

**Appendix D**  
**Responses to Joint Summary of Issues and**  
**Engagement for the Proposed Tilbury Phase 2 LNG**  
**Expansion Project**

## Appendix D. Joint Summary of Issues and Engagement for the Proposed Tilbury Phase 2 LNG Expansion Project

Table D-1 provides the responses to the Joint Summary of Issues that reflect the issues raised through comments received from the public, Indigenous nations and technical advisors (Federal authorities, Provincial ministries, local governments, health authorities, and Washington State Department of Ecology) during the comment period. The Impact Assessment Agency of Canada (IAAC) and British Columbia's (B.C.'s) Environmental Assessment Office (EAO) conducted a comment period from June 1, 2020 to July 16, 2020, inviting participants to provide feedback related to the Tilbury LNG Phase 2 Expansion Project (the proposed Project). The responses provided by FortisBC Holdings Inc. with its natural gas subsidiary FortisBC Energy Inc. (collectively defined as FortisBC) consider both the Provincial and Federal environmental assessment (EA) processes.

Given that both the Federal and Provincial EA processes are triggered, it is assumed that the Province will request that the Federal Minister of Environment and Climate Change Strategy approve a substitution of the Provincial EA process for the Federal impact assessment process. If substitution is approved for the proposed Project, it is expected that the B.C. EAO will conduct the Project Application in accordance with the Conditions set out in the Substitution Decision, and at the end of the assessment process the B.C. EAO will provide its report to both the Provincial and Federal Ministers for their consideration. As such, where the B.C. EAO process is referenced, it is assumed that it is a Substituted process that meets both Provincial and Federal requirements.

**Table D-1. Responses to Summary of Issues**

ID	Joint Summary Comment	Response
<b>Accidents, Malfunctions, and Public Safety</b>		
1	Potential for adverse environmental and human health effects from accidents and malfunctions, such as leaks or spills, during the construction and operation of the Project, and details on proposed prevention, mitigation and response measures that will be implemented.	Subsection 10.7 of the Detailed Project Description (DPD) has been updated to include a preliminary list of accidents and malfunctions that are proposed for assessment in the Application. The Application will include the effect of such incidents on the environment and human health and will develop specific mitigation measures to reduce or eliminate the likelihood or consequence of potential incidents. The same list has been added to the draft Application Information Requirement (AIR) appended to the DPD. The Application will include measures for prevention, mitigation, and response to these accidents and malfunctions. The preliminary list of accidents and malfunctions will be amended as appropriate during the Process Planning Phase of the B.C. EAO process before the AIR is finalized.
2	Potential impacts of accidents and malfunctions on nearby urban areas and businesses.	Subsection 10.7 of the DPD has been updated to include a preliminary list of accidents and malfunctions that are proposed for assessment in the Application. The Application will include the effect of such incidents on the environment and surrounding urban areas and businesses and will develop specific mitigation measures to reduce or eliminate the likelihood or consequence of potential incidents. The same list has been added to the draft AIR appended to the DPD. The Application will include measures for prevention, mitigation, and response to these accidents and malfunctions. The preliminary list of accidents and malfunctions will be amended as appropriate during the Process Planning Phase of the B.C. EAO process before the AIR is finalized.
3	Concern regarding the Project's proximity to the Vancouver Airport Fuel Delivery Project and the potential for an accident between the two projects.	Subsection 10.7 of the DPD has been updated to include a preliminary list of accidents and malfunctions that are proposed for assessment in the Application. The Application will include the effect of such incidents on the environment and surrounding urban areas and businesses and will develop specific mitigation measures to reduce or eliminate the likelihood or consequence of potential incidents. The same list has been added to the draft AIR appended to the DPD. The Application will include measures for prevention, mitigation, and response to these accidents and malfunctions. The preliminary list of accidents and malfunctions will be amended as appropriate during the Process Planning Phase of the B.C. EAO process before the AIR is finalized.
4	Inclusion of reliable modelling for contaminants released to air or spilled to water to inform the emergency management plans and associated response measures and capacities for each major type of foreseeable incident.	Accidental release of contaminants and spills will be assessed in the Application. Subsection 10.7 of the DPD has been updated to include a preliminary list of accidents and malfunctions that are proposed for assessment in the Application. The Application will include modelling that will inform the emergency management plans. The same list has been added to the draft AIR appended to the DPD. The Application will include measures for prevention, mitigation, and response to these accidents and malfunctions. The preliminary list of accidents and malfunctions will be amended as appropriate during the Process Planning Phase of the B.C. EAO process before the AIR is finalized.

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ID	Joint Summary Comment	Response
5	Concerns regarding the safety of people living in urban/residential areas near the Project Site, including in relation to flaring.	<p>FortisBC has an excellent safety record and the Tilbury liquefied natural gas (LNG) facility has been operating safely in Delta, B.C. since 1971.</p> <p>Flares are a common feature of LNG facilities and act as safety devices designed to relieve pressure. This proposed Project is at an early design stage including working on the flare. Additional detail about safety and the proposed flare will be provided in the Application.</p> <p>LNG is made from the same natural gas we use in our homes every day. To make it easier to store and transport by truck or ship, it is cooled to a liquid form.</p> <ul style="list-style-type: none"> <li>▪ When stored in a double-walled steel container, LNG is not flammable or explosive as there is no oxygen or air to react with the fuel.</li> <li>▪ The Tilbury existing facility and the proposed Project will have procedures and safety measures in place for preventing and managing spills, leaks, and vapour clouds. It also has the capability to shut down automatically during an emergency.</li> <li>▪ These safeguards will protect the facility, employees, and the public.</li> <li>▪ The facility has complete on-site fire control and response systems independent of the fire department.</li> <li>▪ The facility is also monitored 24/7 year-round by highly trained site personnel who have been producing LNG for decades.</li> </ul> <p>Subsection 10.7 of the DPD has been updated to include a preliminary list of accidents and malfunctions that are proposed for assessment in the Application. Also, subsection 2.8.4 speaks to the flare technologies being considered for the proposed Project.</p>
6	Risk of a terrorist attack on the Project site or LNG ships.	<p>Through the Certificate of Public Convenience and Necessity application process, a preliminary risk assessment, in combination with an assessment of the security environment in the Tilbury region assessed the risk of terrorism as negligible. As such, FortisBC has determined that accidents and malfunctions from intentional acts of terrorism are beyond the scope of the assessment for the proposed Project. Subsection 10.7 of the DPD has been updated to include a preliminary list of accidents and malfunctions that are proposed for assessment in the Application. The preliminary list of accidents and malfunctions will be amended as appropriate during the Process Planning Phase of the B.C. EAO process before the AIR is finalized.</p>
7	Concerns that Canada lacks regulations for LNG siting similar to regulations in the USA that would prohibit this proposal.	<p>The Tilbury LNG facility has been safely operating in Delta since 1971. The B.C. Oil and Gas Commission (B.C. OGC) oversees the safe construction and operation of the facility. FortisBC will be required to comply with the <i>Liquefied Natural Gas Facility Regulation (LNGFR)</i> under the <i>Oil and Gas Activities Act</i>. The <i>LNGFR</i> requires various safety and risk assessment studies to be carried out at appropriate stages of the proposed Project. These studies follow a process of hazard identification, risk assessment, mitigation, and monitoring. The facility will be designed and built in accordance with the results of the risk assessment as well as appropriate codes and standards, including the B.C. Building Code, Canadian Standards Association (CSA) Z276, and the standards identified in the <i>LNGFR</i>. The latter of which is specific to LNG facilities.</p>
8	Concerns related to locating LNG facilities near populated areas in an environment such as the Fraser River, in consideration of safety concerns and recommendations by the Society of International Gas Tanker and Terminal Operators.	<p>The aim of Society of International Gas Tanker and Terminal Operators is to enhance the safety and operational reliability of gas tankers and terminals. The Tilbury facility is an LNG storage facility and not a terminal or tanker loading facility. The Tilbury Marine Jetty project conducted an assessment on societal risk assessment. The proposed Project will involve conducting other risk assessments as part of the Project Application.</p> <p>The Tilbury LNG facility has been safely operating in Delta since 1971. The B.C. OGC oversees the safe construction and operation of the facility. FortisBC will be required to comply with the <i>LNGFR</i> under the <i>Oil and Gas Activities Act</i>. The <i>LNGFR</i> requires various safety and risk assessment studies to be carried out at appropriate stages of the proposed Project. These studies follow a process of hazard identification, risk assessment, mitigation, and monitoring. The facility will be designed and built in accordance with the results of the risk assessment as well as appropriate codes and standards, including the B.C. Building Code, CSA Z276, and the standards identified in the <i>LNGFR</i>. The latter of which is specific to LNG facilities.</p>

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<b>Acoustic Environment</b>		
9	Effects due to underwater noise.	The potential for underwater noise has been identified for upgrades to the Material Offload Facility (MOF) as well as vessel traffic during construction for bringing equipment to the site via barges. No underwater noise effects are anticipated during operations. The potential environmental effects of underwater noise will be investigated in the Application.
10	Details of the noise and steam vapour characteristics of the Project.	Subsections 10.2, 10.3, and 10.4 of the DPD summarize the atmospheric, physical, and biological environmental components of the proposed Project. The potential environmental effects will be investigated in the Application. FortisBC will review possible impacts from the environmental factors for both the construction and operation phases of the proposed Project.
<b>Alternative Means of Carrying Out the Project</b>		
11	Clarity and further detail on the alternative means of carrying out the Project listed in the Initial Project Description and the rationale for why the current technologies and processes were chosen.	Subsection 2.8 of the DPD has been updated to include a preliminary list of alternative means of carrying out the proposed Project. The DPD includes a preliminary discussion of proposed Project locations, components, and technologies that are considered for alternatives, summarizes the criteria for evaluation of the alternatives considered, information on how engagement feedback was considered, and provides rationale for the preferred alternative, where available. It is proposed that additional details about alternative means of carrying out the proposed Project will be provided in the Project Application.
<b>Alternatives to the Project</b>		
12	Clarity and further detail on the alternatives to the Project that were considered and rationale for why the current approach was selected.	Subsection 2.7 of the DPD has been updated to include additional detail on the alternatives to the proposed Project and rationale as to why the current approach was selected. It is proposed that additional details about alternatives to the Project will be provided in the Application.
<b>Atmospheric Environment</b>		
13	Effects on air quality from construction, operation and decommissioning, including activities associated with combustion (for example, transportation, construction vehicles, compression), intentional and non-intentional releases from equipment, electricity generation, flaring and venting, fugitive sources and physical disturbance to land causing dust (particulate matter).	Subsections 6.2 and 10.2.1 have been updated in the DPD to provide more information on the effects of air quality from proposed Project activities. The draft AIR appended to the DPD details the scope proposed for assessment of effects for the Project Application.
14	Use of the most stringent Canadian Ambient Air Quality Standards or B.C. Ambient Air Quality Objectives to undertake an assessment of existing (baseline) and predicted future (project, project + baseline, accidents and malfunctions, and cumulative) air quality.	Subsection 10.2.1 has been added to the DPD to provide more information on the use of Canadian Ambient Air Quality Standards in the assessment of the proposed Project.
15	Alignment of the Project with Metro Vancouver's regional air quality objectives.	Subsection 10.2.1 has been added to the DPD to provide more clarity on the use of Metro Vancouver's regional air quality objectives for the proposed Project.

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<b>Climate Change and Greenhouse Gas (GHG) Emissions</b>		
16	Contribution of the Project's carbon dioxide and methane emissions to climate change and how this could impact local, provincial, and federal government ability to meet climate change commitments and GHG emission targets.	Subsection 10.2.2.2 of the DPD has been updated to provide context around the contribution of the proposed Project's preliminary carbon dioxide equivalent (CO <sub>2</sub> e) emission estimates compared to local, Provincial, and Federal emission targets. FortisBC is committed to assisting jurisdictions in meeting their GHG reduction targets. FortisBC has set a target to reduce customer GHG emissions by 30 percent by the year 2030. The 30BY30 target is the next phase of FortisBC's plan to reduce emissions, called the Clean Growth Pathway to 2050, which is summarized in subsection 1.1.2. In addition to FortisBC's Company commitments, FortisBC will be considering proposed Project-specific design measures and Company practices to optimize and mitigate proposed Project GHG emissions.
17	Clarity on the scope of activities included in the GHG emissions estimates (including methane leakage during life cycle of LNG production), and descriptions of the methodologies and assumptions used for the quantification of GHG emissions from each activity.	Subsections 6.1 and 10.2.2.1 of the DPD have been updated to include additional details on the scope of proposed Project activities included in the GHG emissions estimates and descriptions of methodologies and assumptions used for the quantification of GHG emissions. The estimates of direct and indirect (acquired) proposed Project GHG emissions have been updated since the Initial Project Description based Project design and representative equipment specifications available at this time. The GHG estimates are therefore preliminary. It is proposed that updated GHG emission estimates will be prepared for the Project Application to satisfy the B.C. EAO, Impact Assessment Agency of Canada (IAAC), and Strategic Assessment of Climate Change requirements.
18	Inclusion of net GHG emissions quantified on an annual basis.	Subsection 10.2.2 of the DPD has been updated and provides a preliminary net GHG emission estimate on an annual basis.
19	Consideration of best available technologies, best environmental practices, and emerging technologies for all aspects and phases of the Project to maximize GHG reductions and energy efficiency.	Subsection 2.8 of the DPD has been updated to include a preliminary list of alternative means of carrying out the proposed Project, including technologies being considered for emission reduction and energy efficiency. One of the key design features of the proposed Project to minimize emissions is the use of renewable hydroelectricity to power the compression of natural gas for liquefaction. The use of electric drives helps make the Tilbury LNG facility one of the lowest carbon intensity LNG facilities in the world. It is proposed that the Application will include additional details about the evaluation of best available technologies, best environmental practices, and emerging technologies that were considered in the proposed Project design to increase energy efficiency and reduce GHG emission.
20	Impacts of the Project on FortisBC being able to meet its corporate 30BY30 objective.	FortisBC has set a goal of reducing customers' GHG emissions by 30 percent by the year 2030 in its 30BY30 target. The proposed Project is expected to play a vital role in meeting this target by producing LNG as a lower-carbon fuel for marine and overseas customers. More detail is provided in Section 2 of the draft DPD.
<b>Country Foods</b>		
21	Effects on country foods from the release of contaminants of potential concern into the environment (air, water, soil) which could be absorbed by foods sourced through hunting, trapping, fishing and harvesting, grown for subsistence or medicinal purposes or having Indigenous cultural importance.	Subsection 10.3 of the DPD includes information on the existing issues in the Fraser River related to country food contamination. Subsection 10.3of the DPD notes that the 7651 Hopcott Road, on Tilbury Island in the City of Delta, B.C. (the proposed Project Site) has already been subject to contamination remediation efforts because of previous activities. It is proposed that potential impacts of the proposed Project on the quality and quantity of country foods will be assessed under the Human Health Valued Component (VC) as well as the Indigenous Interests sections in the Application. If required, mitigation measures to reduce or avoid adverse effects to country foods will be included in the Application.
<b>Cumulative Effects</b>		
22	Cumulative effects on regional traffic and land use, including lands within the Agricultural Land Reserve and in the lower Fraser River area.	It is proposed that cumulative effects on regional traffic will be assessed in the Application under the Land and Resource Use VC. Cumulative effects to regional traffic will be assessed in the Application under the Infrastructure and Services VC.

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23	Cumulative effects of the Project and other industrial projects, such as the Trans Mountain Expansion and Woodfibre LNG Projects, on Southern Resident Killer Whales.	The proposed Project is expected to have limited interactions with Southern Resident Killer Whales. It is estimated that six to eight cargo vessel deliveries will be required during the 3 to 6 year construction period. Some additional deliveries may be required for aggregate and other construction material delivery. The vessel/barge deliverables are expected to come from Sand Heads lighthouse at the mouth of the Fraser River along the shipping channel of the South Arm of the Fraser River to the proposed Project Site. Barges will use established navigation channels to travel to and from the site. Shipping of LNG during operations is assessed in a separate EA for the Tilbury Marine Jetty, which is proposed to operate adjacent to the proposed Project Site.
24	Cumulative effects on air quality from an increase in water and land-based transportation due to the number of developments proposed in the Project area.	Cumulative effects on air quality will be assessed in the Application under the Air Quality VC.
25	Cumulative effects from underwater noise on Southern Resident Killer Whales, their food sources and habitat.	The proposed Project is expected to have limited interactions with Southern Resident Killer Whales. A small number of barges are likely required to deliver materials to the site during construction. Barges will use established navigation channels to travel to and from the proposed Project Site. Shipping of LNG during operations is assessed in a separate EA for the Tilbury Marine Jetty, which is proposed to operate adjacent to the proposed Project Site.
26	Cumulative climate change effects from the Project and other industrial projects.	The Application will include a Cumulative Effects Assessment that will identify potential cumulative effects to each VC by comparing the current and future conditions. Climate change will be considered as part of future conditions, where appropriate, for the specific VC.
<b>Current and Future Generations</b>		
27	Project impacts on future generations due to GHG emissions and climate change.	The Application will include an evaluation of how VCs and Indigenous interests contribute to the proposed Project's positive or negative effects on Current and Future Generations. Since climate change will be considered as part of future conditions when evaluating specific VCs, these impacts will be included in the Current and Future Generations evaluation, where appropriate.
<b>Economic Conditions</b>		
28	Effects of the Project construction on the local and regional economy, local job creation and labour force.	The Application will include an evaluation of how the Project's construction and operations phases will affect the local and regional economy, including local job creation and the labour force. Potential effects of the proposed Project on the local and regional economy, local job creation and labour force will be assessed under the Employment and Economy VC as well as the Indigenous Interests sections in the Application, as applicable.
29	Consideration of whether the Project will generate significant social and economic benefits and opportunities for local communities, including women's employment or entrepreneurship opportunities.	<p>FortisBC is an equal opportunity employer and supports an inclusive and diverse workforce. In addition, FortisBC requires contractors to keep a record of employment, training, and business opportunities provided to Indigenous individuals, local workforce, and contractors. FortisBC monitors the implementation of these hiring practices through regular reporting with contractors.</p> <p>FortisBC has developed Indigenous skills, employment and career-training initiatives, including the Residential Energy Efficiency Works (REnEW) program. FortisBC has also engaged with industry partners like the Electrical Joint Training Committee Society, PLATO Testing, and Industry Training Authority to provide relevant training to Indigenous participants.</p> <p>FortisBC will prioritize local and Indigenous hiring on the proposed Project, where possible, and explore additional programs through ongoing engagement to create training and employment opportunities for under-represented communities.</p>

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**Table D-1. Responses to Summary of Issues**

ID	Joint Summary Comment	Response
30	Details on how women, men, and diverse groups of people are employed either as wage earners in the labour market or in customary livelihood occupations, and employment rates and the level or nature of unemployment in the local area.	The Application will include a description of the existing conditions of the labour market. As per Provincial and Federal requirements (that is, assessing the disproportionate effects on distinct human populations, including populations identified by gender, and the intersection of sex and gender with other identity factors), the Application will describe existing labour conditions that relate to diverse groups of people, including differential conditions for women, men, and other diverse groups. The Application will rely on existing data sets to describe labour conditions. Where existing data sets present limitations to an understanding of diverse labour conditions, the Application will note those limitations and their respective constraints on understanding differential effects.
31	Inclusion of measures that will be undertaken to support the recruitment, development and retention of workers.	FortisBC has a comprehensive training program to develop employees' skills and improve retention. FortisBC has a dedicated human resources team to recruit, develop, and retain workers.
<b>Ecosystems</b>		
32	Effects on the sensitive Fraser River estuary ecosystem including its ecosystem function to reduce flooding impacts.	The Fraser River estuary ecosystem, including its ecosystem function, will be considered in the Summary of Biophysical Factors that Support Ecosystem Function section of the Application. The design of the MOF is ongoing and new in-water structures (such as, piles) may be part of the design. Should the in-water works be necessary, the design will seek to minimize impacts to the Fraser River estuary ecosystem and its overall function.
<b>Effects of the Environment on the Project</b>		
33	Effects of the environment on the Project such as fire, floods, extreme weather events, increased precipitation, and higher water levels due to climate change. Future climate projections should be taken into account.	Subsection 10.8 of the DPD has been updated to include a preliminary list of effects of the environment that are proposed for assessment in the Application. The same list has been added to the draft AIR appended to the DPD. The Application will include measures for prevention, mitigation, and response to these effects of the environment, including climate change adaptation measures. The preliminary list of effects of the environment will be amended as appropriate during the Process Planning Phase of the B.C. EAO process before the AIR is finalized.
<b>Environmental and Impact Assessment Processes</b>		
34	Concerns about the credibility of information generated throughout the assessment process and the opportunity to participate in the process.	FortisBC is committed to undertaking meaningful engagement and encouraging participation by the public. FortisBC has hired qualified, experienced EA professionals to prepare the Application. In accordance with the B.C. EAO AIR Guidance "The Application must identify key personnel responsible for preparing the Application including, their employers, qualifications, and the sections for which they were contributors. The Application must identify key information, reports and data used to support the development of the Application and the associated contributing organization and relevant qualifications. The Application must demonstrate that a qualified individual has prepared the information or studies provided. A qualified individual would include someone who, through education, experience or knowledge relevant to a matter, may be relied on by the proponent to provide advice within his or her area of expertise. Knowledge relevant to a matter may include Indigenous and local knowledge." FortisBC is also in accordance with the guidance developed for the <i>Impact Assessment Act</i> that "is informed and guided by consultation and engagement that occurs with the public, Indigenous groups, lifecycle regulators, jurisdictions, federal authorities (FAs) and other interested parties during early planning." (Tailored Impact Statement Guidelines [Government of Canada 2020]).

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**Table D-1. Responses to Summary of Issues**

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35	Concerns regarding public confidence in the assessment process; including lack of advertising of the open houses and opportunities for meaningful public engagement.	<p>FortisBC will continue to help support communicating opportunities for public engagement on the proposed Project. In addition to the engagement opportunities through the B.C. EAO/IAAC EA process, FortisBC regularly shares information related to the proposed Project through the <a href="http://talkingenergy.ca">talkingenergy.ca</a> website and has a phone line and email for members of the public to engage directly with FortisBC about the proposed Project. FortisBC paid for advertisements in seven local publications, including translated print ads in Punjabi and Chinese language newspapers. A polling feature was set up for the Virtual Open House and public questions that received the most "votes" were answered sooner. The presentation was posted online afterwards. Section 12 of the DPD details the engagement with governments, public, and other parties.</p> <p>To note, due to the extraordinary circumstances of the COVID-19 pandemic, FortisBC has adapted its engagement processes for Early Engagement on the proposed Project. Many community events that FortisBC would normally participate in were cancelled; however, FortisBC is continuing to engage on projects that are considered vital to FortisBC's energy infrastructure, including the proposed Project. FortisBC is also taking steps to keep FortisBC customers, FortisBC employees, and the public safe:</p> <ul style="list-style-type: none"> <li>▪ FortisBC temporarily cancelled in-person meetings and engagement activities to support physical distancing and are using digital alternatives such as teleconferences, Virtual Open Houses, and other digital tools to engage with governments, the public, and other parties.</li> <li>▪ FortisBC is working with regulatory agencies to ensure any engagement is safe and effective in facilitating meaningful dialogue.</li> <li>▪ FortisBC requested the B.C. EAO extend Early Engagement from 90 days to 150 days and asked the IAAC to pause the planning process to allow additional time to ensure meaningful engagement.</li> </ul>
<b>Fish and Fish Habitat</b>		
36	Effects on fish (including salmon, sturgeon, steelhead, and eulachon) mortality, lifecycle, productivity and habitat through alteration, disruption, and destruction of fish habitat during all Project phases.	Subsection 10.4.3 of the DPD provides preliminary details of the baseline conditions and potential effects of the Project on Fish and Fish Habitat. Potential effects to fish and fish habitat for all proposed Project phases will be assessed in the Application under the Fish and Fish Habitat VC. Details of the proposed effects assessment requirements are provided in the draft AIR that is appended to the DPD.
37	Additional information to determine if the upgrades to the temporary construction jetty requires a Fisheries Act authorization.	The Application will consider potential effects to fish and fish habitat associated with upgrades to the MOF. A Permit Plan will be prepared during the Process Planning Phase that will include more details on potential authorization requirements under the <i>Fisheries Act</i> . In addition, a representative from Fisheries and Oceans Canada will participate in the Technical Advisory Committee during the EA process.
38	Mitigation plan, including timing windows for construction of the temporary construction jetty, for impacts to fish and fish habitat.	Mitigation measures will be developed during the proposed Project's detailed design stage and design considerations will be used to reduce impacts of construction and operation of the MOF on fish and fish habitat. The scope of the details for the mitigation plan will be amended as appropriate during the Process Planning Phase of the B.C. EAO process before the AIR is finalized. The details will be outlined in the Project Application.
<b>Geology, Geochemistry, and Geological Hazards</b>		
39	Inclusion of a seismic hazard assessment and effects related to seismic activity including liquefaction and other relevant hazards.	Subsections 10.3.1, 10.8.1, and 10.8.2 of the DPD discusses the seismicity as a potential effect. The Application will include an assessment of Effects of the Environmental on the proposed Project, including earthquakes.

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<b>Human Health and Well-Being</b>		
40	The Human Health Risk Assessment should include baseline, Project-attributed and cumulative health effects (for example hazard quotients for non-carcinogenic and incremental cancer risks for potentially carcinogenic contaminants of potential concern).	FortisBC will complete a Human Health Risk Assessment and this will part of the analysis of possible proposed Project impacts (both positive and negative) on the Human Health VC within the effects assessment.
41	Inclusion of a detailed noise assessment and any related health effects on all potential human receptor locations in accordance with Health Canada guidance. The assessment should include sensitive human receptor locations (for example schools, hospitals, retirement and care homes), residences, cabins and other temporary/seasonal traditional use sites such as hunting, fishing, trapping, berry picking and ceremonial and other use (for example recreational) within the Project area and their distances to key Project components that maybe have potential impacts on these receptors.	Health Canada's (HC) Guidance for Evaluating Human Health Impacts in Environmental Assessment: Noise (HC 2017) will be implemented for the construction and operational phases of the proposed Project in order to assess potential health risks associated with noise. Under the HC guideline, any human receptor within the proposed Project study area that may have a heightened sensitivity to noise exposure should be evaluated (for example, Indigenous Peoples, schools, childcare centres, hospitals).
42	Consideration of effects on human health from all pollutants, including emissions from vessel/barge deliveries, use of portable generator systems or temporary construction power, and potential use of self-generation and/or gas combustion compressor drives.	The proposed Project proposes to align with Metro Vancouver Ambient Air Quality Objective (AAQOs), Canadian Ambient Air Quality Standards, and B.C. Provincial AAQOs. The Application will consider potential health effects due to air quality changes under the Human Health VC. Information from the Air Quality assessment (including emissions from all proposed Project activities during all phases) will be pulled into the Human Health assessment to consider effects of air emissions on Human Health.
43	Consideration of effects on human health of released contaminants against federal and provincial standards during all Project phases, including abnormal operating scenarios.	In the Application, FortisBC will consider potential health effects due to release of contaminants under the Human Health VC. Information from the Air Quality assessment and Soil assessment (which includes an assessment of contamination) will be pulled into the Human Health assessment to consider effects of contaminants on Human Health.
44	Effects on human health and sensitive ecosystem receptors from emission of air pollutants (particulate matter [PM], PM <sub>2.5</sub> , PM <sub>10</sub> ), sulfur oxides, nitrogen oxides, volatile organic compounds, hydrogen sulphide, polycyclic aromatic hydrocarbons, carbon monoxide and other pollutants) and degradation of local or regional ambient air quality.	In the Application, FortisBC will consider potential health effects due to air emissions under the Human Health VC. Information from the Air Quality assessment will be pulled into the Human Health assessment to consider effects of air emissions on Human Health. Ecosystem effects related to air emissions will be evaluated in the Application in the Summary of Biophysical Factors that Support Ecosystem Function.
45	Diesel particulate matter should be assessed for potential effects on human health.	The Application will consider potential health effects due to air quality changes under the Human Health VC, including from the use of diesel fuel. Information from the Air Quality assessment will be pulled into the Human Health assessment to consider effects of air emissions on Human Health.
46	Inclusion of information on populations and activities in the area, including Indigenous peoples who practice traditional activities, their distances in relation to the Project and what Project components may affect which population/activity.	It is proposed that the Application will include an overview of the current state of human and community well-being in the proposed Project area, including local and Indigenous perspectives. An evaluation of potential positive and negative effects on human and community well-being will be included in the Application as well as proposed measures to reduce or avoid negative effects.

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47	Information on how products of LNG processing, such as wastewater including accidental wastewater discharge, hydrogen sulfide, mercury, acid gas and heavy hydrocarbons, will be treated and/or disposed of on Tilbury Island.	Preliminary information about waste and emissions is provided in Section 6 of the DPD. Additional details on waste management will be provided in the Application. FortisBC will comply with all applicable acts and regulations related to waste disposal. During operations, FortisBC will refer to their existing Environmental Management System, environmental standards, and guidance documents. These processes will be updated, as needed, prior to commissioning the upgrades.
<b>Indigenous Peoples' Rights</b>		
48	Effects to the rights of Indigenous peoples and their traditional land use through the construction and operation of the Project.	Effects to the rights of Indigenous Peoples and their Traditional Land Use will be assessed in the Application. Changes in the ability to exercise Indigenous Rights will be assessed including subsistence use, cultural use, Indigenous governance systems, cultural continuation, and additional rights-related activities as identified by Indigenous nations.
<b>Infrastructure and Services</b>		
49	Clarity on the relationship between the Tilbury Marine Jetty project and the Tilbury Phase 2 LNG Expansion Project.	The Tilbury Jetty Limited Partnership is the proponent of the Tilbury Pacific Marine Jetty project and is jointly owned by affiliates of FortisBC and Seaspan. The Tilbury Marine Jetty would be constructed next to the proposed Project Site to enable ship-to-ship LNG fueling and bulk loading of LNG on to specialized carrier vessels. The Tilbury Marine Jetty project is separate and distinct from the proposed Project and the existing Tilbury LNG facility. The EA process for the Tilbury Marine Jetty project began in 2015 and is currently undergoing a combined Federal and Provincial EA, under a Substituted Provincial process that is led by the B.C. EAO. The proposed Project is intended to increase the resilience of the natural gas distribution system. As a regulated utility, FortisBC has an obligation under the <i>Utilities Commission Act</i> to provide adequate, safe, efficient, just, and reasonable natural gas service to its customers. The Tilbury LNG facility plays a vital role in the resilience of the natural gas system in B.C. but requires additional capacity to continue to provide energy security. The benefit will be primarily for customers in the Lower Mainland. The proposed Project is also intended to provide production capacity to meet growing local and global market demand. Local and global demand for LNG is currently being met through truck loading and containerized shipping. The Tilbury Marine Jetty project and Tilbury Phase 2 Expansion are independent with unique economic drivers and will proceed based on their own merits.
50	Additional details on other infrastructure upgrades that will be required, including the transmission line and offsite lay down and storage areas.	Project Components of the DPD has been updated. See Table 2-2. Additional details will also be provided in the Application.
51	Further description of the temporary construction jetty and upgrades	Project Components of the DPD has been updated. See Table 2-2. Additional details will also be provided in the Application.
52	Traffic impact assessment to understand effects from construction and operation traffic on regional and local traffic and future traffic forecasts.	City of Delta (Delta) has a complex transportation system that accommodates the needs of the mobility challenged, pedestrians, cyclists, local traffic, commuter traffic, and goods movement (Delta 2019). It is proposed that traffic management plans and forecasts for Delta and Metro Vancouver will be reviewed and analyzed in the Application to understand the effects from proposed Project construction and operation traffic on regional and local traffic, as well as future traffic forecasts.
53	Effects on local and regional infrastructure such as water mains, forecasts for Greater Vancouver Water District water demand and City of Delta municipal forecasts.	Critical to Delta's well-being and quality of life is the provision, maintenance, and renewal of the Municipality's infrastructure. Delta works closely with Metro Vancouver in the provision of storm water and sanitary sewer systems, and the provision of the water supply. Metro Vancouver provides Delta with safe drinking water to distribute it to residences and businesses in the Municipality. No effect on the use or availability of current local and regional infrastructure and services, such as water mains is anticipated, however this will be confirmed in the Application. Forecasts for Metro Vancouver's water demand and Delta's Municipal water forecasts will be reviewed and analyzed in the Application.

Appendix D. Responses to Joint Summary of Issues and Engagement for the Tilbury Phase 2 LNG Expansion Project

**Table D-1. Responses to Summary of Issues**

ID	Joint Summary Comment	Response
54	Effects from construction, operation, or associated marine shipping traffic on City of Richmond flood protection infrastructure.	Within Metro Vancouver, the City of Richmond (Richmond) has 49 kilometres (km) of dikes and 39 drainage pump stations that provide the Municipality with flood protection from ocean storm surges, freshet, and sea level rise. A portion of Richmond's flood protection infrastructure is along the Fraser River. Potential impacts from proposed Project construction, operation, or associated marine shipping traffic on Richmond's flood protection infrastructure will be investigated in the Application under the Infrastructure and Services VC.
55	Information on the amount of energy required for processing the LNG and the energy's source.	Electric drives and air-cooling will be used for liquefaction and other process units, that reduces overall emissions compared to gas powered equipment. The Application will estimate the amount of electricity required annually to operate the proposed Project, which will be converted into an indirect emission estimate as part of the GHG assessment.
56	Information on the source of the natural gas and whether a new or expanded pipeline will be needed to service the Project.	The Tilbury facility is already connected to natural gas resources in B.C. and Alberta through the existing Provincial transmission system. FortisBC is planning an upgrade of an approximately 1 to 3 km line between the Tilbury Gate Station and the Tilbury LNG facility. The upgrade is for seismic integrity and increased gas send-out capacity. The upgrade is not part of the proposed Project and is authorized by the B.C. government as part of B.C. Order-in-Council O.C. 557/2013 through Direction No. 5 issued to the B.C. Utilities Commission under the <i>Utilities Commission Act</i> . Refer to ID 64 for more information.
<b>Land and Resource Use</b>		
57	Additional details on subsistence use (for example, fishing and harvesting), recreational use (for example, trails and parks), and sensitive places (for example, schools and hospitals) in the Project area generated by engagement of appropriate Indigenous groups and stakeholders.	Indigenous Peoples began establishing fishing camps, settlements, hunting grounds, and spiritual sites on the banks of the Fraser River, and in the upland areas in Tsawwassen and North Delta, with archaeological sites in the area being amongst the oldest known in the Province. The Musqueam Indian Band has a land reserve in Delta. The Tsawwassen First Nation and the Provincial and Federal Governments have signed a treaty, which includes the Tsawwassen First Nation treaty lands located on the southwest edge of Delta. Today, almost half of Delta is farmland reflecting the early European settlement pattern of the Municipality, and today, agriculture still adds to the economy and to residents' quality of life. Apart from agricultural lands, other significant land uses include Burns Bog, a critical Ecological Conservancy Area, single-family residential uses, parks, Regional parks and open areas, and industry and port/terminal use. Further details on land uses in Metro Vancouver and Delta will be investigated in the Application under the Land and Resource Use VC.  In collaboration with Indigenous nations, FortisBC will identify sources of Indigenous Knowledge to incorporate into and use to prepare the assessment of effects for the Project Application.
58	Effects on agricultural land near the Project site.	The DPD has been updated to include additional detail in subsection 10.5.1 Social and Cultural Conditions and 10.5.4 Health Conditions about potential effects on agricultural land near the proposed Project Site. The Application will assess potential effects on agricultural land in more detail under the Land and Resource Uses and Human Health VCs. Mitigation measures to reduce or avoid potential effects on agricultural land will be proposed.
<b>Marine Use (Excluding Navigation)</b>		
59	Clarity around use of the Fraser River during construction of the Project.	Subsection 2.5 describes the use of the river and provides vessel estimates: "Material offloading from the Fraser River of pre-fabricated equipment modules will be required for the proposed Project which would also include marine transportation of vessel/barges along the Fraser River. It is estimated that six to eight Project cargo vessel deliveries will be required during the 3 to 6 year construction period. The cargo vessel deliveries are expected to come from Sand Heads lighthouse at the mouth of the Fraser River along the shipping channel of the South Arm of the Fraser River to the proposed Project Site and will follow the requirements of applicable authorities including Transport Canada. An existing earth jetty on the Fraser River connected to the FortisBC proposed Project Site will be upgraded as part of the proposed Tilbury Marine Jetty project for construction purposes, and additional upgrades may also be required for the T1B development. The proposed Project may require additional upgrades to the MOF barge unloading of equipment modules to accommodate the weight/size of proposed Project modules."

**Table D-1. Responses to Summary of Issues**

ID	Joint Summary Comment	Response
60	Clarity on upgrades and use of the temporary construction jetty and whether upgrades would be completed as part of this Project or the Tilbury Marine Jetty Project.	<p>Subsection 2.3 of the DPD has been updated to include additional details: "Material offloading of pre-assembled equipment modules will be required with access from the Fraser River. An existing earth jetty that will be upgraded as part of the Tilbury Marine Jetty project and the Phase 1 projects may require additional upgrades to accommodate barge unloading of proposed Project equipment modules during construction. The possible additional upgrades are expected to focus on the topside of the jetty and upland areas, which may include improve grading and load bearing and dike upgrades.</p> <p>At the time of writing, design features and construction activities have not been specified for the MOF. The proposed upgrades are expected to focus on the topside of the jetty and upland areas, which may include improving grading, load bearing, and dike upgrades. The design of the MOF is ongoing and new in-water structures (such as, piles) may be part of the design and are therefore included. The design will minimize effects to the surrounding aquatic systems, if the in-water works are necessary. The upgrades may be maintained after completion of the proposed Project for future use."</p>
61	Further details on dredging in the Fraser River.	Dredging has been removed from the DPD and is no longer part of the proposed Project.
<b>Marine Mammals</b>		
62	Effects to marine mammals and their habitat from Project activities including barging that could alter, disrupt or destroy habitat.	Construction activity would likely temporarily displace small mammals, marine mammals, and birds from using nearby adjacent areas during the Construction Phase; however, alternative habitat is available in the surrounding area. Impacts resulting from increased marine traffic during construction may include the potential for collision with marine mammals; however, it is anticipated to be low risk due to the low number (6 to 8) of vessel trips. The resulting potential effects are expected to be minimal. The Application will include an assessment of potential effects to marine mammals under the Fish and Fish Habitat VC.
<b>Natural Gas Extraction using Hydraulic Fracturing (Fracking) Methods and Upstream Effects</b>		
63	Consideration of upstream and downstream climate impacts related to the Project's lifecycle emissions, including fugitive emissions from fracking, processing, transport and final combustion of the gas.	The DPD includes a preliminary estimate of net GHG emissions (includes direct, indirect, and acquired emissions) for all phases of the proposed Project including construction, operations, and decommissioning in subsection 6.1 and 10.2.2.1. The Project Application will include an updated estimate of net GHG emissions. The Application will also include an assessment of "effects of the environment on the Project" per B.C. EAO and IAAC guidance as well as a Climate Resilience Assessment developed in accordance with the Strategic Assessment of Climate Change. FortisBC may be required to provide an estimate of upstream GHG emissions associated with the extraction and transportation of natural gas to the Tilbury facility in the Application. The IAAC will determine if an upstream GHG assessment is required in the Project Application based on the preliminary GHG estimate in the DPD. An assessment of downstream GHG emissions associated with the final combustion of gas are not required under the B.C. EAO or IAAC assessment guidance and will not be included in the Application. However, the proposed Project provides opportunities for downstream users to substantially reduce GHG emissions by replacing conventional fuels (such as, coal and diesel) with low carbon intensity LNG for marine transportation and global markets.
64	Concerns about the effects of fracking on human health, land use, surface water, ground water, agriculture and air quality upstream of the Project.	FortisBC buys both conventional and unconventional gas mainly from B.C.'s Montney region. This includes gas obtained through hydraulic fracturing. Upstream exploration and production are regulated by the B.C. OGC which has the authority to determine if natural gas processing is done in an environmentally safe manner and ensure all regulations are met. Potential effects of fracking are considered under separate regulatory processes and would not be considered as part of the Application for this proposed Project.
65	Information on the companies responsible for upstream and downstream environmental effects of fracking and combustion, including GHGs and effects to water.	The majority of natural gas purchased by FortisBC is produced in B.C., by gas producers who are regulated by B.C. OGC. The B.C. OGC regulates upstream exploration, development, and production. The B.C. OGC has the authority to determine if natural gas production is done in an environmentally safe manner and ensure all regulations are met. The environmental effects of upstream gas production are outside the scope of this Application.

## Appendix D. Responses to Joint Summary of Issues and Engagement for the Tilbury Phase 2 LNG Expansion Project

**Table D-1. Responses to Summary of Issues**

ID	Joint Summary Comment	Response
<b>Navigation</b>		
66	Concerns around increased shipping use of the Fraser River and effects to marine navigation in the narrow inland waterway.	Additional details about the use of the Fraser River during construction has been provided throughout the DPD, especially in subsection 2.5 and Section 5. It is estimated that six to eight cargo vessel deliveries will be required during the 3 to 6 year construction period. Some additional deliveries may be required for aggregate and other construction material delivery. The vessel/barge deliverables are expected to come from Sand Heads lighthouse at the mouth of the Fraser River along the shipping channel of the South Arm of the Fraser River to the proposed Project Site and will follow the requirements of applicable authorities including Transport Canada. An EA for the Tilbury Marine Jetty project, a separate project, is currently undergoing review through the B.C. EAO process that assesses potential impacts from shipping LNG from the proposed Project Site.
67	Consideration of vessel movement and transits both directly to and from the terminal and interaction with existing vessel traffic and safety areas related to the loading of LNG carriers.	An EA for the Tilbury Marine Jetty project, a separate project, is currently undergoing review through the B.C. EAO process that assesses potential impacts from shipping LNG from the proposed Project Site.
<b>Project Contribution to Sustainability</b>		
68	Project impacts on B.C.'s fossil fuel use.	The Province of B.C.'s CleanBC Strategy includes LNG as a transitional fuel to displace more carbon intensive fuels and provide emissions reductions. FortisBC is a critical implementation partner for the Provincial government's GHG reduction objectives. To demonstrate our commitment to B.C.'s climate goals, FortisBC developed the Clean Growth Pathway to 2050 – the public statement to the Provincial government's consultation period as they developed CleanBC. The Pathway highlights four action areas that FortisBC can take to help the government achieve its GHG reduction objectives and reduce GHG emissions globally: 1) Energy Efficiency 2) Renewable Gas 3) Low Carbon Transport and 4) LNG to displace higher carbon fuels for marine transportation and global markets. Each of these actions are described in further detail in subsection 2.2 of the DPD.
<b>Public and Stakeholder Engagement</b>		
69	Engagement of the local agricultural community to discuss ways to minimize the effects to agriculture.	FortisBC recognizes that the local agricultural community is a neighbour to the Tilbury LNG facility and an important stakeholder in the operation and expansion of the facility. FortisBC will seek opportunities to engage the agriculture community on issues of concern. As one of the largest energy providers in the Province, FortisBC has a successful history operating throughout B.C. and has long-established commitment to engagement with a wide range of stakeholders, including members of the public, customers, suppliers, regulators, and public safety agencies. FortisBC recognizes the importance of meaningful engagement and strives to develop and maintain strong relationships with these parties. FortisBC's proven processes have been adapted as appropriate to support the proposed Project. FortisBC has been consulting with government, the public, and other parties on projects for the Tilbury LNG facility since 2012. The focus of FortisBC's engagement on the proposed Project will be to ensure that Municipalities, Federal and Provincial governments, Indigenous nations, the public, and other interested parties are informed about the proposed Project, have access to information, and are encouraged to provide feedback throughout each phase of the proposed Project.

**Table D-1. Responses to Summary of Issues**

ID	Joint Summary Comment	Response
70	Concerns about holding public consultation during the COVID-19 pandemic.	<p>FortisBC recognized the impact that COVID-19 had on the public, Indigenous nations, and governments. FortisBC requested extensions of the Early Engagement Phase from 90 days to 150 days to allow more time for consultation and to push the public comment period into June, avoiding the early phase of the pandemic response. The public comment period was extended from the typical 30 days to 45 days to allow the public more time to submit comments. FortisBC recognizes the importance of meaningful engagement and strives to develop and maintain strong relationships with these parties. FortisBC worked closely with the B.C. EAO and IAAC to develop an engagement approach for the Early Engagement Phase of the proposed Project that was accessible to the public. Two Virtual Open Houses were held on different days of the week and different times of day to accommodate a diversity of schedules. Extra efforts were undertaken to provide both phone and online access to the Virtual Open Houses. FortisBC paid for advertisements in seven local publications, including translated print ads in Punjabi and Chinese language newspapers. A polling feature was set up for the Virtual Open House and public questions that received the most "votes" were answered sooner. The presentation was posted online afterwards. In addition, FortisBC continued to have discussions with key stakeholders and Indigenous nations, while respecting the needs of each group and individual during this time. Engagement during the EA process will occur over the next approximately 2 years and will include numerous opportunities for the public to engage on the proposed Project.</p>
<b>Purpose of and Need for the Project</b>		
71	Consideration of the need for LNG by Asian markets and the economic sustainability of exporting LNG to Asia.	<p>The Tilbury Phase 2 LNG Expansion is intended to meet the growing local and global demand for LNG as a low carbon intensity fuel to displace higher GHG emitting fuels. The liquefaction capacity will be developed as market demand materializes. The world's largest LNG importers are located in Asia and the proposed Project would be well-positioned to meet future demand. For example, China is the biggest of the Asian economies and the National Development and Reform Commission forecasts Chinese annual gas demand to nearly double from 237 billion cubic metres (BCM) in 2017 to 450 BCM by 2030. This increased demand equates to 157 million tonnes (mt) of LNG equivalent or more than 40 percent of the global LNG market as of 2018. Other large Asian economies such as Japan, South Korea, Taiwan, and India are also looking to increase the use of gas to displace higher carbon energy such as coal.</p> <p>There are significant economic benefits for B.C. and Canada associated with the proposed Project. The following benefits are associated with serving local and global markets. In addition to construction related benefits, once the facility is fully operational, annual sales of LNG are expected to contribute \$258 million annually to B.C.'s Gross Domestic Product (GDP) directly and \$457 million when including indirect and induced effects (PwC 2019). Once operating, the proposed Project is anticipated to create 105 direct full-time equivalent (FTE) jobs in B.C., with an additional 575 indirect jobs, and 160 induced FTE jobs. Total annual tax revenues generated from proposed Project operations are anticipated to exceed \$67.5 million in B.C. and \$133 million in Canada (PwC 2019). At this time, the economic benefits have not been split into domestic and global markets at this time.</p> <p>Additional details regarding the need for LNG by local and global markets and the economic sustainability of selling LNG is provided in subsections 2.2 and 10.5.1 of the DPD.</p>

Appendix D. Responses to Joint Summary of Issues and Engagement for the Tilbury Phase 2 LNG Expansion Project

**Table D-1. Responses to Summary of Issues**

ID	Joint Summary Comment	Response
72	Consideration of the purpose of the Project and economics for LNG export versus need by the domestic market.	The proposed Project is being proposed to increase the storage and production of LNG to add resiliency to FortisBC's gas system, improve security of supply to FortisBC's approximately 1.1 million natural gas customers in B.C. and to supply incremental LNG for marine transportation and global markets where low carbon intensity LNG can displace the use of higher carbon emitting fuels such as coal, bunker fuels, and diesel. The economics of the proposed Project are outlined in subsections 2.2 and 10.5.1 of the DPD. At this time, the economic benefits have not been split into domestic and global markets.
73	Information on the percentage of LNG produced by the Project that FortisBC plans to export.	Customer interest in LNG for bulk export ranges from short- to long-term supply agreements of varying quantities. Similarly, interest in LNG for bunkering is also high. While market outlook is positive at this time, there is no certainty on how these markets will evolve. However, by virtue of its integrated design, the facility will have the capacity to supply the domestic market, bunkering, and global markets, thereby enhancing market resiliency for the long-term. Additional details regarding the need for LNG by local and global markets and the economic sustainability of selling LNG is provided in subsections 2.2 and 10.5.1 of the DPD.
74	Details on the economic feasibility of the Project in the context of the current LNG market, including a cost/benefit analysis.	Information on market feasibility has been provided in subsection 2.2 of the DPD. Economic benefits resulting from the proposed Project include increased economic activity, business demand, employment, labour income, and government revenues through taxes and royalties, as well as the enhancement of workforce and business capacity. Subsection 10.5 of the DPD provides a preliminary economic assessment of the proposed Project including its contribution to GDP, employment levels, and tax revenues during construction and operations for both the Province and Canada. These estimates are based on preliminary information and will be updated for the Project Application.
<b>Social Conditions</b>		
75	Inclusion of details on what was heard through the engagement and consultation process on social needs and well-being.	The Joint Summary of Engagement summarizes what was heard through the engagement and consultation process. Some Indigenous nations expressed concerns about potential impacts to rights to fish that can impact economic, social and cultural well-being. The public expressed concerns about potential impacts related to GHG emissions, climate change, to human health and well-being including impacts from noise and potential exposure to contaminants. FortisBC will continue to engage with the public and Indigenous nations to understand social needs and well-being and to incorporate them into the proposed Project design and the Application. The Application will include an assessment of social needs and well-being under Social VCs and the Summary of Human and Community Well-Being.

**Table D-1. Responses to Summary of Issues**

ID	Joint Summary Comment	Response
76	<p>Inclusion of engagement activity methodology that will be used to ensure that the specific needs of men, women and diverse groups of people are understood.</p>	<p>FortisBC is committed to working with the community to ensure engagement is inclusive and designed to reach the diversity of people within the community. The Company is committed to incorporating principles of Gender-Based Analysis (GBA+) recognizing that inequalities in communities affect people differently and to mitigate barriers that limit participation and engagement from distinct groups in the community. In keeping with the GBA+ principles outlined in the preceding sections, FortisBC will seek input from Indigenous nations regarding any limitations that may be a barrier to participation in the process for their respective community members. If these limitations exist, FortisBC will consult with the Indigenous nation on best practices to address these barriers. We will seek feedback from local government on reaching diverse populations within the community to help ensure engagement activities are inclusive and representative of the community at-large.</p> <p>FortisBC has considered potentially impacted populations that may be under-represented by traditional engagement methods. The proposed engagement methods consider different languages, engagement timing and locations, as well as accessibility requirements. FortisBC is proposing the following measures to reach under-represented communities (in-person activities will be limited in the immediate term in response to COVID-19 may be used later in the EA process when it is safe to do so):</p> <ul style="list-style-type: none"> <li>▪ Any news releases will be distributed to in-language media, and in-language ads inviting the public to any B.C. EAO-led engagement activities to help to promote awareness amongst people who speak English as a second language. Furthermore, proposed Project information cards will include a statement that says 'Important information, please have translated' in multiple languages, to encourage readers to have the card translated by someone they know in their language.</li> <li>▪ Project materials will be both in digital and print form, to ensure that people without access to a computer can learn about the proposed Project. These materials will be mailed upon request to the local community.</li> <li>▪ Venues of all public open houses and information sessions to be held in the communities of Delta and Richmond will be in accessible locations to public stakeholders. Venues will have automatic doors, elevators, and obstacle-free pathways for people who use mobility aids such as wheelchairs. Diverse gender representation will be ensured to facilitate any in-person engagement activities.</li> <li>▪ Virtual settings will include a phone line for those without internet access or computer.</li> <li>▪ As public safety is the number one priority; all venues will be in safe locations. Events will begin during daylight hours and on routes that are accessible by transit.</li> <li>▪ FortisBC may also host informal outreach activities such as community pop-up booths and coffee chats. The purpose of these more informal activities is to reach people where they are (that is, at a shopping centre) and engage with those who may not take the time to attend a more formal event. These additional outreach activities will be at different times, and days, as well as in different locations than any B.C. EAO-led engagement activities, in an effort to be accessible to more people.</li> </ul>
77	<p>Inclusion of a description of the social norms and broader social power structure that could impact women, men and diverse groups of people's abilities to equally benefit from the Project.</p>	<p>When assessing potential socio-economic proposed Project effects, the principles of GBA+ will be applied to determine whether there are different impacts for different subsets of the population in the study area. The Application will include existing environment descriptions of the under-represented populations and an effects evaluation will consider the impacts of the proposed Project on that population. This analysis will inform the development of socio-economic monitoring plans and programs related to the proposed Project. Proposed Project benefits will consider measures to increase benefits to under-represented groups through contracting, training, and other economic opportunities.</p>

**Table D-1. Responses to Summary of Issues**

ID	Joint Summary Comment	Response
<b>Species at Risk, Terrestrial Wildlife and their Habitat</b>		
78	Effects on aquatic Species at Risk (for example, white sturgeon, eulachon, Southern Resident Killer Whales), and their habitat, including injury or mortality, sensory disturbance, and change in habitat as a result of noise, vibration, wake and artificial lighting.	Preliminary information about potential effects to aquatic species at risk is provided in subsection 10.4 of the DPD. The Application will assess potential effects to aquatic species at risk and their habitat under several VCs, including Freshwater Fish, Marine Resources, and Wildlife. Mitigation measures will be provided to reduce or avoid potential effects to these species.
79	Effects on terrestrial wildlife resources, migratory birds protected under the <i>Migratory Birds Convention Act</i> , and non-aquatic Species at Risk (amphibians, arthropods, birds, lichens, terrestrial mammals, mosses, reptiles and vascular plants) protected under the <i>Species at Risk Act (SARA)</i> , and their habitat (including residences and critical habitat defined under <i>SARA</i> ).	Preliminary information about potential effects to terrestrial wildlife resources, migratory birds, and non-aquatic species at risk is provided in subsection 10.4 of the DPD. The Application will assess potential effects to these species at risk and their habitat under Fish and Fish Habitat and Wildlife VCs. Mitigation measures will be provided to reduce or avoid potential effects to these species.
80	Inclusion of a nest survey to determine potential effects on nesting birds at the site.	The Application will include an effects assessment on nesting birds, which will include the results of a nest survey at the proposed Project Site. Mitigation measures will be provided to reduce or avoid potential effects to these species.
81	Inclusion of measures to avoid, reduce, or compensate for potential adverse effects to federally and provincially listed Species at Risk.	Preliminary information about potential effects to species at risk is provided in subsection 10.4 of the DPD. The Application will assess potential effects to species at risk and their habitat under several VCs, including Fish and Fish Habitat and Wildlife and Wildlife Habitat. Mitigation measures will be provided to reduce or avoid potential effects to these species.
<b>Vegetation</b>		
82	Inclusion of a vegetation inventory in the Project area and mitigation for the effects of construction and operation on vegetation.	The proposed Project Site is a developed, industrial site that has largely been cleared of vegetation. However, there are a few areas on the proposed Project Site that may require vegetation removal during construction. The Application will include a vegetation inventory of the proposed Project Site and will assess potential effects to vegetation under the Vegetation VC. Mitigation measures will be proposed to reduce or avoid potential effects to vegetation.
<b>Visual Environment</b>		
83	Analysis of the visual impacts of construction and operation from significant City of Richmond viewpoints for example west/south dyke trails and parks.	The proposed Project Site is an existing industrial site located in an industrial neighbourhood. The proposed design for the expansion will be consistent with the existing buildings and infrastructure on the proposed Project Site. FortisBC recognizes the importance of Richmond viewpoints to residents and visitors. The Application will include a visual impact assessment under the Land and Resource Use VC. FortisBC will engage with stakeholders, Indigenous nations, and Richmond to identify key viewpoints to use in the visual assessment. Visual impacts will be taken into consideration when making siting and design decisions. Mitigation measures will be proposed to reduce or avoid potential visual effects.
<b>Vulnerable Population Groups (GBA+)</b>		
84	Use of a GBA+ lens throughout the Project lifecycle to understand the differential impacts and experiences of risk, benefits and impacts of the Project on men, women, diverse persons and people from a range of groups and communities.	When assessing potential socio-economic proposed Project effects, the principles of GBA+ will be applied to determine whether there are different impacts for different subsets of the population especially vulnerable groups in the study area. The Application will include existing environment descriptions of the vulnerable populations and an effects evaluation will consider the impacts of the proposed Project on that population. This analysis will inform the development of socio-economic monitoring plans and programs related to the proposed Project.

**Table D-1. Responses to Summary of Issues**

ID	Joint Summary Comment	Response
85	<p>Consideration of equity throughout the design and implementation of engagement and consultation processes to ensure inclusiveness.</p>	<p>FortisBC is committed to working with the community to ensure engagement is inclusive and designed to reach the diversity of people within the community. The Company is committed to incorporating principles of GBA+ recognizing that inequalities in communities affect people differently and to mitigate barriers that limit participation and engagement from distinct groups in the community. In keeping with the GBA+ principles outlined in the preceding sections, FortisBC will seek input from Indigenous nations regarding limitations that may be a barrier to participation in the process for their respective community members. If these limitations exist, FortisBC will consult with the Indigenous nation on best practices to address these barriers. FortisBC will seek feedback from local government on reaching diverse populations within the community to help ensure engagement activities are inclusive and representative of the community at-large.</p> <p>FortisBC has considered potentially impacted populations that may be under-represented by traditional engagement methods. The proposed engagement methods consider different languages, engagement timing and locations, as well as accessibility requirements. FortisBC is proposing the following measures to reach under-represented communities (in-person activities will be limited in the immediate term in response to COVID-19 may be used later in the EA process when it is safe to do so):</p> <ul style="list-style-type: none"> <li>▪ Any news releases will be distributed to in-language media, and in-language ads inviting the public to any B.C. EAO-led engagement activities to help to promote awareness amongst people who speak English as a second language. Furthermore, proposed Project information cards will include a statement that says 'Important information, please have translated' in multiple languages, to encourage readers to have the card translated by someone they know in their language.</li> <li>▪ Project materials will be both in digital and print form, to ensure that people without access to a computer can learn about the proposed Project. These proposed Project materials will be mailed upon request to the local community.</li> <li>▪ Venues of all public open houses and information sessions to be held in the communities of Delta and Richmond will be in accessible locations to public stakeholders. FortisBC will ensure venues have automatic doors, elevators, and obstacle-free pathways for people who use mobility aids such as wheelchairs. FortisBC will also ensure diverse gender representation to facilitate any in-person engagement activities.</li> <li>▪ Virtual settings will include a phone line for those without internet access or computer.</li> <li>▪ As public safety is our number one priority; FortisBC will ensure all venues will be in safe locations. Events will begin during daylight hours and on routes that are accessible by transit.</li> <li>▪ FortisBC may also host informal outreach activities such as community pop-up booths and coffee chats. The purpose of these more informal activities is to reach people where they are (that is, a shopping centre) and engage with those who may not take the time to attend a more formal event. These additional outreach activities will be at different times, and days, as well as in different locations than any B.C. EAO-led engagement activities, in an effort to be accessible to more people.</li> </ul>
86	<p>Inclusion of adequate consultation with women or diverse groups when negotiating access to land, compensation, or benefit-sharing agreements.</p>	<p>FortisBC is committed to working with the community to ensure engagement is inclusive and designed to reach the diversity of people within the community. FortisBC is committed to incorporating principles of GBA+ recognizing that inequalities in communities affect people differently and to mitigate barriers that limit participation and engagement from distinct groups in the community. In keeping with the GBA+ principles outlined in the preceding sections, FortisBC will seek input from Indigenous nations regarding limitations that may be a barrier to participation in the process for their respective community members. If these limitations exist, FortisBC will consult with the Indigenous nation on best practices to address these barriers. FortisBC will seek feedback from local government on reaching diverse populations within the community to help ensure engagement activities are inclusive and representative of the community at-large.</p>

Appendix D. Responses to Joint Summary of Issues and Engagement for the Tilbury Phase 2 LNG Expansion Project

**Table D-1. Responses to Summary of Issues**

ID	Joint Summary Comment	Response
87	Use of language and information materials that are accessible to all.	<p>FortisBC has considered potentially impacted populations that may be under-represented by traditional engagement methods. The proposed engagement methods consider different languages, engagement timing and locations, as well as accessibility requirements. FortisBC is proposing the following measures to reach under-represented communities (in-person activities will be limited in the immediate term in response to COVID-19 may be used later in the EA process when it is safe to do so):</p> <ul style="list-style-type: none"> <li>▪ Any news releases will be distributed to in-language media, and in-language ads inviting the public to any B.C. EAO-led engagement activities to help to promote awareness amongst people who speak English as a second language. Furthermore, proposed Project information cards will include a statement that says 'Important information, please have translated' in multiple languages, to encourage readers to have the card translated by someone they know in their language.</li> <li>▪ Project materials will be both in digital and print form, to ensure that people without access to a computer can learn about the proposed Project. These proposed Project materials will be mailed upon request to the local community.</li> <li>▪ Venues of all public open houses and information sessions to be held in the communities of Delta and Richmond will be in accessible locations to public stakeholders. FortisBC will ensure venues have automatic doors, elevators, and obstacle-free pathways for people who use mobility aids such as wheelchairs. FortisBC will also ensure diverse gender representation to facilitate any in-person engagement activities.</li> <li>▪ Virtual settings will include a phone line for those without internet access or computer.</li> <li>▪ As public safety is the number one priority; we will ensure all venues will be in safe locations. Events will begin during daylight hours and on routes that are accessible by transit.</li> <li>▪ FortisBC may also host informal outreach activities such as community pop-up booths and coffee chats. The purpose of these more informal activities is to reach people where they are (that is, a shopping centre) and engage with those who may not take the time to attend a more formal event. These additional outreach activities will be at different times, and days, as well as in different locations than any B.C. EAO-led engagement activities, in an effort to be accessible to more people.</li> </ul>
88	Use of disaggregated baseline information (at a minimum, by sex, age and ethnicity, and where possible, by other factors such as Indigeneity or education levels) and inclusion of descriptions of data gaps, where applicable.	When assessing potential socio-economic proposed Project effects, the principles of GBA+ will be applied to determine whether there are different impacts for different subsets of the population especially vulnerable groups in the study area. The Application will include existing environment descriptions of the vulnerable populations and an effects evaluation will consider the impacts of the proposed Project on that population. This analysis will inform the development of socio-economic monitoring plans and programs related to the proposed Project.
89	Inclusion of qualitative insights from studies, consultations, and other sources to complement quantitative information.	When assessing potential socio-economic proposed Project effects, the principles of GBA+ will be applied to determine whether there are different impacts for different subsets of the population especially vulnerable groups in the study area. The Application will include existing environment descriptions of the vulnerable populations and an effects evaluation will consider the impacts of the proposed Project on that population. This analysis will inform the development of socio-economic monitoring plans and programs related to the proposed Project.
90	Inclusion of information on how the Project intends to support culturally sensitive participation of women and diverse groups in decision making.	Throughout all phases of the proposed Project, the principles of GBA+ will be applied to engagement and consultation in order to ensure fair and equitable participation of women and diverse groups. Engagement and consultation will solicit feedback from women and diverse groups on decisions that have the potential to disproportionately affect them.
91	Inclusion of scoping, assessment and mitigation measures for potential issues of gender-based violence (for example, sexual harassment, violence against women, and human trafficking) and identification of vulnerable groups among women (for example, Indigenous and younger women).	When assessing potential socio-economic proposed Project effects, the principles of GBA+ will be applied to determine whether there are different impacts for different subsets of the population especially vulnerable groups in the study area. The Application will include existing environment descriptions of the vulnerable populations and an effects evaluation will consider the impacts of the proposed Project on that population. This analysis will inform the development of socio-economic monitoring plans and programs related to the proposed Project.

**Table D-1. Responses to Summary of Issues**

ID	Joint Summary Comment	Response
<b>Water – Groundwater and Surface Water</b>		
92	Effects on water quality from in-stream, upland and on-site activities during construction, closure and decommissioning, such as disturbances from upgrades to the temporary construction jetty (dredging, installation of piles, placement of fill and riprap and vegetation removal), discharge of water from hydrostatic tests, construction water and increased marine traffic for material delivery.	The DPD provides details on potential activities that could impact water quality. The Application will assess the potential effect of these activities on water quality under the Surface Water, Groundwater, Infrastructure and Services, and Human Health VCs. Mitigation measures will be proposed to reduce or avoid potential effects to water quality.
93	Details on the volume, timing and frequency of removing and redepositing large quantities of water in the Fraser River and its effects on turbidity and water quality.	The Application will provide additional details about water withdrawal and discharge volumes, timing, and frequency. The DPD provides details on potential activities that could impact water quality. The Application will assess the potential effect of these activities on water quality under the Surface Water, Groundwater, Infrastructure and Services, and Human Health VCs. Mitigation measures will be proposed to reduce or avoid potential effects to water quality.
94	Effects of construction on the turbidity of the Fraser River.	The DPD provides details on potential activities that could impact water quality, including turbidity. The Application will assess the potential effect of these activities on water quality under the Surface Water, Groundwater, Infrastructure and Services, and Human Health VCs. Mitigation measures will be proposed to reduce or avoid potential effects to water quality.
95	Long-term effects on water quality from deposition of airborne particulate matter generated by the plant operation, discharges related to effluent (for example, cooling process) and storm water management.	The DPD provides details on potential activities that could impact water quality during operations, including potential long-term impacts of facility operations. The Application will assess the potential effect of these activities on water quality under the Surface Water, Groundwater, Infrastructure and Services, and Human Health VCs. Mitigation measures will be proposed to reduce or avoid potential effects to water quality.

## References

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