NGTL/Foothills Customer Operations Meeting (WebEx only)

Temporary Service Protocol Information Session October 10, 2019

Please note: this document has been revised with an additional question from the post-meeting survey. This update has been included on the last page in italics.

Preamble

The intent of this meeting was to facilitate a better understanding of the application of the Temporary Service Protocol (TSP) and answer any specific questions customers may have. NGTL welcomes feedback on whether this was a valuable approach, and whether more of these types of WebEx discussions should be done in the future.

NGTL spent the first 15 minutes of the meeting outlining what the TSP is, sharing observations to date, and outlining the expected impact of upcoming outages. The remainder of the meeting was allocated to answering questions from customers. A summary of NGTL's speaking points are included below, followed by a summary of all questions asked, including NGTL's answers.

What is the TSP?

- The TSP is a capacity management tool that will apply when three criteria are met. NGTL will
 prioritize delivery services over receipt services
 - o The three 3 criteria are:
 - Summer (Outages that begin Sept 30-Oct 31, 2019 and Apr 1-Oct 31, 2020)
 - At or upstream of Woodenhouse or Clearwater compressor stations
 - Planned maintenance
- For an outage that falls within the TSP, impacts to throughput will be managed by reducing FT-R rather than IT-D.
 - o This does not mean that all outages within the TSP will cause an FT-R restriction. Only applicable outages that require a curtailment will have an impact on FT-R availability.
- However, if a constraint caused by a downstream outage is larger than a constraint caused by a concurrent upstream outage, the TSP will not apply
- Within delivery and receipt areas we will continue to prioritize FT over IT. I.e. FT-D is still prioritized over IT-D and FT-R is still prioritized over IT-R.
- The TSP applies to outages that start within the defined summer period and will last for the entirety of the outage even if the outage spans into the winter period.

How has the TSP been used so far?

- The Canada Energy Regulator (CER) approved the TSP as filed on Sept 26, 2019, indicating a start date of Sept 30, 2019

- No immediate changes at the time of Sept 30 because the primary outage was Wolf Lake C/S, which started prior to the implementation of the TSP
 - As soon as Wolf Lake C/S was completed, we transitioned to 100% IT-D
 - Field receipts and storage injections responded quickly, as high as 11.8 Bcf/d and 1.3 Bcf/d respectively.
 - The NPS 30 Edson Mainline ILI planned maintenance that began on Sept 30 and concluded on Oct 10 was an applicable outage to the TSP, however, we indicated that we would remain at 100% FT-R and 100% IT-D and monitor daily. It was completed without requiring a change to service allowable levels.

Impact on upcoming outages:

- * All commentary is based on the USJR Table found in the Oct 9, 2019 Daily Operating Plan (DOP)
 - o NPS 30 Edson Mainline expected to conclude Oct 10
 - From Oct 11 through to Oct 14, there are no outages that fall within the TSP criteria
 - Meikle River C C/S Maintenance & Hidden Lake C/S
 - Both fall in TSP criteria
 - Meikle River C requires a partial impact to FT-R to manage the system
 - We got some good data on system behavior from the start of the protocol, which has allowed us to manage the outages with more certainty
 - A NrG Highway bulletin was released on Oct 10 to formalize this outage more clearly and specify the % allowable and exact station list
 - TSP applicable outages will happen each day from Oct 15 through Nov 10 based on the current entries (based on October 9, 2019 DOP)
 - We will continue to assess these on a go forward and all changes will be signaled via NrG Highway bulletins as quickly as possible. The DOP will continue to be refined as we go forward – as far in advance we can
 - Why is there an entry on the EGAT table? Outages that impact flow along the North Central Corridor (NCC) have entries in the EGAT table of DOP that indicate a capacity limitation to the NEDA area, which is a subset of the EGAT area. Since reduced NCC flow requires additional flow along the North Lateral (NLAT), it could create a NEDA area-specific constraint.

Q&A:

1. Will 100% IT-D continue through the weekend of October 12-14, 2019?

• We have been watching the system and don't foresee the need to restrict at the moment over that weekend. However, we watch the system on a daily basis and can only confirm allowable capacity one day in advance.

2. When the TSP is in effect, will EGAT IT-D always be 100%?

• Since the TSP only applies to planned constraints upstream of the Clearwater and Woodenhouse compressor stations, it is possible that a delivery-specific constraint could occur (i.e. an outage

downstream). In the event of a delivery-specific outage, the only available tool to manage the constraint would be reduction of delivery services. So, EGAT IT-D allowable will depend on what the driver of the system constraint.

3. With the commencement of the TSP and no higher capacity at East Gate, we have observed higher than the stated capacity numbers moving on the system, and also more gas upstream of James River. Why?

• During the period of 100% IT-D and the planned work at ACME compressor station, the total deliveries to EGAT area storage and export locations exceeded both the posted capability for the ACME outage and the current Base Capability for the EGAT area. Capabilities are based on a large number of input assumptions including, but not limited to, linepack, intra-deliveries along that flow path, and flow along the North Lateral. Higher system linepack can supplement delivery capability, and to the extent intra requirements are lower due to things like weather and plant-turnarounds, additional capacity may exist for deliveries to storage and export points. The number posted for ACME is 126 10³m³/d. It will remain at that capability given that input factors can change quickly resulting in actual capabilities both higher and lower than posted.

4. There were only a few planned USJR outages for October listed in the DOP prior to the TSP being approved. Why have so many been added post-approval of the TSP?

• The additional outages listed are not related to the TSP. Before we communicate outages, we need to be able to appropriately manage and determine what is possible. This can take time. Once we have solidified that we have tool availability and the required personnel and/or contractors available to do the work, we communicate the outage. This is how we manage all outages, not just those related to the TSP.

5. What if downstream maintenance is a larger impact than USJR, does IT-D only get restricted or both? What if the USJR started first?

• If the initial driver is a TSP-applicable outage and a more impactful outage occurs later downstream, we would have to transition to an IT-D restriction if the FT-R restriction was not able to manage the event. This is consistent with what we communicated through the hearing process.

6. What would happen if USJR and downstream outages were of equal impact?

• In the rare circumstance that we had outages in USJR and downstream that were precisely the same impact, the TSP would dictate that we would manage the constraint with an FT-R restriction.

7. What will happen when the final TSP-applicable outage concludes this year?

• November 10, 2019 is currently the planned conclusion date of the Clearwater maintenance event. This is the last event in 2019 that will be subject to the TSP because it is the last event that begins during the stated summer period (i.e. it is planned to start on Oct 30, 2019). Once the Clearwater C/S event is concluded, we will return to current practices until Summer 2020.

8. When will the 2020 maintenance plan be released?

• We are planning to roll out the 2020 maintenance plan in November (same as last year). Like previous years, this will be done at a Customer Operations meeting where we will roll out what we have available for 2020. It won't be an exhaustive list, but it should highlight the key events expected next year.

9. All things being equal, at what point in the capability allowable volume per day would a partial impact to firm service be required?

We can't draw a single line on this because of the multiple inputs and how they change. To
determine capability allowable, we need to compare our expected flow rates on the system as
well as where the expected outage impacts are. As soon as we have confidence in what this
number is, we signal this via NrG and the DOP.

10. Will FT-R be prioritized over IT-D to manage maintenance after November 11, 2019?

• In the winter months, the TSP doesn't apply. However, once we get into the winter months there usually isn't enough IT-D available to manage most maintenance activities, so outages in the USJR are more likely to require management via curtailment of FT-R than IT-D.

11. Since we saw maintenance in January 2019, will we be seeing more winter maintenance in Q1 of 2020?

• Ideally, we avoid peak winter months for maintenance, but contractual requirements for inservice dates may drive outages for the purposes of tying in new facilities. We will have more information on what Q1 will look like at the upcoming Customer Operations meeting where we will release the 2020 plan.

Post-meeting, NGTL issued a survey to gather feedback on the meeting. The survey also included an option to ask additional outstanding questions on the Temporary Service Protocol. When the survey closes, NGTL will update this document with additional questions received with answers. Customers are encouraged to reach out to their respective marketing representative with any further questions.

November 5, 2019 update - questions from survey:

12. What specific items led to keeping EGAT at 100% IT during the ACME outage (Oct 11-14) when there was no on-going USJR outage?

Analysis and monitoring of the NGTL system during the ACME outage determined that
throughput and market demands were such that the constraint caused by ACME could be
managed without an EGAT restriction. Had market demand been such that the ACME constraint
was hindering system operation, an IT restriction would have been implemented.