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# EGP Public Information Session – Q&A (August 2020)

The following Question and Answer document has been developed from the August 2020 Squamish information sessions, held virtually to create COVID-19 safe engagement opportunities. Please note that content has been compiled for written consumption and may be paraphrased for this purpose.

All answers are current as of November 2020.

## Pipeline

Q: Can you please reconfirm the start of preliminary field work and anticipated start of pipeline construction?

A: The current construction schedule includes an Early Works program from May 2022 to November 2022, which will consist primarily of clearing and access development within the Indian River and Stawamus Valleys. Pipeline construction work is currently scheduled to begin in Q1 2023 and finish in Q4 2024. For the District of Squamish area, the construction team is investigating the potential to construct in early 2023 to avoid the peak tourist summer season. The construction schedule for District of Squamish will be discussed with the pipeline contractor before it is finalized, and we will continue to update the community as information becomes available.

Q: During last fall's "preliminary work" -- what exactly was going on? There were as many as 20 trucks (FortisBC branded and other contractors) driving up and down the forest road at the edge of town daily and sounds of blasting could be heard.

A: Last year in 2019, FortisBC carried out a field program to gather additional information to support the detailed design of the pipeline. These field studies included:

- completing an engineering survey to collect data for third party crossings and other features;
- completing an access road assessment to determine the remediation required to bring roads up to construction standards;
- environmental surveys to collect data to inform planning; and
- geotechnical work consisting of boreholes at various locations to learn about the subsurface conditions and inform the pipeline design.

#### Q: Where will the pipeline components be manufactured?

A: Details on the manufacturing of pipe and other associated materials and components are still to be determined. The procurement plan is under development and the project team and its consultants will be assessing the capabilities of various pipe mills within North America, as well as abroad, to be able to manufacture the specific pipe we require. The project is using thicker walled pipe of a higher grade (X70) that some North American mills may not be able to produce to our quality standards. Our preference is to source materials domestically but need to balance a number of factors including cost and meeting our standards and requirements. Q: If you have 5m daylighting, for safety for construction, and you're also adding a 24" pipeline, doesn't that imply a fairly significant construction disruption (compared to what was in the earlier images, where I think there was a claim made that this construction would be less disruptive than the images)?

A: The term "daylighting" refers to a small excavation made by a hydrovac machine. This allows for visual confirmation of the location of nearby utilities so that we do not have to rely solely on line locating equipment. Typically, ground disturbance protocols require that utilities within 5 meters of an excavation are to be daylighted as a safety precaution. However, this does not necessarily require continuous excavation for 5 metres – the width of the excavation will be minimized as much as practical to avoid excessive workspace requirements.

Q: The latest amendment includes expanding the pipe diameter to 24" along a 3 km. stretch in/near the Eagle Mountain compressor station. What expansion plans do you have for the rest of the 10"/12" pipe?

A: There are currently no plans to expand upon the rest of the NPS 10/12 system for this project. We will need to install crossovers between the NPS 24 and NPS 10/12 pipeline at the common valve and trap site locations.

Q: When are you anticipating starting work in the Finch Drive area?

A: The current construction schedule indicates work starting in Q1 or Q2 2023 for the Finch Drive area. This schedule will be discussed in detail with the pipeline contractor to determine if it fits within their execution plan. In general, the project is looking to construct through the District of Squamish area during the off-season to avoid disruptions during the peak tourist season.

Q: Where will the shut-off valves for the pipeline be located (around the entrance and exit from the District of Squamish)? Does this comply with the control valve requirements of CSA-Z662-19 for transit of a high-pressure (2160psi) pipeline through a populated area?

A: The project will have a remotely operable mainline block valve located on the east side of Squamish at the base of Mount Mulligan, about 400m northeast of the fork between the Mamquam and Indian River forest service roads on the east side of town (approx. UTM: 5506217 N and 4922735 E).

There will also be a remotely operable mainline block valve located 4.6 km away on the west side of town near the BC Rail site (exact location TBD). The locations of the valves will meet all requirements outlined within CSA Z662-19.

Q: Given the size and pressure of this pipeline, what is the minimum allowable distance of the pipeline in terms of proximity to residential, commercial and/or industrial properties, dwellings, and/or businesses?

A: There is currently no minimum allowable distance determined by code and regulation bodies between a natural gas pipeline and adjacent residential and other developments or properties. Clause 4 in the pipeline design code CSA Z662-19 requires the design to consider the class location and the associated land use where the pipeline is located. This class location assessment considers the number and type of dwellings and buildings and their intended use. It also determines the design safety factor to ensure that the pipeline is designed with a wall thickness suitable for a given class location area.

Q: Where will the shut-off valves for the pipeline be located?

A: There are two valves with emergency shutdown functionality in the pipeline: there is one valve on the existing line after the Eagle Mountain Compressor Station, and another will be located after the metering station and before the Woodfibre LNG plant. The EGP pipeline will have several other isolation valves for maintenance and the ability to respond to operating emergencies, and these valves can be remotely operated. Considering the class location, the valves will be spaced at distances less than the maximum distance allowed (13 km) by CSA Z662-19 Code. The current proposed mainline block valves within the District of Squamish are as follows:

- The first valve is located on the southeastern side of the District of Squamish near the base of Mount Mulligan. The location of this valve is approximately 400m northeast of the fork between the Mamquam and Indian River forest service roads.
- Approximately 4.6 km downstream of the first mainline block valve, a second mainline block valve will be located on the western side of the District of Squamish near the BC Rail site. Both of these valves can be remotely operated.

Q: What is the total pipeline length, taking into account the new proposed 3 km segment, the revised route, and the 9 km pipeline segment under the estuary?

A: If our proposed amendment for the 3k twinning of pipe in Coquitlam is approved, the total pipeline length will be 50km (47 in Squamish and 3 in Coquitlam).

Q: The existing 10-inch pipeline includes a shut-off valve in Valleycliffe directly adjacent to some residences. My understanding is that you plan to move it upstream to provide the needed protection to our neighbourhood. When do you expect this to happen? Would you consider an automatic shut-off system to better protect our neighbourhood, given that this pipe is within 60 feet of residential properties?

A: The existing NPS 10 valve in the Valleycliffe area will be relocated to the same location as the proposed NPS 24 valve site. The exact timing as to when this will occur has not been determined but will likely occur closer to the end of the construction timeline in 2026 The section of the NPS 10 located behind the Valleycliffe residences will be decommissioned and potentially removed altogether if the EGP project proceeds.

There are no plans to install any additional valves on the NPS 10 pipeline.

Q: Will the 10-inch pipe behind Valleycliffe be relocated to be running alongside the new 24-inch pipe location further east?

A: Yes. There is approximately 3km of the existing 10-inch line that will be relocated to run parallel with the new 24-inch line through the Valleycliffe area. The start of the 3km relocation of the existing 10-inch line is at the intersection of the Mamquam and Indian River forest service roads. The 10-inch will be re-routed to the northeast towards the proposed 24-inch alignment and follow the proposed 24-inch alignment through to the east end of Finch Drive.

Q: What pressure will the new 24-inch pipeline operate at? Does this mean that two high-pressure pipelines will be put along Finch?

A: The new 24-inch pipeline will be designed to a maximum operating pressure of 2160 PSI, however it may operate at lower pressures depending on the time of year and customer demand for gas. There is a pressure profile for flowing pipelines, and while the pressure is always higher at the compressor station (up to a max of 2160 psi), the pressure decreases the further along the pipeline it goes. While we design the pipeline to handle a pressure of 2160 psi, most of the pipeline operates at a much lower pressure.

Q: If there is an accident, how long will it take for the shut-off valves to turn off the high-pressure gas? Does this comply with the control valve requirements of CSA Z662-19 for transit of a high-pressure (2160 psi) pipeline through a populated area?

A: In the event that there is an accident that requires the full shutdown of the pipeline, the mainline valves will take approximately 90 seconds to close from a fully open position.

The design and operation of the pipeline will be fully compliant with the requirements outlined in CSA Z662-19.

Q: You will be upping the horsepower of the Coquitlam compressor station. But north of there, the 12inch pipe will remain the bottleneck to getting more gas to Woodfibre. Are you not risking blowing out the 10-inch pipe, already at 2160 psi?

A: The increased horsepower to be installed at the Coquitlam compressor station is necessary to be able to move the increased amount of natural gas through the expanded system. With the addition of the 24-inch twinning, the overall flowing capacity of the system will increase but the maximum operating pressure will remain 2160 psi for both pipelines for the entire length of the pipelines. The pipelines will operate as one system rather than in isolation from each other with a balanced pressure profile.

The current and modified pressure control and overpressure protection systems at the Coquitlam compressor station are designed in accordance with CSA standards and will ensure the pressure at any point along the system does not exceed the allowable and permitted operating pressure.

### Schedule

Q: How long will construction last? Previously FortisBC noted that the drilling would be three years, 7 days a week, 24 hours a day.

A: We are currently anticipating the Tunnel Contractor to mobilize to the BC Rail Site and the Woodfibre site in the second half of 2022. It will take approximately six months at each site to establish the tunneling operations. This includes three months to establish the site, and another three months to develop the access to the tunnel. Tunneling is expected to begin in mid-Q2 2023 and is expected to last until Q4 2024, at which point the contractor would begin installing the new pipeline. Once the new pipeline is installed, the tunnel will be backfilled. We are currently anticipating completing the tunnel component of the EGP Project in mid-2025.

As for work taking place 7 days a week, 24 hours a day, this is something we are planning to undertake for the tunneling operation and not necessarily for the site development. This is subject to all the necessary approvals need to do so.

Q: Will you be breaking ground on this project before Woodfibre LNG breaks ground? In other words -are you planning for (and how are you planning for) the possibility that Woodfibre doesn't end up being constructed?

A: We have been working closely with Woodfibre LNG to ensure alignment of schedules, which is driven by when the Woodfibre facility requires feed gas. Based on the current schedules, Woodfibre LNG is anticipated to begin construction before the EGP project. FortisBC will only proceed on the basis that the Woodfibre LNG project receives a positive Final Investment Decision and that the plant construction proceeds.

Q: Fortis has consistently said that EMP is dependent on an FID from Woodfibre on its project. Did I miss that announcement?

A: We've been working closely with Woodfibre, and we are aligning our schedule for our project with the Woodfibre requirements for their feed gas delivery. The go-ahead for the EGP project will be based on a positive final investment decision (or FID) from Woodfibre or FID. This announcement has not been made yet.

## Tunnel

Q: Where are you disposing of the material dug out to make the tunnel?

A: FortisBC has been evaluating suitable uses for the material being removed from the tunnel, however we do not have any firm plans at this time. We will provide more details once plans have been finalized.

Q: Why a 14' tunnel for a 24" pipeline?

A: The tunnel diameter needs to be large enough to provide a safe work environment for the tunnel contractor. This includes providing adequate space to facilitate the movement of workers, equipment and materials during construction of the tunnel and installation of the pipeline.

The tunnel diameter is based on the Reference Design completed by FortisBC's tunnel consultant and is subject to change. FortisBC has selected the design-build project delivery method for the tunnel segment, and therefore the final tunnel diameter won't be known until a design-build team has been selected.

Q: How will you get across the estuary?

A: In order to avoid surface disturbance within the Squamish estuary, FortisBC decided that the most effective solution was to construct a tunnel between Squamish and the Woodfibre LNG site to facilitate the installation of the pipeline.

### Compressor

Q: Power: How much power will the pipeline and compressor need, and how will it be generated and supplied to FortisBC?

A: The Electric power requirement for the Eagle Mountain Compressor Station is 50 megawatts and 500 KiloWatts for the Squamish Compressor Station. The electric power requirement for the pipeline will be negligible compared to the compressor stations.

Q: Noise: Describe the noise characteristics of the proposed compressor station(s).

A: The British Columbia Oil Gas and Commission (OGC) has established the BC Noise Control Best Practices Guideline. This guideline outlines the recommended best practices for noise control of operations and facilities in British Columbia under the jurisdiction of the Oil and Gas Activities Act. The guideline is available online.

In advance of submitting our facility permit application with the OGC, we undertook a noise impact assessment to show that the compressor station will meet the BC Noise Control Best Practices Guideline. We model the new equipment that we will be installing with the existing equipment and assess the noise at the compressor station, and the perceived noise at the nearest dwellings, to ensure that it meets the guidelines.

#### Workforce Accommodation

Q: FortisBC has suggested that a work camp may be necessary for the 200+ workers building the pipeline, tunnel and compressor station. As you are aware, rental accommodation in and around Squamish is very limited. Will the work camp ease this pressure; and where/how will this camp be located, serviced, removed?

A: We've been looking at potential workforce accommodation sites and we have identified a number. However, we haven't done anything further than that, and that includes contacting the property owners. The next step is to continue this conversation with both the tunnel and pipeline contractors. Those contractors will begin in the near future, and it's important that we talk to them because they will be the ones who may bring the workforce into town. We will need to decide in conjunction with them where workers will be accommodated. We are very aware of the tight accommodation situation in Squamish, especially during the summer time, which is why we feel it's important to continue with these conversations before making any decisions.

#### Q: Will there be an actual work camp in town?

A: At this point there have been no decisions about the location of workforce accommodation. Once general contractors have been onboarded in the near future, these discussions will occur and the Squamish community will be engaged in these discussions through public engagement sessions

Q: People may be concerned a large number of workers will be coming to town in the era of COVID-19. How are you addressing possible issues around spread of the disease?

A: Ongoing COVID-19 planning will be a priority and area of focus going forward. We are going to be watching along with everyone else on how COVID-19 treats us this winter into next year and we will take precautions to ensure the safety of our workers and everybody in Squamish. This will certainly form a part of our planning going forward as we begin discussions with our contractors on topics including workforce accommodation.

## Safety

Q: If, worst-case scenario, there is an accident, what is the evacuation plan for Squamish neighbourhoods? What is the evacuation boundary?

A: 4.6 km away there will also be a remotely operable mainline block valve located on the west side of town near the BC Rail site (exact location TBD). The locations of the valves will meet all of the requirements outlined within CSA Z662-19.

In the unlikely situation of a pipeline incident first responders from Squamish will likely be first on the scene to make the area safe for the public. FortisBC works regularly with fire departments around its system to ensure effective communication and coordination of response activities in the event of an incident. In addition, FortisBC regularly holds emergency exercises to test plans and coordination with external agencies. There are no specific evacuation boundaries because every situation is slightly different and requires individual judgment by responders based on severity of the incident, weather conditions, traffic patterns and the presence of nearby buildings or residences.

### General

Q: Insurance: Describe the public liability insurance arrangements for the pipeline, which will pass close by heavily-populated areas of Squamish (Crumpit Woods, Loggers Lane, etc.)?

A: FortisBC carries multiple levels of insurance that applies to the operation of the transmission and distribution pipelines. For the EGP project, additional liability insurance will be provided in the form of Builders Risk or Wrap up insurance, as well as directly through the General Contractors engaged on the project.

Q: What public liability insurance is in place for the pipeline?

A: FortisBC's internal insurance experts ensure that all the types of insurance that are needed for the project are in place. That includes what we have currently and what's needed during construction. There is a list a policies that we will seek and make sure that either we or our contractors have in place as we go through the various stages of the project.

Q: Can you speak to FortisBC's ownership? I understand FortisBC is a subsidiary of a multinational corporation. How exactly is that corporate relationship structured?

A: FortisBC is a combined gas and electric utility operating in BC. Fortis Inc. from St. Johns, Newfoundland owns FortisBC and owns many other utilities across Canada, USA and the Caribbean. FortisBC is regulated by the BC Utilities and Commission and the BC Oil Gas Commission to protect customer costs and safety. Fortis Inc. is an investor owned company that trades shares on the major stock exchanges so anybody who wishes to invest and buy shares in the company can do so.