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February 17, 2022

B.C. Sustainable Energy Association
c/o William J. Andrews, Barrister & Solicitor
70 Talbot Street
Guelph, ON
N1G 2E9

Attention: Mr. William J. Andrews

Dear Mr. Andrews:

Re: FortisBC Energy Inc. (FEI)

Project No. 1599211

Application for a Certificate of Public Convenience and Necessity (CPCN) for Approval of the Advanced Metering Infrastructure (AMI) Project (Application)

Response to the B.C. Sustainable Energy Association (BCSEA) Information Request (IR) No. 2

On May 5, 2021, FEI filed the Application referenced above. In accordance with the regulatory timetable as amended in British Columbia Utilities Commission Order G-389-21 for the review of the Application, FEI respectfully submits the attached response to BCSEA IR No. 2.

If further information is required, please contact the undersigned.

Sincerely,

FORTISBC ENERGY INC.

Original signed:

Diane Roy

Attachments

cc (email only): Commission Secretary
Registered Parties

34.0 Topic: Project Need, In-House Meter Reading

Reference: Exhibit B-9, FEI Response to BCSEA IR1 5.1

In IR1 5.1, BCSEA asked why in-house meter reading would be more costly than the current outsourced model. FEI states:

> "The cost advantage of an outsourced model for manual meter reading is largely attributable to economies of scale. The inherent fixed cost categories of providing the service, such as administration and capital costs, are largely the same whether the service is provided in-house or outsourced; however, an outsourced model has the advantage of recovering those fixed costs over multiple utility customers. As noted in the Application, this is one of the reasons that FEI believes that an outsourced model may not be sustainable over the longer term. That is, with fewer customers in the market for these services as the market continues its transition to automation, the recovery of costs from an outsourced provider will be left to a smaller base and thus rates to organizations such as FEI will be higher all else equal." [underline added]

34.1 To clarify, does Olameter read meters for other utilities at the same premises as it reads meters for FEI?

Response:

FEI confirms that Olameter does not have a contract to read electric meters for FBC customers. As noted in Section 3.2.3 of the Application, BC Hydro began implementing an AMI system in 2011; as such, FEI does not believe that Olameter provides large-scale meter reading services to BC Hydro across its shared service territory with FEI. FEI is unaware whether Olameter reads meters for any municipal utilities at the same premises as it reads meters for FEI.

35.0 Topic: Project Alternatives

Reference: Exhibit B-9, FEI Response to BCSEA IR1 15.6

In its response to BCSEA IR1 15.6, FEI said that AMI would enable new rate designs:

> "Both Cost of Service Analysis (COSA) and rate design are dependent on the collection and analysis of customer usage data. Improved granularity and accuracy of the data that informs these activities lead to more accurate cost allocation results and the ability to develop rates that, without such data, would not be possible. …
>
> AMI would also allow FEI to explore more advanced rate designs based on actual utilization information and better customer segmentation. The effectiveness of such rate designs may be dependent on the ability to model future anticipated consumption characteristics for various groups of customers and to send timely price signals to customers." [underline added]

35.1 Please outline the potential rate designs that FEI is currently developing, and indicate the stage of development and the status of stakeholder consultation.

Response:

FEI currently has no plans to develop new rate structures related to AMI. As described in the Application, AMI will provide more granular customer consumption information which will allow FEI to better allocate costs within its cost of service allocation (COSA) studies. AMI meters will also allow FEI to better target energy efficiency outreach by being able to identify customers with high usage.

Two possible rate designs that could be considered once AMI meters are installed include residential and commercial tariffs with demand charges and time of use (TOU) tariffs. However, TOU rates are less relevant to gas utilities due to the ability to store gas within storage facilities and through line pack, which helps mitigate hourly peak demand requirements somewhat.

35.2 If possible, please provide examples of the potential rate designs that would be evaluated using data from the AMI system.

Response:

Please refer to the response to BCSEA IR2 35.1.

36.0 Topic: Project Alternatives

Reference: Exhibit B-9, FEI Response to BCSEA IR1 17, BCSEA IR1 18

In its responses to BCSEA's IR1 17 and IR1 18 series, FEI discussed how AMI would complement the proposed Tilbury LNG Storage Expansion Project in terms of enhancing FEI's system resilience.

36.1 Please clarify, confidentially if necessary, which, if any, aspects of the AMI functionality related to system resilience have been assigned a financial benefit in the AMI financial model.

Response:

FEI confirms the AMI financial analysis did not include or assign any financial benefits related to enhancing FEI's system resiliency. FEI is unable to predict when system disruptions could occur or the extent of them, to allow it to quantify any financial benefit from the AMI Project. Therefore, FEI did not assign any financial benefits associated with system resiliency in evaluating the AMI Project.

37.0 Topic: Consultation

Reference: Exhibit B-9, FEI Response to BCSEA IR1 28.1

In its October 26, 2021 response to BCSEA 1 28.1 regarding FEI's meeting with BC officials about the AMI Project in November 2019, FEI states:

> "FEI does not have more recent information or feedback from BC government officials in this regard; however, FEI expects to continue to engage with the Ministry as it develops the Project."

37.1 Please update this response.

Response:

FEI met with the Ministry of Energy, Mines and Low Carbon Innovation on January 31, 2022 and provided an update regarding Project progress to date, as part of a larger discussion of FEI's current projects and initiatives. The Ministry had no inquiries regarding the Project at this time.

As part of FEI's regular engagement with the Ministry on other business initiatives, FEI will continue to provide updates as the Project progresses.

38.0 Topic: Hydrogen

Reference: Exhibit B-9, FEI Response to BCSEA IR1 32.1; Exhibit B-6, FEI Response to BCUC IR1 34.1 and 34.2

Regarding hydrogen in particular, FEI states in response to BCUC IR1 34.1:

> "Yes. Due to hydrogen's effect on the specific gravity of the blended gas there is a point at which the meter will not function within specification. The Sensus contract states the meter will be compliant with hydrogen blends of up to 10 percent by volume in natural gas. In addition, FEI conducted independent testing of the Sensus SonixIQ meter that successfully verified that the SonixIQ meters would function as designed with hydrogen blends beyond 20 percent by volume in natural gas. Generally, to date in the North American and European market, most readiness review, research, development, and initial hydrogen blending trials related to hydrogen distribution in the gas system have been limited to blend concentrations in the range of 20 to 30 percent mixture by volume."

38.1 How does the sensitivity of the Sensus SonixIQ meters to the percentage of hydrogen content in the gas stream compare with the sensitivity of other components of FEI's gas system to the percentage of hydrogen content in the gas stream? If the AMI meters are installed are they likely to be the limiting factor in terms of the maximum feasible proportion of hydrogen in the FEI gas system?

<u>Response:</u>

As discussed in the response to BCOAPO IR1 14.1, FEI plans to execute a broad program of focused activities including technical feasibility studies and pilot projects to examine and test all aspects of the gas system to determine if and/or how hydrogen interacts with gas system and customer equipment. FEI does not expect that the AMI meters would be the limiting factor in terms of the maximum feasible portion of hydrogen in the system. Due to the use of ultrasonic technology and the associated benefits discussed in the response to CEC Confidential IR1 108.1, FEI also expects that the AMI meter will be able to be updated to handle higher percentage of hydrogen by volume in the future.

Further, in the response to BCUC IR1 34.1, FEI provided the meter tests to date related to hydrogen mixtures in the natural gas distribution system.

39.0 Topic: Project Description

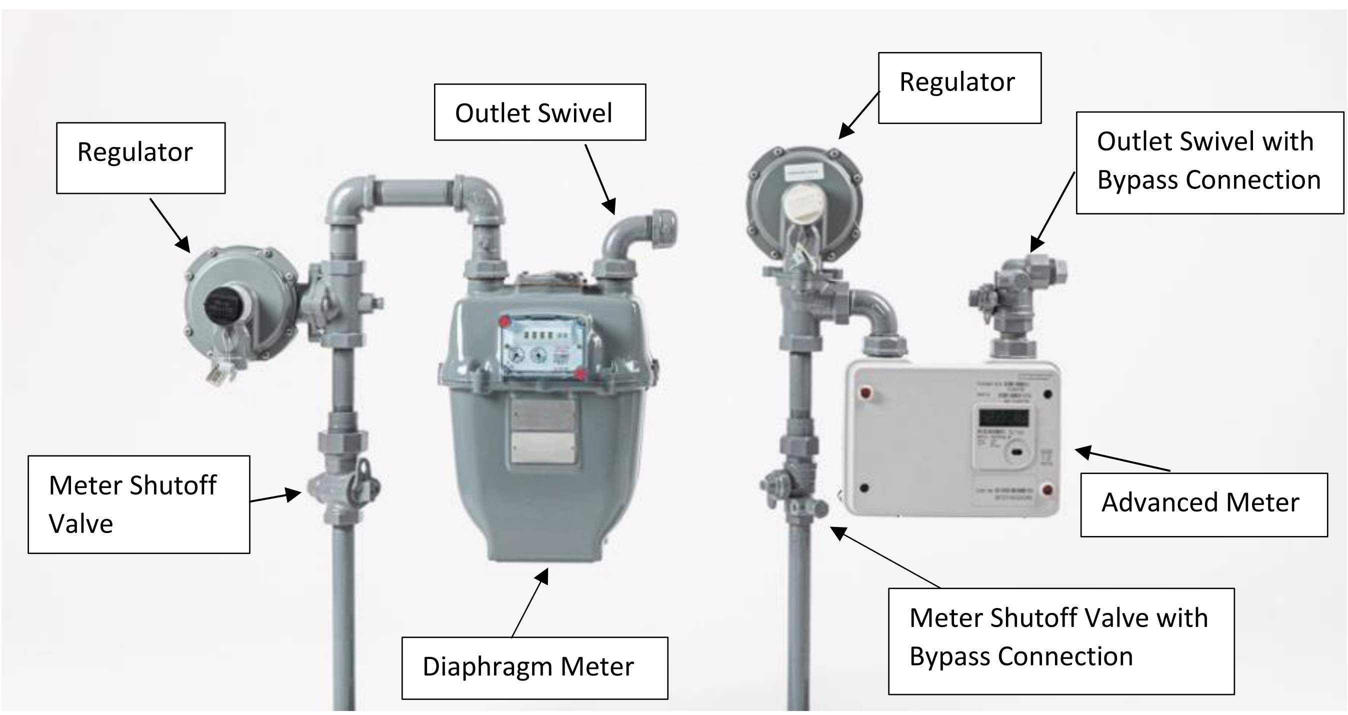
Reference: Exhibit B-9, FEI Response to BCSEA IR1 7.1

39.1 Please explain what a “meter set” includes in typical residential setting before and after the AMI Project. After the AMI Project, will a typical residential meter set include a meter, a bypass valve set and a regulator? Please provide images of a typical residential meter set (with and without a bypass valve set) before and after the AMI Project.

Response:

Currently, FEI’s residential and small commercial meter sets consist of a meter shut-off valve, a regulator, meter connections (inlet and outlet connections typically referred to as swivels), a meter, and miscellaneous fittings. After the AMI Project, FEI’s residential and small commercial meter sets will consist of these same items. The only difference is that, after the AMI Project, these meter sets will contain an advanced meter and bypass connection points on the meter shutoff valve and the meter outlet swivel.

Please refer to the image below which shows examples of both current and proposed meter sets. On the left is a typical meter set currently installed at residential and small commercial customer premises. On the right is a typical meter set that would be in use after the AMI Project is completed.



In its explanation of Unaccounted For Gas and the AMI Project in response to BCSEA IR1 7.1, FEI states:

> "During the advanced meter deployment, over 1.1 million meter sets will be tested for leaks. Any leaks found will be corrected before the meter set is returned to normal operation." [Exhibit B-9, BCSEA IR1 7.1, underline added]

39.2 Please explain the quoted statement. Will 1.1 million meter sets be tested for leaks before the existing meter is replaced by an advanced meter and a bypass valve set is added (where needed)? Wouldn't the time to check for leaks be after installation of the new meter set?

Response:

For each meter set that will be visited during the AMI Project, a field technician will conduct all the necessary install work. After the install work is completed, the field worker will take the necessary steps to commission the meter set, which includes testing the meter set for leaks. Once the field worker has confirmed no leaks are present, the meter set will be returned to normal operation.

FEI continues, in response to BCSEA IR1 7.1:

> "Without the AMI Project, these leaks [corrected by the AMI Project] would not have been detected at all or as quickly; consequently, the AMI Project will have a positive impact on UAF but again, the extent of these have not been quantified."

39.3 Does FEI anticipate being able to quantify, after implementation of the AMI Project, the reduction in gas leakage due to implement of the AMI Project?

Response:

FEI calculates and reports its Unaccounted For Gas (UAF) totals annually. These UAF totals compare how much gas FEI was supplied in a calendar year through its pipeline interconnection points, versus how much gas FEI used for its operations plus how much gas was supplied to its customers. To make these calculations, FEI aggregates the consumption of its more than one million meters. Also, the daily energy content (gigajoules per cubic metre) of the gas FEI supplied is calculated. Because there are many variable data inputs, it is not possible for FEI to determine exactly how much any change in UAF would be attributable to reduced meter set leaks or other UAF calculation inputs.

In response to BCSEA IR1 7.1, FEI states in part:

> "Unaccounted For Gas (UAF), also referred to as Lost and Unaccounted For Gas, refers to gas that is not specifically accounted for in the energy balance of receipts, deliveries, and operations use. UAF includes measurement variances and line loss of gas that is flowing in FEI's transmission and distribution systems. Sources of UAF include, but are not limited to, system leakage, lost gas (i.e., gas lost as a result of utility and third party activities, including gas theft), and aggregate measurement tolerances." [underline added]

FEI also provides the table below that summarizes the recorded annual UAF percentage for each of the latest available five years (2016 to 2020):

FEI - Mainland and Vancouver Island Service Area
2016-2020 Recorded Annual UAF Percentages

	2016	2017	2018	2019	2020
Recorded Annual UAF *(as a percentage of delivered quantity)*	0.62%	0.67%	1.00%	0.38%	0.38%

39.4 How is Recorded Annual UAF determined? Is it a system-level comparison of gas input and gas output?

Response:

UAF is the imbalance that exists at any given time between the measured gas coming into the FEI system (receipt point measurement data) and the measured gas going out of the FEI system (delivery point measurement data). Recorded system-wide annual UAF is calculated as the difference between the quantity of gas received during the period, based on the receipt point measurement data, and the quantity of gas delivered during the period, based on delivery point measurement data.

As explained in the response to BCSEA IR1 7.1, and underlined in the preamble to this information request, various components cause UAF. The impact to recorded annual UAF created by these components can fluctuate considerably from year to year, but cannot be disaggregated.

39.5 What proportion of Unaccounted For Gas is attributable to methane emissions to the atmosphere? Does FEI estimate the proportion of Unaccounted For Gas that is attributable to methane emissions to the atmosphere? If so, how is the estimate done, conceptually? If the data is available, please provide a table showing annual lost gas attributable to methane emissions to the atmosphere as a percentage of delivery quantity. Alternatively, please provide a rough estimate of the proportion of Unaccounted For Gas that is attributable to methane emissions to the atmosphere.

Response:

As explained in the response to BCSEA IR2 39.4, the system-wide annual UAF is calculated as the difference between the quantity of gas received during the period, based on the receipt point measurement data, and the quantity of gas delivered during the period, based on delivery point measurement data. There are various components that comprise the total UAF but none of the individual components can be calculated separately.

Notwithstanding the above, the table below summarizes the relevant data as requested.

	2016	2017	2018	2019	2020
Gas Volume (PJ)	197	221	212	226.6	219
Recorded Annual UAF (%)	0.62	0.67	1.00	0.38	0.38
UAF (PJ)	1.22	1.48	2.12	0.86	0.83
FEI Reported Methane Emissions (tCO_2e)	71664	79177	63039	61441	56078
Methane Emissions (PJ)	0.16	0.18	0.14	0.14	0.12
Methane Emissions as a percentage of UAF (%)	13	12	7	16	15

Using the above information, a Pearson correlation analysis of methane emissions (tCO_2e) and the UAF (PJ) was completed. An R-value of 0.32 was calculated indicating poor correlation between the two datasets.

These results are consistent with studies available in literature. For example, a study completed by ICF International commissioned by the Massachusetts Department of Public Utilities concluded that UAF is "not an appropriate surrogate for methane emissions".[1]

As such, FEI does not consider that the entire attributed methane emissions from UAF as shown above are lost to the atmosphere.

[1] https://www.naesb.org/pdf4/r16009_attachment4.pdf.

39.6 What are the reasons for the annual variation in the 2016 to 2020 figures for Recorded Annual UAF (as a percentage of delivery quantity)?

Response:

Please refer to the response to BCSEA IR2 39.4.

39.7 Please discuss whether the amount of Recorded Annual UAF attributable to methane emissions to the atmosphere is stable year-to-year or varies in sync with total Recorded Annual UAF.

Response:

As discussed in the response to BCSEA IR2 39.5, there is a poor correlation between UAF and methane emissions to the atmosphere. As such, drawing conclusions on the variation in methane emissions as a function of UAF (e.g., stable or varies in sync) is not considered to be accurate or appropriate.

39.8 How does the proportion of Recorded Annual UAF attributable to methane emissions to the atmosphere relate to FEI's official reporting of GHG emissions associated with lost gas?

Response:

FEI interprets "the proportion of Recorded Annual UAF attributable to methane emissions" as FEI's Reported Methane Emissions (tCO_2e) values presented in the response to BCSEA IR2 39.5. In addition, FEI is interpreting "FEI's official reporting of GHG emissions associated with lost gas" as the annual methane emissions to the BC Ministry of Environment and Climate Change Strategy (BC MOE). As a result, the "proportion of Recorded Annual UAF attributable to methane emissions" and "FEI's official reporting of GHG emissions associated with lost gas" are the same values. These values are derived in accordance with the BC MOE Greenhouse Gas Emission Reporting Regulation and Western Climate Initiative's (WCI) calculation requirements.

40.0 Topic: Automatic disconnection and reconnection

Reference: Exhibit B-9, FEI Response to BCSEA IR1 17.2 and 17.3

FEI discusses remote disconnects and remote reconnects in its responses to BCSEA IR1 17.2 and 17.3.

40.1 Please clarify: when a residential customer's gas service is disconnected is any action required regarding the customer's gas appliances? Is the customer advised to first turn off their gas appliances in order to avoid the risk of air entering the gas pipes downstream of the meter and causing a hazard?

<u>Response:</u>

In circumstances where a disconnection is occurring for non-payment, FEI advises customers in advance that it is their responsibility to monitor the safety and security of their home or business for possible damage such as frozen pipes, particularly in winter. However, FEI does not require or advise its residential customers whose gas is being disconnected to take any specific action regarding their gas appliances prior to or at the time of their gas service being disconnected.

The primary reason for this is that when a customer's service is disconnected, the premises' gaslines are isolated from FEI's system so any air which may enter the premises' gaslines cannot migrate into FEI's system. Any air that enters a customer's isolated gas line downstream of the meter will be easily purged before the connected appliance(s) is relit.

40.2 When a residential customer's gas service is reconnected, what actions are required regarding the customer's gas appliances? Is it necessary to manually relight the pilot lights in gas appliances that have pilot lights? What about gas appliances that don't have pilot lights?

<u>Response:</u>

Modern appliances are typically equipped with electronic ignition systems that will not require any action to operate once the service to a premise is reconnected. Older appliances will have a pilot light that is required to be manually lit in order to operate.

Please refer to the response to BCUC Confidential IR1 1.11 which describes the timing of when FEI will finalize its work procedure for AMI reconnects.

41.0 Topic: Features of the AMI Solution

Reference: Exhibit B-1, section 4.3.2.4, section 5.2.1; Exhibit B-6, FEI Response to BCUC IR1 2.1; Exhibit B-9, FEI Response to BCSEA IR1 17.3

In section 4.3.2.4 of the Application, *Automation Provides Additional Customer Benefits as well as Operational Opportunities that Support the Safety, Resiliency and Efficient Operation of the Gas Distribution System*, FEI describes various benefits that AMI would or could provide.

In section 5.2.1, Project Scope, FEI lists items "collectively referred to in this Application as the AMI Solution." [Exhibit B-1, pages 70-71]

41.1 Please explain which of the beneficial aspects of AMI discussed in section 4.3.2.4 are included in the "AMI Solution" and which are not included in the AMI Solution.

Response:

All of the benefits discussed in Section 4.3.2.4 of the Application are enabled by the AMI Solution and the specific scope of the AMI Application as set out in Section 5.2.1. There is further development of certain benefits outside the scope of the Project.

For example, AMI will give FEI the ability to offer enhanced billing options. FEI plans to investigate these options; however, implementation of the options that FEI elects to enable is outside the scope of the Project. Similarly, AMI will provide enhanced data for system planning purposes. FEI will explore how best to use this data; however, the investigation of how to use the data and the implementation of those decisions is outside the scope of the Project.

41.2 Please explain whether functionality, such as remote reconnection, that FEI has not yet decided to implement is considered to be within the AMI Solution.

Response:

Please refer to the response to BCSEA IR2 41.5.

41.3 Is the requested CPCN strictly limited to the AMI Solution, such that items or functionality that is not included in the AMI Solution would not be covered by the CPCN? Does the requested CPCN include features that FEI has not yet decided to implement?

Response:

The requested CPCN is strictly related to the AMI Solution, the scope of which is explicitly listed in Section 5.2.1 of the Application. Please also refer to the response to BCSEA IR2 41.1, which discusses that additional benefits will be enabled by the AMI Solution but are not within the scope of the Project.

FEI states that it "intends to deploy the leak detection and automatic shutoff capability [of AMI meters] for all customers." [Exhibit B-6, FEI Response to BCUC IR1 2.1, underline added]

41.4 For greater certainty, please confirm, or otherwise explain, that the leak detection and automatic shutoff capability of the AMI is included in the AMI Solution.

Response:

FEI confirms that leak detection and automatic shutoff capabilities are included in the AMI Solution.

It appears that FEI has not yet determined if it will enable the remote reconnection capability of the AMI meters ("If FEI enables remote reconnects and expands its application to include post recovery from emergencies…"). [Exhibit B-9, FEI Response to BCSEA IR1 17.3, underline added]

41.5 For greater certainty, please confirm, or otherwise explain, that FEI has not yet determined if the remote reconnection capability of the AMI meters will be implemented.

Response:

Not confirmed. Remote reconnect functionality is within the scope of the AMI Solution and will be enabled and tested during the AMI Project. However, FEI has not yet fully determined what operational situations and conditions will benefit from this functionality.

41.6 Is the remote reconnection capability of the AMI meters considered part of the AMI Solution? Would the requested CPCN include the remote reconnection capability of the AMI meters? If not, would additional regulatory approval be required?

Response:

Please refer to the response to BCSEA IR2 41.5. BCUC approval will not be required for use of the remote reconnect capability.

42.0 Topic: Remote Disconnection

Reference: Exhibit B-1, Application, section 4.3.2.4.1; Exhibit B-9, FEI Response to BCSEA IR1 17.2; BCUC Proceeding re FEI TLSE CPCN Application, Exhibit B-18, FEI Response to RCIA IR2 36.1.1; BCUC Proceeding re FEI TLSE CPCN Application, Exhibit B-26, FEI Response to BCUC IR1 69.1

In section 4.3.2.4.1 of the Application, FEI states:

> "In the event of an extended gas supply emergency that requires a large section of the system to be shut down, <u>AMI would enable the Company to execute a controlled shutdown.</u> A controlled shutdown would provide FEI with the ability to maintain pressure within the section of the system that has been shut down throughout the duration of the gas supply emergency." [pdf p.74, underline added]

42.1 Please further explain a controlled shutdown, maintaining pressure in a section of the system, a pressure collapse, and shutting off customer meters. Does a controlled shutdown necessarily require that all the customer meters are shut off (setting aside whether they are shut off remotely or manually)? Does shutting off all the meters in a certain section necessarily maintain pressure in that section? What is an uncontrolled shutdown? Is an uncontrolled shutdown when one or more customers' meters are not shut off and they continue to draw gas until there is insufficient (or no) pressure in the distribution pipe? When this occurs does the customer's meter turn itself off automatically? Is an uncontrolled shutdown always a pressure collapse?

<u>Response:</u>

A controlled shutdown is broadly defined as the planned disconnection of enough customer load such that the total demand on FEI's system does not exceed FEI's ability to supply gas to the same system. By balancing system demand and supply, FEI is able to maintain the pressure in its system (i.e., prevent an uncontrolled pressure collapse) and ensure that as many customers as possible can remain connected. In the event of a large scale emergency, FEI may be required to shut off all the meters that are connected to a part of the system. If all the meters are required to be turned off, FEI would close the main valves that feed this system or connect it to an adjacent system. Closing the main valves ensures gas does not flow out of the downstream system into another adjacent connected system. The downstream system would now be isolated and pressure will be maintained unless there is damage to this gas system.

An uncontrolled shutdown or hydraulic collapse occurs when parts or all of the gas distribution system are lost due to a reduction of system pressure down to atmospheric pressure[2]. When the pressure in the line reaches this level, infiltration of air into the gas line is possible. A pressure

[2] This definition of an uncontrolled pressure collapse is taken from FEI TLSE CPCN Application Section 3.2.1.3.

collapse will occur if demand on the system exceeds FEI's ability to supply gas to this system for a period long enough to allow the system pressure to reach atmospheric pressure. This situation can occur if supply to the system is restricted and customers continue to draw gas from the system at a rate that exceeds that supply. Additionally, any damage to the system allowing gas to escape to the atmosphere will also contribute to the rate that gas is drawn from the system.

When an uncontrolled pressure collapse occurs, FEI's advanced meters will not automatically shut off and instead will remain open until FEI sends a command to the advanced meter to close its internal valve.

An uncontrolled shutdown is always a pressure collapse. An uncontrolled shutdown is a serious situation, both in terms of service disruption to customers as well as the potential for safety concerns. When a portion of the gas system experiences an uncontrolled shutdown, FEI is unable to directly determine which customers are receiving sufficient pressure to operate their appliances or equipment safely. These pressure variations can vary both in time (as the event progresses) and location (from area to area or even street to street). This uncertainty greatly complicates the ability of FEI to localize, manage, and respond to the supply deficiency.

42.2 In restarting safely after an uncontrolled shutdown, are the recovery actions and the corresponding amount of time for recovery reduced if many customer meters were shut off before the pipeline lost pressure? In the event of a gas supply shortage, would having AMI be beneficial if some but not all customer meters were remotely shut off?

Response:

If a pressure collapse does occur after many customers are shut off, it is expected that AMI would provide a small reduction in the recovery time. The time savings in recovery would result because customers who were shut off before the pressure collapse would not have to be isolated from the system when FEI was ready to re-pressurize the collapsed system. Additionally, AMI's capability of effectively tracking which customers were disconnected would enhance the efficiency of the relight process. However, FEI would still have to isolate the remaining connected customers on the system, re-pressurize the collapsed system, and relight the affected customers' appliances. For the detailed steps required to re-pressurize a collapsed system please refer to the response to TLSE RCIA IR1 8.12, reproduced below for ease of reference.

> 8.12 If FEI has repressurized its system, which would be required to complete the leak survey, explain why it would not begin immediately serving its customers.

Response:

Safely reconnecting customers would be FEI's priority should a system experience a pressure collapse. However, there are a number of steps that have to be successfully completed before FEI would be ready to safely reconnect these customers.

Before reconnecting customers, FEI must be confident the collapsed system is operating safely. The best approach to ensure safety would be to repressurize the collapsed system and then reconnect customers in a controlled manner.

Following a pressure collapse, the first step would be to sectionalize the system into areas that support approximately 2,000 customers. When FEI was ready to repressurize a section of the collapsed system, its pressure would be brought back up to normal operating conditions. Next, a leak survey would be conducted to ensure the newly pressurized section was safe for operation. If leaks were found, repairs would be prioritized based on the number of available resources and the risk profile of each leak. Only after FEI determined the newly pressurized section was safe would FEI start to repressurize the next sectionalized part of the collapsed system. This process would continue until all the collapsed system was successfully repressurized. While FEI crews continued to safely repressurize remaining sections of the collapsed system, FEI would have other dedicated groups of employees working in parallel, relighting customers connected to sections of the system that are safe to resume operation.

Please also refer to the response to BCSEA IR2 42.1 for a description of the strategic benefits AMI offers in relation to allowing for a controlled shutdown which avoids a pressure collapse during a gas supply emergency to minimize impacts on customers.