



450 – 1 Street SW
Calgary, Alberta T2P 5H1

Tel: (403) 920-2603
Fax: (403) 920-2347
Email: bernard_pelletier@tcenergy.com

November 5, 2020

Filed Electronically

Canada Energy Regulator
Suite 210, 517 Tenth Avenue SW
Calgary, AB T2R 0A8

Attention: Mr. Jean-Denis Charlebois, Secretary of the Commission

Dear Mr. Charlebois:

**Re: NOVA Gas Transmission Ltd. (NGTL)
Gas Transportation Tariff (Tariff)
The Explorers and Producers Association of Canada (EPAC)
Application to Extend the NGTL Temporary Service Protocol (TSP) Tariff Provision
Decision RH-002-2019 (Application)
Responses to Information Request (IR) No. 1 to NGTL
File OF-Tolls-Group1-N081-2020-03 01**

On October 29, 2020, NGTL received a letter and IR No. 1 from the Commission of the Canada Energy Regulator (Commission), directing NGTL to file responses by noon on November 5, 2020. In accordance with these directions, NGTL encloses the responses to the Commission's IR No. 1.

Should the Commission require additional information with respect to this filing, please contact Laura Albrecht by phone at (403) 920-5784 or by e-mail at laura_albrecht@tcenergy.com.

Yours truly,
NOVA Gas Transmission Ltd.

Original signed by

Bernard Pelletier
Director, Regulatory Tolls and Tariffs
Canadian Natural Gas Pipelines

cc: Explorers and Producers Association of Canada
Commenters granted intervenor status by the Commission on October 26, 2020 (Filing ID: C09116)
Other interested persons that applied for intervenor status

IR Number: CER 1.1

Category: Economic Matters

Topic: Status of TTFP Discussions for alternative solution

Reference: Reply Comments of NGTL, Pages 5-6 of 6 (PDF 5-6 of 6), [C08477-1](#)

Preamble: In the reference, NGTL stated that it has held extensive consultations for over two years to develop long-term solutions for access to storage through the Tolls, Tariff, Facilities and Procedures Committee (TTFP).

Request: Respecting the sensitive nature of commercial negotiations, provide any information possible regarding the current status of discussions of the TTFP towards finding a permanent long term solution for enhanced access to storage. Include, if possible, all alternative proposals currently being considered and their respective timelines for implementation.

Response:

See the response to CER 1.2 a) through c).

IR Number: CER 1.2

Category: Economic Matters

Topic: Alternative Solutions

Reference:

- i) NGTL Comments, Page 3 of 4 (PDF 3 of 4), C08101
- ii) ARC Financial Corp Letter, Page 4 of 4, (PDF 4 of 4), C08317
- iii) Reply Comments of NGTL, Page 6 of 6, (PDF Page 6 of 6), C08477-1
- iv) NGTL Response to CER IR No. 1 in RH-002-2019, Page 9 of 10, (PDF Page 10 of 13) C01690-1

Preamble: In reference i) NGTL provided four alternative solutions to enhance access to storage while maintaining interruptible service (IT-S). The four solutions identified are:

- firm transportation transfers to storage;
- a new firm storage service;
- new biddable priority interruptible services ahead of existing interruptible services but below firm services; and
- modification of existing short term firm transportation services to provide access to storage locations in addition to Group 1 delivery points.

In reference ii), ARC Financial stated that alternative solutions like NGTL's proposed "firm transportation (FT) transfers to storage" are still uncertain and have not undergone a transparent public vetting process with a broader group of impacted stakeholders to identify unintended consequences and their potential effectiveness. It further argued that it is uncertain if the proposed FT transfers to storage solution could be implemented by April 2021.

In reference iii), NGTL stated that implementing firm transportation transfers to storage would not require a Tariff amendment; instead, NGTL would use the existing Transfer of Service provisions in Section 8 of Rate Schedule FT-R and Section 7 of Rate Schedule FT-D, as well as Section 15.11 of the General Terms and Conditions.

In reference iv), NGTL stated that "...a new firm service for storage would require the addition of new facilities and could therefore not be implemented for at least 3 years. All storage operators currently

connected to the NGTL System are located in fully contracted areas of the system and would require system expansion to facilitate firm access.”

Request:

- a. Provide a detailed description of each of the four proposed solutions from reference i), including:
 - a.1) Timelines for implementation
 - a.2) Impact on enhanced access to storage and system capacity, specifically during planned 2021 maintenance/outages
 - a.3) Impact on Firm Transportation Services versus Interruptible Transportation Services
 - a.4) Impacted geographical locations and points on NGTL System
 - a.5) Confirm if the proposed solutions require amendments to the Tariff. If not, identify the section of the Tariff NGTL would use to implement each proposed solution.
- b. Respecting the sensitive nature of commercial negotiations, describe, the public consultation process undertaken on each proposed solution through the TTFP including opportunities for submissions of input or concerns by NGTL shippers and customers.
- c. Does the statement in reference iv) remain accurate? If not, provide an update. Specifically address if new firm service for storage would require the addition of new facilities; when a new firm service for storage could be implemented; and if all storage operators currently connected to the NGTL System are located in fully contracted areas of the system and would require system expansion to facilitate firm access.

Response:

a) through c)

To address the requests in CER 1.1 and 1.2, this response provides background on the Executive Advisory Committee (EAC) and the Tolls, Tariff, Facilities and Procedures Committee (TTFP) and their confidentiality requirements and on access to storage on the NGTL System. The response also describes the collaborative process and the alternative long-term solutions to enhance access to storage that have been discussed, as well as the status and applicable timelines for these solutions.

TTFP and EAC Collaboration and Confidentiality

NGTL is committed to collaboration with its customers and invests significant effort to build understanding of perspectives and facts, resolve concerns where possible, and co-create solutions when needed. NGTL customers also invest significantly in these efforts, both within and outside of collaboration meetings. The objective of these efforts is to reduce the time, cost and uncertainty associated with litigation when possible.

The primary vehicle for NGTL and its customers to collaborate is the TTFP. The TTFP procedures were filed with the CER in June 2009, when they were last revised, and are publicly available on the NGTL website.

Although NGTL is typically the party proposing issues for adoption in the TTFP so that they can be discussed in the forum, any member can raise an issue for adoption. Once an issue is adopted, it is normally reviewed in separately scheduled task force meetings. Prior to a task force meeting, the date is communicated to the TTFP and interested parties, and any relevant information is distributed in preparation for the discussion. Parties are also encouraged to raise questions and share concerns and feedback between task force meetings. Although NGTL normally leads the discussion, invites input and responds to questions, other parties sometimes present information.

In January 2020, NGTL established the EAC, which is a senior advisory forum made up of a cross-section of customers. The EAC provides an opportunity for strategic conversations that may assist NGTL in framing its broader consultation efforts before the TTFP. The EAC provides another means for NGTL to connect with its customers but does not replace the TTFP.

The EAC and the TTFP operate under the same confidentiality provisions. Confidentiality and the without prejudice nature of the collaborative process are critical to provide the opportunity for successful outcomes. Under these confidentiality provisions, members can publicly provide or refer to materials they created, but not to the material or views of others in those discussions. Therefore, in this response, NGTL will refer only to information it has presented to the EAC and TTFP, and the views of NGTL. Some of the materials presented by NGTL on access to storage would directly or indirectly reveal the views and questions that were expressed by other parties and will therefore not be shared by NGTL.

Access to Storage on the NGTL System

The NGTL System does not include storage facilities, but NGTL provides transportation service to and from storage facilities connected to the NGTL System.

Currently, eligible NGTL connected storage is accessed through Interruptible Transportation – Storage (IT-S) service, which has no associated toll and is available

on a day-to-day basis when capacity designed to provide firm service is otherwise available.

During events of constraints on the System, access to storage may be impacted differently whether a storage location is located upstream or downstream of a mainline constraint. Based on current flow conditions, the January Creek and Big Eddy storage facilities are typically considered upstream locations. The same would be true for the Aitken Creek location to be added in 2021. Other storage facilities are presently considered downstream locations based on current flow conditions. Figure CER 1.2-1 illustrates the storage locations connected to the NGTL System and the capacity of the interconnection to the NGTL System.

Typically, during events of mainline System constraints, upstream storage locations may face restrictions on IT-S withdrawals (just like IT-R restrictions) and downstream storage may face restrictions on IT-S injections (just like IT-D restrictions).

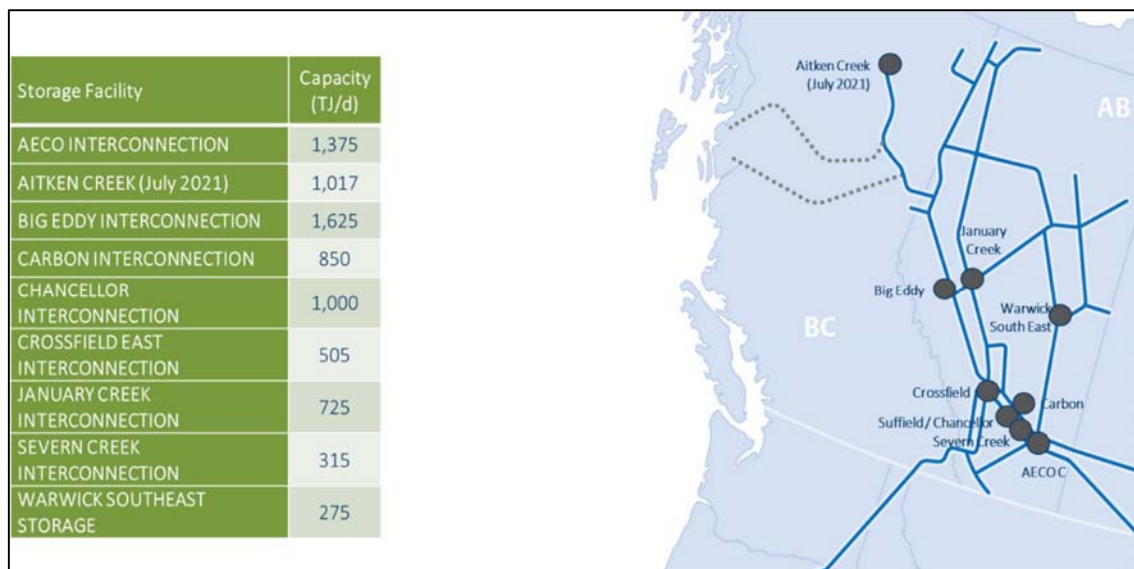


Figure CER 1.2-1: Storage Locations Connected to the NGTL System

Process of EAC and TTFP Discussions

In February 2018, NGTL convened the Access to Storage Task Force (Task Force) to discuss matters relating to access to storage. The Task Force was open to all TTFP members and NGTL also invited non-TTFP members to participate. There were seven meetings of the Task Force prior to the RH-002-2019 Decision:

- February 22, 2018
- March 8, 2018
- April 4, 2018
- April 25, 2018
- June 12, 2018

- November 28, 2018
- April 9, 2019

In 2019, NGTL filed its application for TSP as a temporary measure to improve access to storage. In the industry discussions leading up to that application, NGTL was clear that it would only seek approval for TSP with broad industry support and would not support the continuation of TSP beyond the summer of 2020. TSP was acceptable to NGTL only as a temporary and limited measure.

In the RH-002-2019 Decision, the CER approved implementation of TSP for 2019 and 2020 as a short-term solution and encouraged NGTL and its customers to “continue to explore alternative long-term solutions that will meet system needs, enable continued access to storage during periods when it is critical, and ultimately enhance the efficient functioning of the system thereby supporting market stability.”¹

In January 2020, following the RH-002-2019 Decision, NGTL initiated discussions on access to storage with the EAC. The EAC met on access to storage four times:

- January 27, 2020
- February 27, 2020
- April 30, 2020
- June 12, 2020

NGTL also used a survey to advance discussions in March 2020 when a meeting was cancelled due to the start of COVID-19 restrictions. These discussions framed the issues and reviewed potential alternative solutions.

After these discussions with the EAC, NGTL was supportive of an approach of focussing first on Transfers to Storage as a long-term solution which could be in place by April 1, 2021 and then re-engaged the Task Force.

There have been six meetings of the Task Force since June 2020 and a seventh meeting is planned for November 10, 2020.

- June 23, 2020
- July 13, 2020
- August 11, 2020
- August 14, 2020
- September 2, 2020
- October 2, 2020
- November 10, 2020 (scheduled)

¹ Application for Approval of Amendments to the NGTL Gas Transportation Tariff – Temporary Service Protocol, CER Reasons for Decision, Page 7, Filing ID: C02965-1.

Long-Term Alternative Solutions for Access to Storage

The sections that follow address the alternative solutions discussed by NGTL with the EAC and TTFP. This is followed by a summary of their status and timelines.

In the EAC and Task Force, NGTL explained that recently completed facility additions had already significantly improved the accessibility of storage. This increased operational flexibility is described in the response to CER 1.6. Despite this improvement, additional solutions were sought to further enhance access to storage over the long-term.

Because TSP is a temporary measure, NGTL did not raise TSP as an alternative and no other party chose to raise the extension of TSP as an issue for adoption and discussion at the TTFP.

NGTL considers the solutions in the sections below to be responsive to the CER's direction in the RH-002-2019 Decision. Although the solutions are referred to in this response as alternatives, they are in fact complimentary solutions that can be implemented individually or concurrently. Each respects the value of firm service, sends appropriate signals to the market, and otherwise fits within the existing commercial construct of the NGTL System. All provide different ways to access storage in addition to the current means of IT-S, which is expected to remain the primary means of accessing storage.

NGTL notes that some parties who support a TSP extension in their letters of comment express concerns with these solutions. NGTL notes that TSP is based on prioritizing IT-S and IT-D over firm receipts, and that IT-S has no toll associated with it. Each of the alternatives described below entail a toll or a firm commitment associated with having greater certainty that capacity can be accessed to inject or withdraw from storage. A no toll/no firm commitment access to storage solution that takes priority over firm services does not support the overall NGTL System.

NGTL notes that it has expressed its willingness in the Task Force to consider other alternatives that will enhance long-term access to storage and anticipates that other ideas and variations may be raised as discussions continue.

Firm Transportation – Transfers to Storage (Transfers to Storage)

Since June 2020, NGTL has focussed collaborative efforts on Transfers to Storage as a solution that can be in place by April 1, 2021. The efforts have included explaining how Transfers to Storage would work and addressing concerns by making changes to the proposal where possible. Transfers to Storage have evolved significantly through the collaboration process, and NGTL believes this development process is complete or largely complete. Based on views shared outside of the EAC and TTFP, NGTL understands this alternative to be supported by a broad spectrum of customers.

Transfers to Storage can be implemented relatively quickly because it builds on the existing transfer processes and does not require an amendment to the Tariff. It is consistent with the existing Tariff requirements related to transfers in Section 8.0 of the FT-R Rate Schedule and Section 7.0 of the FT-D Rate Schedule. Section 15.11 of the General Terms and Conditions of the Tariff allows NGTL to develop procedures relating to service terms and conditions under the Tariff. NGTL develops such procedures in consultation with the TTFP and then publishes them on its Customer Express website to provide transparency and clarity to all customers. The current draft procedure for Transfers to Storage is included in the response to CER 1.3. The Transfers to Storage Procedure builds from the existing FT-D and FT-R transfer processes, through which approximately 20,000 transfers are processed annually at thousands of receipt and delivery points, by extending the eligibility to an additional nine locations.

The Transfers to Storage solution would allow the use of an FT-R contract to access storage so that instead of receiving gas from its originally contracted primary receipt point, it can be used to receive gas from a storage location (withdraw). It also allows an FT-D contract to be used to deliver gas to a storage location (inject) instead of delivering to its originally contracted delivery point. Essentially, this solution provides additional flexibility to access storage injection or withdrawal and can be used during a time of constraint when there is little or no IT-S service available.

Figure CER 1.2-2 provides slides presented by NGTL at the July 13, 2020 Task Force meeting that illustrate the concept with simple examples.

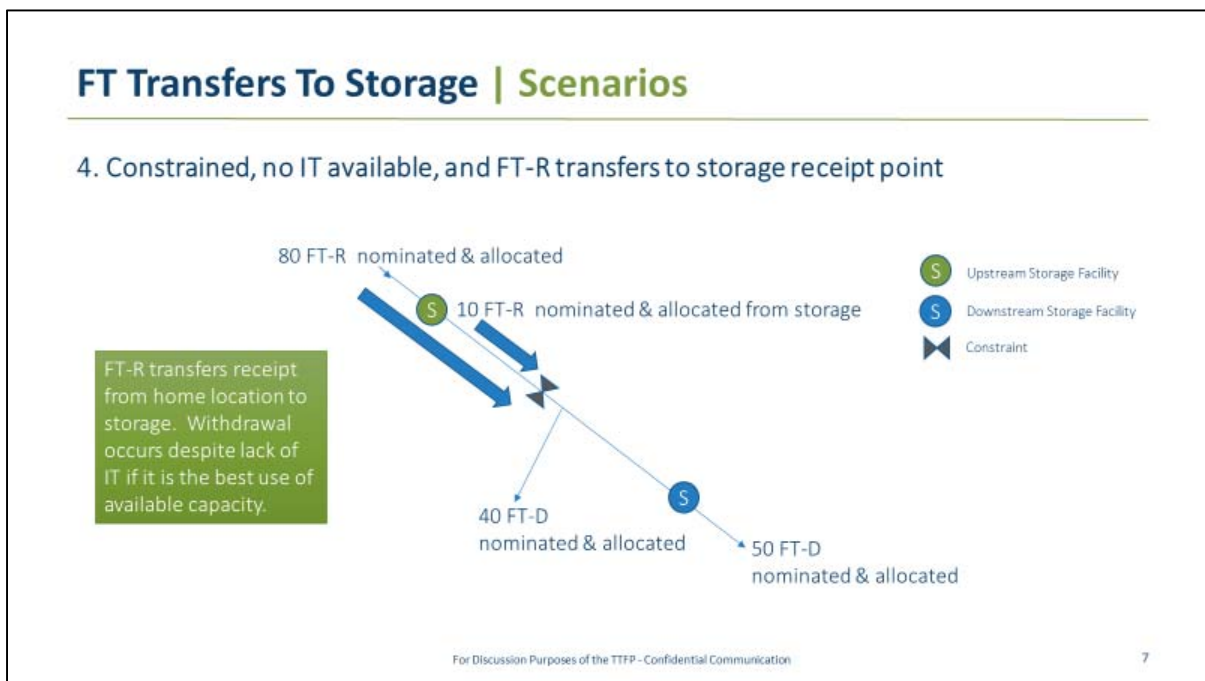


Figure CER 1.2-2: Task Force Meeting Slides

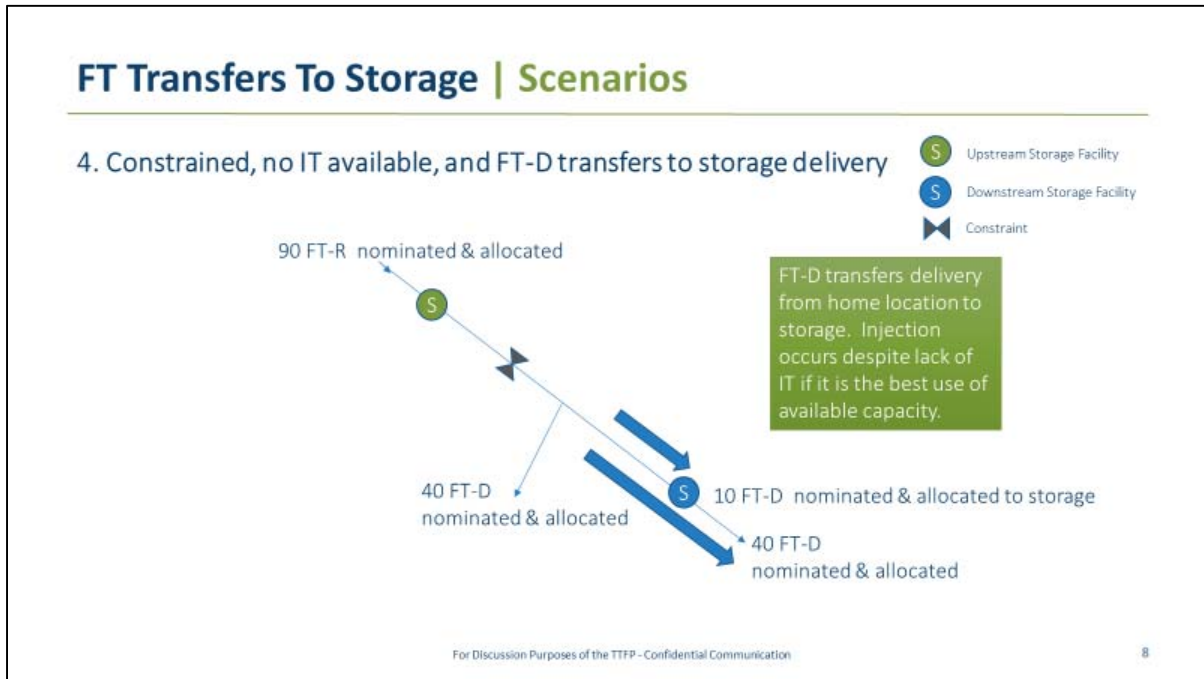


Figure CER 1.2-2: Task Force Meeting Slides (cont'd)

Because Transfers to Storage provide for both injection and withdrawal, they are useful to both upstream and downstream storage locations. Upstream locations would use transfers of FT-R service to storage to facilitate withdrawals when interruptible service is not fully available. Downstream locations would use transfers of FT-D service to storage to facilitate injections when interruptible service is not fully available. Since Transfers to Storage would be available at any time, they are an option to improve access to storage during any events of constraints, including those associated with planned and unplanned maintenance that may occur throughout the year.

Figure CER 1.2-3 provides maps that were presented to the Task Force on September 2, 2020. The map on the left shows the current storage locations in each Project Area (relevant to FT-R transfers), the receipt capacity of the storage locations, and the receipt contracts in secondary term in those areas. The map on the right shows the current storage locations in each Delivery Design Area (relevant to FT-D transfers), the delivery capacity for each storage location, and the contracts in secondary term in the Delivery Design Area. Contract amounts in secondary term are most relevant since the Tariff only permits transfers for service in secondary term.

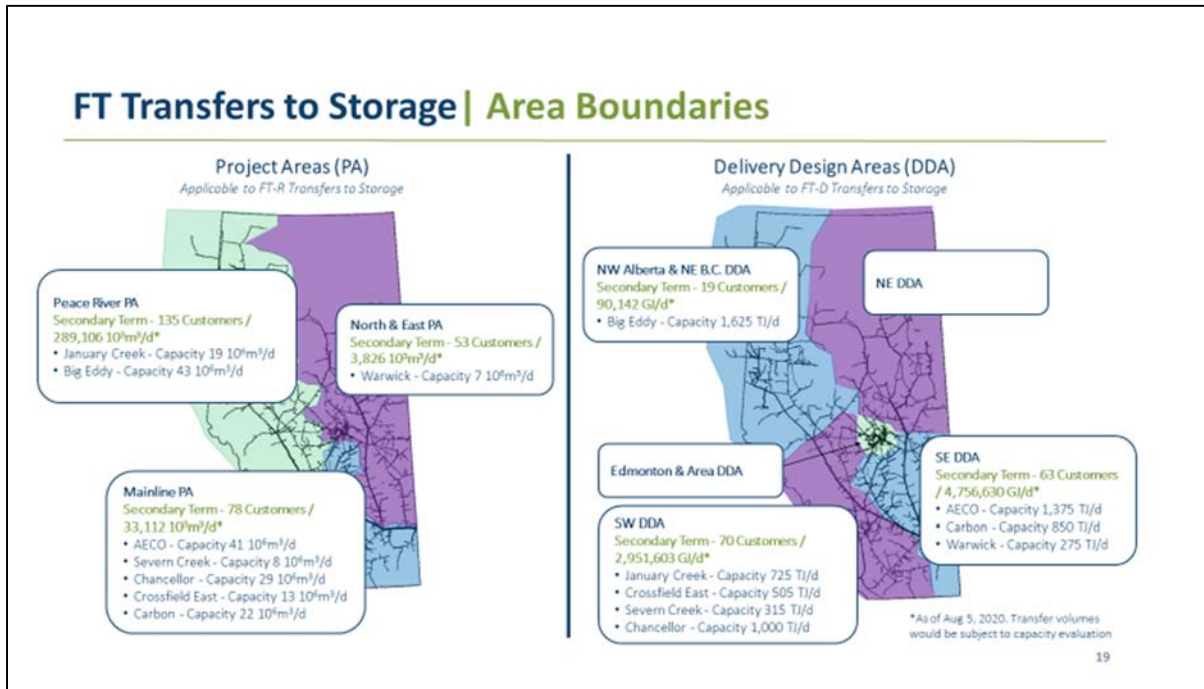


Figure CER 1.2-3: Task Force Meeting Maps

Transfers to Storage respect the firm commitments made by customers and also enhance the value of firm service. Like existing transfers, they provide another way in which firm contract holders can use their service. Directionally, this encourages parties to hold firm service, contributing to the support and stability of the System. Transfers to Storage let market forces work by providing the opportunity for firm contract holders to use capacity where it is valued the most including access at any time to any storage location.

While NGTL noted concerns in the RH-002-2019 proceeding that a previously assessed option of transferring capacity to storage could impact other firm service,² the current Transfers to Storage proposal has addressed this concern through the development, in consultation with the TTFP, of the draft Transfers to Storage Procedure. Please refer to the response to CER 1.3 with respect to the current transfer process, the process for Transfers to Storage, and a copy of the Transfers to Storage Procedure.

NGTL intends to implement Transfers to Storage as a pilot that would commence no later than April 1, 2021. NGTL is currently implementing three other pilot programs relating to other types of firm service transfers. As with all pilots, NGTL will have the ability to make improvements to Transfers to Storage Procedure during the pilot. In addition, after a full year of implementation of Transfers to Storage, NGTL expects to

² NGTL Response to CER Information Request 1.1 g), Filing ID: C01722-1.

prepare a report to the TTFP that addresses the use of the Transfers to Storage and conditions that contributed to their level of utilization, any operational impacts or unintended consequences, and proposed next steps.

While NGTL did not present a TSP extension as a long-term alternative for the reasons set out above, NGTL did provide the following comparison of TSP and Transfers to Storage to the EAC on June 12, 2020, and to the Task Force on June 23, 2020 (see Figure CER 1.2-4).

	FT Transfers to Storage	TSP
Improves Access to Storage - Time	<ul style="list-style-type: none"> Available 365 days a year 	<ul style="list-style-type: none"> Available only on certain days (when planned outages upstream of Woodenhouse C/S and Clearwater C/S cause restrictions) <ul style="list-style-type: none"> Expecting max 24 days of TSP this summer
Improves Access to Storage – Quantity that has option to go to storage	<ul style="list-style-type: none"> Market can choose if firm is more valuable at a storage location Available discretionary capacity and some firm capacity can be used at storage 	<ul style="list-style-type: none"> When TSP is applicable, upstream FT-R is restricted instead of downstream IT Available downstream discretionary capacity can be used at storage
Improves Access to Storage - Locations	<ul style="list-style-type: none"> Upstream and downstream 	<ul style="list-style-type: none"> Downstream only
Maintains value of firm service	<ul style="list-style-type: none"> Respects firms service commitments Increases the value of firm service by providing more options 	<ul style="list-style-type: none"> Undermines commitment made by firm shippers by offering interruptible access to storage at the expense of firm service Could discourage downstream contracting and reduce market access

For Discussion Purposes of the TTFP - Confidential Communication 37

Figure CER 1.2-4: EAC/TTFP Slide on TSP Versus Transfers to Storage

Firm Transportation – Storage (FT-S) Service

A new FT-S service could be added to the Tariff so that customers can contract firm priority service to inject and/or withdraw to/from storage daily when reliance on IT-S or any other available alternative to access storage are not acceptable to them. This solution is expected to entail the same priority as other firm services, providing the highest priority to parties who enter a contract and make a long-term financial commitment to support the System. Parties who contract for FT-S would have much greater certainty of access to storage, even when no IT-S is available. Therefore, FT-S would probably be most attractive as a service when IT-S is not expected to be readily available over a longer term.

Given the early stages of discussion on this solution, no details have been developed, although NGTL expects it would be available to all storage facilities regardless of their geographic location.

There would be an associated toll for FT-S that would need to consider the costs of providing such service, whether the service is contracted using available annual firm capacity, facilitated by the conversion of existing firm service, or by adding facilities. With respect to part c) of the request, the statement remains accurate regarding locations where new facilities would be required, which aligns with the conditions under which customers are likely to be interested in contracting for FT-S.

Although the ability to access firm service at storage locations through FT-S may take time until facilities can be added, firm service could be accessed at storage locations in the meantime through the use of Transfers to Storage.

Biddable Interruptible Services

Under this long-term alternative, the Tariff would be amended so that interruptible services would be biddable (biddable IT). If IT-S was valued more than IT-R and/or IT-D, the bidding mechanism would send the appropriate price signal and IT-S would be allocated ahead of interruptible service for other locations. Biddable IT could either replace the existing interruptible services or complement them.

As this solution relies on the availability of capacity for interruptible services, it would only increase access to storage in times of restriction due to planned or unplanned maintenance when there is some capacity available for interruptible services and the highest-value use of that capacity is to access storage for injection or withdrawal. The revenue generated from biddable IT would contribute to reducing firm service tolls.

The details of biddable IT have not been defined but this solution is expected to be accessible at all storage locations when the above-described circumstances occur. In addition to Tariff amendments, changes to administrative systems would be required to assess and rank bids for interruptible services. Biddable IT would not impact the relationship between firm and interruptible services because firm service would remain the highest priority on the System. Depending on the specific approach, there may be different priority levels for biddable IT than for existing interruptible services.

Short-Term Firm Transport - Delivery (STFT) Service Modifications

Under this alternative the Tariff would be amended to include delivery at storage locations as being eligible for STFT. NGTL does not expand the System to accommodate STFT service, as it is only offered when there is short term firm capacity available on the System (a minimum term of 7 days and a maximum term of 1 year less a day and currently must end on the last day of a month). During an STFT open season, storage locations would have the ability to compete for service, along with Group 1 Delivery Points, through the existing STFT bidding process.

Under this solution STFT could be used at any storage location, but because it only pertains to delivery service, it would only be useful at downstream storage locations

where deliveries for the purpose of injection may be restricted at times. Because STFT has the same priority as all other firm services, it would provide a high degree of certainty in accessing storage if it were contracted, when a block of short-term firm capacity is made available by NGTL for STFT.

Status and Timelines for Long-Term Solutions

NGTL intends to collaborate on FT-S within the TTFP starting in early 2021. If pursued, this service could be made available for contracting in 2022 but may require additional time before facilities are in place for those contracts to commence.

Biddable IT and STFT modifications have not been the subject of focussed consultations. If pursued, the timeline for implementation would depend on the time required for the collaborative process, the regulatory process to approve the necessary Tariff amendments and any required administrative system changes. It is possible that these options could be considered for implementation as early as 2022.

NGTL has focussed its efforts to date on the development of Transfers to Storage as a reasonable long-term improvement to access storage including during times of constraint. Because of the development that has occurred through the collaborative process, the absence of any Tariff amendments that would require CER approval, and the lack of significant administrative system changes, Transfers to Storage can be in place by April 2021 as a pilot program and can be adjusted over time as experience is gained.

IR Number: CER 1.3

Category: Economic Matters

Topic: Processing of Firm Service Transfers

Reference:

- i) Reply Comments of NGTL, Page 6 of 6 (PDF 6 of 6), C08477-1
- ii) Canlin Energy Corporation Letter, Page 2 of 2 (PDF 2 of 2), C08289-1

Preamble: In Reference i) NGTL stated that the proposed firm transportation (FT) transfers to storage solution can be implemented through a pilot project no later than 1 April 2021. NGTL noted that it has a procedure in place for other types of FT-R and FT-D transfers through which nearly twenty thousand transfers are processed annually.

In Reference ii) CanLin Energy Corporation stated that “the firm service transfer process currently being proposed by NGTL is terribly flawed. Similar requests for service transfers can frequently take several days for NGTL System design to approve or refuse and is highly inefficient.”

Request:

- a) Provide the following information regarding the current firm service transfer process:
 - a.1) A step-by-step description of the current process
 - a.2) The average length of time elapsed, in number of days, between receipt of firm service transfer requests and approval or denial of requests for the years 2018, 2019, and 2020
- b) Given concerns outlined in Reference ii) are there any planned improvements to NGTL’s existing firm service transfer process, prior to the implementation of the proposed FT transfers to storage solution?
 - b.1) If yes, describe planned improvements in detail.
 - b.2) If no, explain why.

Response:

a) NGTL currently processes customer requests through its contracting system for transfers of firm services from the contracted receipt point to another receipt point or from the contracted delivery point to another delivery point, as applicable. The provisions of Rate Schedule FT-R (Section 8.0) and Rate Schedule FT-D (Section 7.0) of the NGTL Tariff state that NGTL may grant such transfer requests where the contract is in secondary term and NGTL determines there is sufficient capacity to

accommodate the transfer without the construction of new facilities, among other requirements.

NGTL's current processes for transfer requests between receipt points and between different types of delivery points have been established under various pilot programs and procedures that have been developed in consultation with the TTFP. Transfer requests may be made on a one-way basis or on what is known as an "out and back" basis such that the customer's firm service will eventually return to its originally contracted location (known as the "home location"), in which case the request for the transfer and return are submitted and assessed simultaneously. Depending on the type of transfer, there are various requirements regarding the frequency and timing of requests, as well as the effective date and duration of the transfer.

Each transfer request is evaluated by NGTL to ensure that it can be accommodated within the capacity of the existing System, in accordance with the Tariff requirements. Several factors are considered as a part of this assessment, including:

- **Mainline Capacity** – To ensure that the requested transfer will not adversely impact other firm service contracts, the transfer must be hydraulically neutral or positive such that the overall System capacity remains the same or increases as a result of the transfer.
- **Lateral Pipeline Capacity** – Transfers to a meter station connected to a lateral pipeline system, in addition to the existing aggregate contracts at all meter stations connected to the lateral, must not exceed the hydraulic capacity of the lateral pipeline.
- **Meter Station Capacity** – Transfers to a meter station, in addition to the existing aggregate contracts at that station, must not exceed the operational capacity of the meter station.

Transfer requests that meet all of these capacity checks will be approved and transfer requests failing on any one of the three criteria will be denied.

Many FT-R transfer requests can be managed by the Automated Transfer Process (ATP), an existing contracting system functionality that utilizes the criteria described above to automatically process transfer requests. Flow paths, lateral system capacity and meter station capacity that are qualified for ATP are established in the contracting system and reviewed on a regular basis. Any FT-R transfer request that is submitted by a customer, and that can be accommodated within the thresholds of the established capacity criteria defined in the ATP, is approved instantaneously and confirmed by a system generated e-mail notification to the customer. Currently, approximately 50% of FT-R requests are processed and approved through ATP. FT-R transfer requests that are not within the capacity thresholds are manually assessed.

FT-D transfer requests are currently manually assessed, but as noted in the response to b), efforts are underway to expand ATP functionality to accommodate the processing of certain FT-D transfer requests.

The average number of business days elapsed (i.e. not including weekends or statutory holidays) between receipt of a firm service transfer request and the approval/denial notification is less than one day, as demonstrated by the data from 2018, 2019 and 2020 (as of October 30, 2020) summarized in Tables CER 1.3-1 and 1.3-2, respectively. The data confirms that NGTL processes a large volume of transfer requests effectively and in a timely fashion, with the average time to process requests having been reduced significantly between 2018 and 2020 as a result of the increased use of ATP functionality and enhancements to manual processing.

Table CER 1.3-1: FT-R Transfer Processing (Elapsed time)

FT-R Transfers (Approved and Denied)		
Year	Avg Number of Days	Total Number of Requests
2018	0.72	20,462
2019	0.44	22,146
2020 (YTD)	0.22	17,245

Table CER 1.3-2 FT-D Transfer Processing (Elapsed time)

FT-D Transfers (Approved)*		
Year	Avg Number of Days	Total Number of Requests
2018	0.69	1,798
2019	0.65	2,080
2020 (YTD)	0.29	769
Note* Tracking functionality for FT-D transfers that have been denied is not currently in place		

Manually-processed requests, specifically, have an average response time of 0.64 days, however, in some instances, they may require above-average time to process. The ATP enhancements discussed in response b) are expected to reduce the number of manually-processed requests.

- b) NGTL continually reviews its processes and has identified improvements to the existing firm services transfer processes. The improvements will, among other things, increase ATP processing capabilities and result in faster response times, as well as increased customer flexibility. These improvements include:
- Regularly updating the criteria embedded in the existing ATP functionality to increase the number of FT-R transfer requests that can be approved instantaneously.

- Further ATP development work underway that will enable instantaneous approval of certain FT-D transfer requests.
- NGTL is also exploring, in consultation with the TTFP, the possibility of allowing transfer requests on a daily basis for FT-D1 to FT-D2 locations and vice versa, that currently can only be requested twice a month (mid month and end of month) under an existing pilot program.

Beyond these enhancements, and as noted in the response to CER 1.2, NGTL has also been collaborating on a procedure to accommodate Transfers to Storage.

Transfers to Storage can largely be accommodated within the existing contracting system and transfers framework, and will benefit from the ATP enhancements referred to above. However, procedures in addition to those summarized in a) are required to ensure that the authorization of Transfers to Storage would not impact other firm services and to ensure that there is sufficient capacity to accommodate the transfer as required by the Tariff.

Under the NGTL design methodology, NGTL constructs facilities to meet the forecast peak requirements. This philosophy typically results in fewer NGTL System mainline facilities being required (and therefore results in lower tolls) than what would be the case if the System was designed solely based on contracted volumes. As a result, transfer requests that may impact flows have the potential to impact capacity requirements. Due to utilization assumptions at home locations and the large size of metering facilities at storage locations, Transfers to Storage have the potential to impact flows more significantly than other transfers of firm services. As a result, an additional operational capacity assessment and contract usage determination step is required for some types of Transfer to Storage requests in order for NGTL to be able to ensure that the transfer will not impact other firm services.

In collaboration with the TTFP, NGTL has developed a draft Transfers to Storage Procedure which is provided as Attachment CER 1.3-1. While the procedure is still in draft form, and NGTL continues to consult on it as part of the Task Force, it is in an advanced state of development and is representative of the procedure that would be associated with implementation of Transfers to Storage. For details on the assessment steps and timelines for different types of Transfers to Storage, please refer to Attachment CER 1.3-1.

As NGTL gains experience with Transfers to Storage through the pilot program, improvements can be made to the Procedure to further enhance the efficiency of the Transfers to Storage process.

NGTL FT TRANSFERS TO STORAGE PROCEDURE

I. APPLICATION OF TARIFF TO FT TRANSFERS TO STORAGE

This document describes the Procedure for FT Transfers to Storage. All other relevant Tariff provisions with respect to transfers of Service remain applicable to FT Transfers to Storage, including any provisions applicable to the crossing of a Project Area or Delivery Design Area.

II. DEFINITIONS

Unless otherwise defined in this Procedure, the capitalized terms used in this FT Transfer to Storage Procedure (“**Procedure**”) have the meaning attributed to them in the NOVA Gas Transmission Limited (“**NGTL**”) Tariff.

“**All Other Transfers to Storage**” means any FT Transfer to Storage:

- i. between a Receipt Point and Storage Receipt Point within the same Project Area;
- ii. between a Receipt Point and Storage Receipt Point in a different Project Area; or
- iii. between a Group 1 or Group 2 Delivery Point and Storage Delivery Point in a different Delivery Design Area.

“**Automated Transfer Process**” or “**ATP**” is existing functionality within the Company contracting system that can be utilized to automatically approve transfers that meet automation criteria.

“**Cushion Gas**” means the volume of gas required in a storage reservoir to maintain adequate pressure and deliverability rates throughout the withdrawal season.

“**Design Based Hydraulic Impact and Capacity Assessment**” means the assessment undertaken by Company set out in Paragraph V(2).

“**Effective Gas Day**” means the gas day on which an FT Transfer to Storage, as approved in accordance with this Procedure, is effective.

“**FT Contract**” means a contract for Service for either FT-D1, FT-D2, FT-D3 or FT-R, as applicable, excluding Transferred to Storage Contracts.

“**FT-D1**” means Service under Rate Schedule FT-D at a Group 1 Delivery Point.

“**FT-D2**” means Service under Rate Schedule FT-D at a Group 2 Delivery Point.

“**FT-D3**” means Service under Rate Schedule FT-D at a Group 3 Delivery Point.

“FT-D Transfer to Storage Within a DDA” means an FT Transfer to Storage between, either a Group 1 Delivery Point or a Group 2 Delivery Point, and a Storage Delivery Point within the same Delivery Design Area.

“FT-R” means Service under Rate Schedule FT-R.

“FT Transfer to Storage” means a transfer of an FT Contract that is eligible to transfer to either a Storage Receipt Point or Storage Delivery Point, as applicable, in accordance with this Procedure.

“Home Location” means the Receipt Point or Delivery Point of an FT Contract prior to any FT Transfer to Storage.

“NGTL Storage Inventory” as defined in NGTL’s IT-S Procedure, means total volume of gas including NGTL toll paid Cushion Gas, at any point in time, contained within a commercial storage facility, which is eligible to be returned to NGTL under Rate Schedule IT-S (receipt). When returned to NGTL, this gas will be destined for a Delivery Point and tolled under the appropriate service.

“Operational Capacity Assessment and Contract Usage Determination” means the assessment undertaken by Company pursuant to Paragraph V(3).

“Out and Back” means a transfer request that consists of a pair of transfers that are assessed at the same time, where the out transfer is from location A to location B and the back transfer is a future dated request from location B back to location A.

“Minimum FT-R Aggregate Usage” means the minimum aggregate FT-R usage that will be authorized on a daily basis at each NGTL-connected commercial storage facility and allocated pro-rata among all applicable Transferred to Storage Contracts in Accordance with Paragraph V(3)(B).

“Storage Operator” means the operator of an NGTL-connected commercial storage facility.

“Transferred to Storage Contract” means all or a portion of Service under an eligible FT Contract for which a request for an FT Transfer to Storage has been submitted by a Customer and approved by Company in accordance with this Procedure.

III. PURPOSE

This Procedure sets out the process that applies for Company to ensure that sufficient capacity exists to accommodate FT Transfers to Storage such that other firm services on the NGTL system are not impacted.

IV. ELIGIBILITY FOR FT TRANSFERS TO STORAGE

The following sets out the eligibility requirements for requests for FT Transfers to Storage:

1. A Customer that holds FT-D1 or FT-D2 Service may request the transfer of all or a portion of its Service that is in its Secondary Term to a Storage Delivery Point.
2. A Customer that holds FT-R Service may request the transfer of all or a portion of its Service that is in its Secondary Term to a Storage Receipt Point.
3. Customers that hold FT-D3 Service are not eligible to request an FT Transfer to Storage.
4. All FT Transfer to Storage requests must be Out and Back requests of a minimum of one day to a maximum of 39 days.
5. All FT Transfer to Storage requests may be submitted up to 39 days in advance of, and including, the requested Effective Gas Day.
6. Whether the assignee of an FT Contract that would otherwise be eligible for an FT Transfer to Storage has the right to request an FT Transfer to Storage will be determined in accordance with Company procedures applicable to assignments.
7. An FT Transfer to Storage cannot be requested for an FT Contract that has been temporarily relocated to a different location as part of an Out and Back transfer prior to the return of the contract to its Home Location.
8. All FT Transfer to Storage requests must be submitted through Company's contracting system.
9. FT Transfers to Storage are only available at storage locations that qualify for IT-S service, and for gas that meets the requirements to be considered NGTL Storage Inventory.

V. FT TRANSFERS TO STORAGE ASSESSMENT

1. Assessment Steps

All FT Transfers to Storage requests are first subject to a Design Based Hydraulic Impact and Capacity Assessment as outlined in Paragraph V(2), followed by an Operational Capacity Assessment and Contract Usage Determination as outlined in Paragraph V(3).

2. Design Based Hydraulic Impact and Capacity Assessment

Each eligible FT Transfer to Storage request submitted in accordance with this Procedure will be evaluated to determine the design based hydraulic impact to the system. Local area facility capacity (laterals) and meter station capacity will also be considered to determine whether the transfer request can be accommodated. ATP will be used where applicable for FT Transfer to Storage requests.

Subject to the applicable assessment and notification process set out in this Procedure, FT Transfer to Storage requests that are hydraulically neutral (system capacity remains the same) or positive (system capacity increases) and within applicable capacity limits, will be approved. An automated message from the Company contracting system will be sent to the Customer and the applicable Storage Operator to confirm that the request has been approved.

FT Transfer to Storage requests that are hydraulically negative (system capacity decreases) will be denied. Company will provide an e-mail notification of the denial including a brief rationale for why the request was denied.

3. Operational Capacity Assessment and Contract Usage Determination

A) Operational Capacity Assessment

Operational capacity will be assessed by Company by 8:30 a.m. Calgary Time one Banking Day prior to the Effective Gas Day. Company's determination of the available operational capacity will be extended as required across weekends or other days that are not Banking Days. The operational capacity assessment will include consideration of any planned or unplanned interruptions known at the time of assessment.

B) Usage Determination for Transferred to Storage Contracts

Once the operational capacity is determined for the Effective Gas Day, Company will first allocate the available capacity to the expected system utilization of the FT Contracts at Home Locations, taking into account the potential changes in utilization due to Transferred to Storage Contracts.

A Minimum FT-R Aggregate Usage of 100 TJ/d will be available at each NGTL-connected commercial storage facility and allocated on a pro-rata basis to all applicable Transferred to Storage Contracts at that Storage location.

Company will allocate the remaining capacity to applicable Transferred to Storage Contracts to determine their allowed usage. If the operational capacity is not sufficient to accommodate 100% usage of the aggregate Contract Demand of all applicable Transferred to Storage Contracts, Company will allocate the capacity on a

pro-rata basis to all applicable Transferred to Storage Contracts to determine their allowed usage.

Notwithstanding, FT-D Transfers to Storage Within a DDA have a pre-authorized usage of 100%.

4. FT-D Transfer to Storage Within a DDA

A) Assessment of Requests and Notification Process

Customer may submit an FT-D Transfer to Storage Within a DDA request prior to, and on, the requested Effective Gas Day.

For an FT-D Transfer to Storage Within a DDA request that can be approved and for which ATP is applicable, notification of approval will be sent to the Customer and the applicable Storage Operator immediately.

If ATP is not applicable to the FT-D Transfer to Storage Within a DDA request, Company will conduct the Design Based Hydraulic Impact and Capacity Assessment and will notify Customer and the applicable Storage Operator if the request is approved on a best efforts basis, where notification may be issued during the Effective Gas Day such that Customer is able to nominate its Transferred to Storage Contract on the next nomination cycle.

The allowed usage for Transferred to Storage Contracts approved in accordance with this Section will be 100%.

A Transferred to Storage Contract approved in accordance with this Section will be allowed to return to its Home Location at any time, subject to capacity availability at the Home Location.

B) Priority of Service During Interruptions

Transferred to Storage Contracts approved in accordance with this Section will have the same priority of service as other firm services on the system during planned or unplanned interruptions.

5. All Other Transfers to Storage

A) Assessment of Requests and Notification Process

For All Other Transfer to Storage requests submitted by 10:00 a.m. Calgary time two Banking Days in advance of the Effective Gas Day, Company will conduct the Design Based Hydraulic Impact and Capacity Assessment and will notify Customer and the applicable Storage Operator if the request is approved, no later than 4:00 p.m. Calgary Time two Banking Days in advance of the requested Effective Gas Day.

For All Other Transfer to Storage requests submitted after 10:00 a.m. Calgary time two Banking Days in advance of the Effective Gas Day, Company will conduct the Design Based Hydraulic Impact and Capacity Assessment on a best efforts basis and may provide notification of approval or denial of the request by 7:00 a.m. Calgary time one Banking Day in advance of the Effective Gas Day. If the Company does not provide notification of the approval of these requests to the Customer and the applicable Storage Operator by 7:00 a.m. Calgary time one Banking Day in advance of the Effective Gas Day, the FT Transfer to Storage will not be approved for the Effective Gas Day.

A Transferred to Storage Contract approved in accordance with this Section will not be allowed to return to its Home Location for the Effective Gas Day after 7:00 a.m. Calgary time one Banking Day in advance of the requested Effective Gas Day. All other requests to return a Transferred to Storage Contract to its Home Location at any other time will be accommodated, subject to capacity availability at the Home Location.

B) Notification of Allowed Usage of Transferred to Storage Contracts

Company will notify Customers of their allowed usage of their Transferred to Storage Contracts approved under this Section by 9:00 a.m. Calgary Time one Banking Day prior to the Effective Gas Day. Allowed usage will be used to determine authorized quantities as per the nomination cycles.

C) Priority of Transferred to Storage Contracts During Interruptions

Planned or unplanned interruptions that are known at the time of the Operational Capacity Assessment and Usage determination, outlined in Paragraph V(3)(B), will be factored into the total allowable usage of the Transferred to Storage Contract.

In the event of interruptions that were not known at the time of the Operational Capacity Assessment and Usage Determination, Transferred to Storage Contracts approved in accordance with this Section will have the same priority of service as other firm services on the system.

Notwithstanding anything in this Paragraph V(3)(C), the Minimum FT-R Aggregate Usage will have the same priority of service as other firm services on the system during planned or unplanned interruptions.

VI. CONFIDENTIALITY OF NOTIFICATIONS

Storage Operators that are in receipt of notifications for the approval or denial of FT Transfers to Storage must maintain confidentiality of those notifications and must not disclose the notifications to any other party, unless the Customer to whom the notification applies consents to such disclosure.

VII. REJECTION OF FT TRANSFERS TO STORAGE

Company may reject an FT Transfer to Storage or send it back to the Home Location early if Company determines the FT Transfer to Storage was not requested for the purpose of accessing storage.

VIII. IMPROVEMENTS AS REQUIRED

Company may revise or amend this Procedure as required.

- IR Number:** CER 1.4
- Category:** Economic Matters
- Topic:** Summer Maintenance on NGTL
- Reference:**
- i) EPAC Reply Letter, Page 2 of 12, (PDF 2 of 12), Par. 8, C08594-1
 - ii) Bonavista Energy Corporation, page 1 of 2, (PDF 1 of 2), C08329-1
 - iii) ATCO Energy Solutions and Rockpoint Gas Storage Canada Inc. Letter, Page 3 of 4, (PDF 3 of 4), C08354-1
 - iv) Tourmaline Oil Corp., Page 2 of 3, (PDF 2 of 3), C08328-1
- Preamble:**
- In reference i), EPAC submitted that during summer 2020, none of the 2021 Expansion facilities were captured in any "...planned outage/maintenance periods at and upstream of Clearwater Compressor Station and Woodenhouse Compressor Station." These planned outage/maintenance periods were expected to occur during summer 2020 to ensure an April 2021 in-service date for the NGTL 2021 System Expansion Project (2021 Expansion).
- In reference ii), Bonavista Energy Corporation submitted that the TSP will help ensure market stability during what is likely to be an active summer maintenance season in 2021, as some of the expansion projects slated to be in service for 2021 have been delayed due to COVID-19 impacts.
- In reference iii), ATCO Energy Solutions and Rockpoint Gas Storage Canada Inc. submitted that the GIC approval for the NGTL 2021 System Expansion Project was delayed and that the construction program did not proceed, so there was no planned maintenance associated with construction of those facilities. Constraints on the NGTL System would likely have been markedly different had construction proceeded as anticipated in summer 2020.
- In reference iv), Tourmaline Oil Corp. submitted that if the TSP is not extended, shippers could face a 2021 summer season burdened with not only normal-business related planned outages/maintenance periods, but also those delayed from 2020 which are required to put the 2021 Expansion in place.
- Request:**
- a) Which 2021 Expansion Facilities' construction were delayed in summer 2020?

- b) Which 2021 Expansion Facilities will be under construction during summer 2021?
- c) Provide a list of maintenance and/or construction activities or projects that were delayed in summer 2020 that would have triggered the TSP (located upstream of the Clearwater Compressor Station and the Woodenhouse Compressor Station). Include activities related to the 2021 Expansion and unrelated.
- d) Provide any relevant information associated with those activities identified in c), including, but not limited to:
 - d.1) The constraint impacts that would have taken place in summer 2020 had they gone ahead;
 - d.2) The updated schedule for those activities;
 - d.3) The expected future constraints related to those maintenance and construction activities;
 - d.4) The ability of gas to access storage in the East Gate area; and
 - d.5) Whether the TSP would be triggered (assuming it was in place for summer 2021) during these activities, if they take place from 1 April 2021 to 31 October 2021.

Response:

a) and b)

Table CER 1.4-1 identifies the 2021 NGTL System Expansion Project facilities (2021 Facilities) that have been delayed and for which outages that had the potential to result in constraints were previously anticipated in the summer of 2020, but are now expected to result in outages that have the potential to result in constraints during the summer of 2021. Given the context of the request, only facilities that could result in planned maintenance upstream of the Clearwater and Woodenhouse compressor stations have been identified.

While construction of these facilities is expected to occur over a longer timeframe, anticipated outages are limited to the facility tie-in to the existing System, which often occurs towards the end of the construction phase and over a relatively short period of time.

Table CER 1.4-1 summarizes the anticipated number of days of outages associated with the tie-in of these 2021 Facilities, the approximate timeline during which these outages were previously anticipated, and the currently anticipated timeline for these outages.

NGTL also notes that the construction schedule and related outage plans for the 2021 Facilities were not previously finalized given that their approval was pending. Nonetheless, in an effort to be responsive, NGTL is providing the timeline during which outages would have likely occurred, had approval of the 2021 Facilities occurred in the expected timeframe.

Table CER 1.4-1: Planned Outages Associated with Delayed 2021 Facilities

2021 Project Delayed Facilities	Associated Planned Outages Duration	Previously Anticipated Outage Timing	Currently Anticipated Outage Timing
Grande Prairie Mainline Loop No. 2 - Karr Section	10 days	November 2020	October 2021
Edson Mainline Loop No. 4 - Brewster Section	5 days	October 2020	March 2021
Nordegg Compressor Station Unit Addition (two separate outages for tie-in to multiple pipelines)	11 days 11 days	October 2020 October 2020	May/June 2021 June 2021

c) and d)

In accordance with the TSP provisions of the Tariff, TSP governs the management of constraints that may result from planned maintenance upstream of the Clearwater and Woodenhouse compressor stations during the summers of 2019 and 2020. However, many such outages do not actually result in restrictions to FT-R service. The term “TSP-Applicable Outage” is used to identify events of TSP-governed outages that trigger the application of TSP and actually result in FT-R restrictions.

During the summer of 2020, NGTL completed 30 events of planned maintenance that were governed by TSP, none of which resulted in a TSP-Applicable Outage. Similarly, had the outages associated with the 2021 Facilities shown in Table CER 1.4-1 initially anticipated to occur in the summer of 2020 actually occurred in 2020, they would not have resulted in a TSP-Applicable Outage.

As shown in Table CER 1.4-1, there are now three outages related to the 2021 Facilities expected during the summer of 2021. Should TSP be extended to the summer of 2021, these outages would be governed by TSP. The extent to which any of these outages could result in a TSP-Applicable Outage (i.e., result in FT-R restrictions) depends on a number of factors, including the overall receipt and deliveries impacting the constrained area and the occurrence of other simultaneous outages. While it is difficult to predict the net effect of these factors, the potential for TSP-Applicable Outages in relation to these 2021 Facilities appears limited, having regard to all the factors that contributed to the lack of any TSP-Applicable Outages in 2020.

- IR Number:** CER 1.5
- Category:** Economic Matters
- Topic:** Temporary Service Protocol Usage
- Reference:** NGTL Initial Reply, Page 2 of 4, (PDF 2 of 4), [C08101-1](#)
- Preamble:** In the reference, NGTL submitted there have been no TSP-Applicable Constraint occurrences during 2020 to date, and none are expected to be triggered prior to the defined end date of 31 October 2020.
- Request:** Provide the information on any TSP-Applicable Constraints that took place from 30 September 2019 to 31 October 2019:
- a) The dates and duration for each TSP-Applicable Constraint;
 - b) How NGTL shippers were notified a TSP-Applicable Constraint was activated;
 - c) A map of the area(s) on the System where these constraints took place; and
 - d) The affected volumes constrained for each TSP event.

Response:

a) and d)

As noted in the response to CER 1.4 c) and d), not all events of planned maintenance governed by TSP result in restrictions to FT-R service. The events that result in FT-R restrictions and trigger the application of TSP are referred to as TSP-Applicable Outages.

There were seven different TSP-Applicable Outages that commenced during October 2019. These outages are summarized in Table CER 1.5-1. Outages are bundled wherever possible to ensure maintenance can be completed with the least impact to customers. Due to the bundled nature of the maintenance, there are often several outages listed for one constraint. Due to the integrated nature of the NGTL System, constraints are seen over an area and not at a single point on the System. The TSP-Applicable Constraints on the NGTL System are best represented by the outage capability and impact area.

Table CER 1.5-1 includes the dates, facilities involved in the outages, impact area, base capability without outage impact, outage capability and capability reduction due to outage for all TSP-Applicable Outages. The impact areas are identified by System Segment in the maps of the NGTL System presented in Figures CER 1.5-1 and CER 1.5-2.

Some of the 2019 TSP-Applicable Outages extended beyond October 31, 2019, because they started on or shortly before October 31.

Table CER 1.5-1: 2019 TSP-Applicable Outages, Impact Areas, and Capacity Impact Date

	Outages	Impact Area	Base Capability	Outage Capability	Outage Capability Reduction
Oct 15, 2019	Meikle River	Segments 2, 3, 4, partial 5, partial 7	312 10 ⁶ m ³ /d (11,014 MMcf/d)	293 10 ⁶ m ³ /d (10,343 MMcf/d)	19 10 ⁶ m ³ /d (671 MMcf/d)
Oct 16, 2019	Hidden Lake				
Oct 17, 2019					
Oct 18, 2019					
Oct 19, 2019					
Oct 20, 2019	Hidden Lake	Segments 2, 3, 4, 5, 7, partial 8, and partial 9 (Greater USJR excluding Segment 1)	330 10 ⁶ m ³ /d (11,649 MMcf/d)	296 10 ⁶ m ³ /d (10,449 MMcf/d)	16 10 ⁶ m ³ /d (565 MMcf/d)
Oct 21, 2019	Hidden Lake Hidden Lake North				
Oct 22, 2019	Hidden Lake				
Oct 23, 2019	Hidden Lake North				
Oct 24, 2019	NPS 30 EDSML & CASML				
Oct 25, 2019					
Oct 26, 2019	NPS 30 EDSML & CASML				
Oct 27, 2019					
Oct 28, 2019	NPS 30 EDSML & CASML				
Oct 29, 2019	Clearwater 5				
Oct 30, 2019	NPS 30 EDSML & CASML				
Oct 31, 2019	Clearwater 5 Clearwater				
Nov 1, 2019	NPS 30 EDSML & CASML Clearwater				
Nov 2, 2019	Clearwater				
Nov 3, 2019	NPS 36 NWML Lp				
Nov 4, 2019	Clearwater				
Nov 5, 2019					
Nov 6, 2019					
Nov 7, 2019					
Nov 8, 2019	Clearwater				
Nov 9, 2019					
Nov 10, 2019					
Nov 11, 2019					
Nov 12, 2019					
Nov 13, 2019					
Nov 14, 2019					

- b) NGTL issued two bulletins on September 27, 2019 and September 30, 2019, to inform customers of the pending utilization of TSP to manage restrictions for upcoming planned outages. Seven additional bulletins were issued between October 10, 2019 and November 13, 2020, to inform customers of specific restrictions associated with TSP-Applicable Outages. These bulletins are provided in Attachment CER 1.5-1.

- c) Figure CER 1.5-1 illustrates the impacted areas associated with TSP-Applicable Outages during the October 15, 2019 to October 21, 2019 period, as well as the facilities associated with the TSP-Applicable Outages in that period.

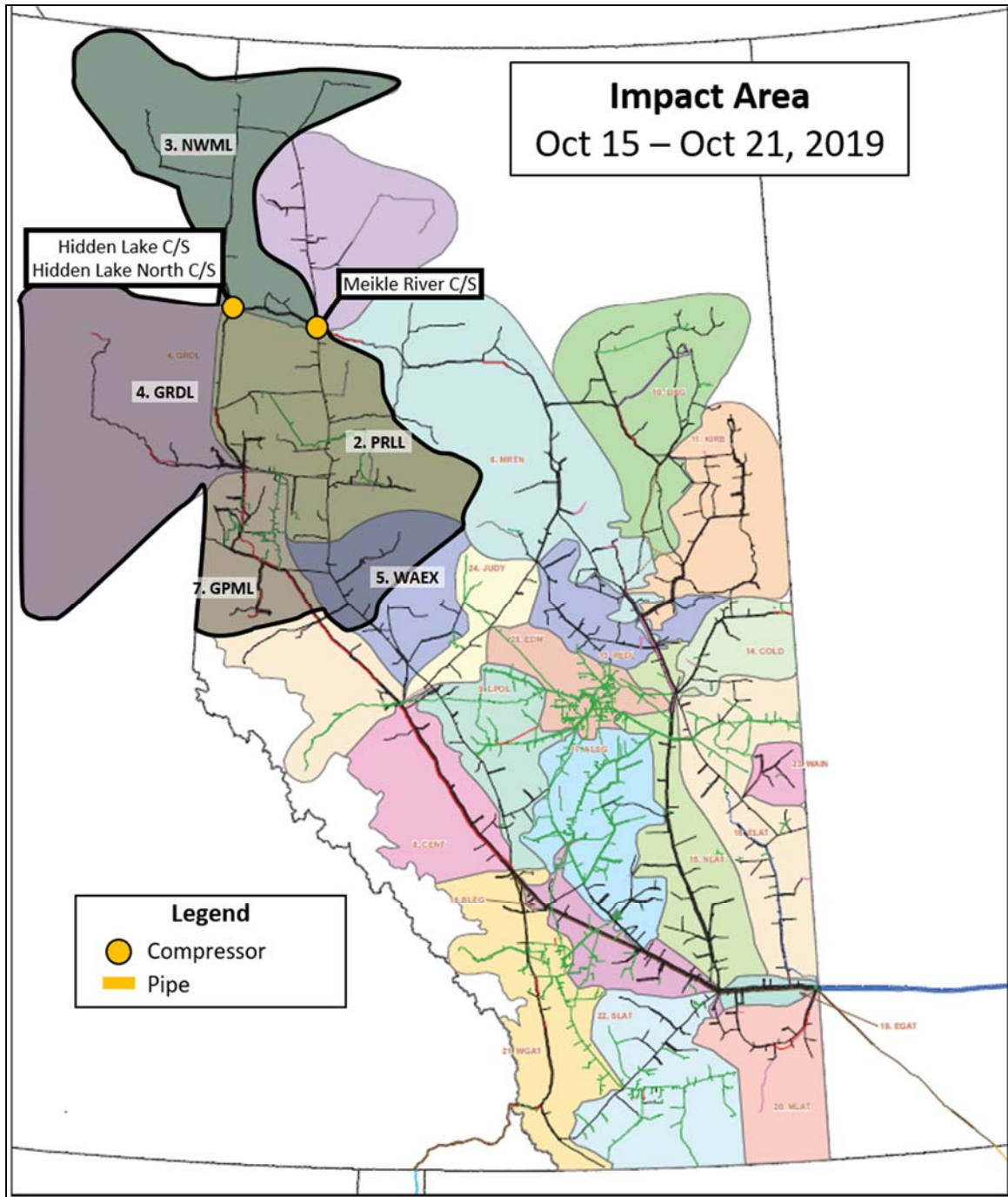


Figure CER 1.5-1: Impacted Areas: TSP Applicable Outages – October 15, 2019 to October 21, 2019

Figure CER 1.5-2 illustrates the impacted areas associated with TSP-Applicable Outages during the October 22, 2019 to November 14, 2019 period, as well as the facilities associated with the TSP-Applicable Outages in that period.

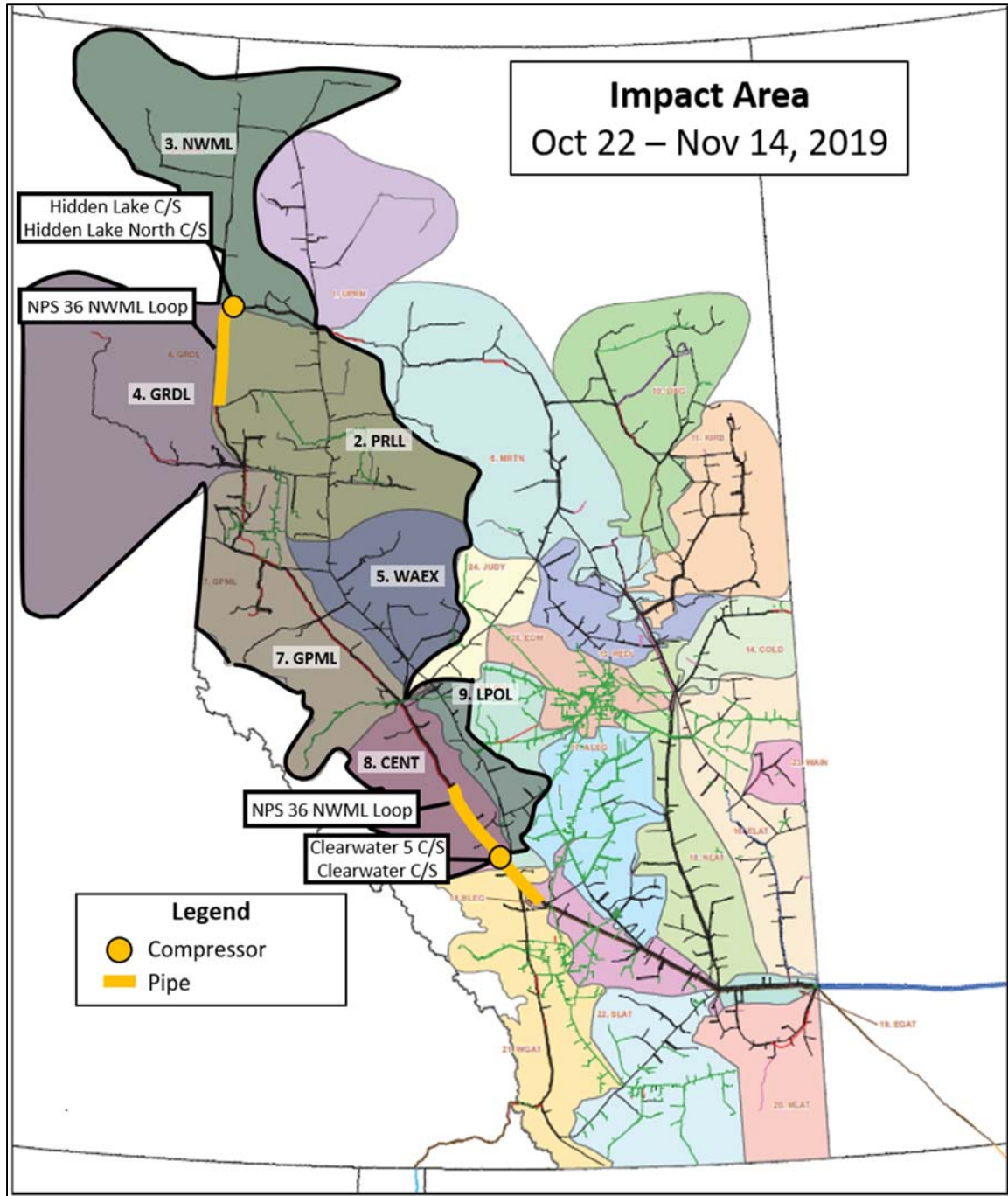


Figure CER 1.5-2: Impacted Areas: TSP-Applicable Outages – October 22, 2019 to November 14, 2019



NGTL Non-Critical Notice

Notice Type: Other

Effective Start Date Time: Sep 27, 2019 09:00 CCT

Subject: NGTL Tariff Temporary Service Protocol (TSP)

Following the conclusion of the Canada Energy Regulator's (CER) expedited oral hearing process on NGTL's Application for Approval of Amendments to the NGTL Gas Transportation Tariff Temporary Service Protocol (TSP), the CER has determined that the Application is approved as filed, with the protocol to be effective starting September 30, 2019.

The CER Decision can be viewed at: <https://apps.cer-rec.gc.ca/REGDOCS/Item/View/3829173>

In summary, the approval of the Application places into effect the TSP which will prioritize interruptible delivery and storage to EGAT during planned operational outages via restriction of receipt service at or upstream of the Clearwater and Woodenhouse Compressor Stations. The TSP will be in effect for summer periods defined as September 30, 2019 to October 31, 2019 and April 1, 2020 to October 31, 2020.

Note that current, ongoing outages will not be impacted by the TSP. Please refer to the Customer Operations Meeting presentation for further details regarding the implementation of this Protocol which can be viewed at: http://www.tccustomerexpress.com/docs/NGTL%20and%20Foothills%20Pipeline%20Customer%20Meeting_Aug%202019.pdf

In conjunction with this notice, NGTL has updated the Daily Operating Plan (DOP) reflecting the updated outage information and new protocol. With the ongoing planned Wolf Lake outage taking effect September 26, 2019 (not subject to the TSP), it is expected the first outage subject to the TSP will be the NPS 30 Edson Mainline Outage upon completion of the Wolf Lake maintenance currently estimated at October 2, 2019.

Please continue to refer to the NGTL DOP and NrG Bulletins for outage details and further information.

Posted Date/Time: Sep 27, 2019 11:08 CCT

Notice Number: 3373373011



NGTL Non-Critical Notice

Notice Type: Other

Effective Start Date Time: Sep 30, 2019 09:00 CCT

Subject: Update on Temporary Service Protocol

Per the [September 27th Bulletin](#), the first outage subject to the Temporary Service Protocol (TSP) was indicated to be the NPS 30 Edson Mainline ILLI upon completion of the Wolf Lake Compressor Station outage.

Please note that The Wolf Lake Compressor Station outage has been extended, with a revised estimated completion date of October 5, 2019.

Posted Date/Time: Sep 30, 2019 16:37 CCT

Notice Number: 3373412010



NGTL Non-Critical Notice

Notice Type: Other

Effective Start Date Time: Oct 10, 2019 09:00 CCT

Subject: NGTL Service (USJR FT-R, WGAT FT-D)

Due to planned maintenance at Meikle River C Compressor Station (DOP entry #15428207) and the current level of field receipts, the service allowable for USJR will be revised as below. For the period following the completion of Meikle River C, we will continue to review system conditions and capability and provide further updates as required.

WGAT service allowable has also been adjusted to reflect the Burton Creek Compressor Station maintenance ending one day earlier.

Current and Upcoming Outages			
Facility/Outage Name	Facility Type/Scope	Outage Type	Area of Impact
NPS 30 Edson Mainline	Pipeline Maintenance	Planned	<input checked="" type="checkbox"/> USJR <input type="checkbox"/> WGAT <input type="checkbox"/> EGAT
Burton Creek	Compressor Modifications	Planned	<input type="checkbox"/> USJR <input checked="" type="checkbox"/> WGAT <input type="checkbox"/> EGAT
Acme	Compressor Maintenance	Planned	<input type="checkbox"/> USJR <input type="checkbox"/> WGAT <input checked="" type="checkbox"/> EGAT
Meikle River C	Compressor Maintenance	Planned	<input checked="" type="checkbox"/> USJR <input type="checkbox"/> WGAT <input type="checkbox"/> EGAT
Hidden Lake	Compressor Maintenance	Planned	<input checked="" type="checkbox"/> USJR <input type="checkbox"/> WGAT <input type="checkbox"/> EGAT

Upstream James River Receipt Area					
Effective: August 2, 2019 at 08:00 MST	IT Allowable: 0%	<input checked="" type="checkbox"/> IT-R	<input type="checkbox"/> IT-D	<input type="checkbox"/> IT-S (receipt)	
Expected End: October 15, 2019 at 08:00 MST	FT Allowable: 100%	<input checked="" type="checkbox"/> FT-R	<input checked="" type="checkbox"/> FT-P	<input type="checkbox"/> FT-D2	
Interconnects: Gordondale, Groundbirch East					
Segments: 1, 2, 3, 4, 5, and partial 7					
Effective: September 26, 2019 at 08:00 MST	IT Allowable: 0%	<input checked="" type="checkbox"/> IT-R	<input type="checkbox"/> IT-D	<input checked="" type="checkbox"/> IT-S (receipt)	
Expected End: October 15, 2019 at 08:00 MST	FT Allowable: 100%	<input checked="" type="checkbox"/> FT-R	<input checked="" type="checkbox"/> FT-P	<input type="checkbox"/> FT-D2	
Interconnects: Big Eddy, January Creek					
Segments: partial 7, partial 8 and partial 9					
Effective: October 15, 2019 at 08:00 MST	IT Allowable: 0%	<input checked="" type="checkbox"/> IT-R	<input type="checkbox"/> IT-D	<input type="checkbox"/> IT-S (receipt)	
Expected End: October 20, 2019 at 08:00 MST	FT Allowable: 80%	<input checked="" type="checkbox"/> FT-R	<input checked="" type="checkbox"/> FT-P	<input type="checkbox"/> FT-D2	
Interconnects: Gordondale, Groundbirch East					
Segments: 2, 3, 4, partial 5, partial 7					
Effective: October 15, 2019 at 08:00 MST	IT Allowable: 0%	<input checked="" type="checkbox"/> IT-R	<input type="checkbox"/> IT-D	<input checked="" type="checkbox"/> IT-S (receipt)	
Expected End: October 20, 2019 at 08:00 MST	FT Allowable: 100%	<input checked="" type="checkbox"/> FT-R	<input checked="" type="checkbox"/> FT-P	<input type="checkbox"/> FT-D2	
Interconnects: Big Eddy, January Creek					
Segments: 1, partial 5, partial 7, partial 8, partial 9					
Effective: October 20, 2019 at 08:00 MST	IT Allowable: 0%	<input checked="" type="checkbox"/> IT-R	<input type="checkbox"/> IT-D	<input type="checkbox"/> IT-S (receipt)	
Expected End: Until Further Notice	FT Allowable: 100%	<input checked="" type="checkbox"/> FT-R	<input checked="" type="checkbox"/> FT-P	<input type="checkbox"/> FT-D2	
Interconnects: Gordondale, Groundbirch East					
Segments: 1, 2, 3, 4, 5, and partial 7					
Effective: October 20, 2019 at 08:00 MST	IT Allowable: 0%	<input checked="" type="checkbox"/> IT-R	<input type="checkbox"/> IT-D	<input checked="" type="checkbox"/> IT-S (receipt)	
Expected End: Until Further Notice	FT Allowable: 100%	<input checked="" type="checkbox"/> FT-R	<input checked="" type="checkbox"/> FT-P	<input type="checkbox"/> FT-D2	

NGTL Outages		West Gate Delivery Area						
Effective:	October 6, 2019 at 08:00 MST	IT Allowable:	0%	<input type="checkbox"/> IT-R	<input checked="" type="checkbox"/> IT-D			
Expected End:	October 15, 2019 at 08:00 MST	FT Allowable:	Partial	<input type="checkbox"/> FT-R	<input checked="" type="checkbox"/> FT-P	<input checked="" type="checkbox"/> FT-D1	<input checked="" type="checkbox"/> FT-D2	<input checked="" type="checkbox"/> STFT
Interconnects:	Alberta B.C. and Alberta Montana							
Segments:	None							
Effective:	October 6, 2019 at 08:00 MST	IT Allowable:	Partial*	<input type="checkbox"/> IT-R	<input checked="" type="checkbox"/> IT-D			
Expected End:	October 15, 2019 at 08:00 MST	FT Allowable:	100%	<input type="checkbox"/> FT-R	<input checked="" type="checkbox"/> FT-P	<input checked="" type="checkbox"/> FT-D1	<input checked="" type="checkbox"/> FT-D2	<input checked="" type="checkbox"/> STFT
Interconnects:	None							
Segments:	22 and partial 21							
Comments	*Partial IT Allowable will be aligned with EGAT Partial IT Allowable %							
Effective:	October 15, 2019 at 08:00 MST	IT Allowable:	Partial	<input type="checkbox"/> IT-R	<input checked="" type="checkbox"/> IT-D			
Expected End:	Until Further Notice	FT Allowable:	100%	<input type="checkbox"/> FT-R	<input checked="" type="checkbox"/> FT-P	<input checked="" type="checkbox"/> FT-D1	<input checked="" type="checkbox"/> FT-D2	<input checked="" type="checkbox"/> STFT
Interconnects:	Alberta B.C. and Alberta Montana							
Segments:	22 and partial 21 (Greater WGAT)							

East Gate Delivery Area								
Effective:	October 5, 2019 at 08:00 MST	IT Allowable:	100%	<input type="checkbox"/> IT-R	<input checked="" type="checkbox"/> IT-D	<input checked="" type="checkbox"/> IT-S (delivery)		
Expected End:	Until Further Notice	FT Allowable:	100%	<input type="checkbox"/> FT-R	<input checked="" type="checkbox"/> FT-P	<input checked="" type="checkbox"/> FT-D1	<input checked="" type="checkbox"/> FT-D2	<input checked="" type="checkbox"/> STFT
Interconnects:	Aeco C, Carbon, Chancellor, Crossfield East 2, Severn Creek, Empress, McNeill, Unity, Warwick SE							
Segments:	15, 16, 17, 18, 19, 20, 23, partial 21, and partial 28 (Lower EGAT)							

The preceding information supersedes any previously published information and will be reflected and maintained in the next release of the Daily Operating Plan. Updates, if required, will be communicated through NrG Highway notice otherwise refer to the [Daily Operating Plan](#).

[NGTL System - Segment Codes & Project Areas Map](#)

[NGTL System - Operational Areas Map](#)

New/updated information

- Affected Area of Impact or Service Type
- Unaffected Area of Impact or Service Type

Posted Date/Time: Oct 10, 2019 16:39 CCT

Notice Number: 3373505010



NGTL Non-Critical Notice

Notice Type: Capacity Constraint

Effective Start Date Time: Oct 16, 2019 09:00 CCT

Subject: NGTL Service (USJR FT-R)

With the conclusion of the maintenance at the Meikle C compressor station, and the upcoming maintenance events at Hidden Lake and Edson/Central Alberta Mainline, the service allowable for USJR will be revised as below. For the period starting October 26, 2019 at 08:00, we will continue to review system conditions and capability and provide further updates as required.


Current and Upcoming Outages			
Facility/Outage Name	Facility Type/Scope	Outage Type	Area of Impact
Acme	Compressor Maintenance	Planned	<input type="checkbox"/> USJR <input type="checkbox"/> WGAT <input checked="" type="checkbox"/> EGAT
Meikle River C	Compressor Maintenance	Planned	<input checked="" type="checkbox"/> USJR <input type="checkbox"/> WGAT <input type="checkbox"/> EGAT
Hidden Lake	Compressor Maintenance	Planned	<input checked="" type="checkbox"/> USJR <input type="checkbox"/> WGAT <input type="checkbox"/> EGAT
Hidden Lake North	Compressor Maintenance	Planned	<input checked="" type="checkbox"/> USJR <input type="checkbox"/> WGAT <input type="checkbox"/> EGAT
NPS 30 Edson Mainline and Central Alberta System Mainline	Pipeline Maintenance	Planned	<input checked="" type="checkbox"/> USJR <input type="checkbox"/> WGAT <input type="checkbox"/> EGAT


Upstream James River Receipt Area				
Effective: October 15, 2019 at 08:00 MST	IT Allowable: 0%	<input checked="" type="checkbox"/> IT-R	<input type="checkbox"/> IT-D	<input type="checkbox"/> IT-S (receipt)
Expected End: October 20, 2019 at 08:00 MST	FT Allowable: 80%	<input checked="" type="checkbox"/> FT-R	<input checked="" type="checkbox"/> FT-P	<input type="checkbox"/> FT-D2
Interconnects: Gordondale, Groundbirch East				
Segments: 2, 3, 4, partial 5, partial 7				
Effective: October 15, 2019 at 08:00 MST	IT Allowable: 0%	<input checked="" type="checkbox"/> IT-R	<input type="checkbox"/> IT-D	<input checked="" type="checkbox"/> IT-S (receipt)
Expected End: October 22, 2019 at 08:00 MST	FT Allowable: 100%	<input checked="" type="checkbox"/> FT-R	<input checked="" type="checkbox"/> FT-P	<input type="checkbox"/> FT-D2
Interconnects: Big Eddy, January Creek				
Segments: 1, partial 5, partial 7, partial 8, partial 9				
Effective: October 20, 2019 at 08:00 MST	IT Allowable: 0%	<input checked="" type="checkbox"/> IT-R	<input type="checkbox"/> IT-D	<input type="checkbox"/> IT-S (receipt)
Expected End: October 22, 2019 at 08:00 MST	FT Allowable: 82%	<input checked="" type="checkbox"/> FT-R	<input checked="" type="checkbox"/> FT-P	<input type="checkbox"/> FT-D2
Interconnects: Gordondale, Groundbirch East				
Segments: 2, 3, 4, partial 5, partial 7				
Effective: October 22, 2019 at 08:00 MST	IT Allowable: 0%	<input checked="" type="checkbox"/> IT-R	<input type="checkbox"/> IT-D	<input checked="" type="checkbox"/> IT-S (receipt)
Expected End: October 26, 2019 at 08:00 MST	FT Allowable: 76%	<input checked="" type="checkbox"/> FT-R	<input checked="" type="checkbox"/> FT-P	<input type="checkbox"/> FT-D2
Interconnects: Gordondale, Groundbirch East, Big Eddy, January Creek				
Segments: 2, 3, 4, 5, 7, partial 8, and partial 9 (Greater USJR excluding Segment 1)				


West Gate Delivery Area						
Effective: October 15, 2019 at 08:00 MST	IT Allowable: Partial	<input type="checkbox"/> IT-R	<input checked="" type="checkbox"/> IT-D			
Expected End: Until Further Notice	FT Allowable: 100%	<input type="checkbox"/> FT-R	<input checked="" type="checkbox"/> FT-P	<input checked="" type="checkbox"/> FT-D1	<input checked="" type="checkbox"/> FT-D2	<input checked="" type="checkbox"/> STFT
Interconnects: Alberta B.C. and Alberta Montana						
Segments: 22 and partial 21 (Greater WGAT)						


Fast Gate Delivery Area



 **Interconnects:** Aeco C, Carbon, Chancellor, Crossfield East 2, Severn Creek, Empress, McNeill, Unity, Warwick SE
Segments: [15](#), [16](#), [17](#), [18](#), [19](#), [20](#), [23](#), [partial 21](#), and [partial 28](#) (Lower EGAT)

 **Bulletins**
The preceding information supersedes any previously published information and will be reflected and maintained in the next release of the Daily Operating Plan. Updates, if required, will be communicated through NrG Highway notice otherwise refer to the [Daily Operating Plan](#).

-  [Contact & FAQ](#)
- [NGTL System - Segment Codes & Project Areas Map](#)
- [NGTL System - Operational Areas Map](#)

 [Subscriptions](#)

- New/updated Information
- Affected Area of Impact or Service Type
 - Unaffected Area of Impact or Service Type

Posted Date/Time: Oct 16, 2019 17:06 CCT

Notice Number: 3373543010



NGTL Non-Critical Notice

Notice Type: Capacity Constraint

Effective Start Date Time: Oct 17, 2019 09:00 CCT

Subject: NGTL Service (USJR FT-R)

With current and expected supply distribution the service allowable will be revised as below. For the period starting October 26, 2019 at 08:00, we will continue to review system conditions and capability and provide further updates as required.

Current and Upcoming Outages			
Facility/Outage Name	Facility Type/Scope	Outage Type	Area of Impact
Acme	Compressor Maintenance	Planned	<input type="checkbox"/> USJR <input type="checkbox"/> WGAT <input checked="" type="checkbox"/> EGAT
Meikle River C	Compressor Maintenance	Planned	<input checked="" type="checkbox"/> USJR <input type="checkbox"/> WGAT <input type="checkbox"/> EGAT
Hidden Lake	Compressor Maintenance	Planned	<input checked="" type="checkbox"/> USJR <input type="checkbox"/> WGAT <input type="checkbox"/> EGAT
Hidden Lake North	Compressor Maintenance	Planned	<input checked="" type="checkbox"/> USJR <input type="checkbox"/> WGAT <input type="checkbox"/> EGAT
NPS 30 Edson Mainline and Central Alberta System Mainline	Pipeline Maintenance	Planned	<input checked="" type="checkbox"/> USJR <input type="checkbox"/> WGAT <input type="checkbox"/> EGAT

Upstream James River Receipt Area			
Effective: October 15, 2019 at 08:00 MST	IT Allowable: 0%	<input checked="" type="checkbox"/> IT-R <input type="checkbox"/> IT-D <input type="checkbox"/> IT-S (receipt)	
Expected End: October 17, 2019 at 17:00 MST	FT Allowable: 80%	<input checked="" type="checkbox"/> FT-R <input checked="" type="checkbox"/> FT-P <input type="checkbox"/> FT-D2	
Interconnects: Gordondale, Groundbirch East			
Segments: 2, 3, 4, partial 5, partial 7			
Effective: October 17, 2019 at 17:00 MST	IT Allowable: 0%	<input checked="" type="checkbox"/> IT-R <input type="checkbox"/> IT-D <input type="checkbox"/> IT-S (receipt)	
Expected End: October 22, 2019 at 08:00 MST	FT Allowable: 83%	<input checked="" type="checkbox"/> FT-R <input checked="" type="checkbox"/> FT-P <input type="checkbox"/> FT-D2	
Interconnects: Gordondale, Groundbirch East			
Segments: 2, 3, 4, partial 5, partial 7			
Effective: October 15, 2019 at 08:00 MST	IT Allowable: 0%	<input checked="" type="checkbox"/> IT-R <input type="checkbox"/> IT-D <input checked="" type="checkbox"/> IT-S (receipt)	
Expected End: October 22, 2019 at 08:00 MST	FT Allowable: 100%	<input checked="" type="checkbox"/> FT-R <input checked="" type="checkbox"/> FT-P <input type="checkbox"/> FT-D2	
Interconnects: Big Eddy, January Creek			
Segments: 1, partial 5, partial 7, partial 8, partial 9			
Effective: October 22, 2019 at 08:00 MST	IT Allowable: 0%	<input checked="" type="checkbox"/> IT-R <input type="checkbox"/> IT-D <input checked="" type="checkbox"/> IT-S (receipt)	
Expected End: October 26, 2019 at 08:00 MST	FT Allowable: 76%	<input checked="" type="checkbox"/> FT-R <input checked="" type="checkbox"/> FT-P <input type="checkbox"/> FT-D2	
Interconnects: Gordondale, Groundbirch East, Big Eddy, January Creek			
Segments: 2, 3, 4, 5, 7, partial 8, and partial 9 (Greater USJR excluding Segment 1)			

West Gate Delivery Area			
Effective: October 15, 2019 at 08:00 MST	IT Allowable: Partial	<input type="checkbox"/> IT-R <input checked="" type="checkbox"/> IT-D	
Expected End: Until Further Notice	FT Allowable: 100%	<input type="checkbox"/> FT-R <input checked="" type="checkbox"/> FT-P <input checked="" type="checkbox"/> FT-D1 <input checked="" type="checkbox"/> FT-D2 <input checked="" type="checkbox"/> STFT	
Interconnects: Alberta B.C. and Alberta Montana			
Segments: 22 and partial 21 (Greater WGAT)			

East Gate Delivery Area			
Effective: October 5, 2019 at 08:00 MST	IT Allowable: 100%	<input type="checkbox"/> IT-R <input checked="" type="checkbox"/> IT-D <input checked="" type="checkbox"/> IT-S (delivery)	

 **Segments:** [15](#), [16](#), [17](#), [18](#), [19](#), [20](#), [23](#), [partial 21](#), and [partial 28](#) (Lower EGAT)

The preceding information supersedes any previously published information and will be reflected and maintained in the next release of the Daily Operating Plan. Updates, if required, will be communicated through Nrg Highway notice otherwise refer to the [Daily Operating Plan](#).

-  [Bulletins](#)
- [NGTL System - Segment Codes & Project Areas Map](#)
- [NGTL System - Operational Areas Map](#)
-  [Contact & FAQ](#)

New/updated Information

-  [Subscriptions](#)
- Affected Area of Impact or Service Type
- Unaffected Area of Impact or Service Type

Posted Date/Time: Oct 17, 2019 11:48 CCT

Notice Number: 3373551010



NGTL Non-Critical Notice

Notice Type: Capacity Constraint

Effective Start Date Time: Oct 23, 2019 09:00 CCT

Subject: NGTL Service (USJR FT-R)



With the anticipated conclusion of the maintenance at Hidden Lake and Hidden Lake North compressor station outages, the on-going maintenance on the Edson/Central Alberta Mainline, and the upcoming maintenance events at Clearwater and the Northwest Mainline Loop, the service allowable for USJR will be revised as below. We will continue to review system conditions and capability and provide further updates as required.

Please note that the Temporary Service Protocol is currently expected to end on November 11, 2019. Further updates will be provided as required.

Current and Upcoming Outages			
Facility/Outage Name	Facility Type/Scope	Outage Type	Area of Impact
Acme	Compressor Maintenance	Planned	<input type="checkbox"/> USJR <input type="checkbox"/> WGAT <input checked="" type="checkbox"/> EGAT
Hidden Lake	Compressor Maintenance	Planned	<input checked="" type="checkbox"/> USJR <input type="checkbox"/> WGAT <input type="checkbox"/> EGAT
Hidden Lake North	Compressor Maintenance	Planned	<input checked="" type="checkbox"/> USJR <input type="checkbox"/> WGAT <input type="checkbox"/> EGAT
NPS 30 Edson Mainline and Central Alberta System Mainline	Pipeline Maintenance	Planned	<input checked="" type="checkbox"/> USJR <input type="checkbox"/> WGAT <input type="checkbox"/> EGAT
Clearwater	Compressor Maintenance	Planned	<input checked="" type="checkbox"/> USJR <input type="checkbox"/> WGAT <input type="checkbox"/> EGAT
NPS 36 Northwest Mainline Loop	Pipeline Maintenance	Planned	<input checked="" type="checkbox"/> USJR <input type="checkbox"/> WGAT <input type="checkbox"/> EGAT

Upstream James River Receipt Area				
Effective: October 22, 2019 at 08:00 MST	IT Allowable: 0%	<input checked="" type="checkbox"/> IT-R	<input type="checkbox"/> IT-D	<input checked="" type="checkbox"/> IT-S (receipt)
Expected End: October 26, 2019 at 08:00 MST	FT Allowable: 76%	<input checked="" type="checkbox"/> FT-R	<input checked="" type="checkbox"/> FT-P	<input type="checkbox"/> FT-D2
Interconnects: Gordondale, Groundbirch East, Big Eddy, January Creek				
Segments: 2, 3, 4, 5, 7, partial 8, and partial 9 (Greater USJR excluding Segment 1)				
Effective: October 26, 2019 at 08:00 MST	IT Allowable: 0%	<input checked="" type="checkbox"/> IT-R	<input type="checkbox"/> IT-D	<input checked="" type="checkbox"/> IT-S (receipt)
Expected End: October 30, 2019 at 08:00 MST	FT Allowable: 82%	<input checked="" type="checkbox"/> FT-R	<input checked="" type="checkbox"/> FT-P	<input type="checkbox"/> FT-D2
Interconnects: Gordondale, Groundbirch East, Big Eddy, January Creek				
Segments: 2, 3, 4, 5, 7, partial 8, and partial 9 (Greater USJR excluding Segment 1)				
Effective: October 30, 2019 at 08:00 MST	IT Allowable: 0%	<input checked="" type="checkbox"/> IT-R	<input type="checkbox"/> IT-D	<input checked="" type="checkbox"/> IT-S (receipt)
Expected End: November 11, 2019 at 08:00 MST	FT Allowable: 77%	<input checked="" type="checkbox"/> FT-R	<input checked="" type="checkbox"/> FT-P	<input type="checkbox"/> FT-D2
Interconnects: Gordondale, Groundbirch East, Big Eddy, January Creek				
Segments: 2, 3, 4, 5, 7, partial 8, and partial 9 (Greater USJR excluding Segment 1)				
Effective: November 11, 2019 at 08:00 MST	IT Allowable: 0%	<input checked="" type="checkbox"/> IT-R	<input type="checkbox"/> IT-D	<input checked="" type="checkbox"/> IT-S (receipt)
Expected End: Until Further Notice	FT Allowable: 100%	<input checked="" type="checkbox"/> FT-R	<input checked="" type="checkbox"/> FT-P	<input type="checkbox"/> FT-D2
Interconnects: Gordondale, Groundbirch East, Big Eddy, January Creek				
Segments: 1, 2, 3, 4, 5, 7, partial 8, and partial 9 (Greater USJR)				

West Gate Delivery Area				
Effective: October 15, 2019 at 08:00 MST	IT Allowable: Partial	<input type="checkbox"/> IT-R	<input checked="" type="checkbox"/> IT-D	

 NGTL Outages	East Gate Delivery Area
Effective: October 5, 2019 at 08:00 MST	IT Allowable: 100% <input type="checkbox"/> IT-R <input checked="" type="checkbox"/> IT-D <input checked="" type="checkbox"/> IT-S (delivery)
 Expected End: Until Further Notice	FT Allowable: 100% <input type="checkbox"/> FT-R <input checked="" type="checkbox"/> FT-P <input checked="" type="checkbox"/> FT-D1 <input checked="" type="checkbox"/> FT-D2 <input checked="" type="checkbox"/> STFT
Interconnects: Aeco C, Carbon, Chancellor, Crossfield East 2, Severn Creek, Empress, McNeill, Unity, Warwick SE	
Segments: 15 , 16 , 17 , 18 , 19 , 20 , 23 , partial 21 , and partial 28 (Lower EGAT)	

 [Contact & FAQ](#)

The preceding information supersedes any previously published information and will be reflected and maintained in the next release of the Daily Operating Plan. Updates, if required, will be communicated through NrG Highway notice otherwise refer to the [Daily Operating Plan](#).

 [Subscriptions](#)

[NGTL System - Segment Codes & Project Areas Map](#)
[NGTL System - Operational Areas Map](#)

New/updated information

- Affected Area of Impact or Service Type
- Unaffected Area of Impact or Service Type

Posted Date/Time: Oct 23, 2019 16:36 CCT

Notice Number: 3373575010



NGTL Non-Critical Notice

Notice Type: Capacity Constraint

Effective Start Date Time: Nov 08, 2019 09:00 CCT

Subject: NGTL Service (USJR FT-R)

The Clearwater Compressor Station outage has experienced a delay, resulting in USJR now expected to return to 100% FT-R effective November 13th at 08:00 MST.

Please note that the 2019 Temporary Service Protocol period will end concurrently with the Clearwater outage.

Further updates will be provided as required.

Current and Upcoming Outages			
Facility/Outage Name	Facility Type/Scope	Outage Type	Area of Impact
Clearwater	Compressor Maintenance	Planned	<input checked="" type="checkbox"/> USJR <input type="checkbox"/> WGAT <input type="checkbox"/> EGAT

Upstream James River Receipt Area			
Effective: October 30, 2019 at 08:00 MST	IT Allowable: 0%	<input checked="" type="checkbox"/> IT-R <input type="checkbox"/> IT-D	<input checked="" type="checkbox"/> IT-S (receipt)
Expected End: November 13, 2019 at 08:00 MST	FT Allowable: 77%	<input checked="" type="checkbox"/> FT-R <input checked="" type="checkbox"/> FT-P	<input type="checkbox"/> FT-D2
Interconnects: Gordondale, Groundbirch East, Big Eddy, January Creek			
Segments: 2, 3, 4, 5, 7, partial 8, and partial 9 (Greater USJR excluding Segment 1)			
Effective: November 13, 2019 at 08:00 MST	IT Allowable: 0%	<input checked="" type="checkbox"/> IT-R <input type="checkbox"/> IT-D	<input checked="" type="checkbox"/> IT-S (receipt)
Expected End: Until Further Notice	FT Allowable: 100%	<input checked="" type="checkbox"/> FT-R <input checked="" type="checkbox"/> FT-P	<input type="checkbox"/> FT-D2
Interconnects: Gordondale, Groundbirch East, Big Eddy, January Creek			
Segments: 1, 2, 3, 4, 5, 7, partial 8, and partial 9 (Greater USJR)			

West Gate Delivery Area			
Effective: October 15, 2019 at 08:00 MST	IT Allowable: Partial	<input type="checkbox"/> IT-R <input checked="" type="checkbox"/> IT-D	
Expected End: Until Further Notice	FT Allowable: 100%	<input type="checkbox"/> FT-R <input checked="" type="checkbox"/> FT-P	<input checked="" type="checkbox"/> FT-D1 <input checked="" type="checkbox"/> FT-D2 <input checked="" type="checkbox"/> STFT
Interconnects: Alberta B.C. and Alberta Montana			
Segments: 22 and partial 21 (Greater WGAT)			

East Gate Delivery Area			
Effective: October 5, 2019 at 08:00 MST	IT Allowable: 100%	<input type="checkbox"/> IT-R <input checked="" type="checkbox"/> IT-D	<input checked="" type="checkbox"/> IT-S (delivery)
Expected End: Until Further Notice	FT Allowable: 100%	<input type="checkbox"/> FT-R <input checked="" type="checkbox"/> FT-P	<input checked="" type="checkbox"/> FT-D1 <input checked="" type="checkbox"/> FT-D2 <input checked="" type="checkbox"/> STFT
Interconnects: Aeco C, Carbon, Chancellor, Crossfield East 2, Severn Creek, Empress, McNeill, Unity, Warwick SE			
Segments: 15, 16, 17, 18, 19, 20, 23, partial 21, and partial 28 (Lower EGAT)			

The preceding information supersedes any previously published information and will be reflected and maintained in the next release of the Daily Operating Plan. Updates, if required, will be communicated through NrG Highway notice otherwise refer to the [Daily Operating Plan](#).

[NGTL System - Segment Codes & Project Areas Map](#)

[NGTL System - Operational Areas Map](#)

New/updated Information

Posted Date/Time: Nov 08, 2019 08:27 CCT

Notice Number: 3873685010

[NGTL Outages](#)

 [Bulletins](#)

 [Contact & FAQ](#)

 [Subscriptions](#)



NGTL Non-Critical Notice

Notice Type: Capacity Constraint

Effective Start Date Time: Nov 12, 2019 09:00 CCT

Subject: NGTL Service (USJR FT-R)

The Clearwater Compressor Station outage has experienced an additional delay, resulting in USJR now expected to return to 100% FT-R effective November 14th at 08:00 MST. A status update will be provided on November 13th at 08:30 MST.

Please note that the 2019 Temporary Service Protocol period will end concurrently with the Clearwater outage.

Further updates will be provided as required.


Current and Upcoming Outages			
Facility/Outage Name	Facility Type/Scope	Outage Type	Area of Impact
Clearwater	Compressor Maintenance	Planned	<input checked="" type="checkbox"/> USJR <input type="checkbox"/> WGAT <input type="checkbox"/> EGAT

Upstream James River Receipt Area					
Effective: October 30, 2019 at 08:00 MST	IT Allowable: 0%	<input checked="" type="checkbox"/> IT-R	<input type="checkbox"/> IT-D	<input checked="" type="checkbox"/> IT-S (receipt)	
Expected End: November 14, 2019 at 08:00 MST	FT Allowable: 77%	<input checked="" type="checkbox"/> FT-R	<input checked="" type="checkbox"/> FT-P	<input type="checkbox"/> FT-D2	
Interconnects: Gordondale, Groundbirch East, Big Eddy, January Creek					
Segments: 2, 3, 4, 5, 7, partial 8, and partial 9 (Greater USJR excluding Segment 1)					
Effective: November 14, 2019 at 08:00 MST	IT Allowable: 0%	<input checked="" type="checkbox"/> IT-R	<input type="checkbox"/> IT-D	<input checked="" type="checkbox"/> IT-S (receipt)	
Expected End: Until Further Notice	FT Allowable: 100%	<input checked="" type="checkbox"/> FT-R	<input checked="" type="checkbox"/> FT-P	<input type="checkbox"/> FT-D2	
Interconnects: Gordondale, Groundbirch East, Big Eddy, January Creek					
Segments: 1, 2, 3, 4, 5, 7, partial 8, and partial 9 (Greater USJR)					

West Gate Delivery Area							
Effective: October 15, 2019 at 08:00 MST	IT Allowable: Partial	<input type="checkbox"/> IT-R	<input checked="" type="checkbox"/> IT-D				
Expected End: November 14, 2019 at 08:00 MST	FT Allowable: 100%	<input type="checkbox"/> FT-R	<input checked="" type="checkbox"/> FT-P	<input checked="" type="checkbox"/> FT-D1	<input checked="" type="checkbox"/> FT-D2	<input checked="" type="checkbox"/> STFT	
Interconnects: Alberta B.C. and Alberta Montana							
Segments: 22 and partial 21 (Greater WGAT)							
Effective: November 14, 2019 at 08:00 MST	IT Allowable: 100%	<input type="checkbox"/> IT-R	<input checked="" type="checkbox"/> IT-D				
Expected End: November 16, 2019 at 08:00 MST	FT Allowable: 100%	<input type="checkbox"/> FT-R	<input checked="" type="checkbox"/> FT-P	<input checked="" type="checkbox"/> FT-D1	<input checked="" type="checkbox"/> FT-D2	<input checked="" type="checkbox"/> STFT	
Interconnects: Alberta B.C. and Alberta Montana							
Segments: 22 and partial 21 (Greater WGAT)							
Effective: November 16, 2019 at 08:00 MST	IT Allowable: Partial	<input type="checkbox"/> IT-R	<input checked="" type="checkbox"/> IT-D				
Expected End: Until Further Notice	FT Allowable: 100%	<input type="checkbox"/> FT-R	<input checked="" type="checkbox"/> FT-P	<input checked="" type="checkbox"/> FT-D1	<input checked="" type="checkbox"/> FT-D2	<input checked="" type="checkbox"/> STFT	
Interconnects: Alberta B.C. and Alberta Montana							
Segments: 22 and partial 21 (Greater WGAT)							


East Gate Delivery Area							
Effective: October 5, 2019 at 08:00 MST	IT Allowable: 100%	<input type="checkbox"/> IT-R	<input checked="" type="checkbox"/> IT-D	<input checked="" type="checkbox"/> IT-S (delivery)			
Expected End: Until Further Notice	FT Allowable: 100%	<input type="checkbox"/> FT-R	<input checked="" type="checkbox"/> FT-P	<input checked="" type="checkbox"/> FT-D1	<input checked="" type="checkbox"/> FT-D2	<input checked="" type="checkbox"/> STFT	
Interconnects: Aecco C, Carbon, Chancellor, Crossfield East 2, Severn Creek, Empress, McNeill, Unity, Warwick SE							

The preceding information supersedes any previously published information and will be reflected and maintained in the next release of the Daily Operating Plan. Updates required, will be communicated through NrG Highway notice otherwise refer to the [Daily Operating Plan](#).

 [NGTL Outages](#)

[NGTL System - Segment Codes & Project Areas Map](#)

 [NGTL System Operational Areas Map](#)

 [New/updated Information](#)

[Affected Area of Impact or Service Type](#)

[Unaffected Area of Impact or Service Type](#)

 [Subscriptions](#)

Posted Date/Time: Nov 12, 2019 11:42 CCT

Notice Number: 3373711010



NGTL Non-Critical Notice

Notice Type: Capacity Constraint

Effective Start Date Time: Nov 13, 2019 09:00 CCT

Subject: NGTL Service (USJR FT-R)

Clearwater Compressor Station maintenance is proceeding per the revised schedule.
USJR will return to 100% FT-R effective November 14th at 08:00 MST.

Please note that the 2019 Temporary Service Protocol period will end concurrently with the Clearwater outage.
Further updates will be provided as required.

Posted Date/Time: Nov 13, 2019 09:40 CCT

Notice Number: 3373719010

IR Number: CER 1.6

Category: Economic Matters

Topic: Increased Operational Flexibility

Reference: NGTL Reply to EPAC, Page 2 of 4, (PDF 2 of 4), [C08101-1](#)

Preamble: In the reference, NGTL submitted that since April 2019, approximately 1 Bcf/d of capacity additions have been put into service and have created additional operational flexibility on the System. It provided a list of the five projects associate with the capacity additions:

- Saddle West Expansion ([A86451-1](#));
- North path Delivery ([A90059-1](#));
- North central Corridor Loop North Star Section 1 ([A95255-1](#));
- GPML McLeod River North Loop ([A92609-1](#)); and
- Clearwater West Expansion ([A92294-1](#)).

The reference also states that from 1 April 2020 through 28 August 2020, an average of nearly 1.3 Bcf/d of storage injections via IT-S occurred, the highest injection level for that timeframe since 2000. NGTL stated that this level of injection occurred without the use of the TSP, as there have been no TSP-applicable constraint occurrences, and none are expected until the TSP's end date.

- Request:**
- a) Provide details associated with the five projects in the reference, including but not limited to:
 - a.1) capacity increases associated with each project;
 - a.2) the in-service date of each project; and,
 - a.3) a map outlining the location of all five projects. On the map, identify the location of the NGTL 2021 System Expansion Project, the Clearwater Compressor Station and the Woodenhouse Compressor Station.
 - b) Provide an explanation of how the operational flexibility associated with these five capacity additions enabled increased gas injections into storage during summer 2020.
 - c) Provide an explanation of how the operational flexibility associated with these five capacity additions are expected to enable storage injections in summer 2021.
 - d) Discuss any other market dynamics at play that may have enabled record storage injection volumes in summer 2020.

Response:

a.1) and a.2)

NGTL designs the NGTL System to meet the forecast peak flow requirements. During off-peak days, System capacity is available for discretionary services and to accommodate planned maintenance. As illustrated in Figure CER 1.6-2 provided in the response to part c), System operational flexibility is achieved primarily through System expansions, driven by incremental peak flow requirements, installation of multiple loops on the same flow path and installation of multiple compressor units at the same station. When increases in System capacity driven by peak flow requirements outpace the forecast increases in annual average flow, capacity available for discretionary service and planned maintenance increases and System flexibility improves. The additional loops and compressor units also reduce the capacity impact from outages and in turn improve System flexibility.

See Table CER 1.6-1 for the capacity additions and on-stream date of the five requested projects.

Table CER 1.6-1: NGTL Capacity Additions

Project	Capacity Increase 10⁶m³/d (mmcf/d)	In-Service Date
Saddle West Expansion	14.16 (500)	Gordondale Lateral Loop No. 3 – Jan 2019 Latornell C/S unit addition – Oct 2019 Nordegg C/S unit addition – Sep 14, 2019 Saddle Hills C/S unit addition and CV mods – Oct 2019 Swartz C/S unit addition – Sep 2019
North Path Delivery	2.01 (71)	NWML Loop No. 2 (Bear Canyon) – Sep 2019 Amber Valley C/S unit addition – Mar 2020 Meikle River C/S Modifications - Jun 2020
North Central Corridor Loop – North Star Section 1	3.12 (110)	Apr 2020
GPML McLeod River North Loop	3.12 (110)	Apr 2020
Clearwater West Expansion	8.499 (300)	GPML Loop No. 2 (Huallen) – Mar 2020 Clearwater C/S unit addition – Apr 2020 Wolf Lake C/S unit addition – Apr 2020 GPML Loop No. 3 (Elmworth 1) – May 2020

Project capacity benefit is expressed as the aggregate System capacity increase utilizing the design flows as at the time of the facility application. The actual project capacity benefit varies with design flow changes and system distribution, and may change from year to year. The capacity shown in Table CER 1.6-1 results in an increase in aggregate NGTL System capacity of approximately 1 Bcf/d during the winter season and 600 MMcf/d during the summer season.

a.3) See Figure CER 1.6-1 for a map with the requested projects identified.

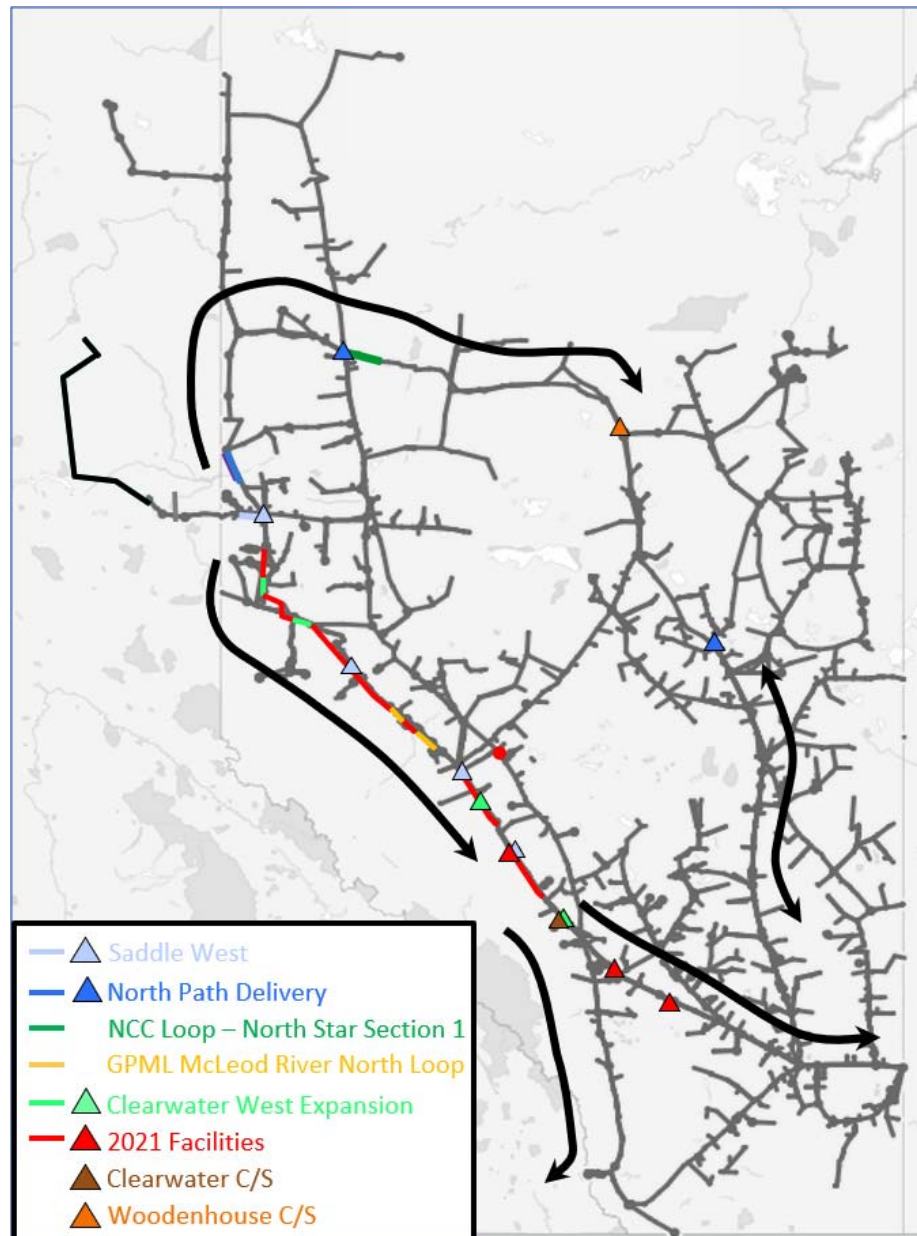


Figure CER 1.6-1: System Map with Project Facilities Identified

b) and c)

Operational flexibility was increased through 2020 as a result of the facilities identified in Table CER 1.6-1, and this increase in flexibility is expected to equally apply to 2021. The added flexibility provided from these facilities occurs for three primary reasons: increased System capacity, increased flow path flexibility, and increased path reliability, each of which will be described in greater detail below.

Increased System Capacity

Capacity on the NGTL System is designed to meet forecast peak day flow requirements, as illustrated in Figure CER 1.6-2. During off-peak days, the excess System capacity is available for, among other things, NGTL to execute planned maintenance and complete tie-ins for new facilities. By scheduling required outages outside of peak periods NGTL is able to avoid or minimize restrictions to firm and interruptible services, such as IT-S. In Figure CER 1.6-2 the area below the Design Capacity Lines and outside of the curves illustrates the capacity that is available for discretionary services (IT-S / IT-D / IT-R). As forecast peak day flow requirements on the System increase, underpinned by aggregate firm contracts, NGTL expands the System capacity to meet the increased peak day design requirements. This is illustrated in Figure CER 1.6-2 by the Post Expansion Design Capacity. When increases in System capacity driven by peak flow requirements outpace the forecasted increases in annual average flow, capacity available for discretionary service and planned maintenance increases. This is shown in the figure by the increased area below the Post Expansion Design Capacity and above the Post Expansion System Load Factor. This result was observed in 2020 by the approximate 1 Bcf/d of incremental NGTL System capacity added to the System by the facilities described in Table CER 1.6-1.

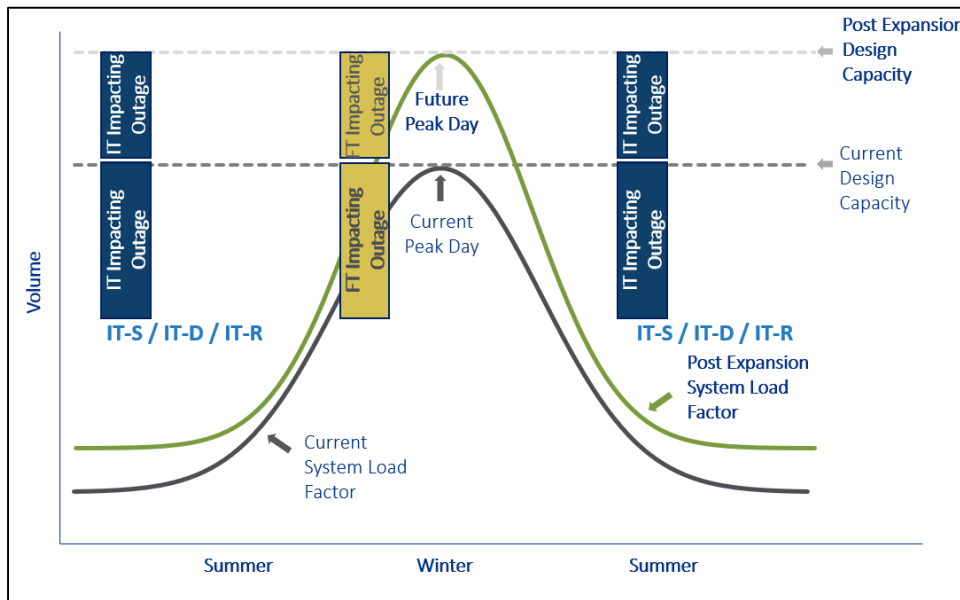


Figure CER 1.6-2: Capacity, Load Factor and Outage Impacts

Increased Flow Path Flexibility

Given the integrated nature of the NGTL System, when new facilities are added, it inherently improves the reliability and flexibility of the System because of the multiple flow paths that can be used to move gas to and from different points on the System. Planned outages typically occur during non-peak periods, enabling NGTL to use the capacity on an alternative flow path to meet changing market conditions, including

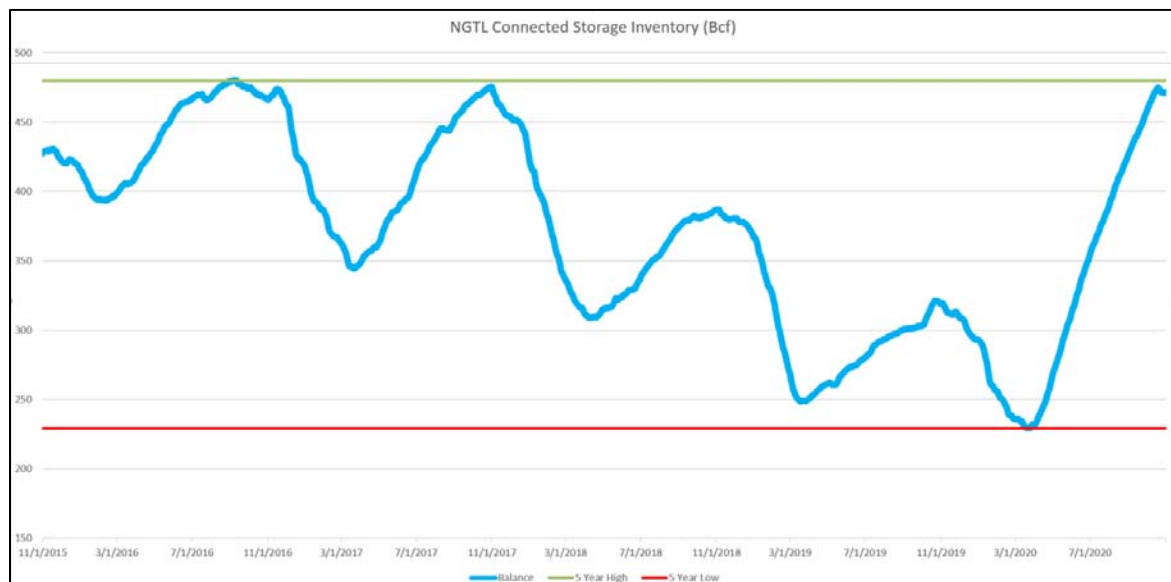
access to storage. The incremental capacity added through the facilities identified in Table CER 1.6-1 improved the flexibility to move gas on the System along the north path across the North Central Corridor as well as down the south path through the Grande Prairie and Edson Mainlines.

Increased Path Reliability

On any given flow path, the addition of new facilities reduces the capacity impact of a facility outage on that flow path. In the case of a pipeline, a loop being added allows flows on the path to be maintained even when an outage or maintenance work is underway on the existing parallel pipeline. In the case of a compressor addition, multiple units allow one or more compressor units to continue compressing gas on the path, while maintenance work on another unit is underway. As part of the facilities identified in Table CER 1.6-1, key pipeline segments and compressor locations were added to existing paths, further increasing System operational flexibility.

- d) There are many factors that may influence storage injections, including physical access to storage and overall levels of receipts and deliveries on the NGTL System.

Unlike 2019, there were no physical factors that limited access to storage in 2020 and therefore, there was no need for the application of TSP. The effect is observed in Figure CER 1.6-3, which shows NGTL connected storage over the last 5 years. Access to storage was limited due to system capacity constraints in 2019, and storage levels were below average. In contrast, without the application of TSP, there were no physical constraints to accessing storage during 2020, allowing storage levels to grow from a 5-year low to a 5-year high.

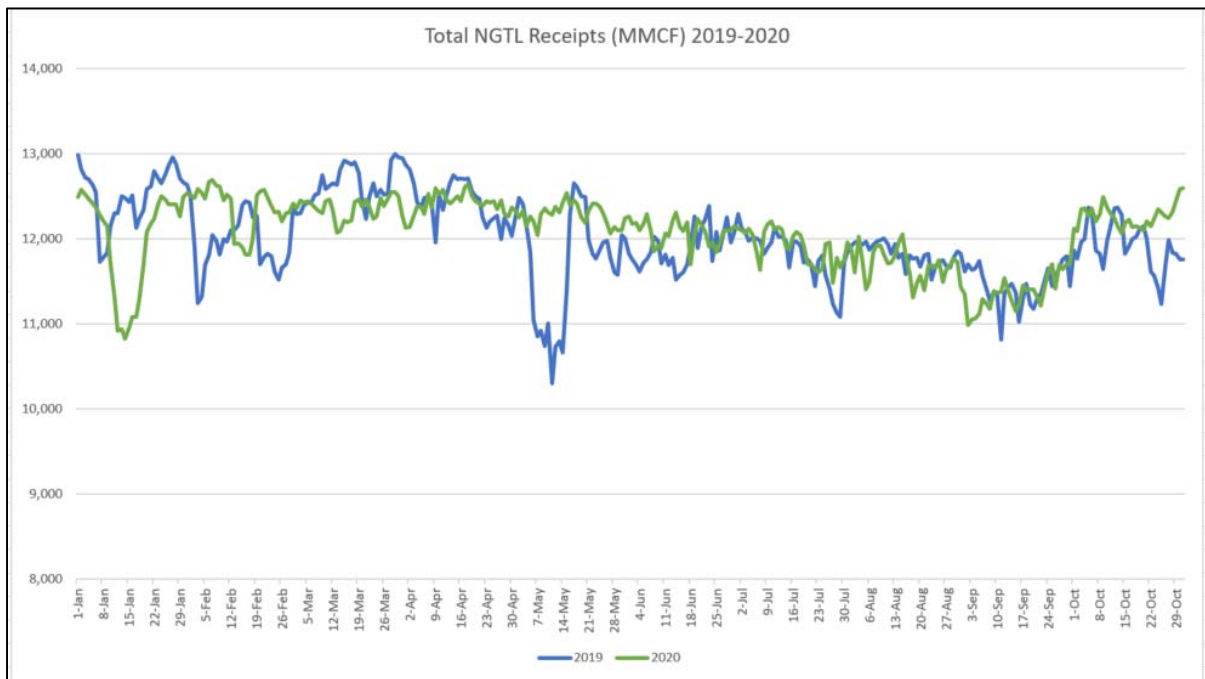


Source: NGTL

Figure CER 1.6-3: NGTL Connected 5-Year Storage Inventories

Looking at year-over-year changes in receipts and deliveries on the NGTL System provides insight into the non-capacity factors that potentially contributed to higher injection levels.

Figure CER 1.6-4 shows total receipts on the NGTL System for 2019 and 2020 and illustrates that there has been a modest increase of approximately 142 MMcf/d, or 1%, during this period. As a result, changes in supply levels likely are not a major factor that contributed to the difference in injection levels between 2019 and 2020.



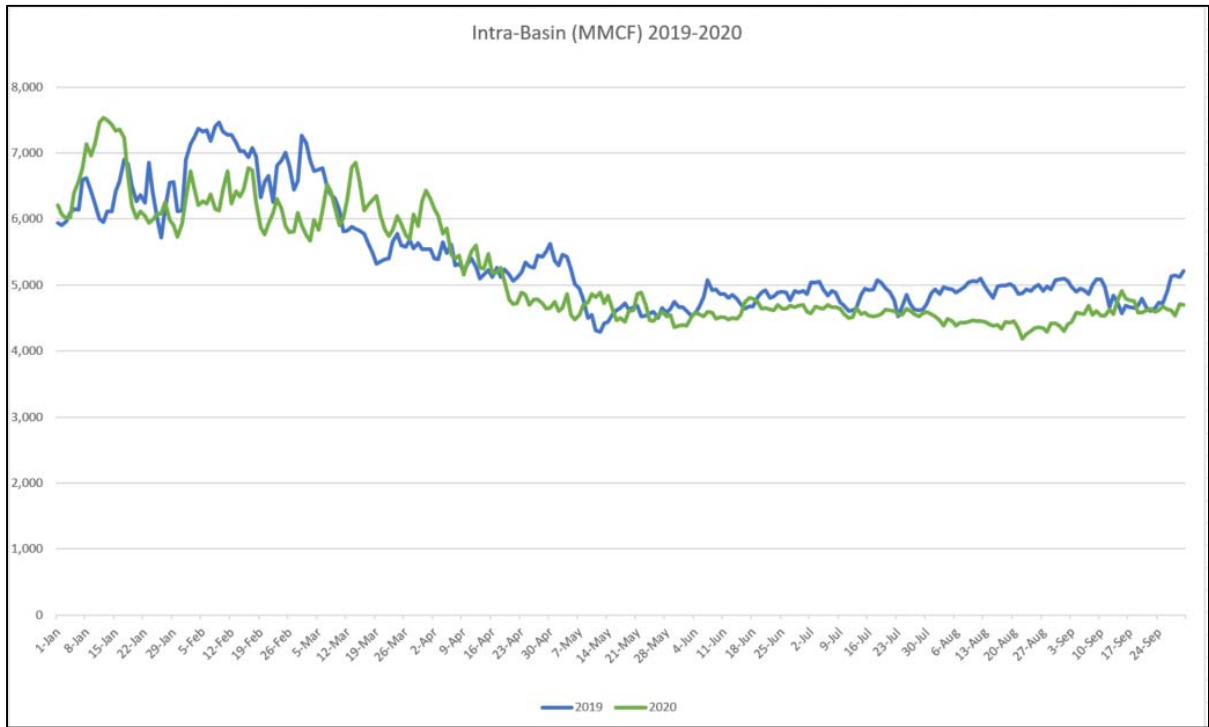
Source: NGTL

Figure CER 1.6-4: NGTL System Receipts

With respect to deliveries, there were some differences at various locations that may have contributed to higher storage injections.

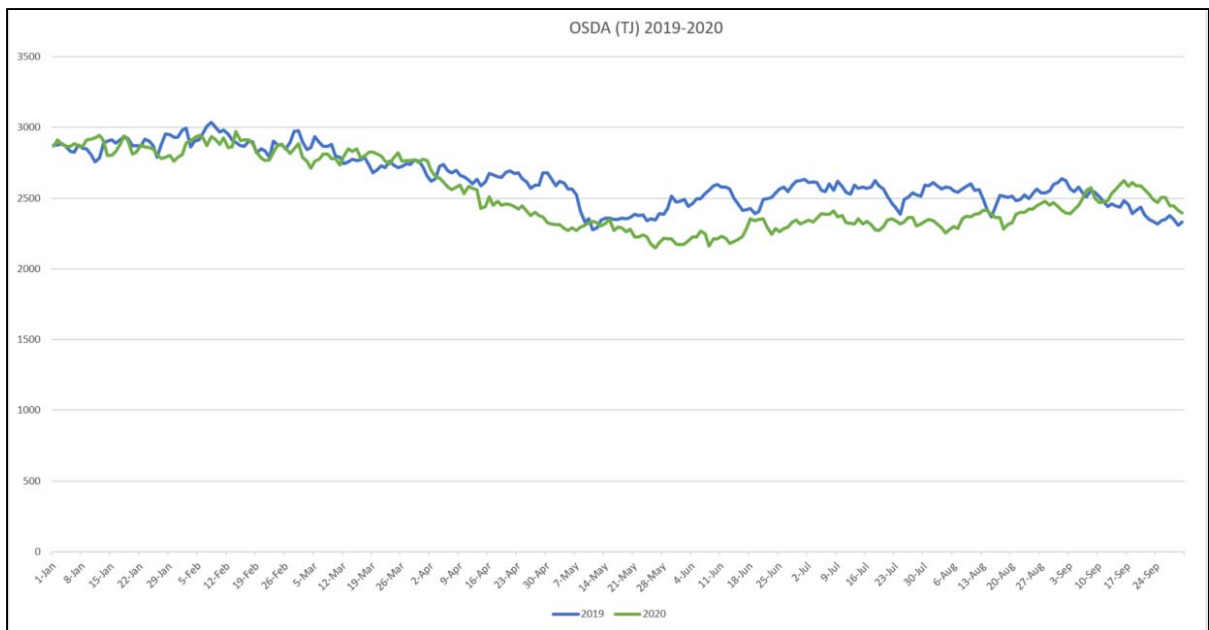
Figures CER 1.6-5 through 1.6-9 respectively show total intra-basin deliveries, intra-basin deliveries to the OSDA¹, and deliveries to the largest FT-D1 locations of Alberta-BC, Empress and McNeil.

¹ The Oil Sands Delivery Area (OSDA) consists of the major markets of OSDA Liege and OSDA Kirby.



Source: NGTL

Figure CER 1.6-5: Total Intra-Basin Deliveries



Source: NGTL

Figure CER 1.6-6: Intra-Basin Deliveries to the OSDA

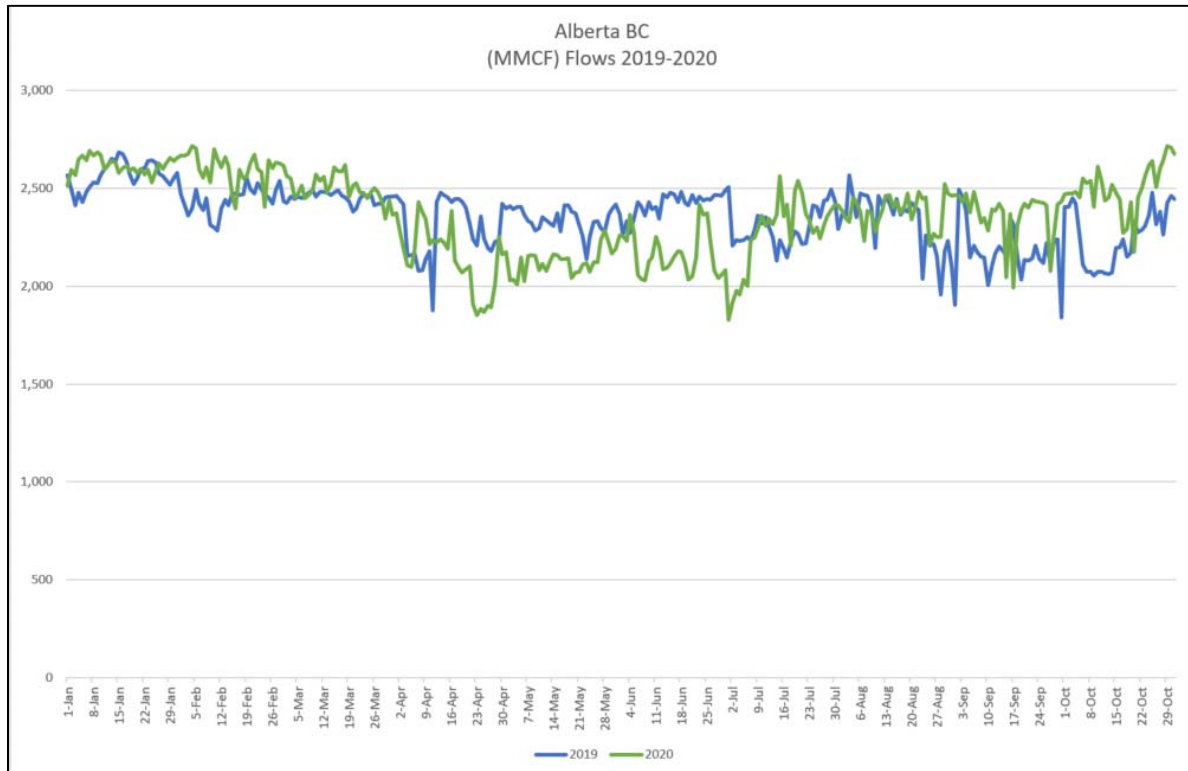


Figure CER 1.6-7: Alberta-BC Deliveries

Source: NGTL

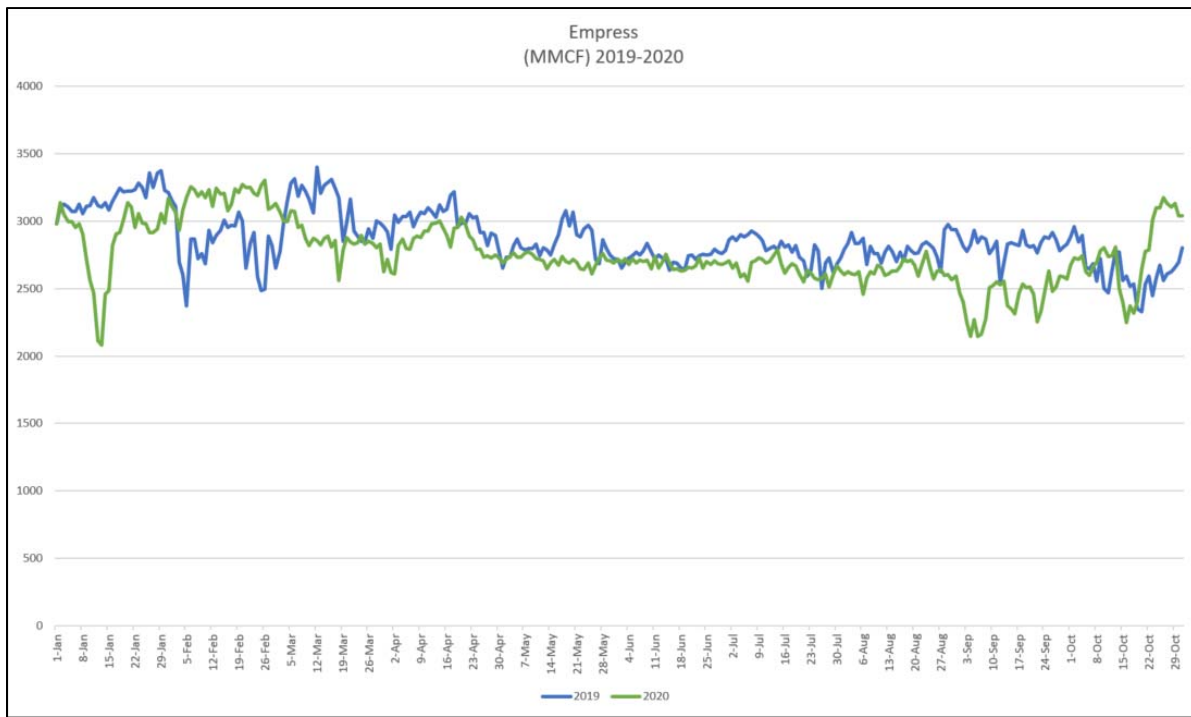
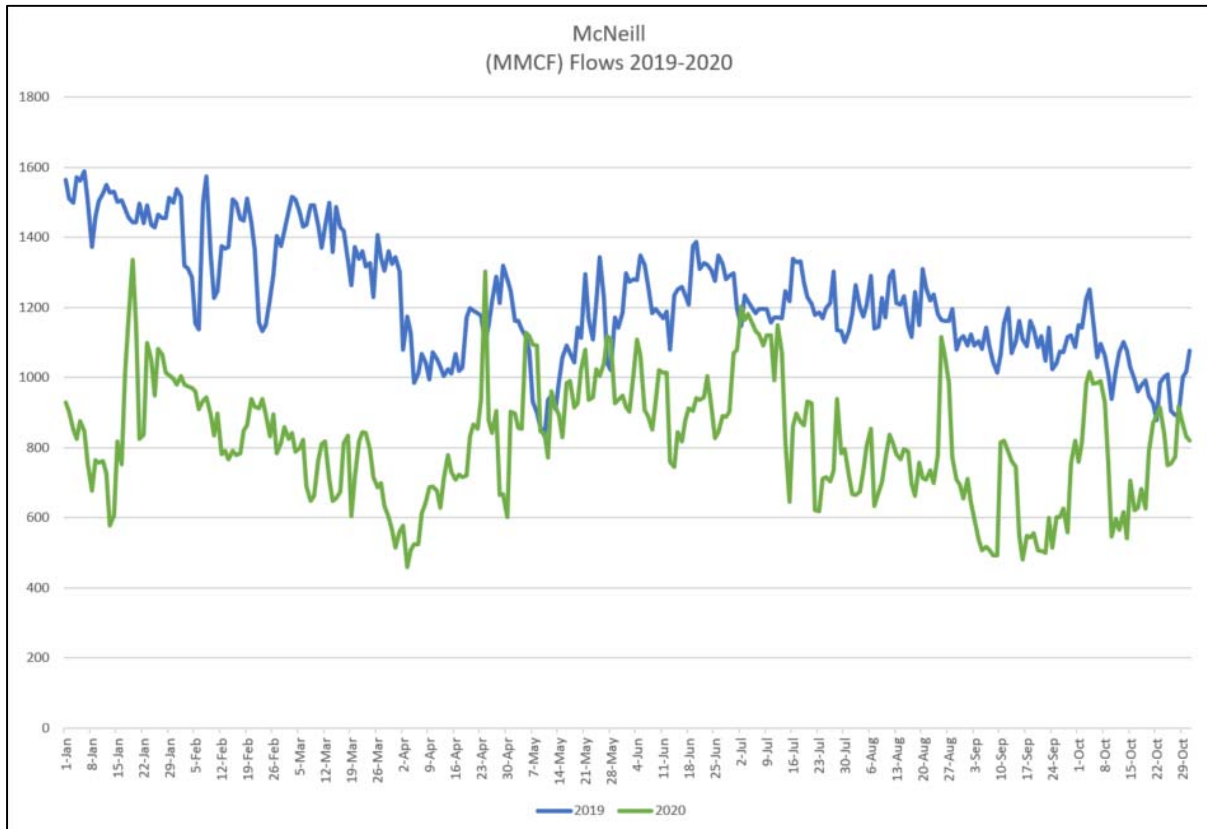


Figure CER 1.6-8: Empress Deliveries

Source: NGTL



Source: NGTL

Figure CER 1.6-9: McNeill Deliveries

There were no material changes in intra-basin deliveries or deliveries at West Gate, and only a modest decline of approximately 134 MMcf/d, or 5%, in deliveries at Empress, as shown in Figures CER 1.6-5, 1.6-7, and 1.6-9, respectively. In consequence, no significant change in injection levels likely resulted from a change in deliveries to these markets.

In contrast, there was a year-over-year temporary reduction in Intra-Basin deliveries to the OSDA of approximately 150 MMcf/d, as shown in Figure CER 1.6-6. This temporary reduction began around March/April 2020 and deliveries largely returned to 2019 levels by September/October 2020. This temporary reduction is likely attributable to temporary reductions of oil sands operations during the early days of the COVID-19 pandemic, as further discussed in the response to CER 1.8, and likely contributed to some of the increase in storage injections during the April to October 2020 time frame.

The biggest year-over-year change in delivery was to McNeill, which experienced reduced deliveries of approximately 329 MMcf/d. This reduction in deliveries is largely attributable to competition from associated gas production from the Bakken basin into the Northern Border pipeline, which resulted in more supply being available for storage injections.

IR Number: CER 1.7

Category: Economic Matters

Topic: Market Volatility

- Reference:**
- i) EPAC Application, Page 2 of 4, (PDF 2 of 4), Par. 8, [C07585-1](#)
 - ii) Birchcliff Energy, Page 1 of 2, (PDF 1 of 2), [C08311-1](#)
 - iii) ARC Financial Corp., Page 2 of 4, PDF 2 of 4, [C08317-1](#)
 - iv) ARC Financial Corp., Page 3 of 4, PDF 2 of 4, [C08317-1](#)

Preamble: In reference i), EPAC submitted that of particular concern is the potential for disruptions in access to storage and the potential for a recurrence of volatility unless the TSP is in place throughout April-October 2021.

In reference ii), Birchcliff Energy emphasizes the importance of reassuring natural gas and capital market participants that the commodity price volatility that occurred during planned outages in the summers prior to the implementation of the TSP will not return, and that the storage system will operate appropriately during times of maintenance.

In reference iii), ARC Financial Corp. submitted that production growth and/or maintenance projects in 2021 could bring back pricing volatility. Several parties echoed this concern.

In reference iv), ARC Financial Corp. submitted Figure 1: Henry Hub and AECO Spot Price, highlighting periods of pricing volatility at AECO. The graph shows pricing volatility subsiding 30 September 2019.

- Request:**
- a) Explain the role storage plays in the Western Canadian natural gas market.
 - b) Explain how the TSP-related tariff provision regarding priority of service during periods of planned maintenance impacted AECO price stability since its inception in 2019 and 2020. Include access to storage in this discussion.
 - c) Explain why the Henry Hub-AECO differential narrowed in September 2019.

- d) Provide an overview of AECO pricing dynamics over the summer of 2020.
- e) Specify any periods of expected AECO price volatility for the summer of 2021 and indicate the cause of that volatility. Also include discussion of any other relevant market dynamics.

Response:

a) The role storage plays in the Western Canadian natural gas market is to provide the ability to store gas when demand is low and to withdraw gas when demand is high. As such, storage provides the following benefits to market participants:

- provides customers the opportunity to participate in economic commercial storage activities;
- provides customers and the System with flexibility by enabling supply/demand balancing (e.g., account balancing, production stabilization, etc.);
- improves security of supply for markets;
- improves System reliability;
- provides peak shaving opportunities;
- load levels receipts and stabilizes throughput;
- reduces System facility requirements, reducing tolls;
- acts as a temporary shock absorber and improves liquidity; and
- helps reduce market volatility.

Storage acts as one of the many means of facilitating supply and demand balancing, along with other means such as changes in export flows, changes in local market consumption, changes in supply levels, and commodity market transactions at NIT.

b) and c)

There are many factors that impact commodity prices, including supply and demand, broad conditions in the North American gas market, system operating conditions, weather conditions, availability of service and operating conditions on interconnecting pipelines. This multitude of factors influences commodity prices at different hubs, such as AECO/NIT and Henry Hub, and the resulting price differential between hubs.

In the RH-002-2019 proceeding, NGTL recognized that constraints on its System can contribute to a temporary imbalance between supply and demand and can be one factor, of many, that impacts prices. Therefore, NGTL also recognized that reduced

price volatility may be an outcome of the application of TSP by enabling enhanced access to storage during times of constraint.

Figure CER 1.7-1 shows the AECO/NIT pricing from September 1, 2019 through October 31, 2020, with the timeframe during which there were TSP-Applicable Outages, from October 15, 2019 to November 14, 2019, highlighted in green. There have been no TSP-Applicable Outages in 2020.



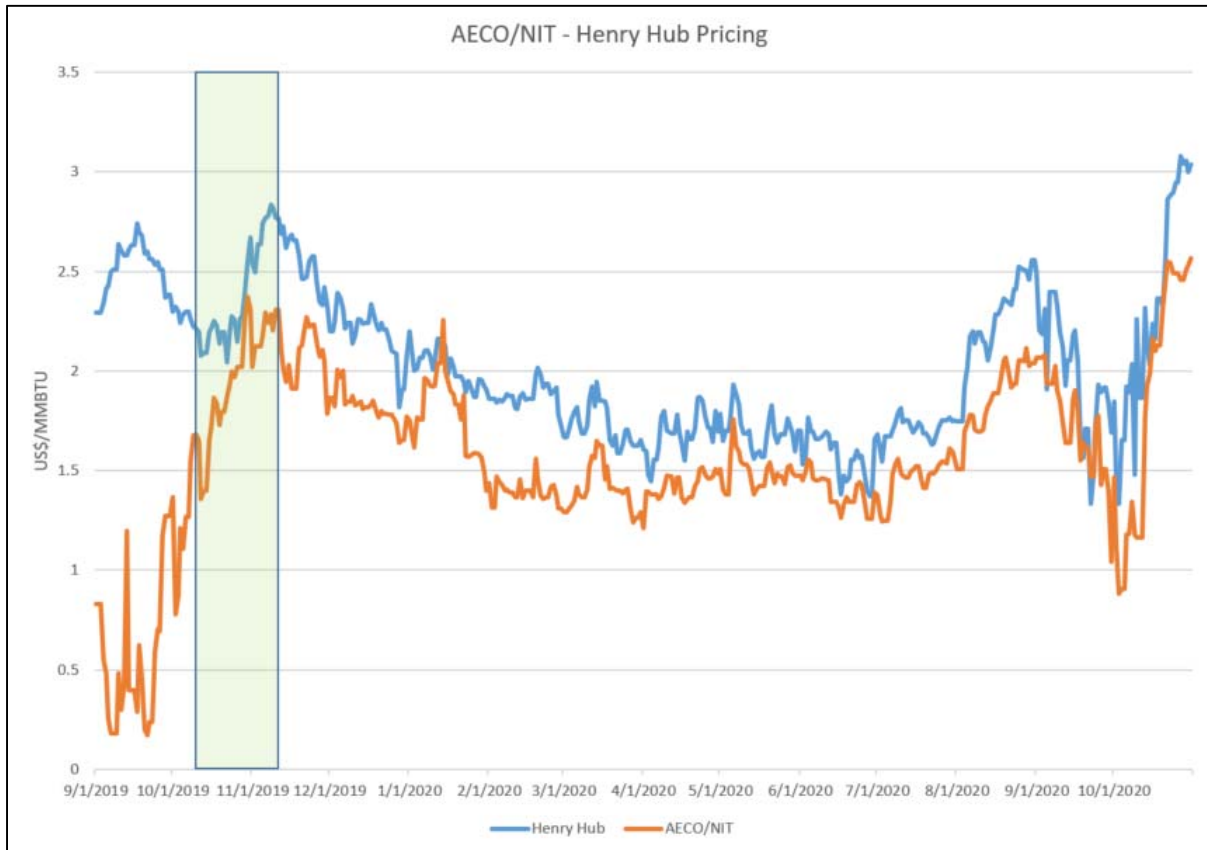
Source: Intercontinental Exchange (with permission)

Figure CER 1.7-1: AECO/NIT Pricing – September 2019 – October 2020

It is difficult to isolate the impact of a single factor on price stability, such as the application of TSP during outages in the October 15, 2019 to November 14, 2019 timeframe, and claim that it has a determinative causal effect without considering all of the other factors influencing natural gas prices. However, what is clear is that any price stability observed after this timeframe is not a result of the application of TSP. As discussed in the response to CER 1.6a), capacity additions have increased the operational flexibility of the NGTL System since October/November 2019 and there were no TSP-Applicable Outages during the summer of 2020.

- d) As shown in Figure CER 1.7-1, AECO prices increased in 2019 and have remained at a higher level through 2020. During that period, Henry Hub prices were relatively stable, such that there has been a narrowing of the basis differentials between these two hubs.

Figure CER-1.7-2 shows the differential from the September 1, 2019 through October 31, 2020 period, with the timeframe during which there were TSP-Applicable Outages, from October 15, 2019 to November 14, 2019, highlighted in green.



Source: Intercontinental Exchange (with permission)

Figure CER 1.7-2: AECO-Henry Hub Differential – September 2019 – October 2020

Again, it would be difficult to isolate the impact of a single factor but the fact that the basis differential has remained relatively narrow since November 2019 without any TSP-Applicable Outages suggests that factors other than TSP have contributed to the narrowing of the differential.

- e) High levels of price volatility reflect extraordinary characteristics in supply and demand dynamics, causing market participants on both the supply and demand sides to react in ways that eventually bring the market into balance. As there are many factors that impact commodity prices and given that short-term market dynamics change from day-to-day and season-to-season, NGTL is not able to meaningfully forecast potential events of excessive price volatility in the future. While System constraints can be a contributing factor that impact prices, the capacity additions made since 2019 have increased the operational flexibility of the System for the summer of 2021 and beyond, as noted in the response to CER 1.6a).

- IR Number:** CER 1.8
- Category:** Economic Matters
- Topic:** Natural Gas Market Impacts of COVID-19
- Reference:**
- i) EPAC, Reply Letter, Page 6 of 12, (PDF 6 of 12), Par. 37, [C08594-1](#)
 - ii) ARC Financial Corp. Letter of Comment, Page 4 of 4, (PDF 4 of 4), [C08317-1](#)
 - iii) ATCO Energy Solutions and Rockpoint Gas Storage Canada Inc. Letter, Page 3 of 4, (PDF 3 of 4), [C08354-1](#)
- Preamble:**
- In reference i), EPAC states that though uncertain, it appears unlikely the effects of the COVID pandemic on gas demand and supply and NGTL throughputs will be quite as pronounced next summer (2021) as they were this summer (2020).
- In reference ii), ARC Financial Corp. submitted that more recently, the sector has faced uncertainty due to COVID-19 related demand loss.
- In reference iii), ATCO Energy Solutions and Rockpoint Gas Storage Canada Inc. submitted that there are a number of unexpected market conditions that may have alleviated pipeline constraints in the summer 2020 gas period, such as the oil price collapse and its impacts on both oil and associated gas production, and the impacts of COVID-19 and the related economic slowdown on gas demand.
- Request:** Provide an explanation of:
- a) The effects of the COVID-19 pandemic on the natural gas market in summer 2020. Include natural gas demand, natural gas supply, impacts on natural gas from the oil price collapse, natural gas throughputs on the NGTL System, and any other relevant market factors.
 - b) The expected effects of the COVID-19 pandemic on the natural gas market in summer 2021. Include natural gas demand, natural gas supply, impacts on natural gas from the oil price collapse, natural gas throughputs on the NGTL System, and any other relevant market factors.

Response:

a) and b)

It is difficult to isolate the direct effects of the COVID-19 pandemic on the natural gas market from the impact of the ongoing economic uncertainty currently affecting market participants, including many NGTL customers. Any impact of the COVID-19 pandemic in 2020 and 2021 would be part of the overall effect of inter-related market forces of gas demand, gas supply, impacts from oil prices and pipeline system throughput.

While not solely linked to COVID-19, comparing receipts and deliveries at various points on the NGTL System in 2019 and 2020 can provide some insight into the potential magnitude of effects on the System related to COVID-19.

Based on the information contained in the response to CER 1.6d), the primary observable effect of the COVID-19 pandemic on NGTL System flows appears to have been a temporary reduction of deliveries to the OSDA, which has since largely returned to pre-pandemic levels. In addition, the level of deliveries at McNeill during the April to July period may have been impacted by COVID-19 related disruptions in associated gas production in the Bakken basin, temporarily reducing the ongoing competition between Bakken gas and WCSB gas. COVID-19 may also have been one of the many factors influencing the slight reduction in deliveries at Empress; however, the extent of that impact is less evident.

Further, there is uncertainty over the likely duration of the COVID-19 pandemic into 2021. As such, it would be difficult to predict what the effects of the pandemic may be in 2021. To the extent the pandemic continues during 2021, similar effects as those experienced in 2020 may be expected in 2021.