

# Slide deck revisions

---

## Agenda item 4. “Update on launch of DOP 2.0” (Slides 41 to 53)

Due to the recent developments regarding COVID -19, TC Energy internally assessed that agenda item number 4 “Update on launch of DOP 2.0” does not qualify as business critical.

Although associated material for the agenda item was included in the slide deck, the topic was not discussed at the March 17, 2020 Customer Operations meeting. TC Energy will provide further information on this topic at a more suitable time.

If you would like more information this topic, please reach out: [action\\_team@tcenergy.com](mailto:action_team@tcenergy.com)



# NGTL System and Foothills Pipe Lines Ltd.

## Customer Operations Meeting

March 17, 2020



# 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
- Please submit your questions via the chat function and we will answer them as time permits
- Please follow up with your marketing reps with any questions that are unanswered during the meeting

# 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**

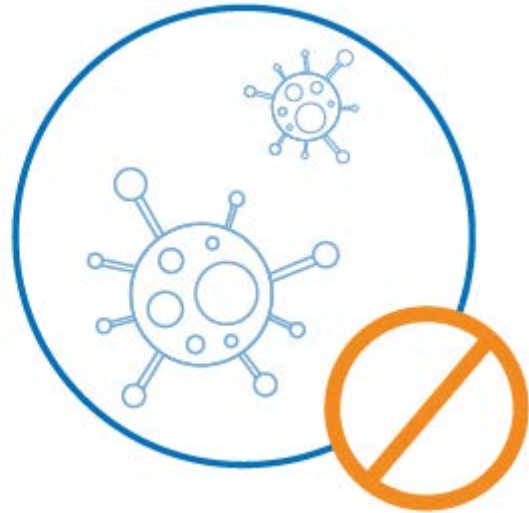
Refers to outage periods where there is potential of FT impact

**Partial  
impact to FT**

Refers to outage periods where FT impact is expected

# Safety Moment – COVID-19 Prevention

**Stop the  
spread  
of germs**



Avoid close contact with people who are sick



Cover your cough or sneeze with a tissue, then throw the tissues in the trash



Avoid touching your eyes, nose and mouth



Clean and disinfect frequently touched objects and surfaces



If you notice symptoms, take the Alberta Health Services self-assessment test and call 811



Wash your hands often with soap and water for at least 20 seconds

# Our focus during COVID-19

---

- Protect our teams, partners and communities
- Ensure no interruption to our customers
- Secure supply of critical equipment and services with our partners

**Notice something is off?**

Please reach out: [Marketing Reps](#) or 403.920.PIPE

# Agenda

---

1. Temporary Service Protocol (TSP)
  - Background
  - System operations management overview
2. Review outages in Daily Operating Plan (DOP)
3. Weekend processing of NGTL transactions
4. Update on launch of DOP 2.0



TEMPORARY SERVICE PROTOCOL  
Background



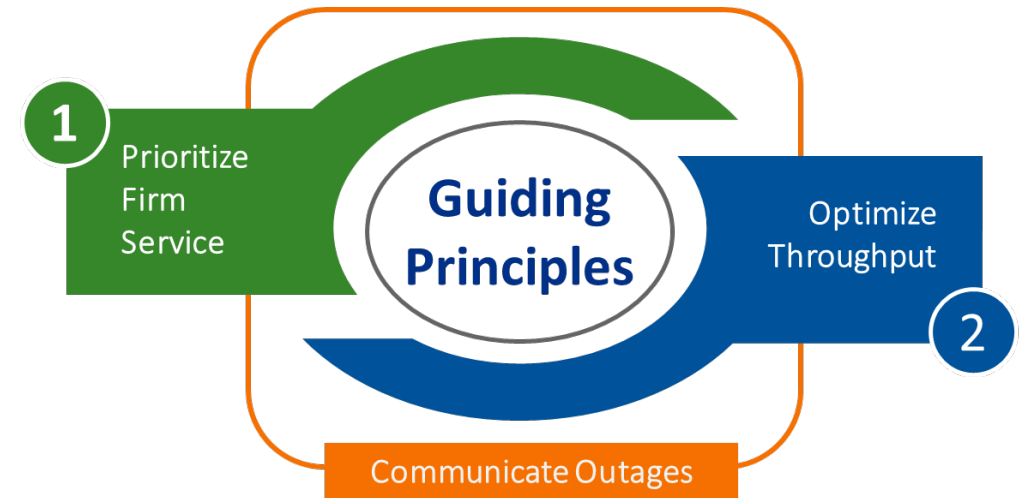
# How We Manage the NGTL System

System managed in accordance with NGTL tariff and guiding principles:

- Maximize availability of firm service
- Optimize throughput

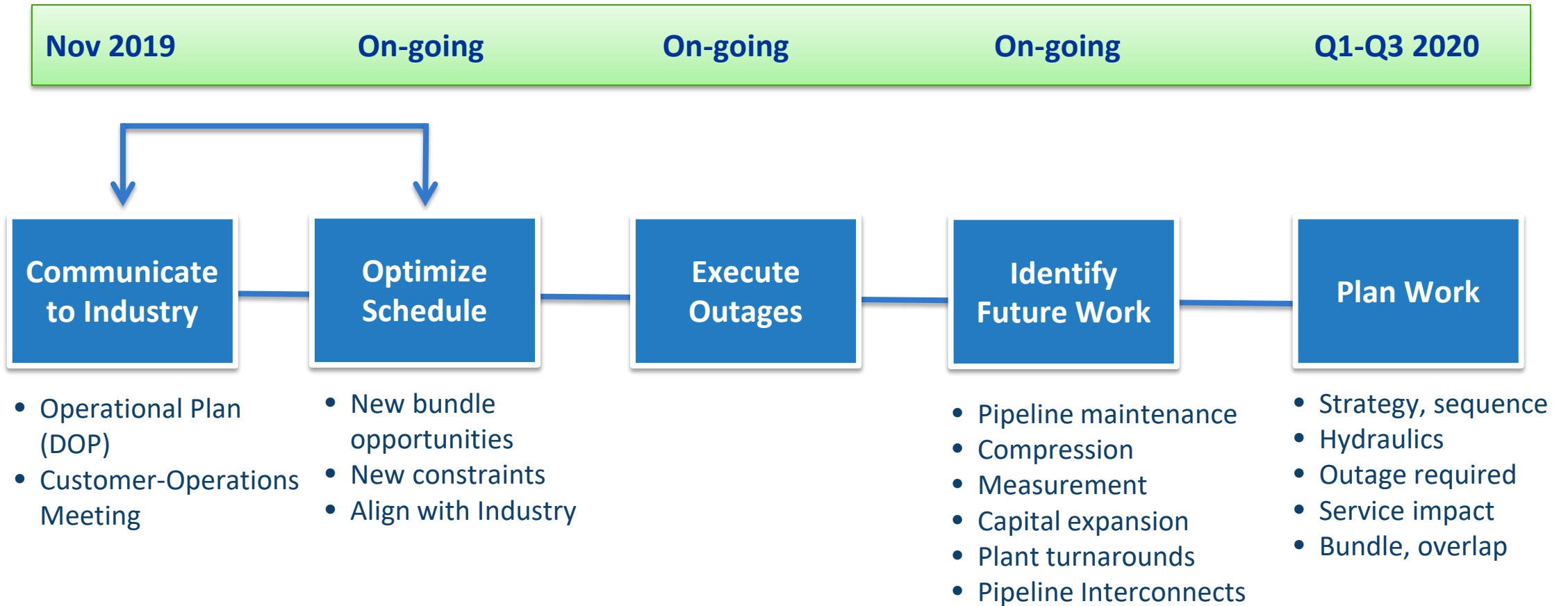
System constraints managed by:

- Firstly, reducing IT availability
- Secondly, reducing FT availability if IT reductions are not sufficient

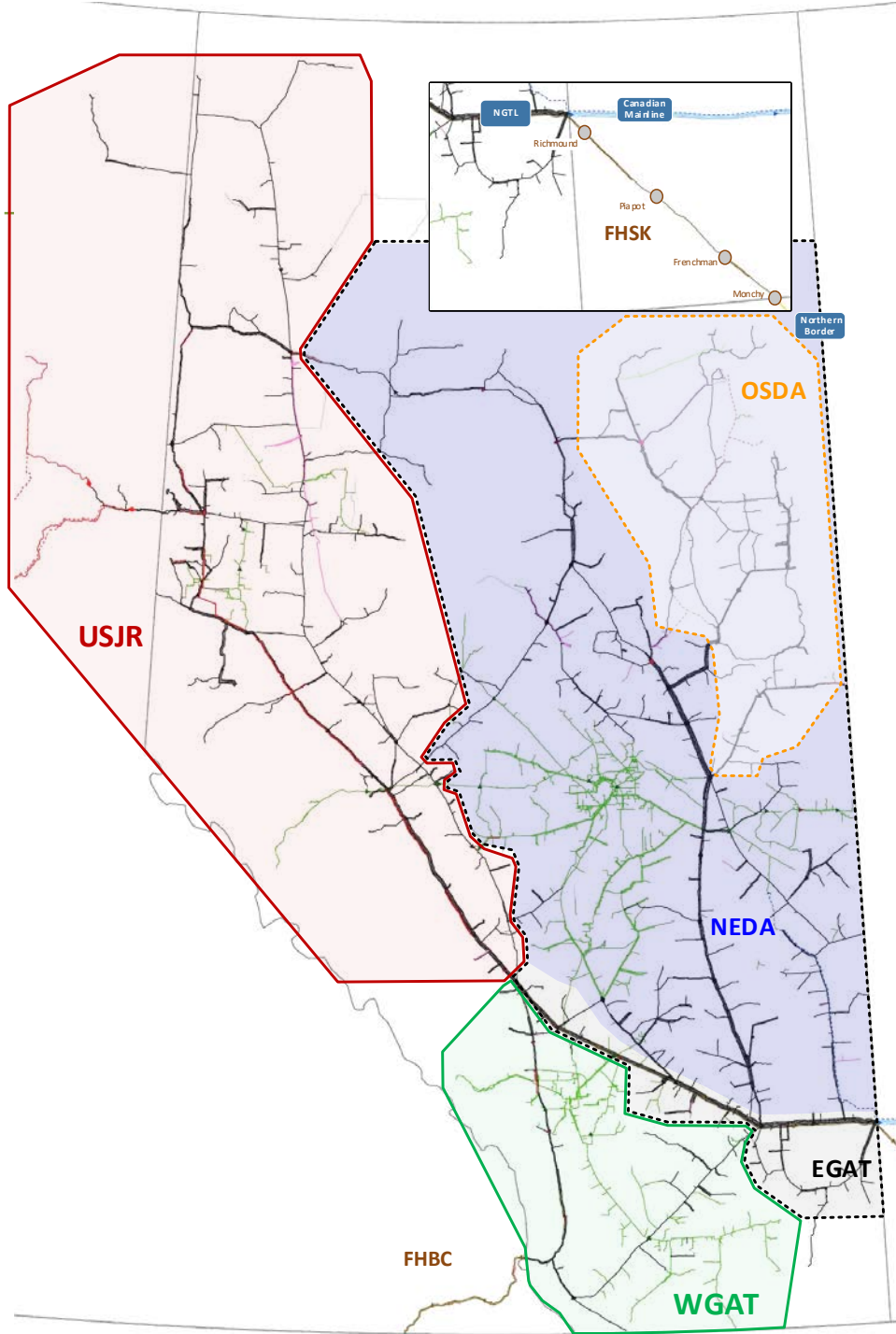


*NGTL system is managed by the “normal tariff practices”*

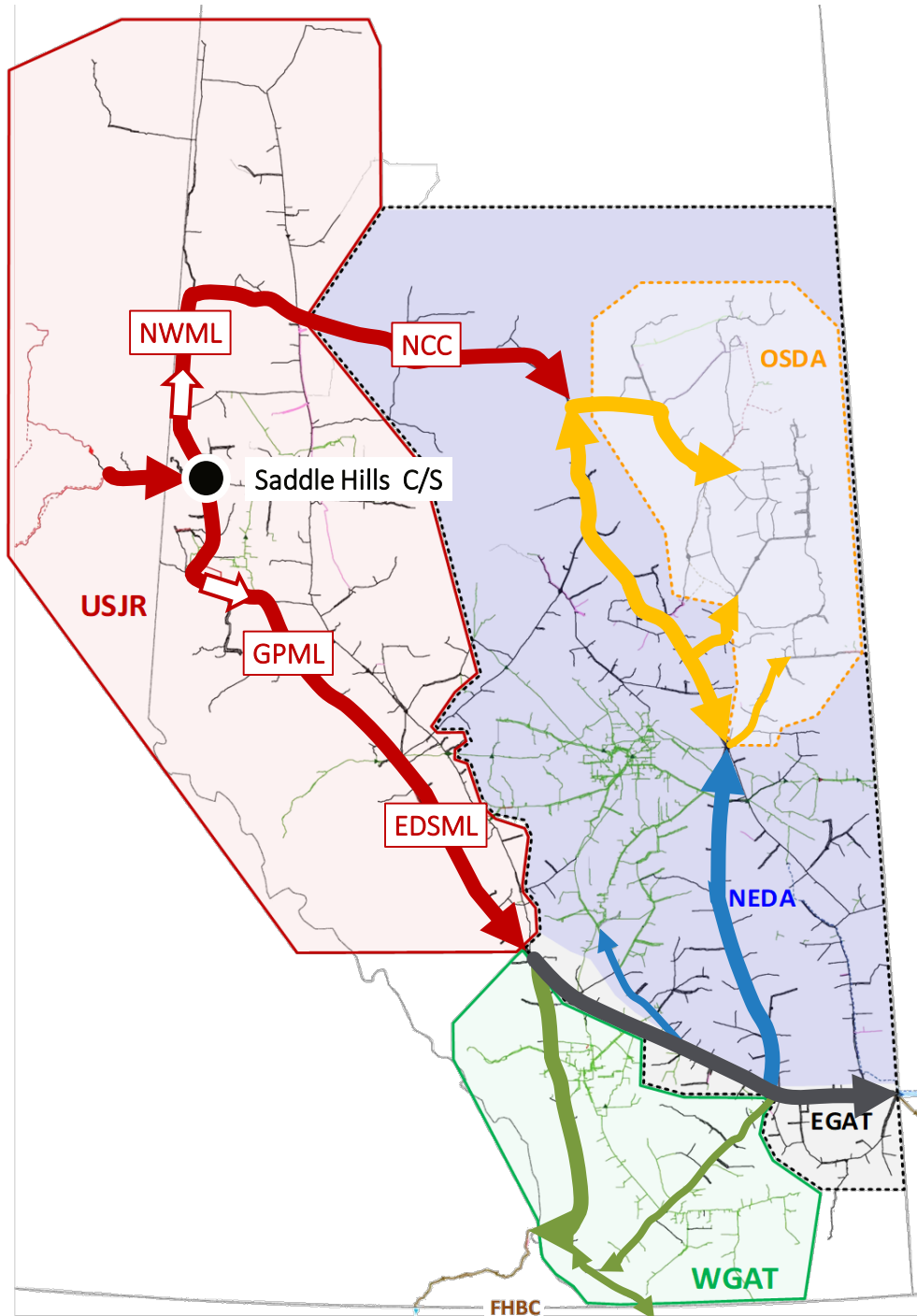
# 2020 Program Timeline



# Area Definitions



USJR	Upstream James River receipt area
WGAT	Western Gate delivery area
EGAT	Eastern Gate delivery area
NEDA	Northeast delivery area (subset of EGAT)
OSDA	Oilsands delivery area (subset of EGAT)
FHBC	Foothills BC system
FHSK	Foothills Saskatchewan system



# Primary Flow Paths

USJR: Moves majority of receipts to all market areas

WGAT: Serves both export and intra basin

EGAT: Serves export, intra basin, and storage

- NEDA: Subsystem of EGAT serving northeast Alberta delivery area (NEDA)
- OSDA: Subsystem of NEDA serving Oilsands delivery area (OSDA)

# TSP Definitions

---

## Planned

- Change in service availability communicated > 48 hours from start date (per tariff)  
(Majority of planned work is communicated 3-6 months from start date)

## Unplanned

- Unknowable events, change in service availability communicated < 48 hours from start date

## TSP Eligible Area

- At or upstream of Clearwater Compressor and Woodenhouse Compressor Stations

# Temporary Service Protocol (TSP)

---

## When does TSP apply

All three criteria noted below must be met:

- Outages starting from April 1, 2020 to October 31, 2020
- During periods of planned outages on the NGTL system
- At or upstream of Woodenhouse or Clearwater compressor stations

- Outages starting on November 1, 2020 and beyond
- Not applicable to unplanned outages
- Downstream of Woodenhouse or Clearwater compressor stations
- Day-to-day supply/demand management outside of planned upstream maintenance windows

## When does TSP not apply

# Look back at 2019

---

Date	Events
August 26, 2019	NGTL applied to the NEB for a temporary tariff amendment pursuant to Section 60 (1) (b) of the National Energy Board Act
September 26, 2019	CER approved Temporary Service Protocol (TSP)
September 30, 2019	TSP came into effect
November 10, 2019	Last TSP applicable completed

# TSP 2019 – Thoughts and Lessons Learned

---

## Clear communication is paramount

- TSP applicable outage does not necessitate an FT-R cut
- Bulletins/DOP need to clearly articulate context and how service will be managed
- Largest outage constraint drives restriction methodology

## Schedule maintenance to avoid TSP start/end dates (April 1/October 31)

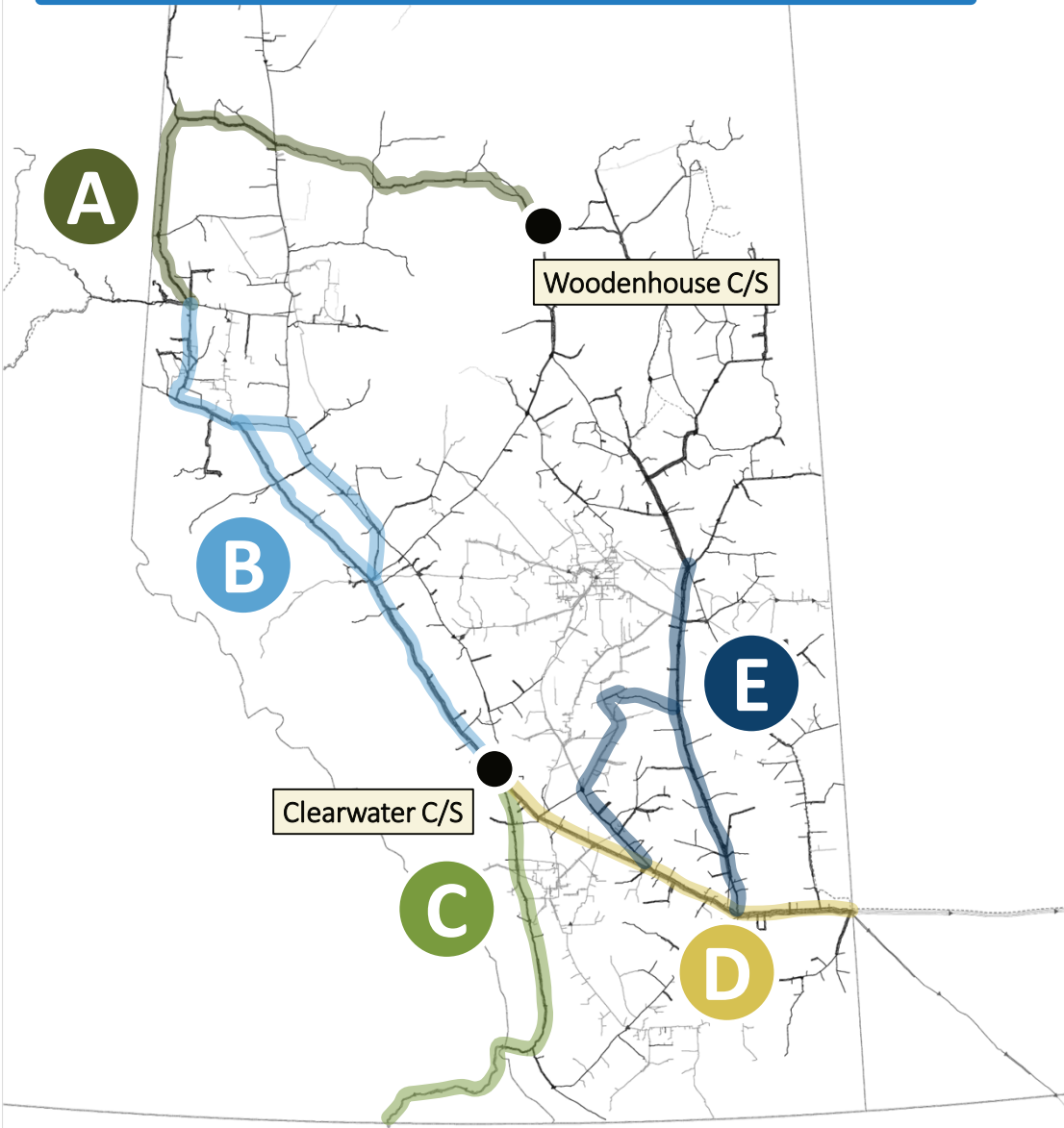
- Outages only scheduled across start/end dates only if absolutely necessary (ISD impact, safety/integrity drivers)





TEMPORARY SERVICE PROTOCOL  
System Operations Management Overview

Service availability is more likely to be reduced by outages on the highlighted paths versus other paths



For informational purposes only

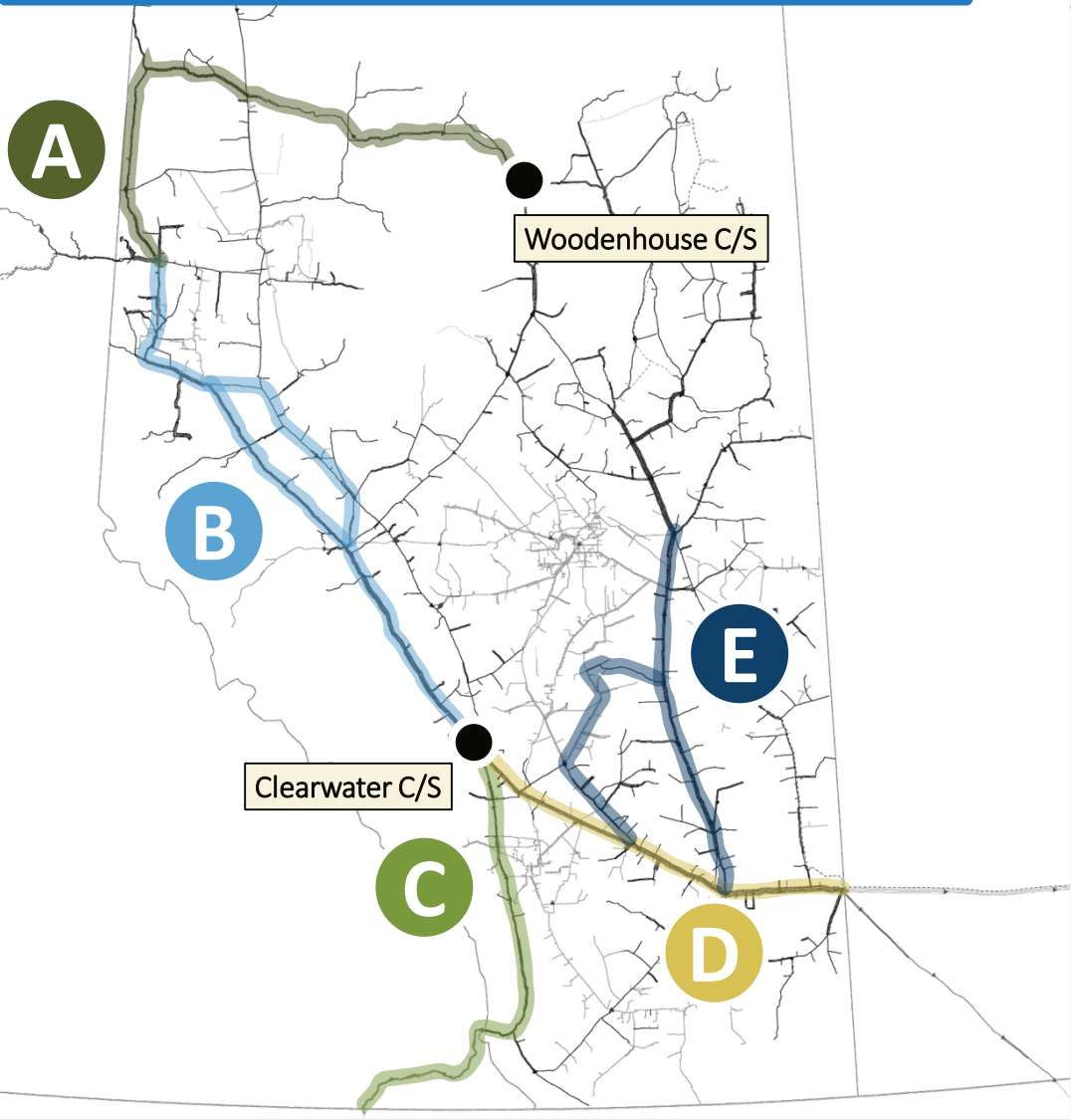
## Flow Path Relationships and Impact Assessment

Normal Tariff Practice

Potential for reduced service availability:

- A** Upstream FT-R and/or downstream IT-D/IT-S
- B** Upstream FT-R or downstream IT-D/IT-S
- C** WGAT/FHBC deliveries only (NGTL or FHBC)
- D** EGAT deliveries only (includes NEDA/OSDA)
- E** NEDA deliveries only (includes OSDA)

outages on paths C, D, and E are not eligible for TSP



For informational purposes only

## Flow Path Relationships and Impact Assessment

Temporary Service Protocol (TSP)

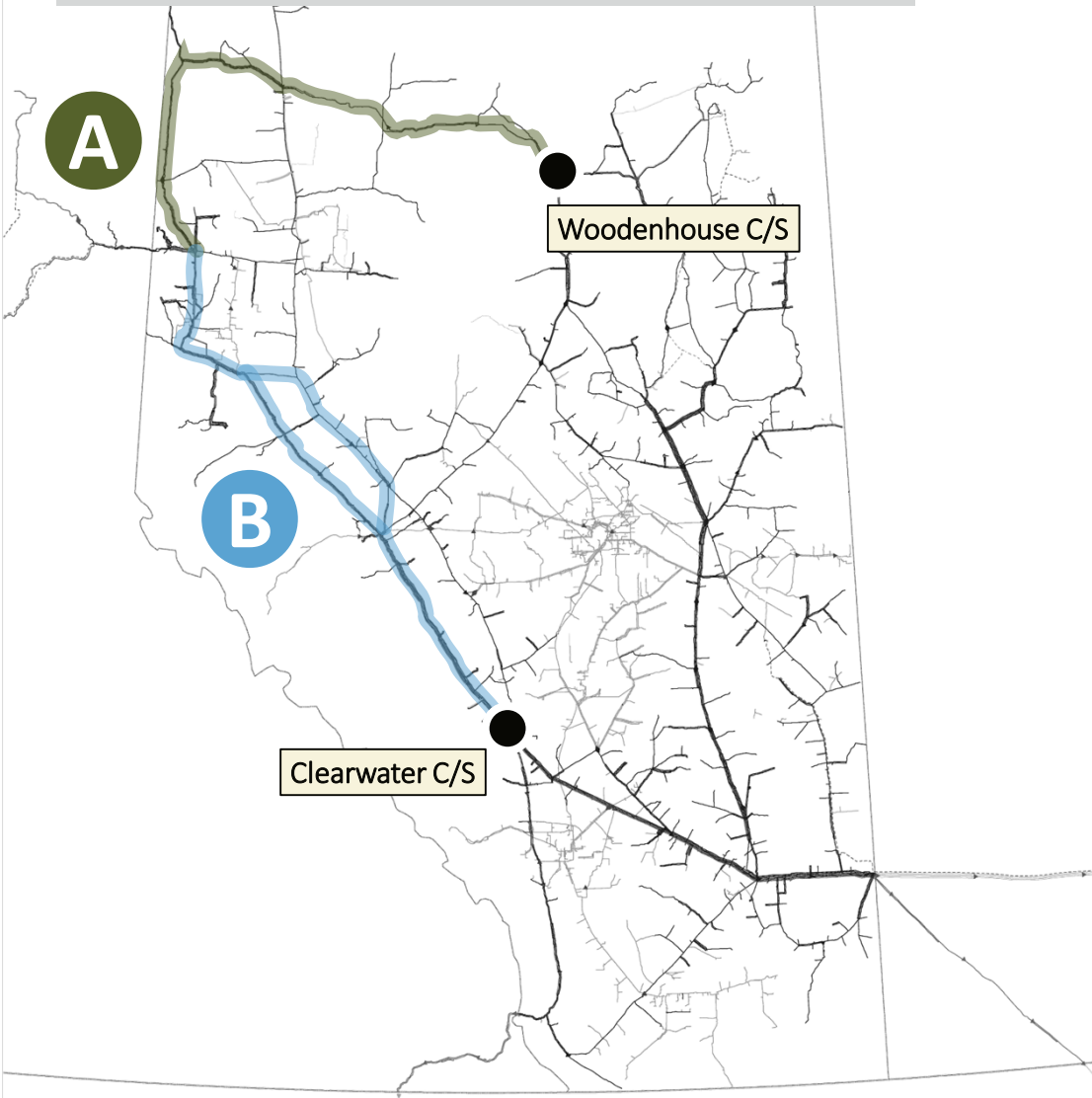
Potential for reduced service availability:

- A Upstream FT-R ~~and/or downstream IT-D/IT-S~~
- B Upstream FT-R ~~or downstream IT-D/IT-S~~
- C ~~WGAT/FHBC deliveries only (NGTL or FHBC)~~
- D ~~EGAT deliveries only (includes NEDA/OSDA)~~
- E ~~NEDA deliveries only (includes OSDA)~~

*Temporary service protocol directs the limitation of service availability to upstream FT receipt but only IF a reduction in flow is required.*

### TSP Eligibility Criteria (all 3 must be met to qualify)

- Apr 1, 2020 to Oct 31, 2020
- Planned (greater than 48hr notice)
- At or upstream Clearwater and Woodenhouse



For informational purposes only

## TSP Terminology

Planned	More than 48 hours notice of change in service availability
Area of Impact	The area in which receipt services are limited or restricted – assessed with hydraulic analysis based on bottleneck(s)
Upstream IT	All receipt IT and storage withdrawal IT services within the receipt area of impact – upstream of the bottleneck(s)
Downstream IT	All delivery and storage injection IT services outside the receipt area of impact – downstream of the bottleneck(s)
Upstream FT	All receipt FT services within the receipt area of impact – upstream of the bottleneck(s)

# TSP Scenario Discussion

---

## A. Normal tariff practices

All unplanned outages, and all planned outages outside the TSP area or timeframe

## B. Temporary Service Protocol (TSP)

All planned outages within TSP area and timeframe

## C. Transition from TSP to Normal tariff practices

Unplanned outage coincides with a TSP eligible outage

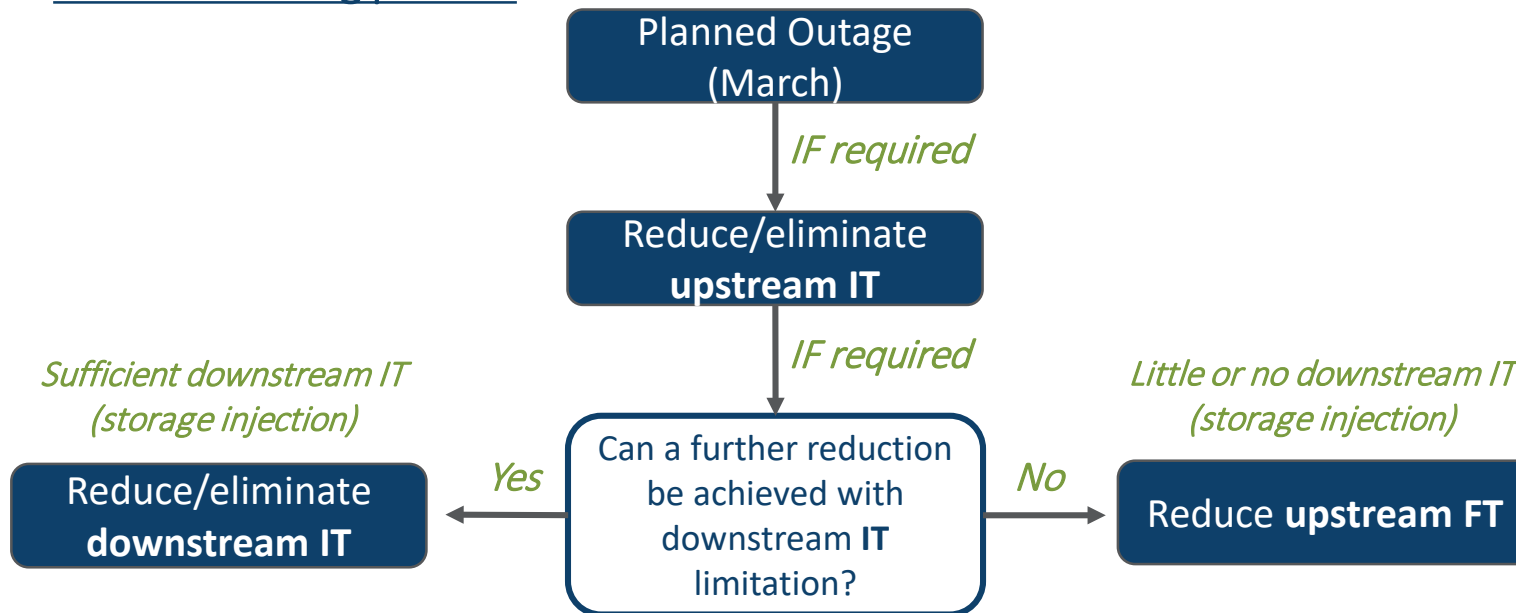
*Simplified illustrations are used to discuss each scenario. Consult with your marketing representative for a more detailed and comprehensive perspective and understanding.*

# Scenario A – Planned Alces River Outage (March): Normal Tariff Practices

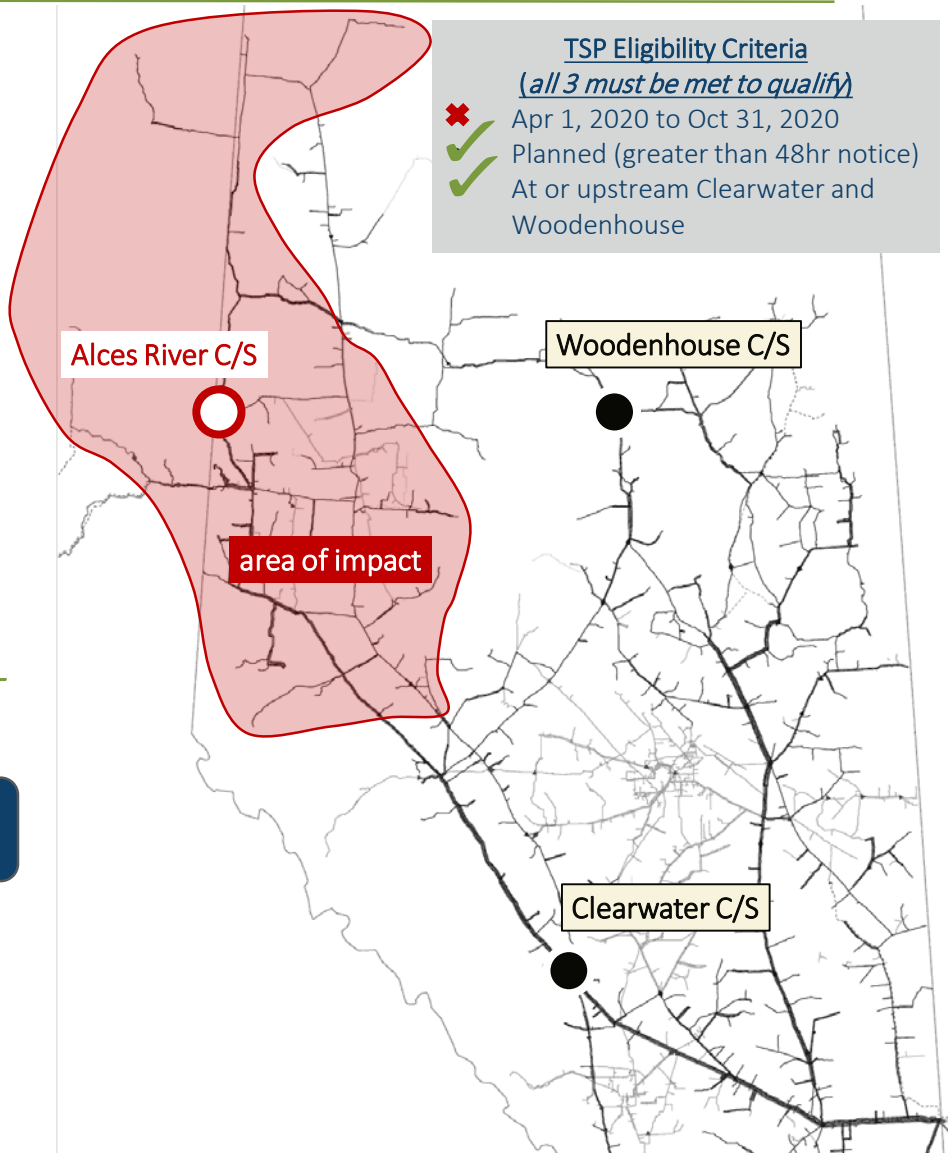
## Outage Assessment Results

- Area of impact determined based on hydraulic analysis – bottleneck(s)
- Receipt flow expected to exceed capability in the assessed area of impact

## Decision making process



*Normal tariff practices prioritize all FT services over all IT services*

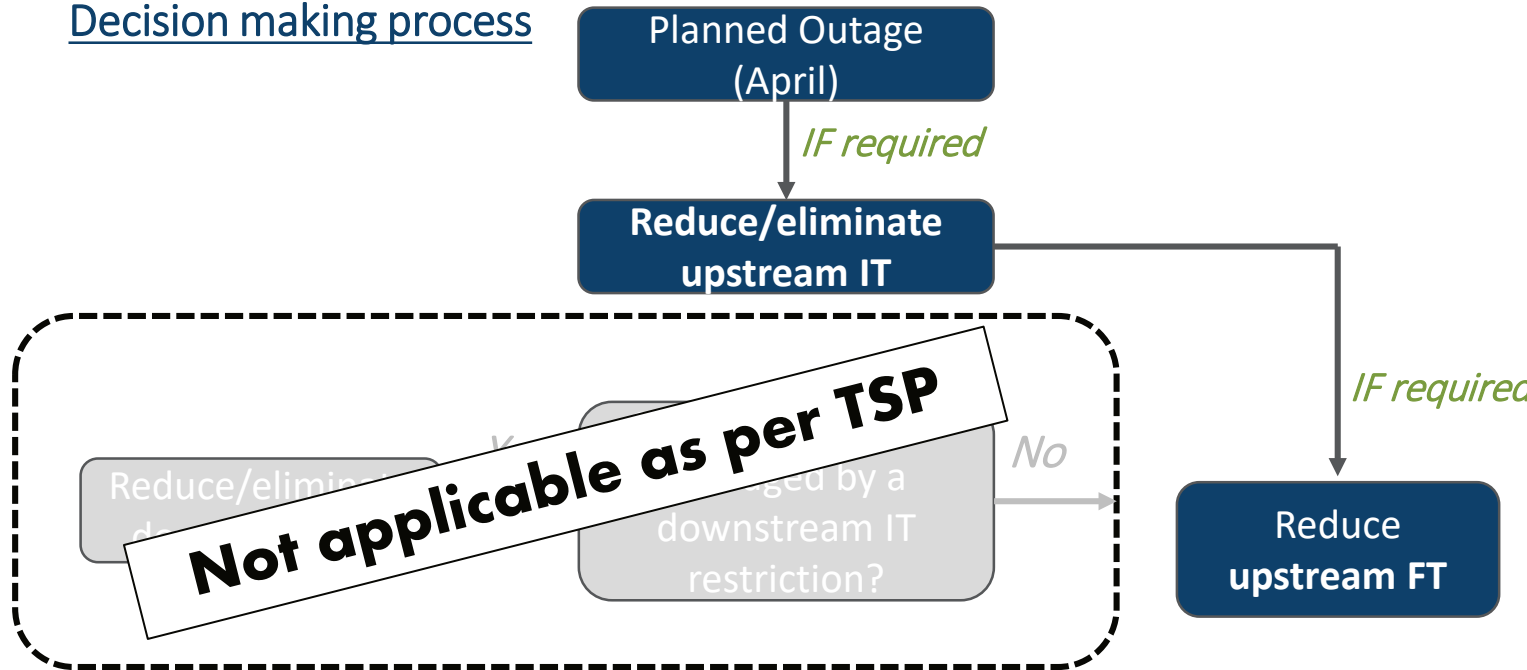


# Scenario B – Planned Alces River Outage (April): TSP eligible

## Outage Assessment Results:

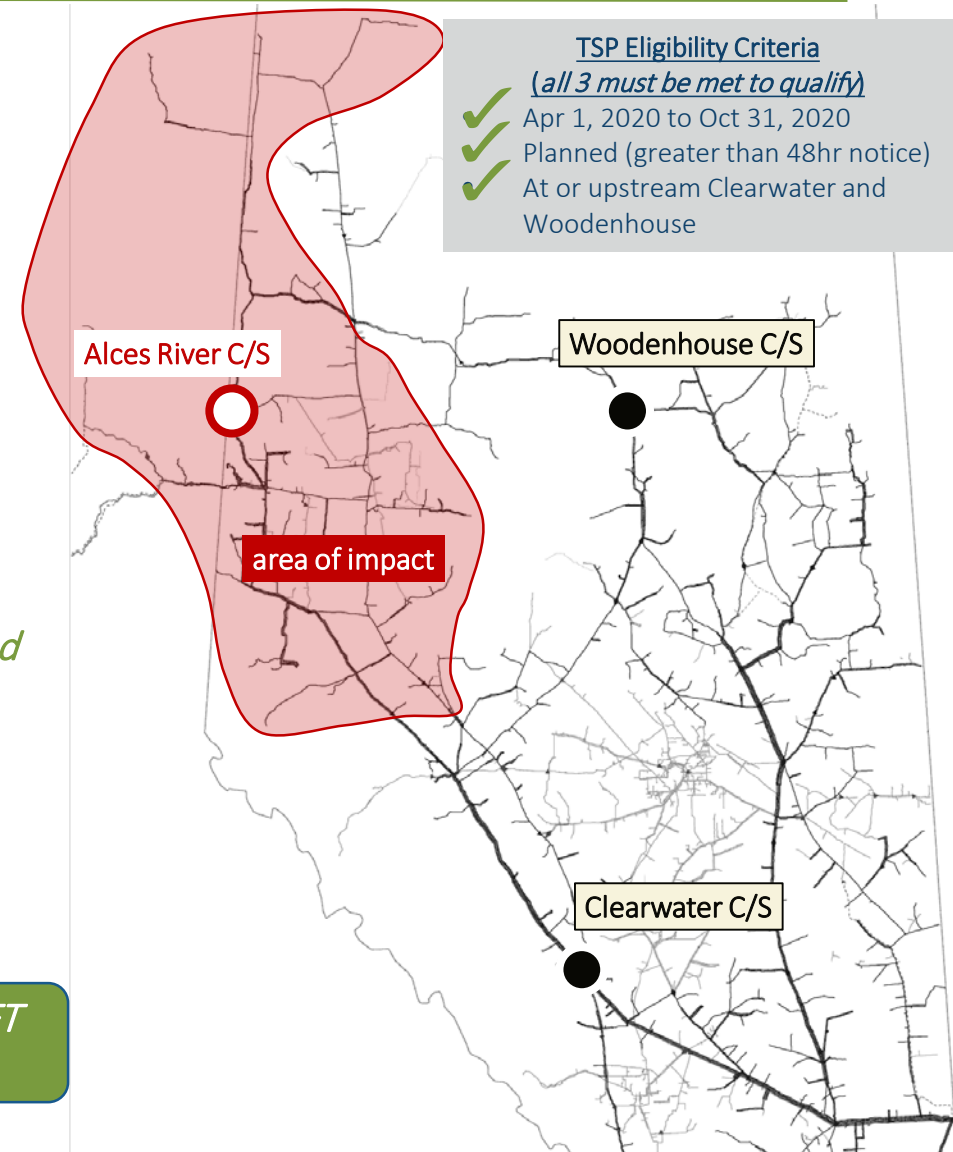
- Area of impact determined based on hydraulic analysis – bottleneck(s)
- Receipt flow expected to exceed capability in the assessed area of impact

## Decision making process



*Temporary service protocol directs the limitation of service availability to upstream FT receipt but only IF a reduction in flow is required.*

For informational purposes only



# Scenarios C: Unplanned Outage Coincides with a TSP Eligible Outage

*Transition to normal tariff practices will occur unless the unplanned outage duration is too short to make the transition practical*

**Outage Assessment Period:** *Determination of outage duration may take 1-2 days*

- Full discovery of cause(s) and determination of scope of repair(s) is often uncertain
- Even so, the majority of unplanned outages are resolved within 1-2 days

**System Adjustment Period:** *Transitioning from upstream FT limitation to downstream IT limitation is expected to take 1-2 days*

- Initial downstream limitation effect 08:00 next day (earliest case)
- Timing of downstream response, and upstream response through daily supply demand balancing is uncertain, especially if the change occurs on a weekend
- Restoration of upstream FT services only after we have confidence in the result throughput

**Communication:** *Current tools DOP and NrG will be used to clearly communicate assessment and adjustment periods*

- DOP identifies TSP applicable outages
- NrG notices to communicate unplanned outage with potential for transition to normal tariff practices (periodic updates)
- NrG notice to communicate transition to normal tariff practices if the duration of unplanned outage is long enough to make it practical to do so



## Scenario C – Unplanned Meikle River Outage Coincides with Planned Alces River Outage (April): Transition from TSP to Normal Tariff Practices

---

- Planned Alces River C/S outage is underway with limitation to upstream FT
- Unplanned Meikle River outage starts partway through the Alces River outage

### Unplanned Outage Assessment

- Meikle River (unplanned) with lower capability replaces Alces River as the driver for service limitation - *Not TSP eligible*
- Meikle River return to service timing is long enough such that transition to normal tariff practices is triggered.
- Regular communication via NrG Highway advising of status and expected timing of transition to ‘normal tariff practices’

# Scenario C – Unplanned Meikle River Outage Coincides with Planned Alces River Outage (April): Transition from TSP to Normal Tariff Practices

## Decision making process

*1 – 2 days for most outage assessments*

Unplanned Meikle River C/S Outage

Reduce upstream FT availability, as required (possibly same day)

Can a further reduction be achieved with downstream IT limitation?

*No*

Adjust upstream FT availability, as required

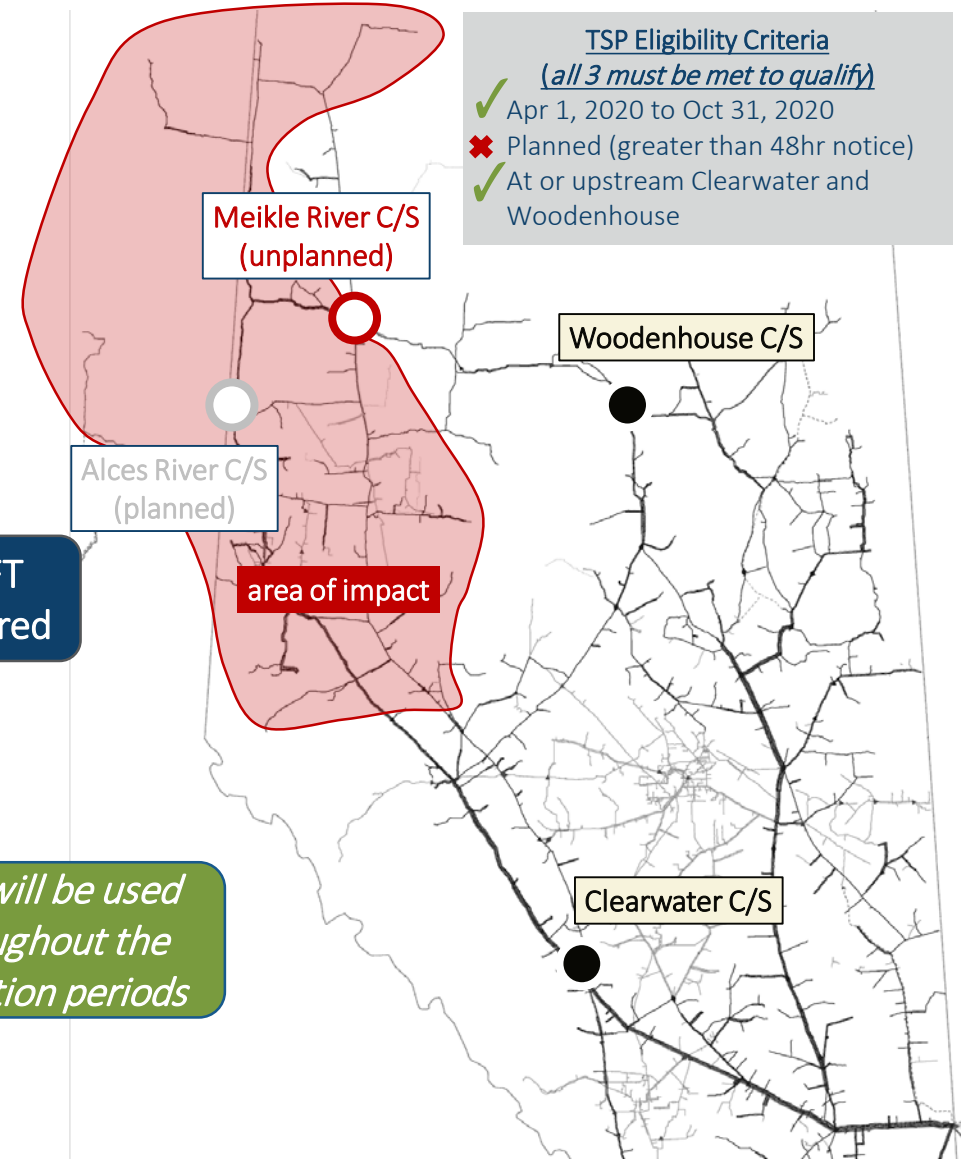
*Yes*

Reduce/eliminate downstream IT

Restore upstream FT (following day)

*Transition to normal tariff practices is expected to take 1 – 2 days*

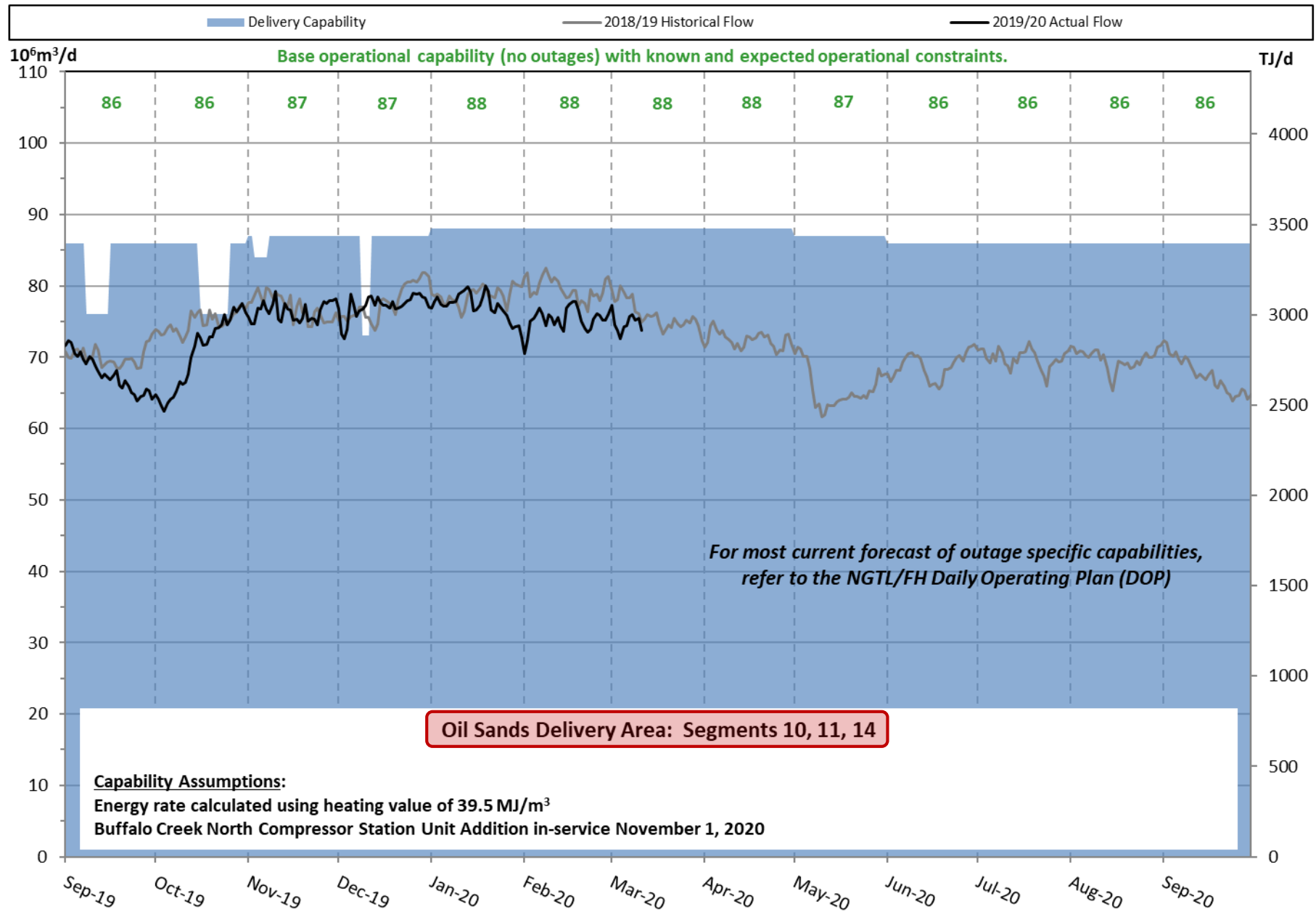
*NrG Highway notices will be used to ensure clarity throughout the assessment and transition periods*





# 2020 Outage Review

From DOP as of Monday March 16



# Northeast delivery area (NEDA) Oilsands delivery area (OSDA)

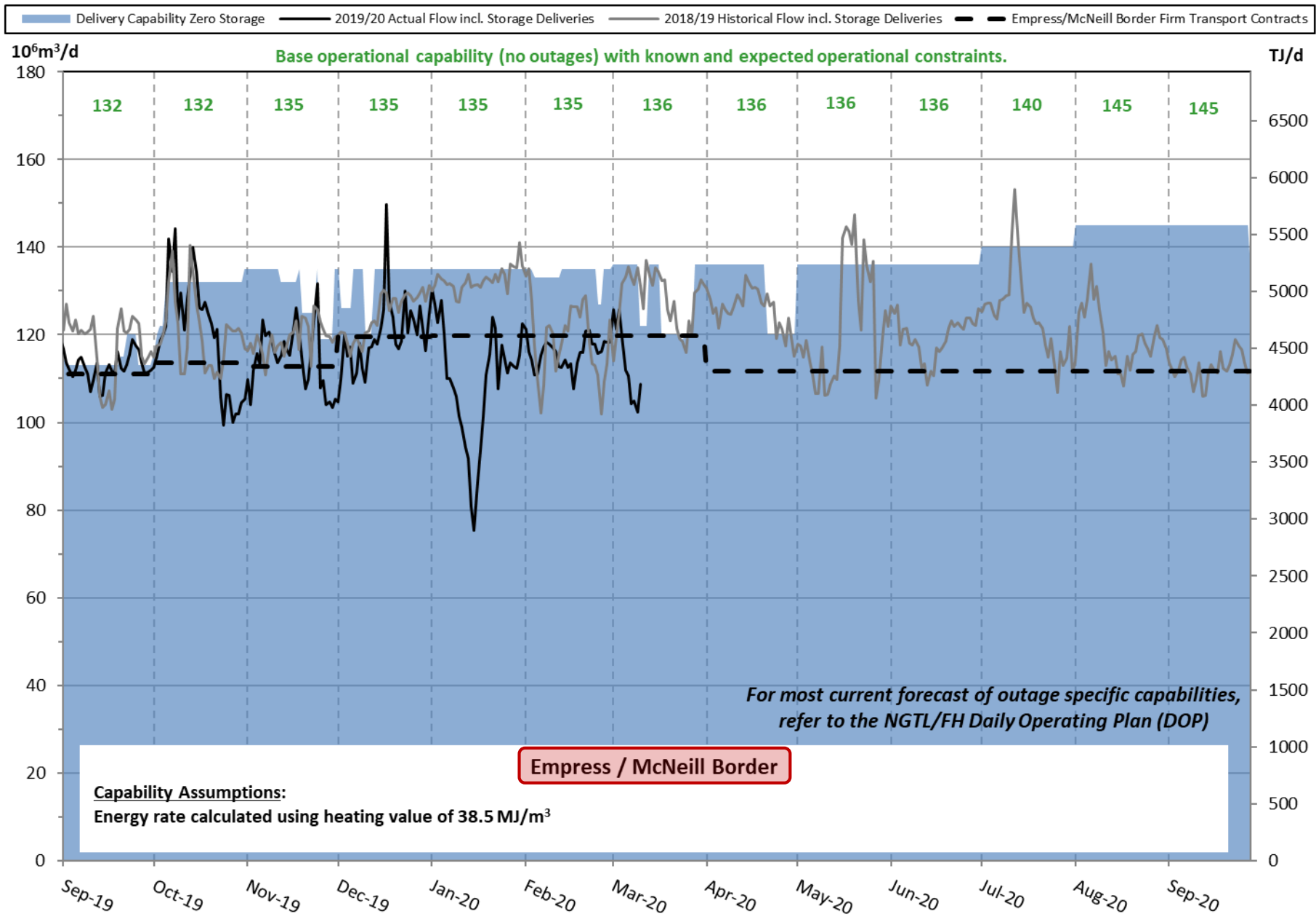
---

No  
impact to FT

Potential  
impact to FT

Partial  
impact to FT

**There are currently no outages planned with potential impact isolated to just OSDA and NEDA**



Last Updated: March 11, 2020

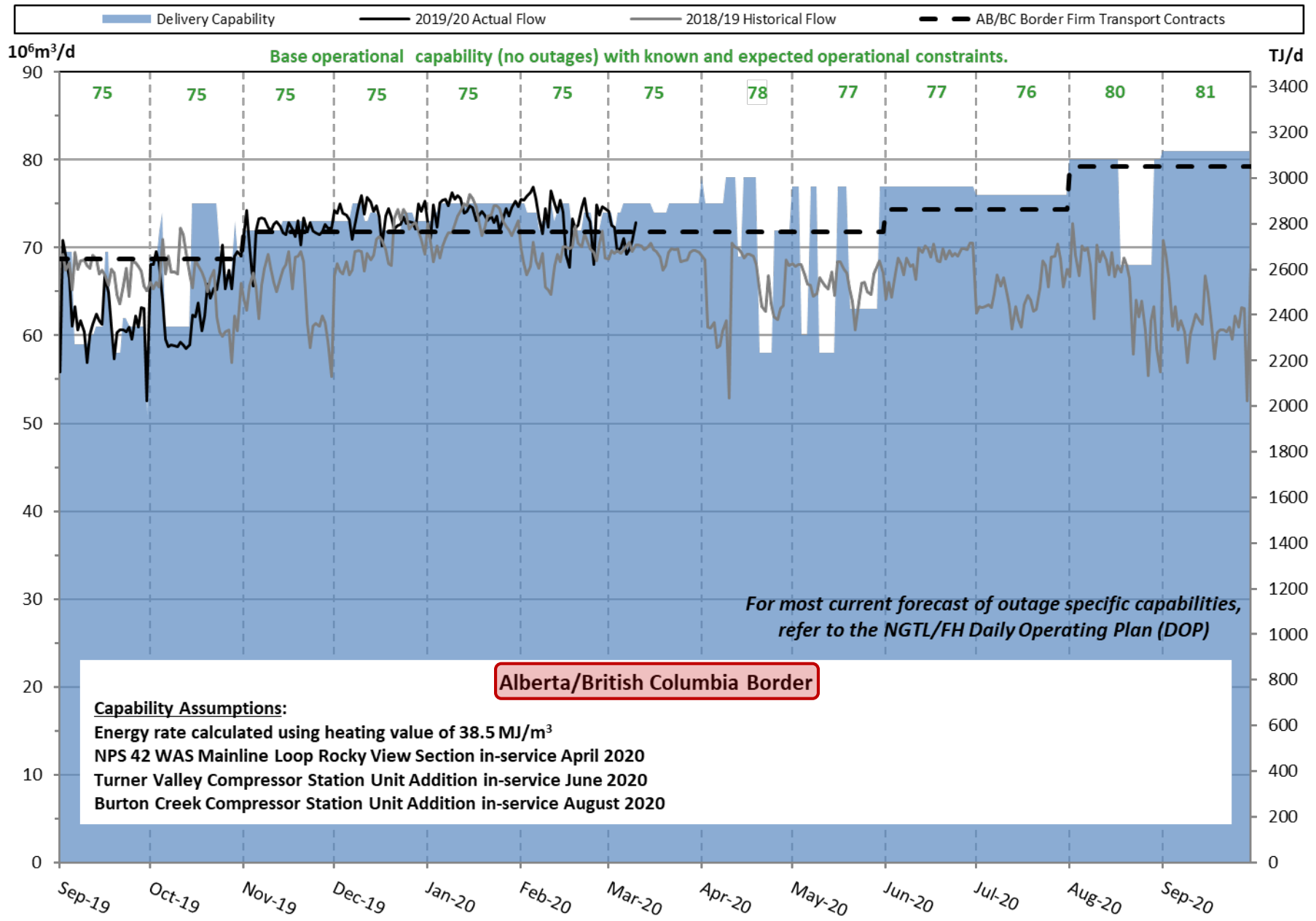
# East Gate delivery area (EGAT) Foothills Zone 9 (FHSK)

No  
impact to FT

Potential  
impact to FT

Partial  
impact to FT

Outage ID	Start	End	Capability/ Allowable (10 <sup>3</sup> m <sup>3</sup> /day)	Service Allowable Location/Area	Outage Description
15777564	MAR 17, 2020	MAR 19, 2020	120,000	No impact to FT-D anticipated: Empress/McNeill Borders Segments 6, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, partial 21, 23, 24, partial 28	Goodfish - Compressor Station Maintenance
13638041	MAR 17, 2020	MAR 27, 2020	120,000	No impact to FT-D anticipated: Empress/McNeill Borders Segments 6, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, partial 21, 23, 24, partial 28	Meikle River D - Compressor Station Modification
16197070	MAR 23, 2020	MAR 25, 2020	119,000	No impact to FT-D anticipated: Empress/McNeill Borders Segments 6, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, partial 21, 23, 24, partial 28	Alces River - Compressor Station Maintenance
15714468	APR 21, 2020	APR 30, 2020	120,000	No impact to FT-D anticipated: Empress/McNeill Borders Segments 15, 16, 17, 18, 19, 20, 23, partial 21, and partial 28	Schrader Creek East & West - Compressor Station Maintenance
15862705	SEP 28, 2020	OCT 25, 2020	135,000	No impact to FT-D anticipated: Empress/McNeill Borders Segments 15, 16, 17, 18, 19, 20, 23, partial 21, and partial 28	NPS 42 Central Alberta System Mainline Loop - Pipeline Maintenance
15695808	OCT 12, 2020	OCT 21, 2020	130,000	No impact to FT-D anticipated: Empress/McNeill Borders Segments 15, 16, 17, 18, 19, 20, 23, partial 21, and partial 28	Beiseker - Compressor Station Modifications





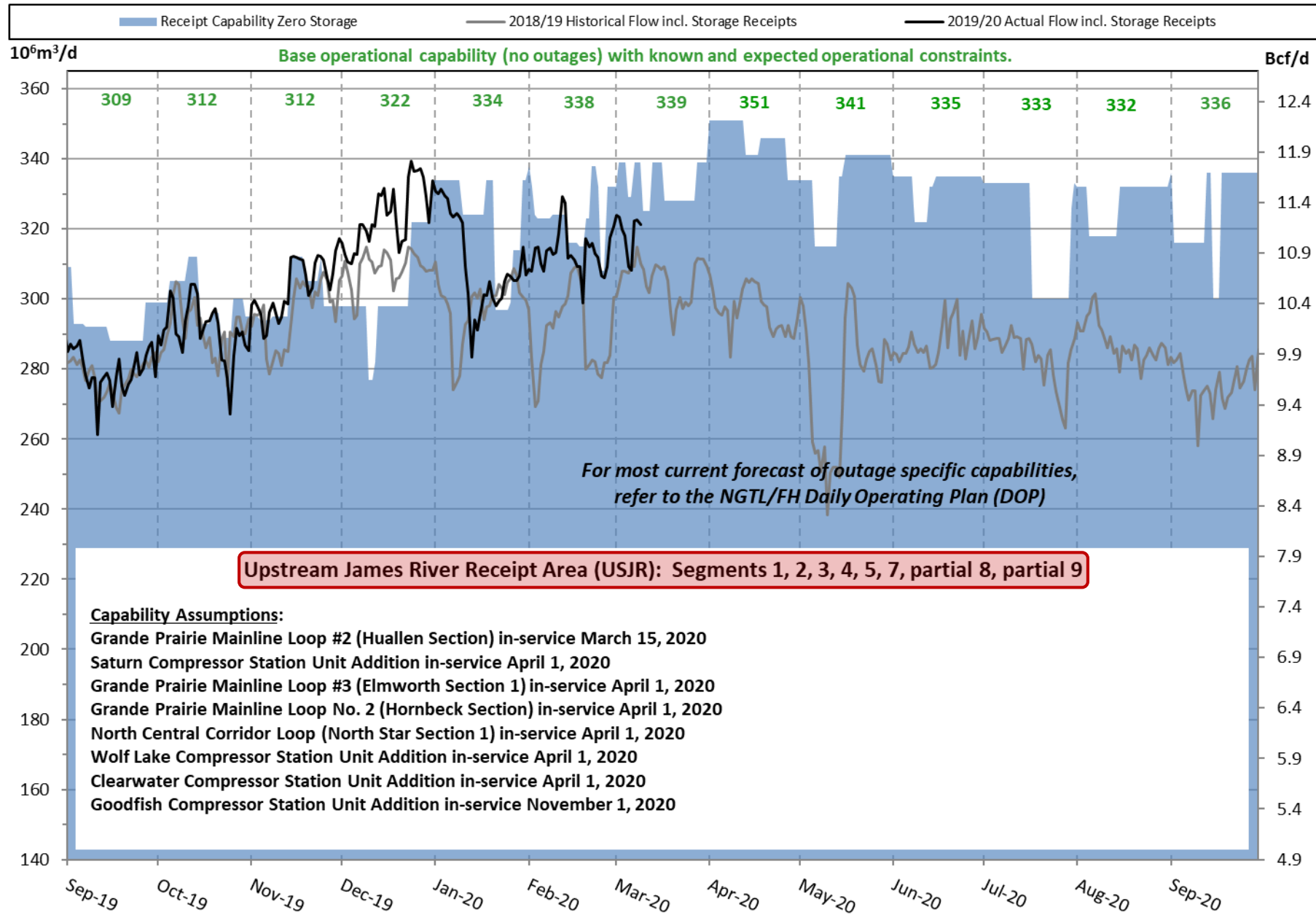
# West Gate Delivery Area (WGAT) Foothills Zone 8 (FHBC)

No  
impact to FT

Potential  
impact to FT

Partial  
impact to FT

Outage ID	Start	End	Capability/ Allowable (10 <sup>3</sup> m <sup>3</sup> /day)	Service Allowable Location/Area	Outage Description
16095402	MAR 16, 2020	MAR 20, 2020	74,000	No impact to FT-D anticipated: Alberta/BC Border Segments 22 and partial 21	NPS 36 Western Alberta System Mainline - Pipeline Modifications
15782797	APR 01, 2020	APR 08, 2020	75,000	Potential impact to FT-D: Alberta/BC Border Segments 22 and partial 21	NPS 36 Foothills Zone 7 Leg 1B - Pipeline Maintenance
15714485	APR 13, 2020	APR 14, 2020	69,000	Potential impact to FT-D: Alberta/BC Border Segments 22 and partial 21	Winchell Lake - Compressor Station Maintenance
15714473	APR 20, 2020	APR 24, 2020	65,000	Partial impact to FT-D: Alberta/BC Border Segments 22 and partial 21	Turner Valley - Compressor Station Maintenance
15714468	APR 21, 2020	APR 30, 2020	72,000	No impact to FT-D anticipated: Alberta/BC Border Segments 22 and partial 21	Schrader Creek East & West - Compressor Station Maintenance
15782762	MAY 10, 2020	MAY 15, 2020	58,000	Partial impact to FT-D: Alberta/BC Border Segments 22 and partial 21	NPS 42 Western Alberta System Mainline - Pipeline Maintenance
14360038	MAY 20, 2020	MAY 29, 2020	63,000	Partial impact to FT-D: Alberta/BC and Alberta/Montana Borders	Burton Creek - Compressor Station Modifications
15782794	AUG 18, 2020	AUG 28, 2020	68,000	Partial impact to FT-D: Alberta/BC and Alberta/Montana Borders	NPS 36 Western Alberta System Mainline - Pipeline Maintenance
15714444	APR 20, 2020	APR 24, 2020	58,000	Partial impact to FT-R: Alberta/BC Border Foothills BC	Moyie - Compressor Station Maintenance
15714008	MAY 04, 2020	MAY 06, 2020	60,000	Partial impact to FT-R: Alberta/BC Border Foothills BC	Crowsnest A - Compressor Station Maintenance
15714166	MAY 20, 2020	MAY 25, 2020	65,000	Partial impact to FT-R: Alberta/BC Border Foothills BC	Elko - Compressor Station Maintenance



Last Updated: March 11, 2020

# Upstream James River receipt area (USJR)

No  
impact to FT

Potential  
impact to FT

Partial  
impact to FT

Outage ID	Start	End	Capability/ Allowable (10 <sup>3</sup> m <sup>3</sup> /day)	Service Allowable Location/Area	Outage Description
15782447	MAY 06, 2020	MAY 13, 2020	315,000	Partial impact to FT-R: USJR	[TSP Eligible] NPS 42 Edson Mainline Loop 2 - Pipeline Maintenance
15714005	MAY 06, 2020	MAY 15, 2020	335,000	Potential impact to FT-R: USJR	[TSP Eligible] Clearwater A5 - Compressor Station Maintenance
15782799	JUL 17, 2020	JUL 29, 2020	300,000	Partial impact to FT-R: USJR	[TSP Eligible] NPS 42 Edson Mainline Loop - Pipeline Maintenance
15777973	SEP 15, 2020	SEP 17, 2020	300,000	Potential impact to FT-R: Segments 1, 2, 3, 4, 5, 7, partial 8 (Upstream of Swartz) and partial 9 (Upstream of Lodgepole) USJR	[TSP Eligible] Berland River - Compressor Station Maintenance
15714476	OCT 26, 2020	OCT 27, 2020	318,000	Potential impact to FT-R: USJR	[TSP Eligible] Vetchland - Compressor Station Maintenance

Outage ID	Start	(Duration) End	Capability/ Allowable (10 <sup>3</sup> m <sup>3</sup> /day)	Typical Flow (10 <sup>3</sup> m <sup>3</sup> /day)	Location/Area	Outage Description
15777564	MAR 17, 2020	MAR 19, 2020	175,000	150,000-180,000	Potential impact to FT-R: Segments 2, 3, 4 and partial 7 (Upstream of Latornell)	Goodfish - Compressor Station Maintenance
13638041	MAR 17, 2020	MAR 27, 2020	175,000	150,000-183,000	Potential impact to FT-R: Segments 2, 3, 4 and partial 7 (Upstream of Latornell)	Meikle River D - Compressor Station Modification
16197070	MAR 23, 2020	MAR 25, 2020	174,000	150,000-180,000	Potential impact to FT-R: Segments 2, 3, 4 and partial 7 (Upstream of Latornell)	Alces River - Compressor Station Maintenance
15778213	APR 13, 2020	APR 17, 2020	194,000	153,000-186,000	Potential impact to FT-R: Segments 2, 3, 4 and partial 7 (Upstream of Latornell)	[TSP eligible] Meikle River C - Compressor Station Modification

**Note: DOP refinement in progress to combine reporting of these types of outages into one table.**

# Upstream James River receipt area (USJR)

No  
impact to FT

Potential  
impact to FT

Partial  
impact to FT

Outage ID	Start	(Duration) End	Capability/ Allowable (10 <sup>3</sup> m <sup>3</sup> /day)	Typical Flow (10 <sup>3</sup> m <sup>3</sup> /day)	Location/Area	Outage Description
15778036	APR 18, 2020	APR 30, 2020	179,000	150,000-180,000	Potential impact to FT-R: Segments 2, 3, 4 and partial 7 (Upstream Latornell)	[TSP eligible] Gold Creek - Compressor Station Maintenance
15554152	APR 27, 2020	MAY 07, 2020	197,000	140,000-180,000	Potential impact to FT-R: Segments 2, 3, 4 and partial 7 (Upstream Gold Creek)	[TSP eligible] Meikle River B - Compressor Station Maintenance
15778054	MAY 06, 2020	MAY 11, 2020	227,000	174,000-219,000	Potential impact to FT-R: Segments 2, 3, 4, 5 and partial 7 (Upstream of Berland River)	[TSP eligible] Latornell A1 - Compressor Station Maintenance
15778169	JUN 01, 2020	JUN 05, 2020	192,000	140,000-180,000	Potential impact to FT-R: Segments 2, 3, 4 and partial 7 (Upstream Gold Creek)	[TSP eligible] Meikle River A - Compressor Station Maintenance
15778214	JUN 08, 2020	JUN 12, 2020	179,000	150,000-180,000	Potential impact to FT-R: Segments 2, 3, 4 and partial 7 (Upstream Latornell)	[TSP eligible] Goodfish - Compressor Station Maintenance
15778167	JUN 08, 2020	JUN 14, 2020	189,000	150,000-180,000	Potential impact to FT-R: Segments 2, 3, 4 and partial 7 (Upstream Latornell)	[TSP eligible] Hidden Lake - Compressor Station Maintenance
15778057	JUL 17, 2020	JUL 30, 2020	176,000	150,000-180,000	Potential impact to FT-R: Segments 2, 3, 4 and partial 7 (Upstream Latornell)	[TSP eligible] Pipestone Creek - Compressor Station Maintenance
15782671	AUG 05, 2020	AUG 14, 2020	190,000	153,000-186,000	Potential impact to FT-R: Segments 1, 2, 3, 4 and partial 7 (Upstream of Latornell)	[TSP eligible] NPS 30 Grande Prairie Mainline Loop - Pipeline Maintenance
15782796	SEP 02, 2020	SEP 12, 2020	175,000	174,000-219,000	Partial impact to FT-R: Segments 1, 2, 3, 4, 5 and partial 7 (Upstream of Berland River)	[TSP eligible] NPS 36 Northwest Mainline - Pipeline Maintenance

# Contact information

---

Ian Chisholm

Manager, Operations Planning

[ian\\_chisholm@tcenergy.com](mailto:ian_chisholm@tcenergy.com)

403-920-6252

Kevin D'Souza

Chair, NGTL/Foothills Customer Ops Meeting

[kevin\\_dsouza@tcenergy.com](mailto:kevin_dsouza@tcenergy.com)

403-920-7915



**Weekend processing of NGTL transactions**

# NGTL Weekend Transactions

---

- NGTL would like to notify customers that due to additional process automation combined with existing functionality the following NGTL contracting requests may be processed on weekends:

## Weekends

NGTL Permanent Assignments – Online Pre – Approved (OPA) \*10:30 & 14:30

NGTL Temporary Assignments – Online Pre – Approved (OPA) \*10:30 & 14:30

NGTL Transfers – On Automated Transfer Process paths following normal transfer rules

- Requests *may* be processed so long as further review or analysis of the request is not required

# Contact information

---

Taylor Kimmett

Manager, Contracts

[taylor\\_kimmett@tcenergy.com](mailto:taylor_kimmett@tcenergy.com)

403-920-5579



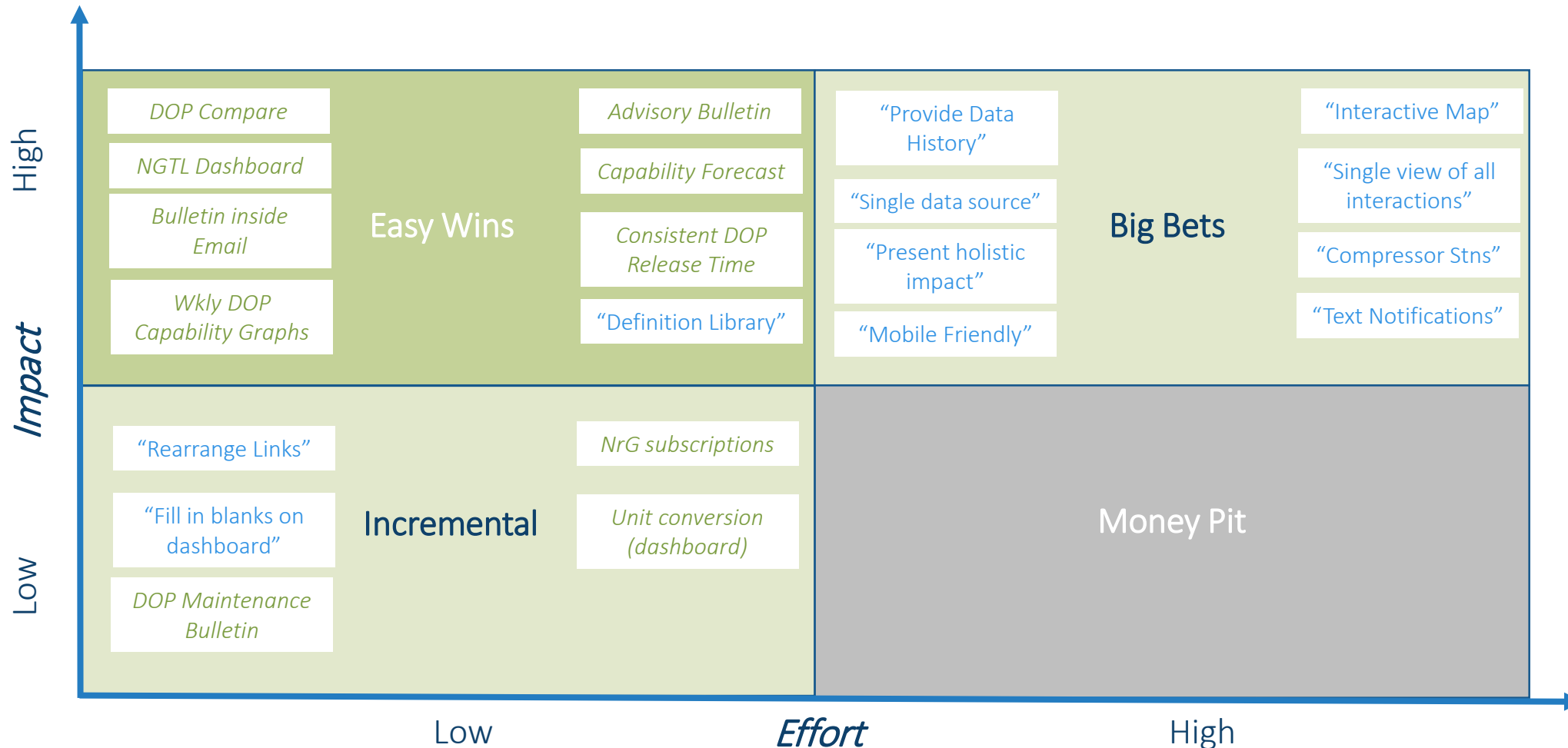


# Update on launch of DOP 2.0

Agenda item not discussed at the March 17, 2020 Customer Operations meeting

# COAT | How we got here

As we collected the COAT feedback for each enhancement, we noticed that many suggestions landed in our 'big bets' area. This was a complete step change that required an updated problem solving methodology and re-imagination of our communications.

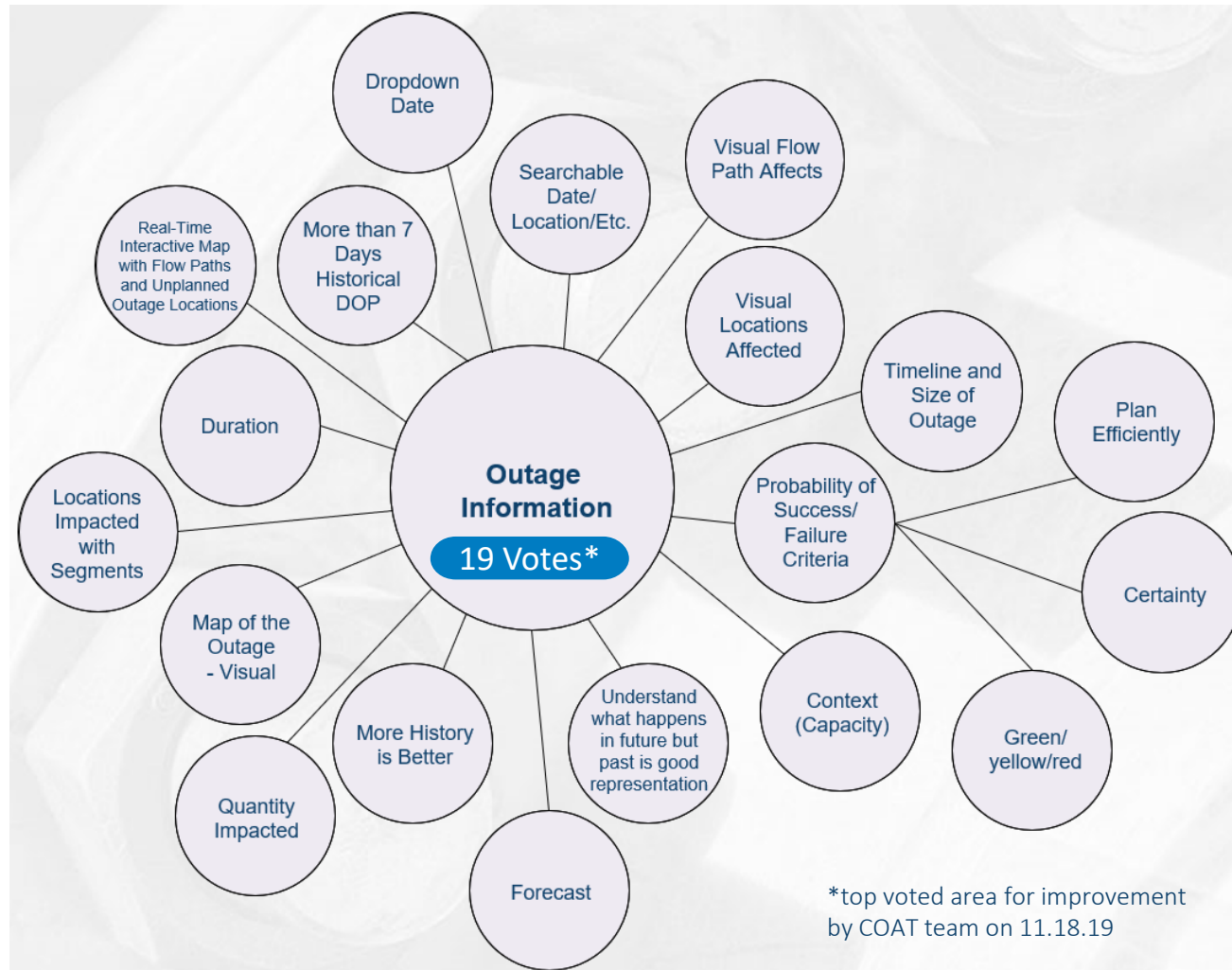


Small sample size of the enhancements requested. These are consistently being evaluated and used as guiding principles.

Those in *green* are 'live'.

# Methodology | Building the 'vision'

Feedback from our November 18<sup>th</sup> workshop, along with previous COAT inputs were used to develop the vision of what a successful working prototype should be. We honed in on the key/repeated ideas below and focused on 'how' a user would want to consume the data.



## As a TC customer...

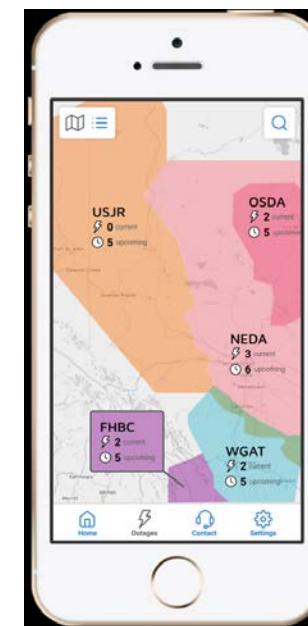
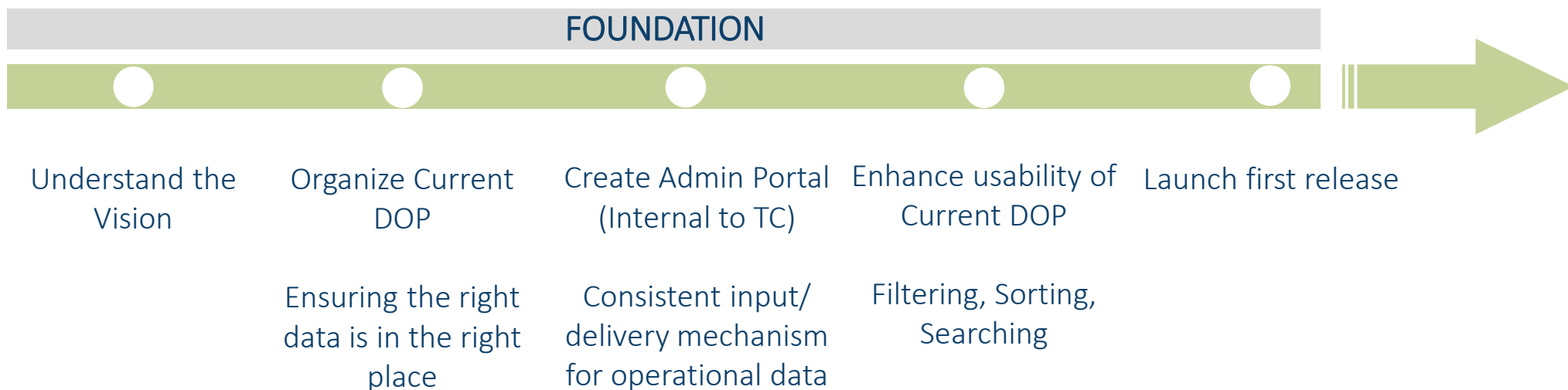
“I want planned and unplanned outage notifications...”

“I want some depiction of a level of certainty on when these outages will occur and the level of holistic impact they will have on the system...”

“I want to see historical outage information so that I can determine trends. This helps me forecast future outages and their potential impact...”

# Re-imagination | Big Bets Team Delivery

To get closer to the vision, we'll need to lay the ground work. This is mainly around understanding where we want to go (vision) and identifying the right data early on. Naturally, we'll then need to tweak and/or build our internal processes for consistency and speed. Since we'll be working in *two-week sprints*, it gives us a lot of flexibility to test, fail, learn and/or re-prioritize together, as a Big Bets Team.



The Vision



DEMO

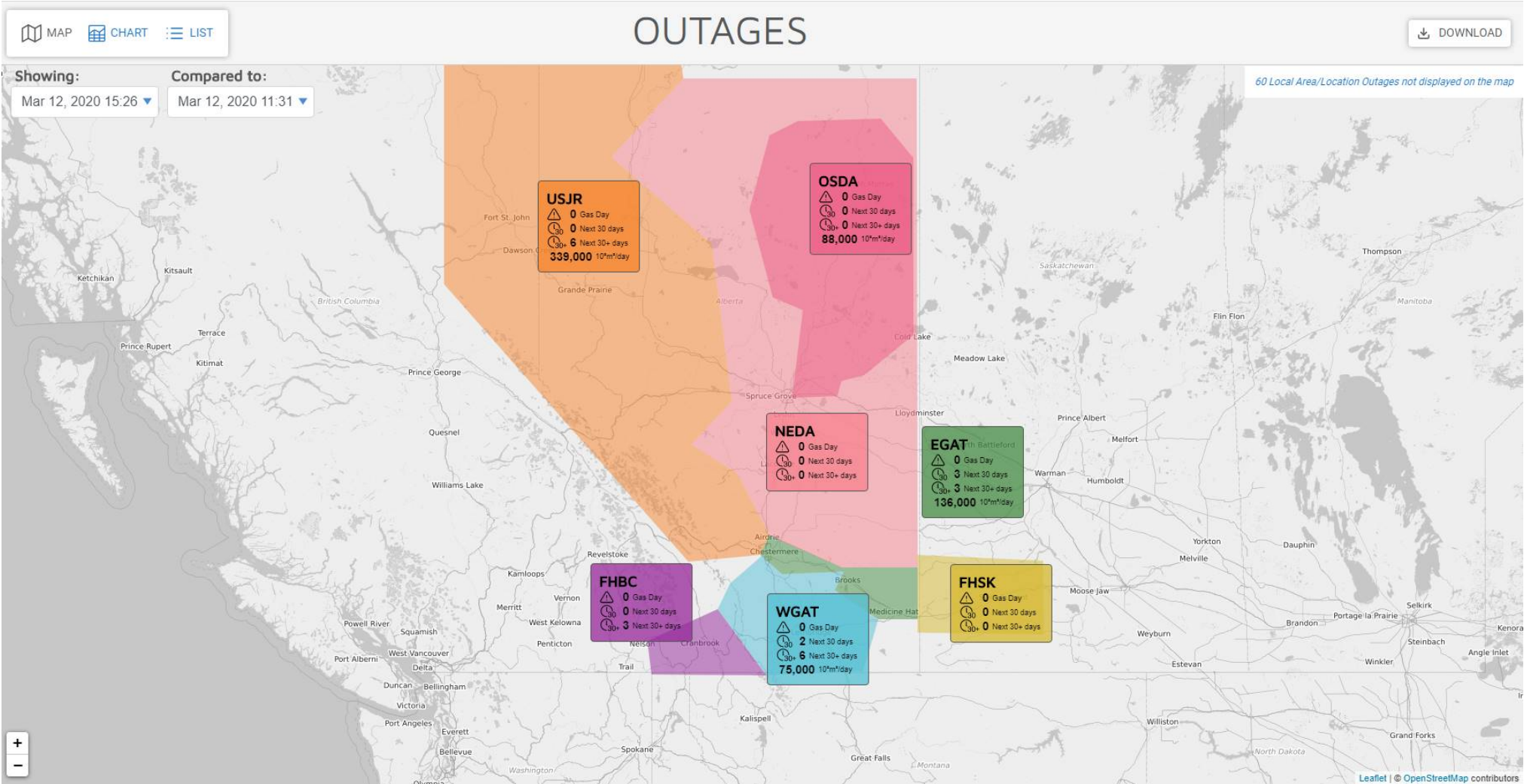
Agenda item not discussed at the March 17, 2020 Customer Operations meeting

## Getting set up for DOP 2.0

---

- Current files for HTML and DOP Compare will be removed
- CSV file will be available through new link (the same information will be provided)
- **Support:** Chrome, Firefox, Safari and Edge (desktop only)

# Daily Operating Plan (DOP) 2.0 – Map view



# DOP 2.0 – List view

MAP
CHART
LIST

## OUTAGES

DOWNLOAD
VIEW ALL

**Showing:** Mar 12, 2020 15:26 **Compared to:** Mar 12, 2020 11:31

<div style="background-color: #f9a825; padding: 5px; margin-bottom: 5px;"> <p><small>Receipt</small> <b>Upstream James River</b> Base Operational Capability 339,000 10<sup>3</sup>m<sup>3</sup>/day</p> </div> <div style="padding: 5px;"> <p> 0 Gas Day</p> <p> 0 Next 30 days &gt;</p> <p> 6 Next 30+ days <span style="color: green; font-weight: bold;">1</span></p> <p> Capability and Historical Flow &gt;</p> </div>	<div style="background-color: #a6a6a6; padding: 5px; margin-bottom: 5px;"> <p><small>Receipt</small> <b>Local Area/Location</b></p> </div> <div style="padding: 5px;"> <p> 1 Gas Day <span style="color: yellow; font-weight: bold;">1</span> <span style="color: green; font-weight: bold;">1</span></p> <p> 5 Next 30 days <span style="color: yellow; font-weight: bold;">1</span> &gt;</p> <p> 30 Next 30+ days <span style="color: green; font-weight: bold;">3</span></p> <p style="text-align: center; font-size: small;">*Local Area/Location Outages not displayed on the map</p> </div>	<div style="background-color: #4db6ac; padding: 5px; margin-bottom: 5px;"> <p><small>Delivery</small> <b>West Gate</b> Base Operational Capability 75,000 10<sup>3</sup>m<sup>3</sup>/day</p> </div> <div style="padding: 5px;"> <p> 0 Gas Day</p> <p> 2 Next 30 days &gt;</p> <p> 6 Next 30+ days</p> <p> Capability and Historical Flow &gt;</p> </div>
<div style="background-color: #9c27b0; padding: 5px; margin-bottom: 5px;"> <p><small>Receipt</small> <b>Foothills BC</b></p> </div> <div style="padding: 5px;"> <p> 0 Gas Day</p> <p> 0 Next 30 days &gt;</p> <p> 3 Next 30+ days</p> </div>	<div style="background-color: #4caf50; padding: 5px; margin-bottom: 5px;"> <p><small>Delivery</small> <b>East Gate</b> Base Operational Capability 136,000 10<sup>3</sup>m<sup>3</sup>/day</p> </div> <div style="padding: 5px;"> <p> 0 Gas Day <span style="color: yellow; font-weight: bold;">1</span></p> <p> 3 Next 30 days &gt;</p> <p> 3 Next 30+ days</p> <p> Capability and Historical Flow &gt;</p> </div>	<div style="background-color: #e91e63; padding: 5px; margin-bottom: 5px;"> <p><small>Delivery</small> <b>North &amp; East Delivery Area</b></p> </div> <div style="padding: 5px;"> <p> 0 Gas Day</p> <p> 0 Next 30 days &gt;</p> <p> 0 Next 30+ days</p> <p> Capability and Historical Flow &gt;</p> </div>
<div style="background-color: #e91e63; padding: 5px; margin-bottom: 5px;"> <p><small>Delivery</small> <b>Oil Sands Delivery Area</b> Base Operational Capability 88,000 10<sup>3</sup>m<sup>3</sup>/day</p> </div> <div style="padding: 5px;"> <p> 0 Gas Day</p> <p> 0 Next 30 days &gt;</p> </div>	<div style="background-color: #ffc107; padding: 5px; margin-bottom: 5px;"> <p><small>Receipt</small> <b>Foothills Saskatchewan</b></p> </div> <div style="padding: 5px;"> <p> 0 Gas Day</p> <p> 0 Next 30 days &gt;</p> </div>	<div style="background-color: #a6a6a6; padding: 5px; margin-bottom: 5px;"> <p><small>Delivery</small> <b>Local Area/Location</b></p> </div> <div style="padding: 5px;"> <p> 0 Gas Day</p> <p> 0 Next 30 days &gt;</p> </div>

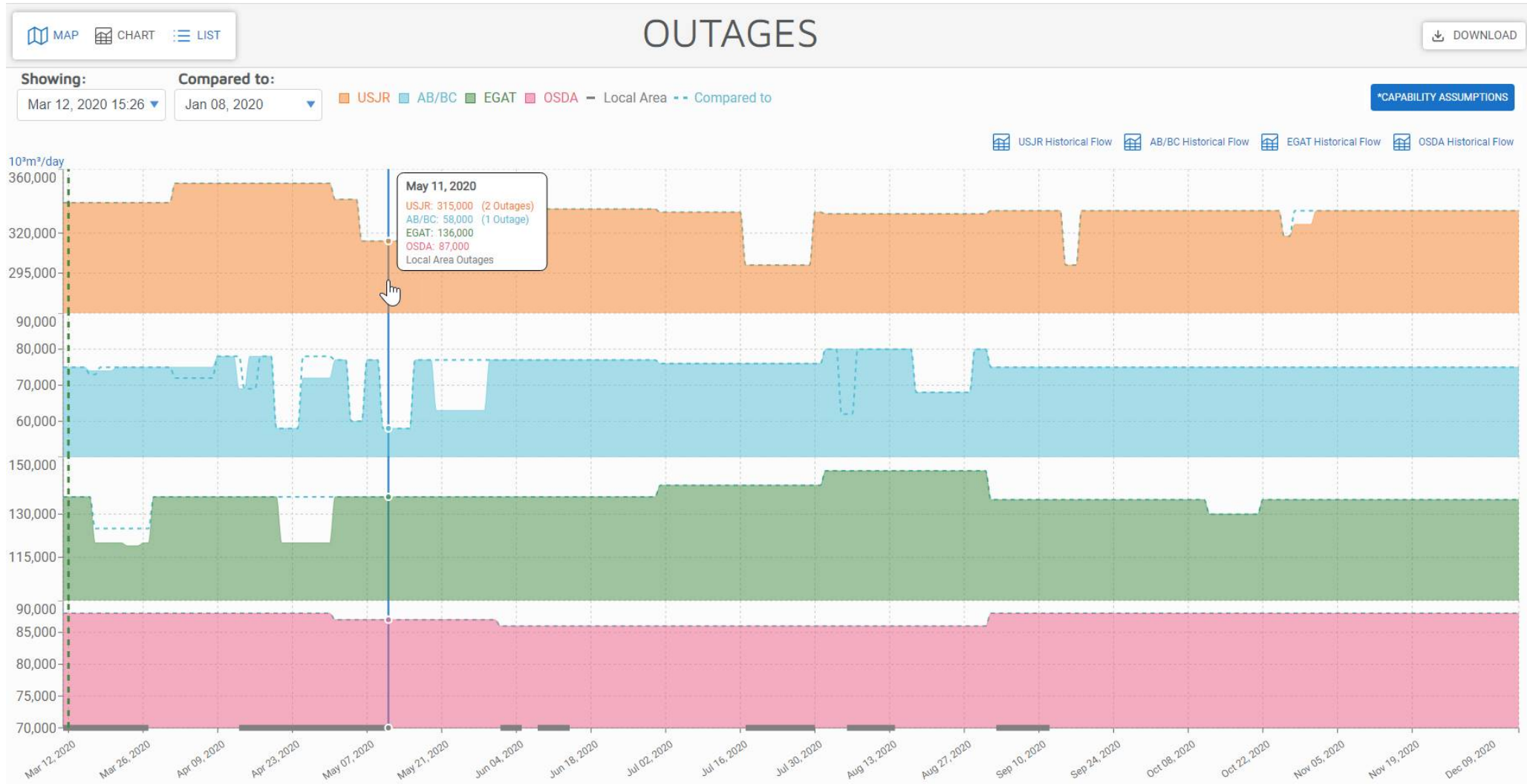
● NEW
● REMOVED / COMPLETED
● CHANGED



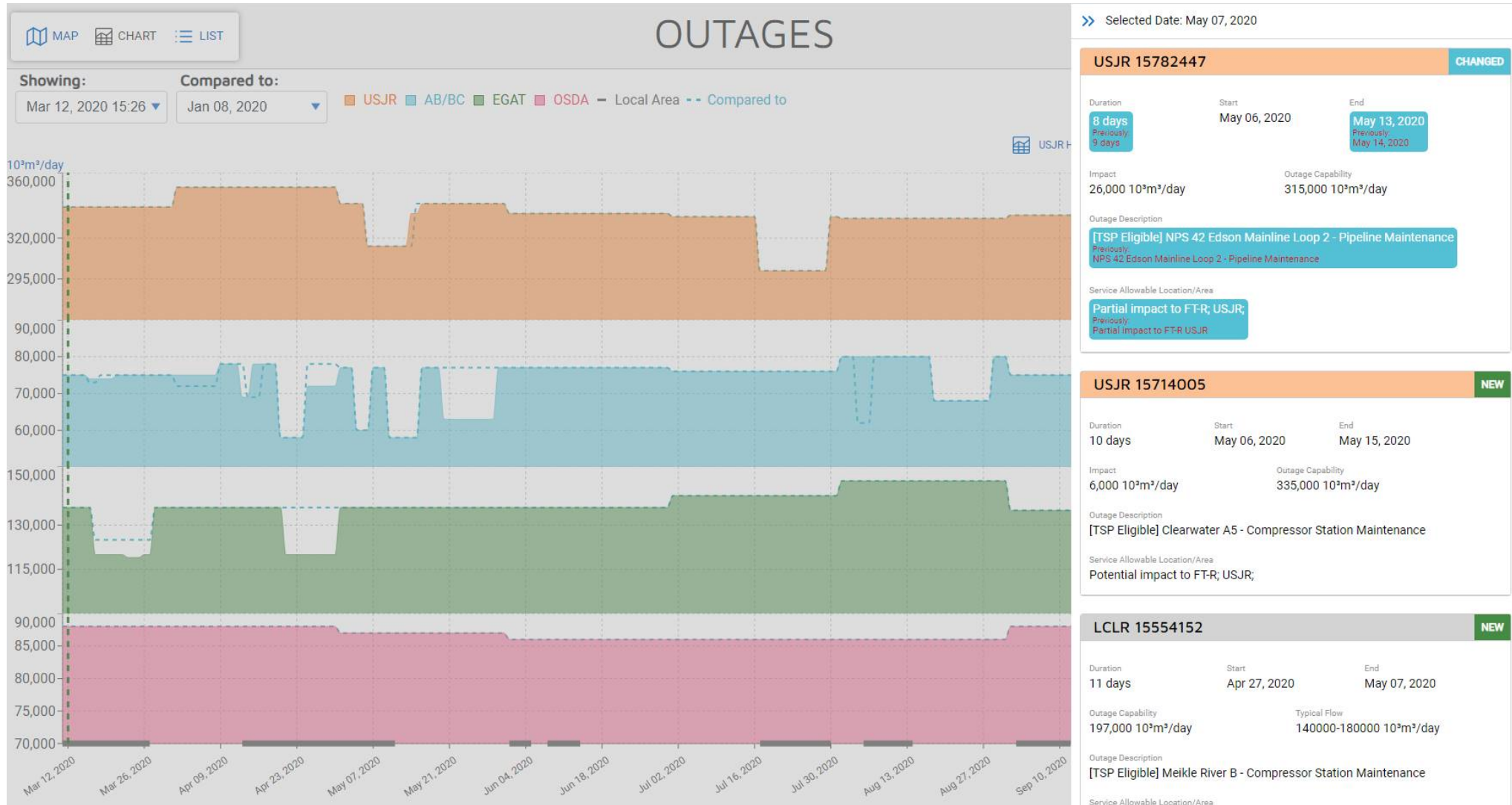
# DOP 2.0 – USJR area from List view

Upstream James River							
Showing:		Compared to:		Base Operational Capability	Historical Flow Chart Last Updated		
Mar 12, 2020 15:26		Jan 08, 2020		339,000 10 <sup>3</sup> m <sup>3</sup> /day	Mar 11, 2020		
NEXT 30+ DAYS							
<b>CHANGED</b> 15782447							
Duration	Start	End	Impact	Outage Capability	Outage Description	Service Allowable Location/Area	
8 days <small>Previously 9 days</small>	May 06, 2020	May 13, 2020 <small>Previously May 14, 2020</small>	26,000 10 <sup>3</sup> m <sup>3</sup> /day	315,000 10 <sup>3</sup> m <sup>3</sup> /day	[TSP Eligible] NPS 42 Edson Mainline Loop 2 - Pipeline Maintenance <small>Previously NPS 42 Edson Mainline Loop 2 - Pipeline Maintenance</small>	Partial impact to FTR; USJR; <small>Previously Partial impact to FTR USJR</small>	
<b>NEW</b> 15714005							
Duration	Start	End	Impact	Outage Capability	Outage Description	Service Allowable Location/Area	
10 days	May 06, 2020	May 15, 2020	6,000 10 <sup>3</sup> m <sup>3</sup> /day	335,000 10 <sup>3</sup> m <sup>3</sup> /day	[TSP Eligible] Clearwater A5 - Compressor Station Maintenance	Potential impact to FTR; USJR;	
<b>CHANGED</b> 15782799							
Duration	Start	End	Impact	Outage Capability	Outage Description	Service Allowable Location/Area	
13 days	Jul 17, 2020	Jul 29, 2020	33,000 10 <sup>3</sup> m <sup>3</sup> /day	300,000 10 <sup>3</sup> m <sup>3</sup> /day	[TSP Eligible] NPS 42 Edson Mainline Loop - Pipeline Maintenance <small>Previously NPS 42 Edson Mainline Loop - Pipeline Maintenance - changed</small>	Partial impact to FTR; USJR; <small>Previously Partial impact to FTR USJR</small>	
<b>NEW</b> 15777973							
Duration	Start	End	Impact	Outage Capability	Outage Description	Service Allowable Location/Area	
3 days	Sep 15, 2020	Sep 17, 2020	34,000 10 <sup>3</sup> m <sup>3</sup> /day	300,000 10 <sup>3</sup> m <sup>3</sup> /day	[TSP Eligible] Berland River - Compressor Station Maintenance	Potential impact to FTR (Segments 1, 2, 3, 4, 5, 7, partial 8 (Upstream of Swartz) and partial 9 (Upstream of Lodgepole)); USJR	
<b>CHANGED</b> 15714476							
Duration	Start	End	Impact	Outage Capability	Outage Description	Service Allowable Location/Area	
2 days	Oct 26, 2020	Oct 27, 2020	16,000 10 <sup>3</sup> m <sup>3</sup> /day	318,000 10 <sup>3</sup> m <sup>3</sup> /day	[TSP Eligible] Vetchland - Compressor Station Maintenance <small>Previously Vetchland - Compressor Station Maintenance</small>	Potential impact to FTR; USJR; <small>Previously Partial impact to FTR USJR - changed</small>	
<b>NEW</b> 1555555							
Duration	Start	End	Impact	Outage Capability	Outage Description	Service Allowable Location/Area	
6 days	Oct 26, 2020	Oct 31, 2020	8,600 10 <sup>3</sup> m <sup>3</sup> /day	325,400 10 <sup>3</sup> m <sup>3</sup> /day	Vetchland - Compressor Station Maintenance	Potential impact to FTR; USJR;	

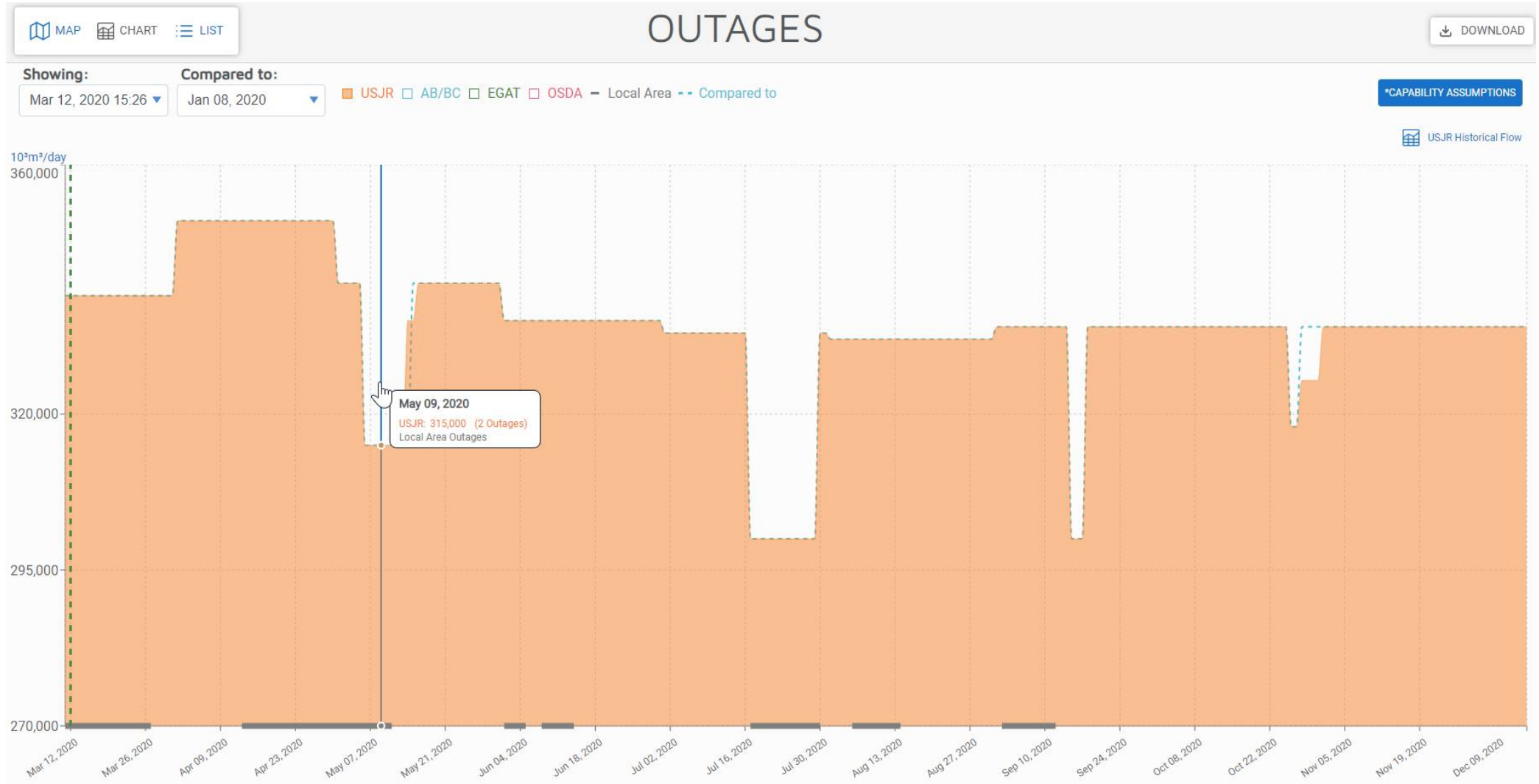
# DOP 2.0 – Chart view



# DOP 2.0 – Chart view



# DOP 2.0 – Chart view



## Contact information

---

Nadim Kassam

Modernization, Customer Experience

[nadim\\_kassam@tcenergy.com](mailto:nadim_kassam@tcenergy.com)

403-920-5011