

# Welcome and Thank You for Joining Us

# Participating via WebEx:

- Please sign-in through WebEx application including your full name and company
- To reduce background noise and improve audio quality, all WebEx participants will be placed on mute when entering the meeting
- Please submit your questions via using the raise hand function and coming off mute or the chat function and we will answer at the best possible opportunity

# Forward Looking Information

This presentation includes certain forward-looking information. Statements that are forward-looking are based on certain assumptions and on what we know and expect today and generally include words like anticipate, expect, believe, may, will, should, estimate or other similar words.

The information provided is for informational purposes only and is not to be relied upon for any other purpose whatsoever. The information is based upon certain assumptions that may or may not be accurate, and therefore is subject to various risks and uncertainties. TC Energy shall not be liable for damages sustained as a result of any use or reliance on such information.

The outages listed in this presentation are not an exhaustive list. Outage date, duration, and impact may be subject to change. Refer to the Daily Operating Plan (DOP) for all planned outages with potential service impact.

No impact to FT

Refers to outage periods where FT impact is not expected

Potential impact to FT

Refers to outage periods where there is potential of FT impact

Partial impact to FT

Refers to outage periods where FT impact is expected





Outage information in this presentation may not be accurate beyond the June 9, 2022 NGTL/Foothills Customer Operations (WebEx only) meeting

For current outage information, please refer to the most recent Daily Operating Plan (DOP) on my.TC Customer Express

This meeting will only cover operational topics related to the NGTL and Foothills systems. For information on Commercial and Regulatory topics, please contact your Marketing Representative

# Tire Safety

- With proper maintenance and storage, tires can last 6-10 years
- Over time, the rubber degrades and can pose a potential risk
- Each tire has series of letters and numbers
  - The last four digits represent the week and year it was manufactured
- As there are no laws against selling old tires, next time you go and buy tires, make sure to check the manufactured date
- Also pay attention to tires that are not used as frequently, such as trailer or motorcycles

#### **DOT M64B IC1R 3317**



# Agenda



- 1. Projects Update
- 2. Review of May and June events
- 3. New Plant Turnaround Information Form
- 4. Review of DOP Outages
- 5. Storage Access
- 6. Open Floor & Verbal Updates

# Project Updates

# 2021 Expansion Project Update

100% scenario

90% scenario DVN and DVS

65% scenario DVN or DVS

30% scenario

#### Facilities already in-service (Map I.D. # 1, 2, 3, 8, 9)

• Robb (Map I.D. # 7) placed in service June 2nd

#### Deep Valley North (DVN) (Map I.D. # 4)

- Section 4 in service
- Section 1 completed
- Sections 2/3 anomaly digs required
  - Section 3 mobilizing week of June 13 (outside Caribou Zone)
  - Section 2 mobilizing post July 15 (inside Caribou Zone)

#### Deep Valley South (DVS) (Map I.D. #5)

 Activities remaining: Hydrotest, caliper, anomaly digs and commissioning

### Not required for the 65 or 90% Scenario

Colt, Little Smoky River trenchless crossing and adjacent 3km of pipeline

# Estimated in-service of 65 and 90% scenarios

September/October 2022

#### Remains subject to

Ground conditions, weather & road access/conditions

Team continues to evaluate opportunities to expedite construction safely and within compliance

**Note:** EDML/Clearwater/WestPath 2022 capacity requires NGTL 2021 Expansions to be in service



# Other Project Updates – NGTL

#### **Edson Mainline Expansion**

- Elk River (Map I.D. # 16) completed 32 km of mainline
  - Mobilize for Season 2 early July for remaining 8 km
- Alford Creek (Map I.D. # 17) completed 43 km of mainline, major water courses, road and pipeline corridor
  - Mobilize for Season 2 early June for remaining 3 km

#### North Corridor Expansion (Bear Canyon (Map I.D. # 20), North Star (Map I.D. # 22), Red Earth(Map I.D. # 23))

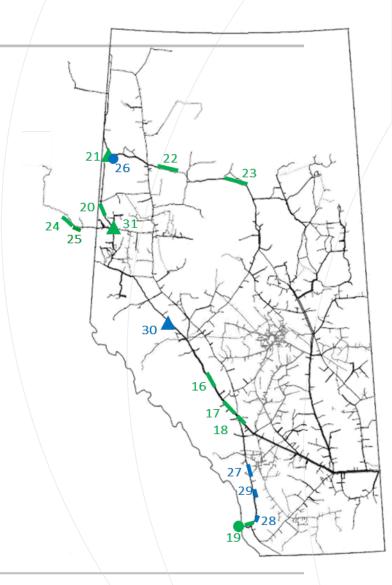
- Early clearing in Q1 2022 and camp site preparation mid-May 2022
- Mainline construction in Q3 2022
- Construction plans are being assessed to mitigate risks on sections of Red Earth
  - All sections are required to be in service for full NCE capacity

#### Sunrise (Map I.D. # 24) and Saturn (Map I.D. # 25)

Mainline construction in Q3 2022

#### West Path 2022/2023

- Raven (Map I.D. # 18) /ABC (Map I.D. # 19) clearing Q1 2022 and mobilization for mainline construction in May/June
- Turner Valley (Map I.D. # 27) /Lundbreck (Map I.D. # 28) /Longview (Map I.D. # 29) CER issued report. Awaiting GIC approval

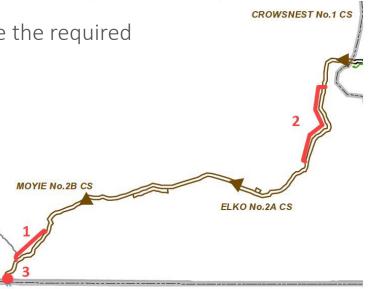




# Other Project Updates – FH

#### West Path 2022/2023

- Yahk (Map I.D. # 1) Clearing Q1 2022 and mobilization for mainline construction in June
  - Working to address potential rightsholders and landowner construction and environmental concerns
- Elko (Map I.D. # 2) Mobilizing in June and clearing commences July 1
  - Working closely with municipal and federal agencies to provide the required information for outstanding permits and land rights



# Review of May and June Events

# Early May – EGAT





#### Why were EGAT flows higher than capability?

#### Outages located in the USJR area

- DOP entries in both USJR and FGAT areas.
- Decrease in capability shown for EGAT is to signify that <u>IF</u>
   USJR supply exceeded USJR capability, a broad area
   restriction curtailing EGAT IT-D could be applied to reduce
   flows through the bottleneck prior to impacting FT-R

#### Low Intra-provincial demand

 Resulting in lower flows up the North Lateral (NLAT) and lower flows at major interconnects in EGAT

#### Low West Gate demand

Resulting in more supply that could be redirected to EGAT



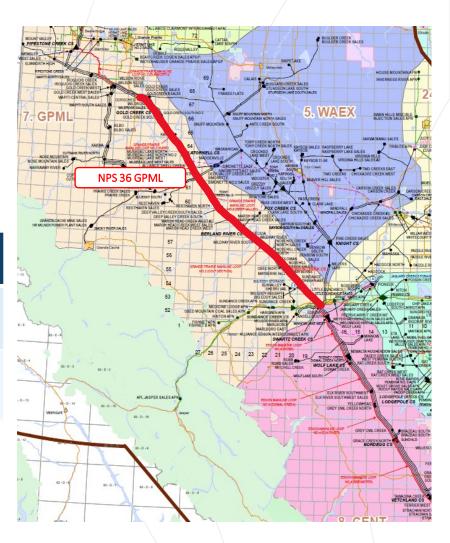
## NPS 36 Grande Prairie Mainline Pipeline Maintenance

#### **Background:**

- Planned NPS 36 Grande Prairie Mainline Pipeline Maintenance May 20 29
- Service Allowable:
  - USJR: 0% IT-R, 100% FT-R
  - Lower EGAT: Partial IT-D, 100% FT-D (132 10<sup>6</sup>m<sup>3</sup>/d)

Bulletin Date	Effective Date	Service Allowable	Comments
May 17	May 20 (08:00 MST)	0% IT-R, 100% FT-R (USJR) Partial IT-D, 100% FT-D (Lower EGAT)	Bulletin issued
May 26	May 30 (08:00 MST)	100% IT-R, 100% FT-R (USJR)	Pipeline maintenance expected to be completed as scheduled on May 29, 2022; End of USJR IT-R restriction

Partial IT-D, 100% FT-D (Lower EGAT) remains in place due to the Jenner Compressor Station outage



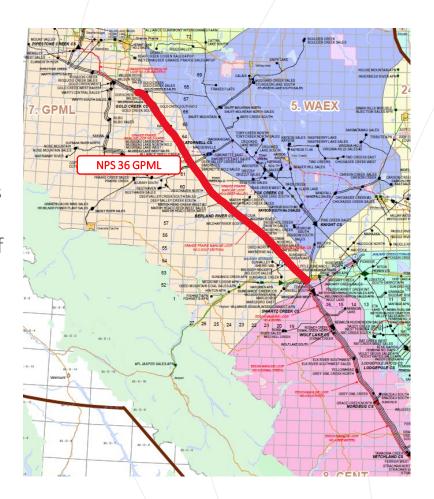




## NPS 36 Grande Prairie Mainline Pipeline Maintenance

#### What Happened?

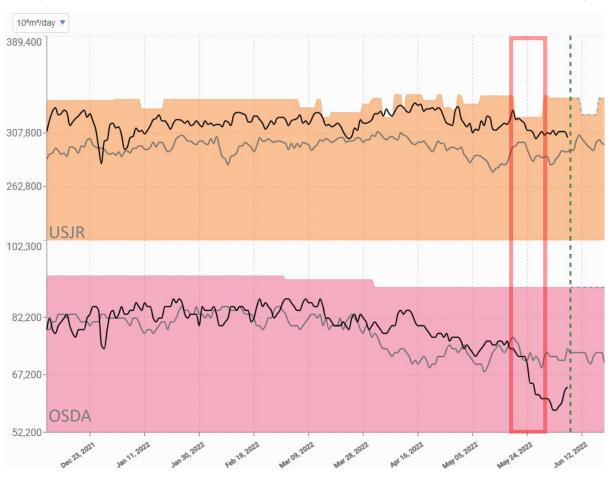
- May 20 29: EGAT Authorization level = 132 10<sup>6</sup> m<sup>3</sup>/d
  - ~390-450TJs of IT-D authorized as communicated in the evening cycle bulletins
- May 20: Storage injection shifted from EGAT storage locations (downstream of the bottleneck) to the USJR storage locations (upstream of the bottleneck)
- Mid-way through: Unreported plant turnarounds commenced at:
  - Major plants in the OSDA (mostly in Segment 10)
  - Some plants in USJR (mostly in Segment 7)
  - No change in total storage injection



# NPS 36 Grande Prairie Mainline Pipeline Maintenance



Why wasn't the restriction lifted when USJR flows were visibly lower than capability?



- Very low OSDA demand (Unreported PTAs)
  - Resulting in lower flows across the NCC (major egress flow path for USJR supply) and reducing USJR capability
  - Partially offset by unreported PTAs in USJR
- Outage capabilities are dynamic
  - DOP capability is based on the best information and assumptions leading up to the outage
  - Actual capability during the outage can fluctuate day by day. In this case, the outage capability significantly decreased when the unreported PTAs commenced

System was operating right up to its maximum capability and all facilities ran reliably throughout the NPS 36 GPML pipeline maintenance work





#### **Background:**

- Planned Jenner Compressor Station Maintenance May 28 June 12
- Capability communicated in DOP: 146 106m3/d
  - Increased in DOP from 140 106m3/d to 146 106m3/d on May 26
- Service Allowable:
  - Lower EGAT: Partial IT-D, 100% FT-D

Bulletin Date	Effective Date	Service Allowable	Comments
May 26	May 20 (08:00 MST)	Partial IT-D, 100% FT-D (146) (Lower EGAT)	Bulletin published communicating continuation of Partial IT-D restriction following NPS 36 GPML ILI
	June 1	Partial IT-D, 100% FT-D (150) (Lower EGAT)	Authorization level increased from 146 $10^6 \text{m}^3/\text{d}$ to 150 $10^6 \text{m}^3/\text{d}$
June 1	June 2 (08:00 MST)	100% IT-D, 100% FT-D (Lower EGAT)	Bulletin published communicating end of Partial IT-D restriction as result of lower demand than authorized quantities



### Jenner Compressor Station Maintenance



#### Why was the EGAT Partial IT-D kept in place following the NPS 36 GPML ILI?

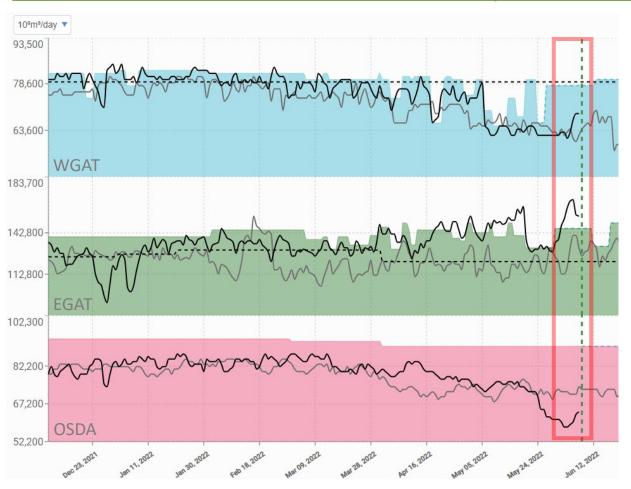
- West Gate demand was expected to increase
  - Downstream maintenance limiting overall WPATH capability was expected to be completed May 28 which would have resulted in less supply available for EGAT
- Jenner Compressor Station is located within the EGAT area
  - Outage results in an actual EGAT delivery capability constraint. As a result, we did not expect to have the capability for flows to return to levels seen prior to the GPML ILI







#### What allowed us to lift the restriction and why were EGAT flows higher than capability again?



#### Lower demand than authorized quantities

 Shippers not fully utilizing what was being authorized to them (EGAT authorization level was increased from 146 to 150 10<sup>6</sup>m<sup>3</sup>/d and was being fully authorized, but very minimal change in utilization was observed)

#### Low Intra-provincial demand remained

 Ongoing unreported PTAs resulting in very low OSDA/NEDA demand and low flows up the NLAT

#### Low West Gate demand remained

 Downstream maintenance work was extended longer than originally anticipated allowing more supply for EGAT

#### High overall system linepack

 Downstream upsets on interconnecting systems at the major borders resulted in high OBA accounts and linepack significantly higher than target

# New Plant Turnaround Information Form

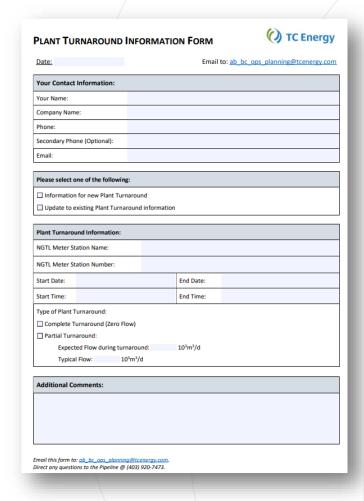
### Plant Turnaround Information Form

- Where possible, we will continue to make all efforts to align maintenance with customer maintenance activities to maximize coordination opportunities and minimize impacts
- All customer specific information received will remain strictly confidential within the outage planning and coordination teams
- Please provide dates and schedules as they are developed and submit updates as necessary. Information may be provided at any time

#### Most common places to find the form:

- Customer Express
- Bottom of the Daily Operation Plan (DOP)

Where to send the form: ab bc ops planning@tcenergy.com



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Plant turnaround information is VERY important to us!
Please report your maintenance and turnaround schedules for 2022 and beyond
Click HERE for the PTA form

# Review of DOP Outages From DOP as of Wednesday, June 8

# Daily Operating Plan (DOP) – Current Assumptions

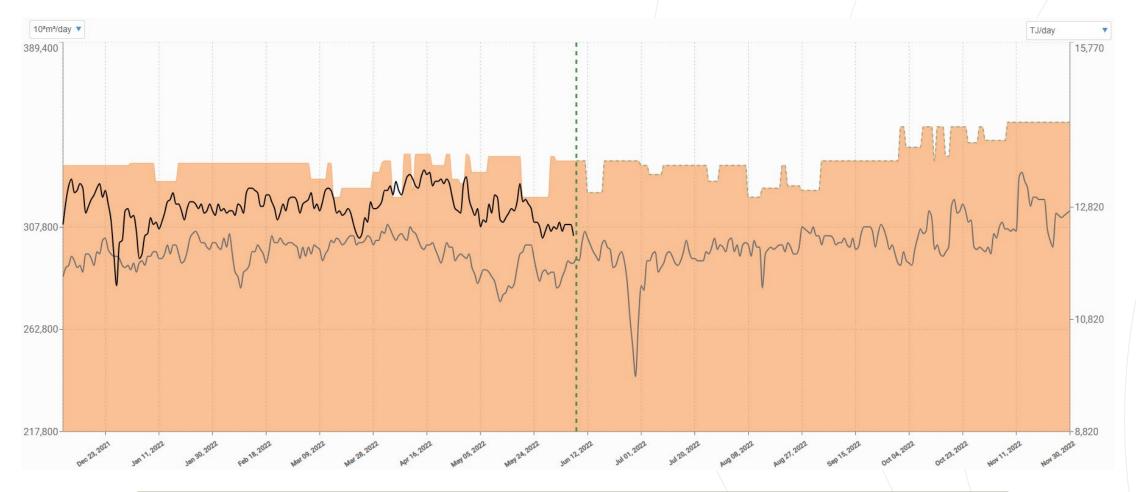
- No change to facility assumptions since the last Customer Operations Meeting on May 13, 2022
- April 1, 2022 through to September 30, 2022 assume all 2021 expansion facilities are in-service with the exception of the Deep Valley and Colt sections (comparable to 30% of the project's total capability on a design capacity basis)
- Beyond October 1, 2022 assumes all 2021 expansion facilities are in-service with the exception of the Colt section (comparable to 90% of the project's total capability on a design capacity basis)

Outages and/or maintenance work is posted to the DOP if there is reasonable expectation that the event could or will result in a change to service authorization levels.

Optimization efforts are ongoing and we will continue focus on safety, optimizing system capacity, and minimizing outage impacts.

#### **Upstream James River**







## Upstream James River Receipt Area (USJR)

No impact to FT

Potential impact to FT

Partial impact to FT

Outage Description	Start	End	USJR Outage Capability (10 <sup>6</sup> m³/d)	USJR Impact (10 <sup>6</sup> m³/d)	Area Outage Capability (10 <sup>6</sup> m³/d)	Outage Area Typical Flows (10 <sup>6</sup> m³/d)	Service Allowable Location/Area
Goodfish – Compressor Station Maintenance	12-Jun-22	17-Jun-22	327	10	N/A	280-320	Potential impact to FT-R USJR
Meikle River C – Compressor Station Maintenance	12-Jun-22	17-Jun-22	323	14	N/A	280-320	Potential impact to FT-R USJR
Knight – Compressor Station Maintenance	4-Jul-22	8-Jul-22	331	4	N/A	280-320	Potential impact to FT-R USJR
Swartz Creek – Compressor Station Maintenance	25-Jul-22	28-Jul-22	328	7	N/A	280-320	Potential impact to FT-R USJR
Berland River – Compressor Station Maintenance	8-Aug-22	12-Aug-22	321	14	N/A	280-320	Potential impact to FT-R USJR
Berland River B2 – Compressor Station Maintenance	8-Aug-22	19-Aug-22	325	10	N/A	280-320	Potential impact to FT-R USJR
Latornell – Compressor Station Maintenance	22-Aug-22	27-Aug-22	326	9	216	165-205	Potential impact to FT-R USJR U/S of Berland*
Otter Lake A1 – Compressor Station Maintenance	27-Aug-22	2-Sep-22	324	11	N/A	280-320	Potential impact to FT-R USJR
Woodenhouse C3 – Compressor Station Maintenance	27-Aug-22	2-Sep-22	324	11	N/A	280-320	Potential impact to FT-R USJR
Otter Lake – Compressor Station Maintenance	3-Oct-22	8-Oct-22	343	9	N/A	280-320	Potential impact to FT-R USJR
Saddle Hills B3 – Compressor Station Maintenance	13-Oct-22	13-Oct-22	337	15	214	160-190	Potential impact to FT-R USJR U/S of Latornell

<sup>\*</sup>Risk to FT-R expected to be within a subset of USJR only. If adequate downstream IT-D exists to offset an FT-R curtailment, area of IT-D curtailment could include portions of segments 7, 8, and 9 based on hydraulic equivalency analysis and location of the bottleneck.



For the purposes of the operational capability charts and outage impacts, NGTL has assumed the 30% scenario for April 1 – Sept 30, 2022 and the 90% scenario thereafter for East Gate and USJR. As of May 12, 2022, this is the most likely scenario NGTL expects but may be subject to change based on changing circumstances. Please refer to the NGTL bulletin posted on May 12, 2022.

### Upstream James River Receipt Area (USJR)

No impact to FT

Potential impact to FT

Partial impact to FT

Outage Description	Start	End	USJR Outage Capability (10 <sup>6</sup> m³/d)	USJR Impact (10 <sup>6</sup> m³/d)	Area Outage Capability (10 <sup>6</sup> m³/d)	Outage Area Typical Flows (10 <sup>6</sup> m³/d)	Service Allowable Location/Area
Paul Lake – Compressor Station Maintenance	17-Oct-22	18-Oct-22	339	13	N/A	280-320	Potential impact to FT-R USJR
Alces River – Compressor Station Maintenance	17-Oct-22	18-Oct-22	340	12	N/A	280-320	Potential impact to FT-R USJR
Clearwater – Compressor Station Maintenance	25-Oct-22	28-Oct-22	345	7	N/A	280-320	Potential impact to FT-R USJR
Hidden Lake North – Compressor Station Maintenance	31-Oct-22	7-Nov-22	346	8	224	160-190	Potential impact to FT-R USJR U/S of Latornell



#### Alberta-B.C. Border

(includes both NGTL and Foothills BC outages)





For the purposes of the operational capability charts and outage impacts, NGTL has assumed the 30% scenario for April 1 – Sept 30, 2022 and the 90% scenario thereafter for East Gate and USJR. As of May 12, 2022, this is the most likely scenario NGTL expects but may be subject to change based on changing circumstances. Please refer to the NGTL bulletin posted on May 12, 2022.

# West Gate Delivery Area (WGAT) Foothills Zone 8 (FHBC)

No impact to FT

Potential impact to FT

Partial impact to FT

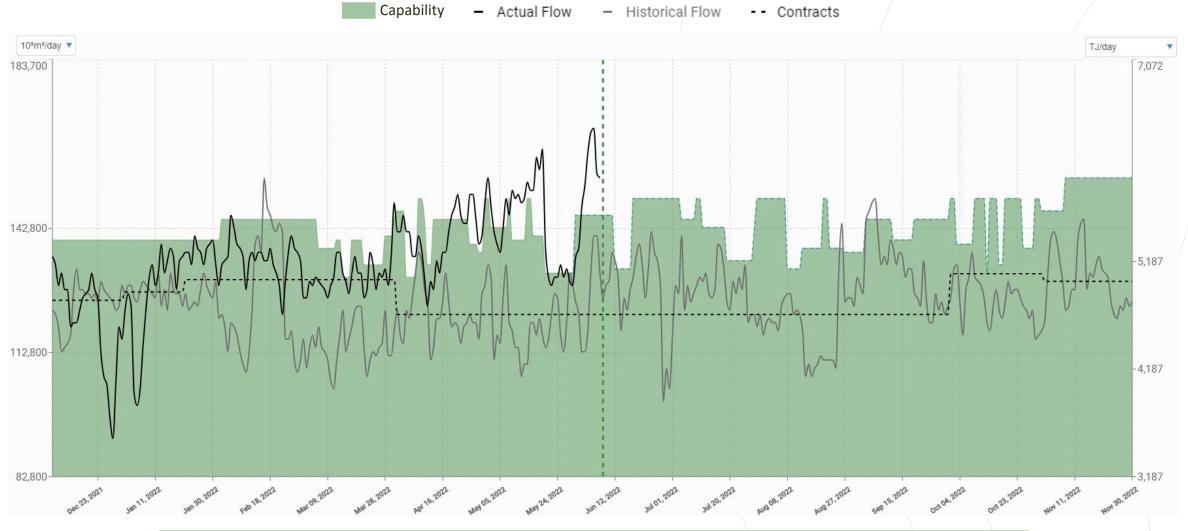
Outage Description	Start	End	Capability/ Allowable (10 <sup>6</sup> m³/d)	Impact (10 <sup>6</sup> m³/d)	System	Service Allowable Location/Area
NPS 24 South Lateral – Pipeline Maintenance*	25-May-22	12-Jun-22	78	2	NGTL	Potential Impact to FT-D Alberta/BC and Alberta/Montana Borders
Winchell Lake – Compressor Station Maintenance*	27-Jun-22	1-Jul-22	75	5	NGTL	Potential Impact to FT-D Alberta/BC and Alberta/Montana Borders Segments 22 and partial 21
Crowsnest B – Compressor Station Maintenance*	11-Jul-22	15-Jul-22	73	7	FHBC	Potential Impact to FT Alberta/BC Border Foothills BC
NPS 36 FPL Zone 7 Western Leg 1B – Pipeline Maintenance*	19-Jul-22	<mark>23-Jul-22</mark>	78	2	NGTL	Potential Impact to FT Alberta/BC and Alberta/Montana Borders Segments 22 and partial 21
NPS 36 BC Mainline – Pipeline Modifications	5-Aug-22	14-Aug-22	70	10	FHBC	Potential Impact to FT Alberta/BC Border Foothills BC
NPS 48 BC Mainline Loop - Pipeline Modifications	<del>1-0ct-22</del>	<del>11-Oct-22</del>	<del>68</del>	<del>12</del>	FHBC	Potential Impact to FT Alberta/BC Border Foothills BC
NPS 42 Western Alberta System Mainline Loop – Pipeline Maintenance	1-Oct-22	10-Oct-22	60	20	NGTL	Potential Impact to FT-D Alberta/BC and Alberta/Montana Borders
NPS 36 BC Mainline – Pipeline Maintenance	19-Oct-22	25-Oct-22	54	26	FHBC	Potential Impact to FT Alberta/BC Border Foothills BC
NPS 36 WAS Mainline – Pipeline Modifications	8-Nov-22	19-Nov-22	66	17	NGTL	Potential Impact to FT-D Alberta/BC Border
Turner Valley A1 and A2 – Compressor Station Maintenance	8-Nov-22	21-Nov-22	76	7	NGTL	Potential Impact to FT-D Alberta/BC and Alberta/Montana Borders

<sup>\*</sup>Aligned with downstream maintenance that is expected to be limiting West Path capability



For the purposes of the operational capability charts and outage impacts, NGTL has assumed the 30% scenario for April 1 – Sept 30, 2022 and the 90% scenario thereafter for East Gate and USJR. As of May 12, 2022, this is the most likely scenario NGTL expects but may be subject to change based on changing circumstances. Please refer to the NGTL bulletin posted on May 12, 2022.

#### **East Gate**





#### East Gate Delivery Area (EGAT)

No impact to FT

Potential impact to FT

Partial impact to FT

Outage Description	Start	End	Capability (10 <sup>6</sup> m <sup>3</sup> /d)	Impact (10 <sup>6</sup> m <sup>3</sup> /d)	System	Service Allowable Location/Area
Jenner - Compressor Station Maintenance		12-Jun-22	<mark>146</mark>	<mark>4</mark>	FHAB	No impact to FT-D anticipated Empress/McNeill Borders Segments 15, 16, 17, 18, 19, 20, 23, partial 21, and partial 28
Crawling Valley – Compressor Station Maintenance		24-Jul-22	143	7	FHAB	No impact to FT-D anticipated Empress/McNeill Borders Segments 15, 16, 17, 18, 19, 20, 23, partial 21, and partial 28
NPS 36 Eastern Alberta System Mainline Loop 2 – Pipeline Maintenance	19-Jul-22	27-Jul-22	135	15	NGTL	No impact to FT-D anticipated Empress/McNeill Borders Segments 15, 16, 17, 18, 19, 20, 23, partial 21, and partial 28
Clearwater A6 – Compressor Station Maintenance	15-Aug-22	18-Aug-22	139	11	NGTL	No impact to FT-D anticipated Empress/McNeill Borders Segments 15, 16, 17, 18, 19, 20, 23, partial 21, and partial 28
Schrader Creek – Compressor Station Maintenance	22-Aug-22	31-Aug-22	139	11	NGTL	No impact to FT-D anticipated Empress/McNeill Borders Segments 15, 16, 17, 18, 19, 20, 23, partial 21, and partial 28
Acme – Compressor Station Maintenance	12-Sep-22	18-sept-22	140	5	FHAB	No impact to FT-D anticipated Empress/McNeill Borders Segments 15, 16, 17, 18, 19, 20, 23, partial 21, and partial 28



For the purposes of the operational capability charts and outage impacts, NGTL has assumed the 30% scenario for April 1 – Sept 30, 2022 and the 90% scenario thereafter for East Gate and USJR. As of May 12, 2022, this is the most likely scenario NGTL expects but may be subject to change based on changing circumstances. Please refer to the NGTL bulletin posted on May 12, 2022.

#### East Gate Delivery Area (EGAT)

No impact to FT

Potential impact to FT

Partial impact to FT

Outage Description	Start	End	Capability (10 <sup>6</sup> m <sup>3</sup> /d)	Impact (10 <sup>6</sup> m <sup>3</sup> /d)	System	Service Allowable Location/Area
Beiseker B3 - Compressor Station Maintenance	3-Oct-22	3-Oct-22	143	7	NGTL	No impact to FT-D anticipated Empress/McNeill Borders Segments 15, 16, 17, 18, 19, 20, 23, partial 21, and partial 28
Clearwater – Compressor Station Maintenance	25-Oct-22	28-Oct-22	138	10	NGTL	No impact to FT-D anticipated Empress/McNeill Borders Segments 15, 16, 17, 18, 19, 20, 23, partial 21, and partial 28



For the purposes of the operational capability charts and outage impacts, NGTL has assumed the 30% scenario for April 1 – Sept 30, 2022 and the 90% scenario thereafter for East Gate and USJR. As of May 12, 2022, this is the most likely scenario NGTL expects but may be subject to change based on changing circumstances. Please refer to the NGTL bulletin posted on May 12, 2022.

#### Foothills Zone 9 (FHSK)

No impact to FT

Potential impact to FT

Partial impact to FT

Outage Description	Start	End	Capability (10 <sup>6</sup> m <sup>3</sup> /d)	System	Service Allowable Location/Area
NPS 42 Foothills Mainline Zone 9 – Pipeline Maintenance	16-Nov-22	28-Nov-22	25	FHSK	No impact to FT anticipated  Monchy Border  Foothills Saskatchewan



#### Oil Sands Delivery Area





Northeast Delivery Area (NEDA) Oil Sands Delivery Area (OSDA)

No impact to FT

Potential impact to FT

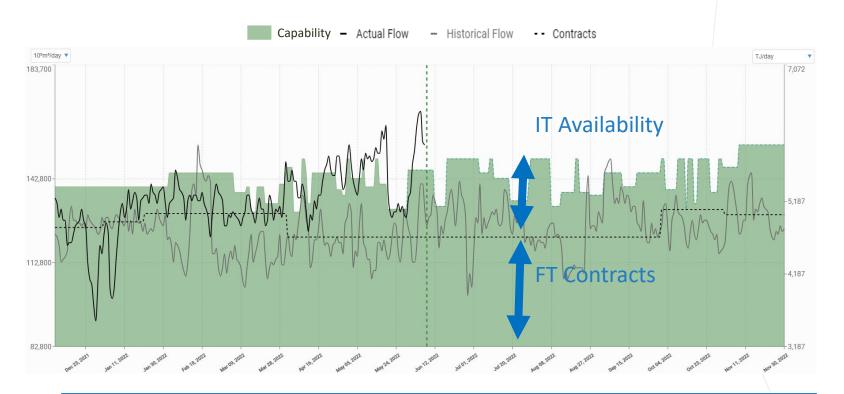
Partial impact to FT

There are currently no outages planned that are specific to OSDA or NEDA



# Storage Access

# Understanding EGAT IT Availability



By using transfers to storage, projected IT, and accessing upstream locations, access to storage is available for the 2022 summer should customers choose to inject.

A snap-shot of Interruptible
 Access to EGAT, for remainder of
 the summer season can be ~100
 Bcf (assuming 100% FT
 utilization; operating assumptions
 hold true, no unplanned outages,
 market choices, etc.)

#### Access to Storage:

- 1. IT service
- 2. Unutilized FT
- 3. FT transfer to storage
- 4. Upstream storage injection capability may be available



# Open Floor & Verbal Updates

### **Contacts**

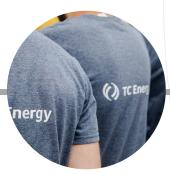
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