

FORTISBC ENERGY INC.

Regional Gas Supply Diversity Project

Quarterly Progress Report for the Period April 1, 2023 to June 30, 2023

Submitted to the British Columbia Utilities Commission

July 28, 2023



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1 1. PROJECT BACKGROUND

2 1.1 PROJECT BACKGROUND

3 On June 1, 2022, pursuant to sections 59 to 61 of the Utilities Commission Act (UCA), FortisBC 4 Energy Inc. (FEI) filed an application (RGSD Application) with the British Columbia Utilities 5 Commission (BCUC), for approval of a new non-rate base deferral account called the Regional 6 Gas Supply Diversity (RGSD) Development Account, to capture actual development costs 7 incurred for a potential RGSD Project (Project). In the Application, FEI proposed to file quarterly 8 progress reports to the BCUC on work completed, anticipated work, and material developments, 9 starting with the quarter ending at least three months after the BCUC's decision on the Application. 10 On September 14, 2022, the BCUC issued Order G-253-22 granting approval to establish the

- 11 RGSD Development Account, a non-rate base deferral account attracting FEI's WACC return, to
- 12 capture actual development costs incurred with respect to the potential RGSD Project, with
- 13 disposition of the deferral account balance to be determined in a future proceeding.

Order G-253-22 directed FEI to provide Quarterly Progress Reports to the BCUC on work completed, anticipated work, and material developments on the potential RGSD Project, starting with the fourth quarter ending December 31, 2022, by no later than 30 days after the date of the quarter end. Order G-253-22 further directed that in lieu of the July 2023 quarterly report, FEI was to provide the update in the Annual Review for 2024 Delivery Rates process, including an update of costs incurred to date and a proposal for the method and timing of the recovery of those incurred costs.

21 This is the third Quarterly Progress Report for the Project (Report) which covers the period April

22 1, 2023 to June 30, 2023.



12.PROJECT DEVELOPMENT UPDATE, WORK COMPLETED AND
COSTS INCURRED TO DATE

3 2.1 RGSD PROJECT DEVELOPMENT UPDATE

4 As described in the RGSD Application, preliminary engineering assessment and meaningful and 5 comprehensive engagement and collaboration with stakeholders and Indigenous Nations prior to 6 beginning Project approval processes is critical to ensure the RGSD Project, at the point of 7 readiness for submission for approvals, has reasonable support and confidence on the Project 8 concept and design. Engineering assessment work and supporting documentation on the RGSD 9 Project has progressed in a measured and prudent manner. FEI's project phase gate processes 10 require that the RGSD Project go through a complex and detailed screening analysis to evaluate all RGSD sub-variants (i.e., evaluating other delivery points,¹ such as tie-ins to T-South at 11 12 Kingsvale or Hope as described in Section 4.1.2 of the RGSD Application) prior to further 13 advancing the pre-FEED work. As part of its screening analysis, FEI will also be exploring an 14 integrated regional pipeline infrastructure solution, as these sub-variations of the RGSD Project 15 might require capacity upgrades from Enbridge on T-South between Kingsvale or Hope and 16 Huntingdon in order to deliver the incremental volume sourced from SCP.

- 17 Federal and provincial policies continue to progressively decarbonize emissions from all sectors,
- 18 including the gas system. FEI anticipates that the RGSD Project will need to continue to identify,
- 19 investigate, design and support appropriate infrastructure solutions that will help to meet clean
- 20 energy targets and maintain the reliability of gas flows through BC, thereby improving marketplace
- 21 liquidity, security and overall supply competitiveness.

These project development activities and regional market developments require time to complete and are in the best interests of FEI and its customers as they will allow FEI to utilize its recent discussions with stakeholders to avoid or adequately mitigate issues that may be related to pipeline capacity, design, route selection and construction activities.

- 26 The following sections provide an update on the project development work completed to date,
- including the work completed during this reporting period, anticipated work for the next reportingperiod and an update to the costs incurred to date.

29 2.2 PROJECT DEVELOPMENT WORK COMPLETED IN THIS PERIOD

In Q2 of 2023 the Project development work focussed on initiating screening analysis and
 activities as discussed below:

¹ As currently envisioned, the RGSD Project involves an extension of the SCP from its current endpoint at Oliver to a new endpoint at Huntingdon.



- FEI engaged five external consultants to initiate specialist technical work on all subvariants of the RGSD Project;
- FEI completed two risk workshops to identify risks and opportunities to inform a project
 risk register; and
- FEI continued to provide information on the Project to First Nations through meetings and
 other communications and identified next steps for further engagement.

7 2.3 SUMMARY OF PROJECT DEVELOPMENT WORK COMPLETED TO DATE

8 The project development work completed to date spans a period from November 2021 to June 9 2023 and is divided into two phase gates: a Preliminary and Conceptual Phase (Pre-Phase 1);

- and a Screening and Pre-Feed Phase (Phase 1). Project development activities completed to
- 11 date under each phase are summarized in the sections below.

12 2.3.1 Pre-Phase 1 Work Completed

As discussed in Section 6.2.1.1 of the RGSD Application, the RGSD Project is an evolution of previous work related to assessing an extension of the SCP. FEI had already completed some assessment work over the past few years, both internally and with the assistance of engineering, geotechnical and environmental consultants. FEI has been able to use some of the historical information to assist in completing the following activities for the RGSD Project related to the SCP compressor upgrades and a new pipeline segment between Oliver and Huntington:

- Class 5 capital cost estimate for the pipeline extension and compressor station additions;
- A desktop geotechnical hazard assessment;
- Environmental constraints analysis;
- Land and right of way requirement assessment to inform cost estimates; and
- Ongoing analysis of FEI's system to understand implications of hydrogen transportation.

24 2.3.2 Phase 1 Work Completed to Date

- 25 The Project development activities completed by FEI to date during Phase 1 are as follows:
- Continued to build out the Project team and appointed a team focussed on the development of the Project.
- Advanced the vetting of qualified pre-Feed consultants by completing a request of expressions of interest procurement process.
- Advanced consultancy scopes to support screening activities and analysis.

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- Developed a plan and schedule for an assessment to include all the delivery point subvariants, namely T-South connections at Kingsvale and Hope.
- Developed a concept for a path to determine and mitigate carbon footprint and schedule
 for all of the Project's sub-variants.
- Continued to engage with First Nations on the Project concept. Through meetings and other communications, provided information on the Project, discussed challenges and opportunities, and identified next steps for further engagement. The summary of Indigenous engagement completed to date is discussed further in Section 2.3.2.1 below.

9 2.3.2.1 Indigenous Engagement Completed to Date

Indigenous engagement and participation is a critical component of the RGSD Project. As a result, FEI began engagement with Indigenous communities early on by sharing the project concept. The purpose of this was to gather feedback from First Nations and incorporate that into the conceptual project design. FEI's approach to collaboration was informed by its Statement of Indigenous Principles, commitment to reconciliation, and understanding of the need for free, prior, and informed consent.

- FEI gathered information from the British Columbia Consultative Areas Database to identify which
 Indigenous communities to engage. In addition, FEI had consultants review the approach. After
 conducting an analysis, FEI decided to engage with the Nations most proximal to the proposed
 project. Since early 2021, FEI has reached out to 30 First Nations and 6 tribal councils to discuss
 the Project. FEI was successful in connecting with all tribal councils and 14 of the 30 First Nations.
 FEI will continue to seek to connect with the remaining 16 First Nations.
 FEI has held 56 meetings with Chief and Council and staff, conducted two aerial tours with two
- Nations to review the route and gather feedback, and presented the project concept at an open house to community members of another Nation. These meetings began as project introductions and progressed into routing and compressor station location reviews, knowledge sharing and partnership discussions. Some of the meetings evolved into working groups with staff members and another Nation held regular meetings with FEI for project updates.
- FEI understands First Nations require capacity funding agreements (CFA) to engage; therefore,
 based on requests, a total of 13 CFAs were extended to First Nations of which 6 CFAs have been
 confirmed.
- 31 In addition to the CFAs, FEI responded to community requests made by Nations and provided
- 32 funding for Indigenous community initiatives. FEI staff have attended over 15 local Indigenous
- 33 community events to learn and build stronger relationships.



1 2.3.2.2 Project Schedule Summary

- 2 Table 2-1 below provides a summary of development activities that have been completed to the
- 3 end of Q2 2023. FEI has initiated a detailed screening analysis to advance the Project to the point
- 4 where FEI can decide which sub-variants of the RGSD Project need to be further evaluated for
- 5 Pre-Feed. FEI has updated the preliminary Project Pre-Feed activities timeline (Figure 2-1 below)
- 6 and plans to update the overall Project schedule in subsequent reports after the completion of
- 7 screening analysis.

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Table 2-1: Status of Project Development Activities to Date

Activities	Status	
Advance Indigenous Nations engagement and stakeholder consultation efforts	In Progress	
Initiate screening analysis for all three RGSD sub- variations	In Progress	
Advance commercial discussions with prospective shippers for potential capacity on RGSD Project pipeline	In Progress	
Develop Project Risk Register	In Progress	

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Figure 2-1: Updated Preliminary RGSD Project's Pre-Feed Activities Timeline



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12 **2.3.3 Project Development Costs Incurred to Date**

13 FEI has used a measured, prudent and diligent approach in progressing the initial phases of the

14 Project development work completed to date to evaluate the RGSD Project and its sub-variants.

15 As of the end of Q2 2023, FEI has spent a total of \$2.93 million including AFUDC and taxes. This

- 16 compares to the \$23.7 million that FEI forecast at the time of the RGSD Deferral Account
- 17 Application for work up to Q3 of 2023. Table 2-2 summarizes the development costs on an annual
- 18 and a project phase gate basis.



Table 2-2: Project Development Cost Summary								
Annual Cost Summary								
2021 2022			2023	Total Cost				
\$0.47 million	\$1.43 million		\$1.03 million	\$2.93 million				
Phase Gate Cost Summary								
Preliminary and Conce (Pre-Phase Nov 2021 to Sep	1)	Screening and Pre-FEED Phase (Phase 1) Oct 2022 – Jun 2023		Total Cost				
\$1.40 millio	n	\$1.53 million		\$2.93 million				

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13.ANTICIPATED PROECT DEVELOPMENT WORK AND2TREATMENT OF SUBSEQUENT COSTS

3 3.1 ANTICIPATED WORK PLAN FOR NEXT PERIOD

The next quarterly reporting period will cover the period from July 1, 2023 to September 30, 2023,
and FEI anticipates that the following activities will be initiated and developed during the next
quarterly reporting period.

7 Screening Analysis

8 The project development work completed to date has provided FEI with a good understanding of 9 the SCP compressor additions and the new pipeline segment from Oliver to Huntington. As 10 mentioned in Section 2.1 above, FEI is undertaking a comprehensive screening analysis to 11 evaluate all options prior to initiating further Pre-Feed work. For the next stage of project 12 development, FEI will continue to advance its screening analysis to include the alternative delivery 13 points described in Section 4.1.2 of the RGSD Application, namely T-South tie ins to Kingsvale 14 and Hope.

The screening analysis will consist of multifunctional assessments of each of the delivery options and will seek to bring into focus option(s) that would be viable candidate(s) for further consideration. The work covered under this assessment will be comprised of but not be limited to: pipeline engineering, geotechnical, environmental, regulatory, stakeholder and Indigenous engagement, risk, construction, scheduling and cost estimating activities. Factored into the assessment will be any impacts of these options on FEI's resiliency scenarios and commercial agreements, and a long-term demand forecast.

In addition, with the introduction of the Province's plan related to GHG emissions reductions, all options require a carbon footprint assessment, plan and schedule to achieve net zero. The results of this work will be used to assist in the selection of the option(s) to be considered in the Pre-Feed work to follow.

26 Indigenous Engagement

Indigenous engagement is a priority for advancing this Project and FEI will maintain dialogue with the Indigenous Nations affected. Engagement will continue to focus on FEI having conversations with First Nations to discuss interests and opportunities, setting up mutually agreed upon preapplication engagement processes with First Nations, and continuing engagement according to those plans.

32 **Public Consultation**

FEI plans to commence engagement with local governments and communities, once the screening activities are developed, beginning with those most impacted by the Project.



1 4. MATERIAL DEVELOPMENTS ON THE PROJECT

2 4.1 REGIONAL MARKET AND PIPELINE INFRASTRUCTURE UPDATE

3 Developments with respect to regional infrastructure have an impact on FEI and the US Pacific 4 Northwest operating marketplace. As discussed in the RGSD Application, the following market 5 conditions have become even more pronounced, are outside of FEI's control, and continue to 6 drive the critical need for the new regional pipeline infrastructure.

- 7 1. Constrained Capacity on T-South System: The BC and US Pacific Northwest (Region) 8 as a whole, including FEI, rely on Enbridge's T-South system for the majority of their daily 9 gas supply. The T-South system remains fully subscribed due to high demand in the 10 Region. Over the past several years, market conditions have caused increased supply and pricing risks in the Region. The pricing volatility at the Huntingdon/Sumas market that 11 12 occurred during and after the T-South Incident confirms FEI's view that there is a limited 13 amount of supply available at Huntingdon. The 2022/23 winter season demonstrated 14 significant pricing scarcity across natural gas and power markets in the US Pacific 15 Northwest demonstrating supply challenges that stemmed from lack of infrastructure and pipeline capacity. FEI's strategy to incur demand tolls on the T-South system instead of 16 17 purchasing gas at the Sumas hub has been a prudent choice, however, maintaining this 18 strategy in the future would be challenging unless additional pipeline infrastructure is built.
- 19 2. Forthcoming Increases in Regional Demand: Constrained capacity in the Region will 20 be further exacerbated by a number of major infrastructure projects proposed, including 21 Woodfibre LNG, that require large volumes of baseload gas supply as feedstock. As well, 22 natural gas usage for power generation has increased in the US Pacific Northwest, due to 23 the retirement of coal plants. As the Region continues to try to replace the power 24 generated by coal with renewable projects, it is uncertain what the future usage will be, as 25 renewables are not sufficiently available at this time, and will be intermittent, depending 26 on weather conditions. Natural gas and the power market in the US Pacific Northwest will 27 continue to become more interconnected, as reliance on natural gas as the marginal 28 resource is expected to continue.
- Decarbonization Initiatives: A review of increasingly regional and federal public policy initiatives seeking to reduce GHG emissions presents FEI with an opportunity to continue to play a key role to innovate and implement solutions that help to create a lower-carbon future.
- FEI will continue to monitor these ongoing changes to the regional market as they have a
 significant impact on maintaining access to cost-effective and reliable gas supply.



1 4.1.1 Westcoast T-South Expansion Update (Sunrise Expansion Program)

2 As discussed in the RGSD Application. FEI is mindful of the pace of development on Westcoast's 3 proposed T-South Expansion project. Westcoast provided indication in early 2022 of its intention 4 to seek shipper interest in a further expansion of T-South through a binding "open season" that 5 was conducted later in the year. The T-South expansion was initially expected to be a \$2.5 billion 6 expansion to provide up to 300 MMcf/day from pipeline looping and additional compression along 7 the line. On November 4, 2022, Enbridge confirmed that the open season was fully subscribed 8 for 300 MMcf/day, with a weighted average term of 65 years. Enbridge will not publicly disclose 9 the names of the successful bidders who were awarded the capacity until the expansion in-service 10 date. The cost of the expansion, originally estimated at \$2.5 billion earlier in 2022 by Enbridge, has since been revised to up to \$3.6 billion in November 2022, which would lead to an even higher 11 12 toll increase for all T-South shippers than originally anticipated. Based on internal analysis, the proposed expansion at a current estimated cost of \$3.6 billion will result in major toll increases of 13 14 over \$0.30/Mcf (over current 2023 tolls) for all full path T-South shippers. In May 2023, Enbridge 15 announced plans to file an application with the Canada Energy Regulator (CER) by mid-2024 16 which is expected to include updated cost estimates based on detailed studies that will include 17 Indigenous consultation and greater technical scoping. Enbridge anticipates that the expansion 18 capacity could be in-service no earlier than Q4 2028, contingent upon CER approval.

19 This T-South expansion, planned for as early as 2028, is being proposed to maintain gas flows to

20 the US Pacific Northwest region at current levels after the planned Woodfibre LNG project comes

21 online in 2027. It is expected that this capacity expansion will involve the construction of extensive

22 new loops and additional compression.

23 4.2 FEI MUST CONTINUE WITH THE RGSD PROJECT DEVELOPMENT WORK

24 FEI has long recognized that the extension of FEI's Southern Crossing Pipeline (SCP) - now 25 referred to as the RGSD Project - would provide additional regional capacity in a way that 26 provides significant benefits to FEI and its customers and reduces risks for them. In contrast, the 27 T-South Expansion project will have significant impacts on FEI customers with little to no benefits. 28 and FEI customers still face the potential for additional - and potentially even larger - T-South 29 expansions to address unresolved regional demand growth in the region. It is in the best interest 30 of FEI and its customers for FEI to continue to proceed with the project development work on the 31 **RGSD** Project.



1 5. CONCLUSION

- 2 As discussed in this Report, FEI has taken a diligent, prudent and measured approach to the
- 3 project development activities completed to date (i.e., until Q2 2023). The costs incurred to date
- 4 have been reasonable and prudently incurred to develop the Project concept.
- 5 In this initial phase of the development work, FEI primarily focused on the Indigenous engagement 6 activities, as early engagement and developing Indigenous support for the Project is key to its 7 success. FEI also successfully completed a request for expressions of interest and identified three 8 potential proponents capable of completing Pre-Feed work. In order to have meaningful and 9 comprehensive engagement and collaboration with stakeholders and Indigenous Nations prior to 10 beginning Project approval processes and to have reasonable support and confidence on the 11 Project concept and design, FEI determined to complete a detailed screening analysis on all three 12 sub-variations of the RGSD Project (i.e., to assess other delivery points, such as tie-ins to T-South at Kingsvale or Hope) prior to advancing further Pre-Feed work. 13
- Furthermore, to help manage the potential impact of decarbonization initiatives and policies introduced by federal and provincial government, FEI will need to continue to identify, investigate,
- 16 and support appropriate infrastructure solutions that will help to meet these clean energy targets
- 17 and maintain the reliability of gas flows through BC and thereby improve marketplace liquidity,
- 18 security and overall supply competitiveness.
- FEI's project development activities will allow FEI to utilize its recent discussions with
 stakeholders to avoid or adequately mitigate issues that may be related to pipeline capacity,
 design, route selection and construction activities.
- FEI is also mindful of the proposed Westcoast's T-South Expansion project. The RGSD Project development work must continue and proceed in a timely way so as to avoid FEI having to underwrite the cost of the announced T-South Expansion, which as proposed, comes with little, if any, upside for FEI and its customers in terms of access to supply, supply cost, resiliency, or
- 26 progress towards a renewable and low-carbon energy future.