and then subsequently October 7, 2022, Inuvialuit Energy Security Project LTD. (IESPL) received a letter (Files OF-EP-OA-I184-1414 01 & 02 & 03) via email from the Canada Energy Regulator (CER) in which the Commission of the CER directed IESPL to respond to certain topics relevant to the Inuvialuit Energy Security Project (IESP) Notice of Hearing. This submission responds to those topics and supplements the information set out in more detail in the IESPL applications for approval of the early site works (C19712), the well workover (C20338) and the IESP Energy Centre (C21113).

Seasonal restrictions provide limited windows of construction locally, and delay of the Early Site Works Operations Authorization Application through this Hearing Order will add at a minimum, another year to the project schedule. This delays the numerous benefits that the IESP will bring to the local region, prolongs the energy insecurity of the ISR, and introduces new environmental and safety risks associated with the M-18 sump by not allowing year-round access.

Please do not hesitate to reach out with any questions you may have regarding this matter.

Sincerely,

Travis Balaski, P.Eng.
President
Inuvialuit Energy Security Project LTD.

Hearing Order MH-002-2022 Appendix I – List of Topics

The Commission is interested in hearing from IESPL and participants about this List of Topics for consideration in the hearing with respect to the early site works, well workover, and installation and operation of the IESP Energy Centre applications for authorizations. The Commission may also consider submissions about relevant topics that are not listed.

1. **Potential effects of the authorizations on the rights of the Indigenous peoples of Canada recognized and affirmed by section 35 of the Constitution Act, 1982 and the Inuvialuit Final Agreement;**

   IESPL Response

   The requested authorizations for the early site works (**ESW**), well workover and installation and operation of the IESP Energy Centre (**Works**) will have a positive effect on the existing rights of Indigenous peoples with an interest in the area, and particularly with respect to the Inuvialuit. Further explanation follows:

   - The Works related to the IESP will support the energy security of the Inuvialuit Settlement Region (**ISR**) and directly benefit the Inuvialuit, while also respecting Inuvialuit values related to its land and principles of sustainable development established by the Inuvialuit under the Inuvialuit Final Agreement (**IFA**).

   - A reliable, regional source of energy will have a net positive benefit since it will: (a) reduce environmental footprint of the current energy infrastructure used to supply the ISR, which relies on energy sources and transport methods that have much greater impact and negative benefit, and (b) reduce the egregious costs and economic burden associated with providing energy to the ISR.

   - The Works are situated entirely within Inuvialuit lands and the ISR, as defined under the IFA. The IFA is a land claim agreement that was recognized and affirmed by the Government of Canada and outlines the Government of Canada's commitment with respect to the right of the Inuvialuit.

   - Delaying the authorizations and the Works has and will continue to have a negative effect on the rights of the Inuvialuit and their ability to: (a) preserve the environment on Inuvialuit lands, which includes any sump remediation work in the ISR; (b) be equal and meaningful participants in the northern and national economy and society, as recognized and affirmed by the Government of Canada under the IFA.

   - Inuvialuit Regional Corporation (**IRC**) is mandated under the IFA to represent the rights of and interests of Inuvialuit. IRC supports the Works and believes they should proceed as soon as possible.

   - Inuvialuit Energy Security Project LTD. (**IESPL**) will undertake the Works. IESPL is an Inuvialuit corporation and wholly owned by IRC and Inuvialuit Petroleum Corporation (**IPC**) which was established under the IFA. IESPL shares the IRC mandate to act in the interests of the Inuvialuit.

- In accordance with the IRC regulatory requirements for work on Inuvialuit lands and the ISR, IESPL undertook extensive consultation, community meetings and other communication with all rights holders and stake holders that may be affected by the Works. The consultation began in 2016 and is ongoing. Summaries are set out in section 2.7 of the Early Works Application and the Energy Centre application and in section 2.6 of the Well Workover Application. The design of the Works reflects this community input.

- The relevant IRC regulatory agencies and co-management bodies – including the Inuvialuit Land Administration (**ILA**), Inuvialuit Game Council (**IGC**), and the Environmental Impact Screening Committee (**EISC**) – have reviewed and approved the Project.

- Following its review, the EISC concluded that the Works will have no significant negative impacts and may proceed.

Further delay to the timely completion of the Works will delay the positive benefits to the environment and the Inuvialuit.

2. The interests and concerns of the Indigenous peoples of Canada, including with respect to historic and current use and management of lands and resources for traditional purposes and self-governance;

IESPL Response

The Works reflects Inuvialuit self-governance and Inuvialuit values related to the land and resources in all aspects, including its concept, purpose, design, review and approval under the IFA governance framework.

The IFA was negotiated over 10 years and confirms Inuvialuit rights over Inuvialuit lands and the Inuvialuit Settlement Region. The IFA was signed on 5 June 1984 and came into effect pursuant to the *Western Arctic (Inuvialuit) Claims Settlement Act*. It is a modern treaty under subsection 35(3) of the *Constitution Act, 1982*. The IFA outlines foundational legal rights and principles and establishes the governing framework to allow the Inuvialuit Settlement Region to be governed by the Inuvialuit consistent with the Inuvialuit values related to the land and its management. To the extent of inconsistency between the IFA and other federal, territorial, or municipal laws, regulations and policies, the IFA prevails (IFA s. 3(3)).

The IFA objectives, which guide activities and decision-making under the IFA, include:

- Preserving Inuvialuit cultural identity and values within a changing northern society,

- Enabling Inuvialuit to be equal and meaningful participants in the northern and national economy and society, and

- Protecting and preserving Arctic wildlife, environment, and biological productivity.

As explained in the response to Topic 1 above, the Works are being undertaken by IESPL, an Inuvialuit entity, in the interests of the Inuvialuit. The Works have also been reviewed and approved by the relevant Inuvialuit regulatory agencies, including the ILA, following extensive public consultation.

Given that such approvals have been obtained by IESPL and that the interests in the Works have been established by the Inuvialuit, the Inuvialuit now express concerns over the timeline on which the Works will be completed. Management of Inuvialuit lands and resources are meant to align directly with the IFA as fundamental rights provided for by the Government of Canada. Further delay in the Works creates restrictions on the Inuvialuit's ability (and right) to manage and preserve these lands for future generations and in accordance with the spirit of the IFA. The increasing costs of heat and electricity in the ISR are another concern of the Inuvialuit that the Works are intended to mitigate.

3. The appropriateness of the general land requirements for the Project and potential impacts of the Project on owners and users of lands;

IESPL Response

The Works are located entirely within Inuvialuit lands and the Inuvialuit Settlement Region, as defined under the IFA. No new land is required for the Works and all such land is owned by IRC.

As explained in the response to Topic 1 above,

- IRC is the entity mandated under the IFA to represent the rights of and interests of Inuvialuit. The IRC regulates activity on the Inuvialuit lands through the ILA.
- The Works have also been reviewed and approved by the relevant Inuvialuit regulatory agencies, following extensive public consultation.
- The Works support positive benefits to the environment, the local communities and economy, and the Inuvialuit.

There are three types of land use related to the land required for the IESP: historical land use, traditional land use and industrial/scientific land use.

Historic land use within the Regional Area of the IESP (10km radius) has been investigated by qualified archaeologists, licenced by the Prince of Wales Heritage Centre. Initially, Areas of Archeological Potential (**AoPs**) were identified from desk top studies and numerous previous investigations of the area and were summarized in a 2018 desktop study commissioned by IPC and ATCO. All AoPs that conflicted with the IESP development were then investigated through field assessment as an Archaeological Impact Assessment (**AIA**). The AIA was completed in September 2021. No cultural material or features warranting protection were found. Going forward, an Archaeological Site Management Plan and ongoing Chance Find Procedure are provided in Appendix 3 of the OA applications and will be used and improved through the project life.

Traditional Land Use (**TLU**) in the IESP has been reviewed and discussed through multiple meetings, since 2018, with the IGC, THTC and IHTC. IESPL currently meet monthly with the HTC's and quarterly with the IGC. As described in Topic Response #12 below, the IESP also identified TLU from the 2012 GNWT-sponsored Summary of Existing Traditional Knowledge for the Inuvik to Tuktoyaktuk Highway (**ITH**) Study Area (Kavik-Stantec 2012), the recently updated Tuktoyaktuk and Inuvik Community Conservation Plans (2016) and the new Environment Canada Beaufort Regional Coastal Sensitivity Atlas (2015). There are no Traditional Land Users within the Project Area. The closest cabin to the project is 7.62 km to the east, on

the other side of the ITH. The cabin has not been used for many years (the former owner has passed away). There are no other cabins within the Regional Area. There is a trapline and winter fishing location located west of Iqalushaq Lake south-west of M-18 approximately 4.5 km. IESP meet regularly (at least monthly) with the owner of the trapline. A Wildlife Management and Monitoring plan that has been twice reviewed by GWNT ENR, IGC, THTC, IHTC and WMAC-NT is provided with the OA application. This WMMP will be reviewed by these organizations regularly and continually updated and improved.

Industrial and Scientific Land use in the area includes the ITH, previous oil and gas exploration, Borrow Source 177, tourism usage of the ITH, and regional scientific research. As described in Section 12 below, there has been significant seismic and drilling activity in the area from 1968 to 2002. The excellent access to arctic lands and waters has attracted scientists from all over the world for decades. Currently, there are no other industrial or scientific land users or potential land users (i.e. with applications before the EISC or ILA) in conflict with the IESP.

4. The health, social, and economic effects of the Project;

IESPL Response

Health, social and economic effects were assessed as part of IESPL application to the EISC and summarized in Section 11.4 (Potentially Affected Community) of the Project Description. Conclusions of the assessment were that residual IESP effects, once mitigations are applied, are predicted to be positive for the following Valued Components (**VCs**):

- Socio-economic: Energy security
- Socio-economic: local business and employment opportunities
- Socio-economic: Local infrastructure
- Environmental: Net reduction of greenhouse gas emissions
- Social: Training and capacity building
- Socio-economic: Reduction in local diesel fuel and gas costs
- Health: Sump remediation

There were no significant negative effects predicted for the project. The EISC requested additional information in the form of IRs, as did the Inuvialuit Game Council (**IGC**). IESPL addressed all concerns to the satisfaction of interested parties. A decision was provided by the EISC on January 25, 2021, with 15 Recommendations. EISC agreed with the IESPL impact assessment that the project would have no significant negative impact. The decision reads as follows (in part):

After careful deliberation, the Panel delivered an 11(17)(b) decision:

> *"The development, if authorized subject to environmental terms and conditions recommended by the Screening Committee, will have no such significant negative impact and may proceed without environmental impact assessment and review under the Inuvialuit Final Agreement." [IFA s. 11. (17)(b)]*

The ISR is currently "energy insecure," which means its future energy needs cannot be met viably by the current energy supply options and delivery infrastructure. This insecurity stems from the vulnerability of the transportation network on which the energy imported into the ISR relies.

- The Dempster Highway crosses two rivers, which take weeks to freeze into an ice road in the fall and weeks to thaw into a ferry-friendly waterway in the spring. During those times, the ISR is isolated from its southern energy supply.

- The Mackenzie River is also closed to barges in the fall, winter, and spring months. River transportation is beset with challenges and unpredictability, particularly with climate change.

Energy insecurity manifests in the high price families must pay to heat and power their homes and run their vehicles. The average household in the ISR does not have a lot of disposable income and a significant portion of that goes to paying for utilities. Not infrequently, choices must be made between the heating bill and other household needs. The IESP is an important foundation to the economic development of the Inuvialuit region and is critical to a secure and affordable energy supply for local communities. With local reserves anticipated to last more than 50 years, the IESP represents the most reliable and viable replacement for the dwindling Ikhil gas well.

The IESP also proposes to provide a more affordable supply of natural gas, propane, and synthetic diesel to the residents of Tuktoyaktuk, which would improve access to energy and improve quality of life overall. In addition to replacing the Ikhil gas field (currently one operating well), the IESP will also displace LNG and propane which are currently trucked in from southern Canada, reducing the costs that local residents and businesses must pay for energy.

It will also reduce the greenhouse gases associated with the transportation of the energy and the source of energy, since it will be natural gas based. The synthetic diesel from the project will displace diesel from southern Canada and will be a natural gas equivalent in GHGs. The LNG and propane will be used to displace the LNG and propane from the south, meaning significant transportation distances (5000km round-trip) are reduced using this locally produced resource.

The IESP will be located entirely on Inuvialuit Private Lands, and it aligns with core objectives of various relevant governance and policy documents for the economic and energy development for the Inuvialuit Private Lands and the broader region, including the following:

- The IESP supports the principal objectives of the IFA and promotes the full participation of Inuvialuit in the northern economy.

- The IESP reinforces the IRC's strategic plan, which was developed in consultation with the leadership of all Inuvialuit communities.

- The IESP aligns with the Inuvialuit Community Economic Development Organization (ICEDO) 2020 Regional Opportunity Readiness Plan to complement and maximize Inuvialuit economic opportunities.

- The IESP maximizes the retention of benefits and opportunities in the ISR with more than 1500 person-years of direct employment created over the next 50 years.

- The IESP reinforces the Canadian Northern Economic Development Agency (CanNor) mandate to help advance northern economic development by contributing to northern economic growth and diversification. The Mackenzie Delta Region has mineral resource wealth more than one billion barrels of oil and ten trillion cubic feet of gas from 60 significant discoveries (INAC 1999). The M-18 well will be the third full production well in the history of the Region and the first one wholly owned by a 100% Inuvialuit-owned company.

- The IESP supports Natural Resources Canada's Arctic Energy Strategy – specifically:
    - To support energy security in communities,
    - To upgrade existing fossil fuel-based energy systems, and
    - To reduce the reliance of northern communities on southern fuels for energy.

- IPC expects the availability of a secure gas supply in the region will allow the Northwest Territories Power Corporation (NTPC) the opportunity to convert numerous community diesel fired generators to co-blended fuels.

- The IESP advances the goals of the GNWT 2030 Energy Strategy to reduce GHGs from electricity generation and energy transport vehicles and to develop the NWT's energy potential. The potential GHG emission reductions of transporting local gas versus trucking from the south is expected to exceed 20,000 tonnes per year – a massive reduction over the existing fuel transportation scenario.

- The IESP contributes to the GNWT 2013 Energy Action Plan and the current mandate of the NWT Executive in Council – specifically to introduce LNG supply in the Beaufort Delta Region.

5. The environmental effects of the proposed Project, including any cumulative environmental effects;

IESPL Response

Environmental effects of the IESP, including any cumulative environmental effects were assessed as part of the impact assessment prepared for the EISC.

A summary of the potential environmental effects is provided in the Project Description Sections 14.0 (Analysis of Potential Significant Negative Environmental Impacts) and Section 15.0 (Cumulative Environmental Impacts) and is repeated here for ease of reference to the reader.

Residual negative IESP effects, once mitigations are applied, are predicted to be none to negligible for the following Valued Components (**VCs**):

- Heritage and archaeological resources
- Climate
- Water lakes and rivers
- Regional drainage
- Traditional land use
- Fish and fish habitat
- Wildlife harvesting
- Wildlife – waterbirds
- Waste
- Wildlife habitat

Residual IESP effects, once mitigations are applied, are predicted to be low for the following VCs:

- Air quality
- Permafrost and soil
- Noise
- Light
- Waste
- Increased access to the area because of the access road

The predicted residual effects from the IESP include:

- Loss of 15 ha of vegetation (road and pad footprints) within the LSA
- Disturbed local drainage
- Use of borrow from Borrow Source 312
- Potential for localized effects to barren-ground caribou from sensory disturbance
- Potential for localized effects to grizzly bears and wolverine from sensory disturbance
- Potential for localized effects to tundra-nesting birds, short-eared owl, grey-headed chickadee and rusty blackbird from sensory disturbance
- Land Use – increased traffic on ITH

Predicted significant impacts from the Project include:

- None

In summary, the IESP team's assessment indicated that all predicted impacts are reversible, and no predicted impacts were of sufficient duration, extent, frequency, or magnitude to be considered significant by the Canada Impact Assessment Agency criteria. The only predicted impacts of any duration are sensory disturbance to humans or wildlife from noise, light and/or traffic.

Detailed mitigations for these and all other potential impacts are provided in Sections 15 and 16 of the Project Description and in the Environmental Protection Plans (appended to the OA applications as Appendix 3). There are no predicted significant impacts to wildlife, wildlife harvesting or the environment from the IESP.

Adaptive management, extensive monitoring and integrated management programs will be in place so the Project management team can respond appropriately to mitigate and resolve any issues that may arise. A full description of proposed mitigation measures to address any potential impacts is provided in Section 16 of the Project Description and expanded upon in the Environmental Protection Plans (Appended as Appendix 3 to the OA applications).

6. The relationship between the Inuvialuit Environmental Impact Screening Committee's recommended terms and conditions for the IESP and the authorization applications currently before the Commission;

IESPL Response

The relationship between the EISC's recommended terms and conditions for the IESP and the Authorization Applications currently before the Commission are provided in the Table below.

Table: Relationship between EISC Recommendations and the Current OA Applications

EISC #	EISC Recommendation	OA Application Status
1	Water Quality: sump monitoring	Implemented and Active: sump monitoring has included and will continue to include sub-surface ground temperature, visual inspections, surveys for settlement, and water sampling. All monitoring programs are part of the Integrated Management System prepared in conformance with Section 5 of the OGDRP, as described in the OA application.
2	Water Quality: IWB Guidance	Recommendation Completed – water licence is not required.
3	Hydrology: Transport Canada determination	Recommendation Completed – bridge does not require TC authorization.
4	Fish and Fish Habitat: Monitoring Program	All recommendations were implemented. Appendix 3 of the OA includes the IESP Fish and Fish Habitat Protection Plan.
5	Mammals and Habitat: Bear Den protocols	In place since 2020, Bear Den surveys occur annually. The WMMP and Bear Encounter Protocol were initially developed with GNWT, IGC, IHTC, THTC, and WMAC-NT ("the WMMP review Committee") 2 years ago and

Table: Relationship between EISC Recommendations and the Current OA Applications		
		Revision 3 is provided in Appendix 3 of the OA applications. The WMMP is set to be reviewed again in Q1 2023 by the WMMP review committee members.
6	Mammals and Habitat: WWHPP (revised to WMMP)	As above, all recommendations have been implemented. Revision 3 of the WMMP is provided in Appendix 3 of the OA applications.
7	Harvesting Activities: updates to the WMMP	Implemented – see #5.
8	Archaeological Resources: AIA and Site Management Plan	Recommendation Completed – an AIA was completed in September 2021 in the single area of overlap. No cultural material or features warranting protection were found. The Archaeological Site Management Plan and ongoing Chance Find Procedure are provided in Appendix 3 of the OA applications.
9	Waste Management: Updates	Recommendation Implemented. The WMP is provided in Appendix 3 of the OA applications with both adaptive management and continual improvement as part of the plan going forward.
10	Waste Management: Hazmat	Recommendation Implemented. The WMP is provided in Appendix 3 of the OA applications with both adaptive management and continual improvement as part of the plan going forward.
11	ERP and Contingency Plan – provide location of Spill Response Equipment	As addressed in Appendix 4 (and Appendices 4 and 5 of the Energy Centre OA application), the final location of the spill response equipment will be confirmed no later than 90 days prior to commencement of activity. Locations will vary depending on the project phase and activity. A list of proposed equipment is provided in the ERPs appended to the OA applications.
12	ERP and Contingency Plan	As above, the map of local drainage will be provided following completion of engineering design and no later than 90 days prior to commencement of activity.
13	Adaptive Management Plan	Completed – adaptive management is discussed in all the Environmental Protection Plans provided in Appendix 3 of the OA applications. It is also a core component of the ISO-based IESP IMS and the IESP Quality Plans under ISO 9001.
14	Management and Monitoring Plans	Recommendation implemented. See the EPPs provided in Appendix 3 of the OA applications.
15	Commitments	Implemented and ongoing. IESPL have a commitment Register which tracks all commitments from letters, orders, approvals, meetings, IRs, and our applications.

7. The safety and security of persons and the protection of the environment during construction of the proposed Project, including emergency response;

IESPL Response

Safety and security of persons and the protection of the environment, including emergency response is paramount to the IESP and is expressed in our Corporate Policy Statement and Core Values provided in Section 3.5 of the Energy Centre OA application, which was submitted September 30, 2022, to the CER.

The IESP Integrated Management System has been developed so the policies, plans, and procedures that IESPL have set are implemented and integrated throughout the project, including all our contractors, during each phase.

Construction of the IESP includes the Early Site Works activities (construction of the all-weather gravel road, bridge and pads) and the installation of the IESP Energy Centre. Safety and Security of persons and the protection of the environment, including emergency response during ESW is described in the ESW OA Application Sections 4.0, 5.0, and 6.0, as well as Appendices 2, 3 and 4.

Safety and security of persons and the protection of the environment, including emergency response during Installation of the IESP Energy Centre are described in the Energy Centre OA Application Sections 4.0, 5.0, and 6.0, as well as Appendices 2, 3 and 4.

8. The contingency plans for spills, accidents, or malfunctions during construction of the Project;

IESPL Response

As mentioned previously, safety and security of persons and the protection of the environment, including emergency response, is paramount to the IESPL and is expressed in our Corporate Policy Statement and Core Values provided in Section 3.5 of the Energy Centre OA application.

IESPL will use Incident Command System (**ICS**) for our emergency management programs, processes, and training. The ICS is a globally recognized, standardized approach to the command, control, and coordination of emergency response providing a common hierarchy within which responders from multiple agencies can be effective. IESPL believe that ICS provides the best option for coordination measures with any relevant municipal, provincial, territorial, or federal emergency response plans.

To date, IESPL has completed two HAZID studies, a Hazard, Risk, Vulnerability, Capability Assessment (HRVCA) and a Hazard and Operability (HAZOP) Study for the project. The assessments to date identified hazards, mitigations, controls, and recommendations. A summary of the identified hazards and their mitigation measures are provided in Table 4 of the ESW OA application and Table 7 of the Energy Centre OA application.

The complete details of IESPL's contingency plans are found in Appendix 4 of the OA applications.

9. The economic feasibility of the proposed Project, including financial responsibility and liability for potential spills and debris;

IESPL Response

The IESP Energy Centre will produce three commodities or products for sale, liquefied natural gas (**LNG**), synthetic diesel, and propane. LNG is a natural gas stream predominantly made up of methane cooled to a liquid state for efficient means of transportation. IESP LNG is intended to be supplied to the existing Northwest Territories Power Corporation (**NTPC**) Inuvik LNG power plant, and for future delivery and use to both the Inuvik Gas Limited (**IGL**) utility in Inuvik and the NTPC power plant in Tuktoyaktuk.

IGL is considering the conversion of their natural gas utility in Inuvik to LNG and NTPC has public plans already in place for the conversion of the Tuktoyaktuk power plant from diesel to LNG. Consumer grade propane is predominantly (>90%) made up of the propane molecule. The propane will be supplied to IGL as a secondary fuel in Inuvik and can be consumed in the existing propane-air system.

Synthetic diesel is a hydrocarbon fuel product produced by combining hydrogen and carbon molecules in a modified gas to liquids (**GTL**) process. Synthetic diesel can be used in place of traditional diesel and will be supplied to power generation and home heating in Inuvik and Tuktoyaktuk that is not met with LNG or propane and can also be used as a general transportation fuel in the region.

The overall preliminary project economics have been reviewed by IESPL and our civil, drilling, and engineering contractors. IESPL expects it will fund the capital costs of the project by using a combination of equity and project debt financing. The preliminary project economics, when factoring in the upfront capital requirements, long-term sustaining capital requirements, and annual operating expenses, is expected to yield project returns in line with other midstream natural gas operations in western Canada, while providing significant savings to the various fuel users in the region. It should be noted that the owner of the IESPL, the Inuvialuit Corporate Group, was created under the Inuvialuit Final Agreement to represent the collective interests of the Inuvialuit, the Indigenous Peoples of the region. In addition to the feasibility of the IESP, the Inuvialuit Corporate Group has a mandate to ensure benefits of development beyond energy supply remain in the region.

IESPL liability refers to the potential financial consequences owing to environmental impairment or damages to land, water, flora and/or fauna directly resulting from IESP activities (and/or historical activities at the M-18 site). The potential liability from the development, operation and decommissioning of the IESP involves exposure from a variety of sources.

From a regulatory perspective, IESPL is considering the following regulations as potential sources of liability. The IFA contains detailed and comprehensive provisions with respect to developer's potential liability for damages sustained by wildlife harvesters because of development on certain Inuvialuit lands.

- The NWT Oil and Gas Operations Act (**OGOA**) provides for liability to arise from an operator's failure to comply with the requirements of OGOA or any orders of the CER made pursuant OGOA.

- Potential liabilities under other policies, regulations, and statutes, such as the Fisheries Act and Regulations, the Inuvialuit Water Board and the Rules and Requirements of the Inuvialuit Land Administration might apply during the construction, operations and/or abandonment of the IESP.

Some of these liabilities could result from the uncontrolled or unauthorized release of harmful substances. There is also the potential, over the expected life of the IESP, for other liabilities to arise because of future legislation or government policy.

Current potential liability for the IESP includes the existing M-18 drilling sump built in 2001 and the M-18 well itself. IESPL is aware of the existence of a drilling sump built in 2001 at the M-18 site. IESPL has investigated and estimated the liability of the M-18 sump as part of the acquisition from the previous well owner. To our best knowledge, having completed nearly a dozen field investigations of the Project Area, there are no other extant environmental liabilities to the IESP.

The Inuvialuit Land Administration is currently in the process of identifying sumps throughout the ISR that may pose a risk to human health or the environment. IESPL has mitigated this liability through detailed Phase 1 and Phase 2 Environmental Assessments of the M-18 sump, the review of all past environmental assessments, commercial agreements regarding the transfer of the Concession and discussions with ILA concerning the sump. IESPL's current plan for the remediation and monitoring of the M-18 sump has been reviewed by all applicable regulators, including the ILA and the IWB, and was approved by the EISC on January 25, 2021.

The future cost of abandonment, remediation, and reclamation of an oil or gas well is a liability that is typically recorded and regularly updated on the developer's/site owners' balance sheet as an Asset Retirement Obligation (**ARO**) or Decommissioning Liability. Similarly, any costs associated with a period of environmental monitoring after site remediation activities would reasonably be included in the ARO.

Part 6 of the OGOA Oil and Gas Drilling and Production Regulations requires the operator of a well that is suspended or abandoned to leave that well in a safe condition with sound integrity and in a state that will prevent pollution. The future cost to abandon, remediate and reclaim/restore the M-18 wellsite is an ongoing liability.

The IESP Energy Centre, in the same manner as a wellsite, abandonment, remediation, and reclamation of an oil or gas facility is a liability that is typically recorded and regularly updated on the developer's/site owners' balance sheet. The final decommissioning, remediation, reclamation and/or long-term post-closure monitoring of the IESP site to the future standards of regulators is another ARO/decommissioning liability that will attach to the project and that is contemplated under Section 64 of OGOA. Future liability for the Energy Centre is mitigated through engineering and infrastructure that will prevent spills, leaks, drips, etc. Hazardous waste will only be sent to authorized and permitted facilities. Equipment change-outs will consider liability in the decision for re-use, recovery, or disposal of old equipment.

The IFA provides a complete regime for developer's liability with respect to actual wildlife harvest loss and future harvest loss suffered by wildlife harvesters. Where the loss is established, the developer's liability is absolute and does not require proof of fault or negligence. The remedies include:

- Compensation.

- Property replacement.

- Remediation and reclamation of damaged wildlife habitat.

Under OGOA, the IESP is subject to potential liability for:

- Failure to comply with the Act and Regulations, including failure to report spills, incidents or near-misses, loss, emergency, or accidents.

- Loss or damage suffered by any person because of a spill or an authorized discharge, emission or escape of oil or gas; or loss, damage, or costs caused by debris.

- Costs reasonably incurred by the Government authorities in taking any action in relation to the spill or authorized discharge, emission or escape of oil or gas. With respect to spills, OGOA defines "actual loss of damage" as including loss of income, including future income, and, with respect to any Indigenous peoples of Canada, includes loss of hunting, fishing, and gathering opportunities. Civil liabilities and remedies are also preserved under OGOA.

OGOA Sections 13 and 64(1) require proof of the financial capability of an applicant before issuing authorization under the Act. The Scope of this proof is further defined in Sections 64(1) through 64(5) of OGOA, which implies a requirement for proof of financial capability to:

- Complete the work to be authorized.

- Abandon and reclaim the site according to the Development Plan.

Under Section 64(1) of OGOA, the proof may take any form satisfactory to the CER, including a line of credit, a guarantee, or an indemnity bond, in an amount satisfactory to CER. The proof of financial responsibility remains in force: "(a) for the duration of the work or activity in respect of which the authorization is issued; and (b) for a period of one year after the time at which the Regulator notifies the holder that all works in respect of which the authorization was granted have been successfully abandoned or decommissioned" in accordance with the Act and the regulations. Similar provisions are found in other applicable legislation, such as the Northwest Territories Waters Act, administered in the ISR by the Inuvialuit Water Board.

IESPL is a member of the Inuvialuit Corporate Group of Companies and is a well-supported and financially strong organization. IESPL is capable of and committed to meeting its obligations under the current regulations and any unforeseen events that may arise from its operations. The Inuvialuit Corporate Group manages over $1 billion worth of assets, is fully insured for its operations, and has a long-standing working relationship with both the Federal and Territorial Governments. IESPL will provide the required financial securities as the project progresses through its various operational phases.

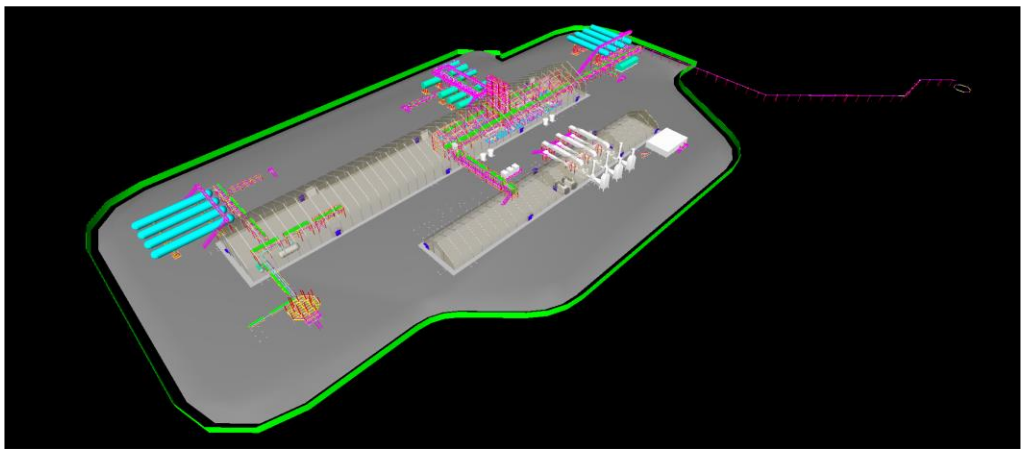
10. The suitability of the design of the proposed Project that would address the challenges of the unique Arctic environment;

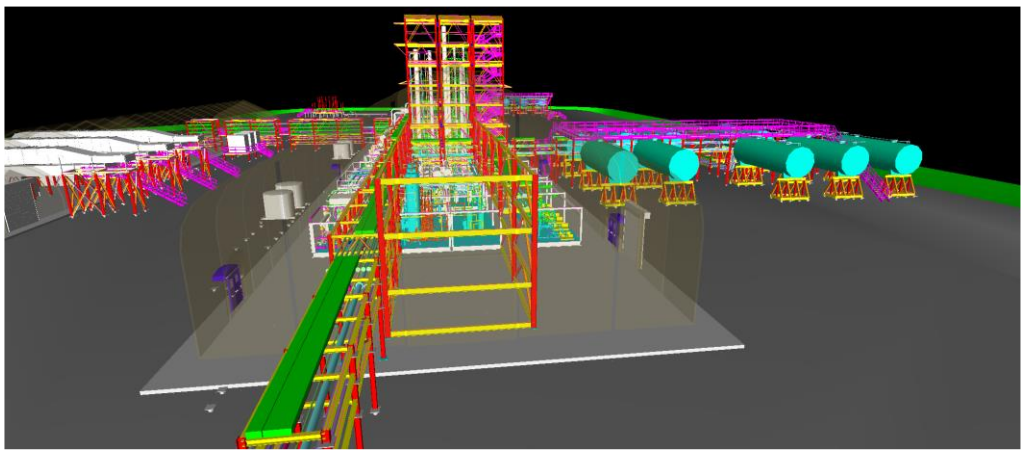
IESPL Response

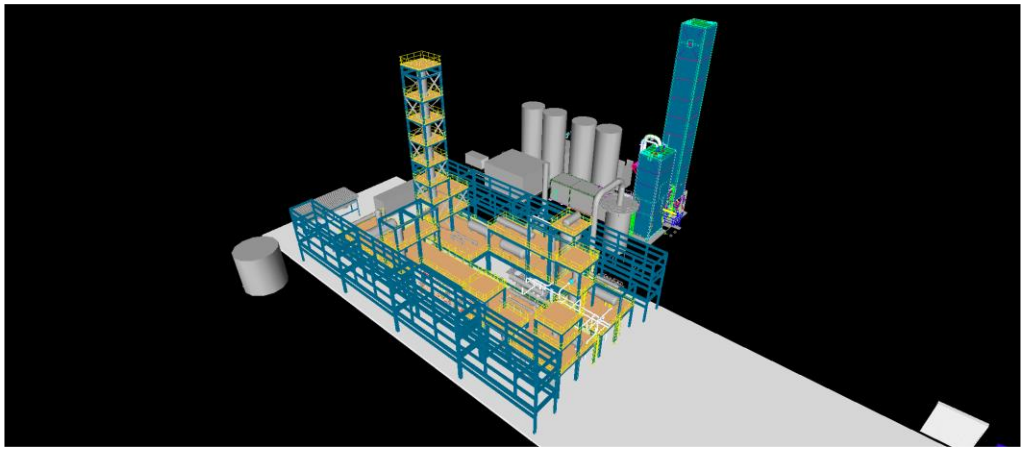
The IESP is being designed to meet all the demands that the Arctic environment may place upon a project of this kind. IESPL will install all equipment inside buildings that it can. The only equipment to be installed outside the process buildings are fired heaters, enclosed ground flare and vaporizer stacks, air coolers, storage tanks and piping connecting the M-18 well to the plant and piping connecting the plant production to the storage tanks.

The only normal operations exposed to the cold is truck loading. Truck loading pumps will be in a shelter. Operations like what IESPL is proposing are in Northern Alberta and British Columbia where similar temperatures are experienced. Products will only be sold by metering to avoid issues with scales that can be affected by snow in below freezing conditions.

The pictures below provide views from portions of the plant from 3D models showing layouts inside the process building.







Other design factors of the IESP include dealing with the weather extremes, remote access, and the permafrost. With the large land mass, restricted access, and small population of the Northwest Territories, acknowledgement of the supply chain restrictions and added redundancy for equipment, personnel, and project schedule execution is a factor for which we are prepared. With the extreme weather, which can range in temperature from below -40 °C to +30 °C, material selection for any design has been reviewed carefully.

For gas processing, low temperature steel will be used for ambient exposed piping, and insulation and heat tracing will be used for most process systems to maintain design integrity. Process cooling will also factor ambient conditions because of these extreme variations. Special control will be used in the winter and additional cooling may be used during the long summer days when needed. The extreme weather also brings long winters with blowing snow and high accumulation. Facility design will ensure snow loading is factored and proper egress will always be maintained for operations.

Gas production and processing at the IESP must follow a very different engineering design than other parts of Canada to ensure permafrost soils are protected and maintained in a frozen state. Warm gas production from the M-18 sub surface wellbore will be properly analyzed and protected from heating the permafrost, and surface facilities must have special foundation design to maintain permafrost integrity. This can involve various design methods such as raising facilities on ad-freeze piles to maintain air gaps under warm buildings or having active or passive refrigeration systems installed under buildings. IESPL will monitor and maintain permafrost conditions for the IESP to ensure long term structural integrity of the installation.

11. The ability of the TUK M-18 well to produce, given that the well was drilled and production tested in the winter of 2002;

IESPL Response

The following extractions comes from the Development Plan for the project, which was approved on March 8, 2022, by the CER. More details can be found in the Development Plan as required.

IESP Development Plan Section 4.1 - Production Rate
The M-18 well will produce the natural gas and NGLs at an average rate of approximately 150 e3m3/d (5.3 million cubic feet per day). The production rate will vary, due to seasonal demands, from a low of

57 e3m3/d to a high of 170 e3m3/d of raw gas flow, depending on summer or winter demands of the project facilities.

IESP Development Plan Section 4.4 - Reserves
The gas field has calculated in-place Reserves of 9,486 e6m3 (334.94 billion cubic feet). Assuming a raw gas recovery factor of 83%, the total Recoverable Raw Gas is 7,873 e6m3 (278.0 billion cubic feet) and the total Sales Gas, which is less surface loss, is 6,615 e6m3 (223.58 billion cubic feet).

The volume of reserves was calculated two different ways, one as a volumetric calculation and second through material balance based upon the testing of the M-18 well during the two drill stem tests. Both calculations resulted in numbers that were in very close agreement for the original gas in place.

At the higher production rate for a full 365-day production year, the Development Plan indicated there is approximately 100 years of sales gas in place.

The suspension in 2002 allowed for re-entry to the wellbore in the future. 20 years of well suspension will not impede the ability of the wellbore, or the reservoir, to flow natural gas and liquids to surface for testing or production of the M-18 wellbore.

12. Any information about previous work completed in the Project location that supports these authorization applications;

IESPL Response

Previous work completed in the Project location was summarized in Section 18 of the Project Description submitted to the EISC in September 2020. These summaries are provided again here for convenience to the reader.

Table 18-1 provides a list of previous Environmental Assessments submitted to the EISC or the EIRB that overlap with either the Local Study Area (LSA) or the Regional Study Area (RSA) or both. Copies of the previous assessments are available from the EISC Registry. The results of the previous environmental assessments and their Registry File numbers are also included in Table 18-1. Copies of all available Decision Letters are provided in Appendix 9. Table 18-2 provides a list of previous studies and regulatory applications relevant to the Project. Table 11-6, also from the EISC Project Description is a list of abandoned wells within 15 km radius of the TUK M-18 well. For the most part, each of these wells also went through environmental assessments for seismic and drilling, as well as EISC, IWB and NEB approvals.

The abundance of field studies, engineering work and mitigation assessments already conducted in this area have provided the IESP opportunities to better evaluate its own proposed approach, and believe, has improved Project planning. The information available on the EISC, IWB, and EIRB websites have further enriched project planning and design.

The broader RSA for the IESP has been researched for more than five decades for numerous projects. The area's proximity to the Hamlet of Tuktoyaktuk has made this area an ideal place to study the land, soils, vegetation, waters, coast, permafrost, pingos, climate, fish, archaeology, ecology, and wildlife. Valuable

traditional knowledge relating to this area has also been collected. An additional ten environmental assessments were also carried out under Federal review for oil and gas projects that occurred inside the RSA prior to the creation of the EISC. Some of the current and proposed research projects in the RSA were provided in Section 11 of the Project Description.

At the more focused level of the LSA, environment and wildlife, the potentially affected community, regional land uses, and traditional land uses are well-studied and documented. To date, the LSA has been subject to thirteen previous environmental assessments for EISC Project Descriptions, and the RSA has been subject to dozens of environmental studies. For example, nearly 50% of the LSA was included in the RSA of the comprehensive Environmental Impact Assessment for the Inuvik to Tuktoyaktuk Highway (**ITH**), including the area's most valued lake (Tiktaliq Lake) and the IESP's most important watershed, Gunghi Creek. In addition, the 2012 GNWT-sponsored Summary of Existing Traditional Knowledge for the Inuvik to Tuktoyaktuk Highway Study Area (Kavik-Stantec 2012), the recently updated Tuktoyaktuk and Inuvik Community Conservation Plans (2016) and the new Environment Canada Beaufort Regional Coastal Sensitivity Atlas (2015) incorporated traditional knowledge of the area at a scale and comprehensiveness that has not been seen prior.

While a robust baseline of knowledge exists for this area, work in relation to the IESP has added considerably to that baseline. Twelve studies of the LSA have been commissioned to date to provide detailed information about the area. This has involved an expenditure to date of more than three million dollars ($3,000,000) and hundreds of hours of work by Inuvialuit and other experts. These previous studies, along with the assessment provided in this submission support the conclusion that there will be no significant adverse impacts on the environment, local people or the harvesters that use this area.

This accumulation of knowledge and understanding has led to consistency in decision-making over time in the broader region. For example, of the 229 wells explored and drilled in the ISR onshore to date, all have been approved to proceed without further environmental impact review and assessment under the Inuvialuit Final Agreement.

Table 18-1: Previous Environmental Assessments Relevant to the Project (updated to October 2022)						
Previous Project Descriptions that Overlap the Study Area	Year	Overlap	Proponent	Consultant	EISC File Number	Decision
EISC Project Description - 2022 Geotechnical Borehole Investigation	2022	LSA	IESPL	Kiggiak EBA	01/22-04	"Project qualifies for an exemption from environmental impact screening under Exclusion Item # 16 of the EISC Guidelines."
EISC Project Description - Inuvialuit Energy Security Project	2020	Both	Inuvialuit Petroleum Corporation	Various	[09/20-04]	"The development, if authorized subject to environmental terms and conditions recommended by the Screening Committee, will have no such significant negative impact and may proceed without environmental impact assessment and review under the Inuvialuit Final Agreement."
IESP Summer Field Studies	2021	LSA	Inuvialuit Petroleum Corporation	Kiggiak EBA	[07/21-04]	The EISC has reviewed your project summary and has determined that your project does meet the definition of development as defined under the Inuvialuit Final Agreement, but your project qualifies for an exemption from environmental impact screening under Exclusion Item # 10 of the EISC Guidelines. Exclusion Item # 10 reads: "Developments or 'other uses' deemed by the EISC to not be of consequence to the Inuvialuit Settlement Region in accordance with IFA s.13(7) and s.12(3)(b) and (c), and which would not have a significant impact on air, water, land or renewable resources, or negatively affect present or future wildlife harvesting."

Table 18-1: Previous Environmental Assessments Relevant to the Project (updated to October 2022)						
Previous Project Descriptions that Overlap the Study Area	Year	Overlap	Proponent	Consultant	EISC File Number	Decision
IESP Archaeological Impact Assessment	2021	LSA	Inuvialuit Petroleum Corporation	Kiggiak EBA	[07/21-03]	As above.
EISC Project Description - South Tuktoyaktuk Feasibility Study - Geotechnical Investigation	2020	LSA	Inuvialuit Regional Corporation	Kiggiak EBA	[01/20-10]	"Project qualifies for an exemption from environmental impact screening under Exclusion Item # 16 of the EISC Guidelines."
EISC Project Description - Gunghi Creek Crossing Replacement	2019	RSA	Government of the Northwest Territories Department of Infrastructure	Wood	[10/19-02]	“The development, if authorized subject to environmental terms and conditions recommended by the Screening Committee, will have no such significant negative impact and may proceed without environmental impact assessment and review under the Inuvialuit Final Agreement.”
EISC Project Description - Mackenzie Beaufort Energy Pre-Feasibility Studies	2018	LSA	ATCO Midstream NWT Ltd. and IESPL	Kiggiak EBA	[06/18-04]	Project qualifies for an exemption from environmental impact screening under Exclusion Item #16
Project Description Report for Construction of the Inuvik to	2010	LSA	Hamlet of Tuktoyaktuk, Town of Inuvik, Government	Kiggiak EBA	[02/10-05]	"The development could have significant negative impact on the environment and Inuvialuit wildlife harvesting in the Inuvialuit Settlement Region and is subject to further assessment and review."

Table 18-1: Previous Environmental Assessments Relevant to the Project (updated to October 2022)						
Previous Project Descriptions that Overlap the Study Area	Year	Overlap	Proponent	Consultant	EISC File Number	Decision
Tuktoyaktuk Highway, NWT			of Northwest Territories			
EISC Project Description - Tuktoyaktuk to Granular Source 177 Access Road	2008	Both	Government of the Northwest Territories and Hamlet of Tuktoyaktuk	Kiggiak-EBA	not available	not available
EISC Project Description - Tuk 2 Winter 2001/2002 Drilling Program	2001	LSA	Anderson Resources Ltd.	Inuvialuit Environmental and Geotechnical Inc.	[08/01-10]	"The development will have no such significant negative environmental impact and may proceed without further environmental impact review and assessment under the Inuvialuit Final Agreement."
EISC Project Description - Tuk South Winter 2001/2002 3D Seismic Program	2001	LSA	Anderson Resources Ltd.	Inuvialuit Environmental and Geotechnical Inc.	[08/01-09]	"The development will have no such significant negative environmental impact and may proceed without further environmental impact review and assessment under the Inuvialuit Final Agreement."
EISC Project Description - Tuk 2 (Winter 2001/2002) Drilling Program Water Licence Application	2001	LSA	Anderson Resources Ltd.	Inuvialuit Environmental Inc.	[07/01-04]	"The development will have no such significant negative environmental impact and may proceed without further environmental impact review and assessment under the Inuvialuit Final Agreement."

Table 18-1: Previous Environmental Assessments Relevant to the Project (updated to October 2022)						
Previous Project Descriptions that Overlap the Study Area	Year	Overlap	Proponent	Consultant	EISC File Number	Decision
EISC Project Description - Tuktoyaktuk Peninsula Winter 2000/2001 Seismic Program	2000	LSA	Anderson Resources Ltd.	Inuvialuit Environmental Inc.	[11/00-02]	"The development will have no such significant negative environmental impact and may proceed without further environmental impact review and assessment under the Inuvialuit Final Agreement."
Development Proposal - ESSO Winter Seismic Program 1991/92	1991	LSA	Esso Resources Canada Limited	none	[10/91-03]	"The development will not have significant negative environmental impact on the Inuvialuit Settlement Region, and may proceed without further environmental impact review and assessment under the Inuvialuit Final Agreement."
Construction of the Inuvik to Tuktoyaktuk Highway, Northwest Territories	2010	Both	Hamlet of Tuktoyaktuk, Town of Inuvik, Government of Northwest Territories	Kiggiak EBA	EIRB: 2002-10-05	https://eirb.ca/projects/inuvik-tuk-highway/
Mackenzie Gas Project	2002	RSA	Imperial Oil Resources Ventures Limited	Tera-Golder-AMEC-Axys	NEB: GH-1-2004	https://www.cer-rec.gc.ca/pplctnflng/mjrpp/archive/mcknzgs/mcknzgs-eng.html

Table 18-2: Previous Studies and Regulatory Applications Relevant to the Project			
Study Title	Year	Proponent	Consultant/Author
Beaufort Delta Energy Feasibility Study	2018	Inuvialuit Regional Corporation	Hatch Engineering
Feasibility Study for LNG Fuelled Electrical Generation in Tuktoyaktuk	2017	GNWT PWS	Jenmar Concepts
Submission to the EISC - ITH Borrow Source 312 West All Season Access Road Construction and Operation Program	2015	GNWT DOT	Kavik Stantec
Submission to the EISC - ITH Borrow Source 1401A All Season Access Road Construction and Operation Program	2014	GNWT DOT	Kavik Stantec
Submission to the EISC: Project Description Solid Waste Landfill	2014	Hamlet of Tuktoyaktuk	AECOM
ITH (Inuvik to Tuktoyaktuk Highway) Sedimentation and Erosion Control Plan	2014	GNWT DOT	Kavik Stantec
ITH Permafrost Monitoring Plan	2014	GNWT DOT	GNWT DOT
Aquatic Effects Monitoring Plan and Surveillance Network Program: Construction of the ITH	2014	GNWT DOT	GNWT DOT
ITH Fish and Fish Habitat Protection Plan	2014	GNWT DOT	Kavik Stantec
A Vision for the NWT Power System Plan	2013	NT Energy	Northwest Territories Power Corporation
Northwest Territories Energy Action Plan	2013	GNWT	GNWT
ITH Archaeological Site Management Plan	2013	PWNHC	GNWT DOT
ITH Spill Contingency Management Plan	2013	GNWT DOT	EGT Northwind Ltd.

Table 18-2: Previous Studies and Regulatory Applications Relevant to the Project			
Study Title	Year	Proponent	Consultant/Author
ITH Emergency Response Management Plan	2013	GNWT DOT	EGT Northwind Ltd.
ITH Waste Management Plan	2013	GNWT DOT	EGT Northwind Ltd.
ITH 2013 Bathymetric Survey-Rev. 1	2013	EGT Northwind Ltd.	Kiggiak EBA
ITH Wildlife and Wildlife Habitat Protection Plan: (1) Construction	2013	GNWT DOT	Kavik Stantec
ITH - Baseline Data Acquisition Program: Vegetation Mapping and Rare Plant Surveys	2012	GNWT DOT	Kavik Stantec
ITH Baseline Data Acquisition Program: Wildlife Habitat Potential Mapping	2012	GNWT DOT	Kavik Stantec
ITH Hydrotechnical Assessment of Stream Crossings	2012	GNWT DOT	Kavik Stantec
ITH Traditional Knowledge Workshops	2012	GNWT DOT	Kavik Stantec
Summary of Existing Traditional Knowledge for the Inuvik to Tuktoyaktuk Highway Study Area	2012	GNWT DOT	Kavik Stantec
ITH Potential Borrow Source Geotechnical Investigations Program	2012	GNWT DOT	Kavik Stantec
Mackenzie Valley Community Gas Conversion Preliminary Feasibility Study	2012	GNWT ITI	Canadian Gas Services International
Inuvik Wood Pellet Infrastructure Study	2012	GNWT ENR	Arctic Energy Alliance
Submission to the EISC: Project Description for the South Parsons Lake Gas Supply Project, NWT	2011	Utilities Group Facilities Inc. (UGFI)	Canadian Petroleum Engineering Inc. and IMG Golder

Table 18-2: Previous Studies and Regulatory Applications Relevant to the Project			
Study Title	Year	Proponent	Consultant/Author
Emergency Response Plan UGFI IKHIL Production Well Project	2011	Inuvialuit Petroleum Corporation	Canadian Petroleum Engineering Inc.
Archaeological and Fisheries assessment of the Inuvik to Tuktoyaktuk Highway	2011	GNWT DOT	IMG-Golder
Spring 2010 Aquatic Field program Results	2010	GNWT DOT	Kiggiak EBA
Submission to the EISC Inuvik to Tuktoyaktuk Highway / Spring – Summer 2010 Field Stream Crossing Assessment	2010	GNWT DOT	Kiggiak EBA
Project Description Report for Construction of the Inuvik to Tuktoyaktuk Highway, NWT	2010	Hamlet of Tuktoyaktuk, Town of Inuvik and GNWT	Kiggiak EBA
Town of Inuvik Community Energy Plan	2010	Town of Inuvik	Kavik-Axys and Stantec Consulting
Archaeological and Fisheries Assessment of the Tuktoyaktuk to Source 177 Road	2009	GNWT DOT	IMG-Golder
Submission to the EISC: Construction Phase Environmental Management Plan for the Tuktoyaktuk to Granular Source 177 Access Road	2009	GNWT DOT	Kiggiak EBA
Submission to the EISC: Construction Phase Wildlife Management Plan for the Tuktoyaktuk to Granular Source 177 Access Road	2009	GNWT DOT	
Foundation for a Sustainable Northern Future - Report of the Joint Review Panel for the Mackenzie Gas Project (Volumes I and II)	2009	National Energy Board	Joint Review Panel of the Mackenzie Gas Project

Table 18-2: Previous Studies and Regulatory Applications Relevant to the Project			
Study Title	Year	Proponent	Consultant/Author
Submission to the EISC: MGM Energy Corp. Ogruknang 2D Seismic Program, 2007/2008, 2008/2009 and 2009/2010	2007	MGM	IMG-Golder
Review of the Ikhil Gas Development and Pipeline Regulatory and Environmental Process: Lessons Learned	2007	Environmental Studies Research Fund	Kavik Axys
Inuvik Gas Pipeline Lessons Learned	2004	Imperial Oil Resources Ltd.	North of 60 Engineering
Mackenzie Gas Project	2002	Imperial Oil Resources Ventures Limited	EIA including numerous field studies and reports
Tuktoyaktuk Peninsula Lake and Fish Habitat Survey	2000	Anderson Exploration Ltd.	Inuvialuit Environmental Inc.
Town of Inuvik gas supply environmental overview: A report submitted to the Inuvialuit Petroleum Corporation	1996	Inuvialuit Petroleum Corporation	Webb and McDougall (1996)
Beaufort Region Environmental Assessment and Monitoring Program (BREAM)	1986 to 1994		BREAM analysis reports
Mackenzie Environmental Monitoring Program (MEMP)	1985 to 1994		Government and industry reports
Inuvialuit Organizations (Joint Secretariat, FJMC, Wildlife Management Advisory Council (NWT), Inuvialuit Game Council, HTC, ILA)	1984 to present	Various	Surveys, management plans, co-management plans, harvest studies, etc.

Recent land use in the M-18 RSA and the LSA has mostly involved oil and gas exploration. Several dozen seismic and drilling programs have occurred over the past five decades within the LSA and RSA. There are 18 abandoned oil or gas wells within a 15 km radius of M-18. The wells were drilled between December 1968 and February 2002. Eleven of the wells were drilled in 1985-1986 and were screened by

the EISC and approved by the IWB and the NEB. Seventeen of the wells are owned by Imperial Oil and the most recent two wells (TUK M-18 and TUK B-02) are currently owned by Canadian Natural Resources Limited (CNRL). All the wells except for TUK B-02 had drilling waste sumps, currently in various states of repair. A list of the wells within the RSA and LSA is provided in Table 11-6.

Table 11-6: Oil and Gas Wells in the RSA (10km radius of the M-18 well)

SITE NAME	OWNER	CLASS	WELL STATUS	Original Spud Date	Depth (m)	Land Owner
TUK F-18	Imperial Oil	Exploratory Well	Abandoned	1968-12-29	3146	7(1)a
TUK L-09	Imperial Oil	Exploratory Well	Abandoned	1983-11-18	3030	7(1)a
TUK J-29	Imperial Oil	Exploratory Well	Abandoned	1985-01-11	3227	7(1)a
TUK H-30	Imperial Oil	Delineation Well	Abandoned	1985-04-21	1400	7(1)a
TUKTUK A-12	Imperial Oil	Delineation Well	Abandoned	1985-12-02	1790	7(1)a
TUK G-39	Imperial Oil	Delineation Well	Abandoned	1985-12-05	1797	7(1)a
TUK B-40	Imperial Oil	Delineation Well	Abandoned	1985-12-08	1800	7(1)a
TUKTUK H-22	Imperial Oil	Delineation Well	Abandoned	1986-01-11	1802	7(1)a
TUK G-48	Imperial Oil	Delineation Well	Abandoned	1986-01-14	1700	7(1)a
TUKTUK D-11	Imperial Oil	Delineation Well	Abandoned	1986-02-07	1810	7(1)a
TUK E-20	Imperial Oil	Exploratory Well	Abandoned	1991-01-25	3173	7(1)a
TUK M-18	CNRL	Delineation Well	Suspended	2001-12-24	2962	7(1)a
TUK B-02	CNRL	Exploratory Well	Abandoned	2002-02-17	3187	7(1)a

13. The scope and the sequence and timing of the authorizations sought by IESPL for the IESP.

Background

IPC's approach to engagement on the IESP has several key features.

- IPC started early in the Project planning stage.

- IPC followed the well-tested governance framework established under the IFA and has supplemented this with highly individualized engagement on a person-by person, group-by-group, and community-by-community basis.

- Residents of the ISR are accustomed to consultation and engagement processes as a result of earlier experiences including:
    - Their own regional environmental assessments over the years;
    - The ITH pre-development work;
    - The Mackenzie Gas Project;
    - Decades of offshore explorations and seismic studies; and
    - Many research projects of all kinds.

Over twenty years ago, prior to granting the TUK 2 Concession to Petro Canada in 2000, Inuvialuit leadership, through the chairs of the six Inuvialuit community corporations, engaged in discussion about the development of M-18. Since then, the Inuvialuit Corporate Group has waited for market conditions to align so that the well owners would want to develop the well.

While southern markets may have been the target for the well owners, Inuvialuit were focused on providing an affordable source of energy to local residents and businesses. To date, a southern market for Arctic-sourced natural gas has not been sufficient to support the well development. As a result, residents of the ISR were in an increasingly precarious situation for their energy security.

In response, between 2016-2018, the Inuvialuit Corporate Group, with financial and informational support from the Government of Canada through CanNor, and from the GNWT through the Department of Infrastructure Tourism and Investment (**ITI**), undertook an assessment of the feasibility of producing local natural gas for local consumption. This work entailed extensive engagement with both levels of government, the Northwest Territories Power Corporation, local businesses, and residents who were willing to share their experience with, for example, power and heating supply, logistics, conversion and more.

Once the Inuvialuit Corporate Group determined that the development of M-18 was feasible from a technical and economic perspective, Inuvialuit and its partners set out in the summer of 2018 to complete field studies to assess the possible impacts of this development on the local environment and those who rely on it. This required approvals from the ILA, the EISC, and the Aurora Research Institute (**ARI**), and included engagement with the ILA, both Inuvik and Tuktoyaktuk HTCs, both Inuvik and Tuktoyaktuk Community Corporations, and with other harvesters and Inuvialuit knowledgeable about the area.

Further, once it was determined that potential environmental impacts would not be significant to neither harvesters nor the environment, IESPL undertook a geotechnical study in winter 2020 to determine the development approach that would result in the least disturbance and impact to the local area. This study [Kiggiak EBA 2020] required further approvals from the ILA, the EISC and the ARI; communications and engagement with local businesses, both Inuvik and Tuktoyaktuk HTCs, and both Inuvik and Tuktoyaktuk Community Corporations, as well as wildlife and environmental monitors, regarding the timing, location, and trajectory of components of the proposed study.

This work led to the current design of the IESP. Finally, twenty years after the IRC and ILC granted the TUK 2 Concession, IESPL set out through the summer of 2020 to formally consult the residents of local communities on the details of the proposed IESP. IESPL also reached out to the co-management bodies established under the IFA to provide information, documentation, presentations, and opportunities to have questions answered. The consultation and public outreach were an iterative and robust process that followed best practice for community engagement.

The engagement included a range of communication methods and opportunities including presentations followed by written correspondence, subsequent meetings, question and answer brochures and telephone calls as individuals had questions. Contributions from stakeholders have been documented, considered and implemented into the IESP. Local Inuvialuit from the IESP were available for questions in Inuvialuktun.

The Traditional Knowledge Guide for the ISR (Kavik-Axys and FMW, 2008) encourages developers and traditional knowledge holders to work extensively together prior to an environmental impact assessment to gain the full value of traditional knowledge during the Project planning. IESPL used this philosophy to improve its Environmental Assessment for the CER Development Plan. Although the GNWT carried out extensive workshops to incorporate local traditional knowledge from Inuvik and Tuktoyaktuk (Kavik-Stantec 2012) for the ITH Project, IESPL decided to supplement that study and directly interview harvesters from Tuktoyaktuk about their use of the Project Area and the Regional Area. Interviews were completed via telephone by an Inuvialuit and former resident of Tuktoyaktuk. In-person sessions in the community were led by IRC Operations, and former resident of Tuktoyaktuk,

and IRC Communications, with IRC's Special Advisor providing information as needed. Harvesters and other land users were asked about their use of the RA and PA, as well as to find out if they knew of anyone else who uses the areas.

The ILA provided its record of Inuvialuit cabins in the region and IESPL was able to contact the owners directly to discuss the IESP. Relying on the EISC registry for a listing of all outfitters or hunting guides using the area, IESPL was able to reach out to these individuals as well. A list of outfitters, interviewed harvesters, and elders was provided in Section 20 of the EISC Project Description. The list of cabin owners is considered confidential.

Meetings with local leaders of the IRC and the six Community Corporations about the IESP began in the fall of 2016 when the Feasibility Study was first contemplated. Regular updates were provided on the outcomes of the study through 2017 and 2018. Formal pursuit of the IESP began in 2018 with periodic presentations being made to Inuvialuit leadership as the concepts developed. Meetings with government leaders and co-management bodies were also held to problem-solve specific issues and determine the overall level of support for the IESP. Details of these consultations are provided in Section 12.3.3 of the CER Development Plan. Specific meetings with communities and community organizations were initiated in the summer of 2020 as soon as the basis of design was conceived, and conceptual plans and potential impacts were available for discussion.

The IFA was signed by the parties on June 5, 1984, and was given the force of law through the *Western Arctic (Inuvialuit) Claims Settlement Act*, s.c. 1984, chp. 24. It is a modern treaty under subsection 35(3) of the *Constitution Act*, 1982. The IFA applies throughout the ISR. To the extent of inconsistency between the IFA and other federal, territorial, or municipal laws, regulations and policies, the IFA prevails (IFA s. 3(3)). The IFA, and the responsibility for implementing it in satisfaction of its objectives, belongs not only to Inuvialuit, but to all signatories. Those objectives, which guide activities and decision-making under the IFA, include:

- Preserving Inuvialuit cultural identity and values within a changing northern society;
- Enabling Inuvialuit to be equal and meaningful participants in the northern and national economy and society; and,
- Protecting and preserving Arctic wildlife, environment, and biological productivity.

IESPL intends for the IESP to respond to the impending local energy security crisis while actively advancing these objectives. As described previously, the proposed IESP is located entirely upon Inuvialuit 7(1)(a) Lands, within an existing Concession Area. Devon NEC Corporation and Suncor Energy Inc. submitted a Discovery Notice (**DN**) and Productive

Acreage Block (**PAB**) Application to ILA on February 10, 2010. ILA provided notice of agreement with the DN and PAB in June 2010. Pursuant to an agreement between IPC and the well owners, right, title, and interest under the concession passed to IPC as of August 1, 2020. Under the 2014 Devolution Agreement, the GNWT assumed responsibility for the regulation of onshore oil and gas activities in the NWT outside of the ISR, the Norman Wells Proven Area, and other miscellaneous federal lands, previously regulated by the National Energy Board (**NEB**). However, within the ISR, it was agreed that the NEB would continue to act as regulator pursuant to the GNWT oil and gas "mirror" legislation for a period of 20 years from the signing of the Devolution Agreement. On August 28, 2019, with the passing of the Canadian Energy Regulator Act, the NEB became the CER. In the ISR, the CER now administers the NWT Oil and Gas Operations Act (**OGOA**) and regulations, whereas outside of the ISR and the Norman Wells Proven Area, the NWT Office of the Regulator for Oil and Gas Operations (**OROGO**) is the primary regulator, and administrator, of OGOA. The purpose of OGOA is:

"To promote, in respect of the exploration for, and exploitation of, oil and gas:

- Safety, particularly by encouraging persons exploring for and exploiting oil or gas to maintain a prudent regime for achieving safety;
- The protection of the environment;
- The conservation of oil and gas resources;
- Joint production arrangements; and
- Economically efficient infrastructures."

Of specific concern to the approval of the IESP, are the sections of OGOA that are relevant to approvals and authorizations. These sections include but are not limited to: Section 10: Operating Licenses and Authorization for Work; Section 14: Development Plan Approval, and Section 17: Benefits Plan (discussed in Section 1.1.3 of the Development Plan Application). An overview of the anticipated CER process is provided in Figure 6 of the CER Development Plan. Additional regulatory approval is required from the GNWT for the construction of the access road intersection with the ITH. This is a minor permit that has already been applied for with the Department of Transport and is expected to be approved without issue or delay. Kiggiak EBA submitted a request for review to the Department of Fisheries and Oceans Canada (**DFO**) on behalf of IPC on October 26, 2020. DFO provided an email to Kiggiak EBA on October 30, 2020, indicating that the project will not require an authorization under the Fisheries Act or the Species at Risk Act. IPC submitted a Construction Notification and Aeronautical Assessment Form to Transport Canada regarding the construction of permanent structures. NAV Canada have provided a letter dated November 27, 2020, which stated: "NAV

CANADA has evaluated the captioned proposal and has no objection to the project as submitted". Other applications that will be needed for the project include GNWT Registration of the gas production facility; GNWT Worker's Compensation Board (**WCB**) Registration for operations; and Permits and Licenses related to quarrying from the Inuvialuit Land Administration. The IESP does not require a permit from the Inuvialuit Water Board.

IESPL also reviewed the Oil and Gas Installations Regulations in detail as they relate to the IESP, finding numerous sections of the regulation that were outdated or misaligned with standard construction of an onshore oil and gas installation, leading to several requests for Regulatory Deviation/Exemption as per OGOA. These requests were approved in early 2022.

IESPL Response

With the extensive history of consultation, study, engineering design, and consideration for the environment and safety, IESPL submitted its Operating Authorization applications in three separate packages with the intent of receiving approvals in sequential order that would preserve an already delayed project schedule due to regulatory complexity. Seasonal restrictions provide limited windows of construction locally, and delay of the Early Site Works Operations Authorization Application through this Hearing Order will add at a minimum, another year to the project schedule.

This further review delays the numerous benefits that the IESP will bring to the local region, prolongs the energy insecurity of the ISR, and introduces new environmental and safety risks associated with the M-18 sump by not allowing year-round access. IESPL, in its letter dated August 2, 2022, to the Commission of the CER, outlined the facts and issues at hand associated with delay of the Early Site Works approval.

The Hearing Order decision ignored these requests and the IESP will be delayed as a result. IESPL is now working on the assumption that it will begin Early Site Works in late 2023, and the revised project schedule in the IESP Application for Authorization for Installation and Operation of the IESP Energy Centre will be followed. The updated IESP construction schedule is now over 2 years delayed from the original CER Development Plan application.