SYSTEM UTILIZATION MONTHLY REPORT

for the month ending

May 2019

http://www.tccustomerexpress.com/2885.html

Published date: July 15th, 2019

Highlights This Month:

• N/A

NOVA Gas Transmission Ltd.



TABLE OF CONTENTS

MONTHLY FEATURES

PAGE

| Firm Transportation Service Contract Utilization | 3 |
|--|-----|
| Design Capability Utilization | |
| Upper Peace River | . 4 |
| Upper & Central Peace River | 5 |
| Peace River Design | 6 |
| Upstream James River | |
| Eastern Alberta Mainline (James River to Princess) | 8 |
| Western Alberta Mainline (AB/BC & AB/Montana Borders) | |
| Rimbey Nevis – Flow Within | 10 |
| South & Alderson – Flow Within1 | 11 |
| Medicine Hat - Flow Within | 12 |
| Eastern Alberta Mainline (Princess to Empress/McNeill) | |
| Ft. McMurray Area – Flow Within1 | 14 |
| Kirby Area – Flow Within1 | 15 |
| North of Bens Lake – Flow Within | .16 |
| North & South of Bens Lake – Flow Within1 | 17 |
| Future Firm Transportation Service Availability | 18 |
| How to Use This Report1 | 19 |

REFERENCES

| NGTL Design Areas Map | |
|----------------------------|--|
| NGTL Pipeline Segments Map | |
| Definition of Terms | |

Utilization reports are posted approximately six weeks after the end of the reported month.

If you have any questions on the content of this report, contact Winston Cao at (403) 920-5315 or winston_cao@transcanada.com.



FIRM TRANSPORTATION SERVICE¹ CONTRACT UTILIZATION³ By NGTL Pipeline Segments

May 2019

| | | Del | ivery | Rec | Receipt | | |
|-----------------|---|-------------|----------|-------------|----------|--|--|
| | | | May CD | | May CE | | |
| Segment | Contract | Utilization | (TJ/d) | Utilization | (MMcf/d) | | |
| UPRM | FT | 0% | 0.0 | 52% | 78 | | |
| | $FT + IT^2$ | 0% | | 52% | | | |
| PRLL | FT | 45% | 30.4 | 78% | 241 | | |
| | FT + IT | 48% | | 80% | | | |
| NWML | FT | 46% | 7.0 | 70% | 313 | | |
| | FT + IT | 47% | 7.0 | 70% | 51. | | |
| | | | | | | | |
| GRDL | FT FT + IT | 0% 0% | 0.0 | 76% 76% | 3,451 | | |
| | $\mathbf{F}\mathbf{I} + \mathbf{I}\mathbf{I}$ | 0% | | /070 | | | |
| WAEX | FT | 39% | 16.0 | 75% | 910 | | |
| | FT + IT | 93% | | 75% | | | |
| UDY | FT | 50% | 18.0 | 69% | 3 | | |
| | FT + IT | 61% | | 74% | | | |
| | | 1501 | 104.0 | = < 0 / | | | |
| SPML | FT FT + IT | 46% 68% | 196.2 | 76% 76% | 5,02 | | |
| | | 0070 | | | | | |
| CENT | FT | 0% | 0.0 | 59% | 2,482 | | |
| | FT + IT | 0% | | 59% | | | |
| POL | FT | 55% | 95.0 | 67% | 1,02 | | |
| | FT + IT | 58% | | 69% | | | |
| VCAT | FF | 77% | 2.049.2 | 96% | 22 | | |
| WGAT | FT FT + IT | 77% 78% | 3,948.2 | 96% 112% | 22 | | |
| | | | | | | | |
| LEG | FT | 46% | 380.2 | 91% | 55 | | |
| | FT + IT | 47% | | 108% | | | |
| LAT | FT | 22% | 178.8 | 94% | 14 | | |
| | FT + IT | 22% | | 122% | | | |
| ALAT | FT | 91% | 261.3 | 95% | 6 | | |
| | FT + IT | 91% | 20110 | 137% | Ū | | |
| | | | | | | | |
| BLEG | FT FT + IT | 57% 59% | 176.6 | 95% 113% | 37 | | |
| | | 5570 | | 11570 | | | |
| EGAT | FT | 98% | 4,273.4 | 92% | 1: | | |
| | FT + IT | 100% | | 124% | | | |
| ARTN | FT | 41% | 16.0 | 77% | 4 | | |
| | FT + IT | 46% | | 88% | | | |
| JEG | FT | 67% | 2,099.3 | 61% | 2 | | |
| | FT + IT | 67% | 2,099.5 | 107% | 2 | | |
| | | | | | | | |
| GRB | FT FT I IT | 71% | 1,716.0 | 52% | | | |
| | FT + IT | 71% | | 170% | | | |
| SMHI | FT | 63% | 12.0 | 66% | 1 | | |
| | FT + IT | 63% | | 83% | | | |
| REDL | FT | 20% | 14.0 | 79% | 1 | | |
| CEDE | FT + IT | 20% | 14.0 | 152% | - | | |
| | | | | | | | |
| COLD | FT FT + IT | 54% 54% | 211.8 | 44% 152% | | | |
| | 11 11 | 5470 | | 132 /0 | | | |
| EDM | FT | 41% | 1,882.1 | 72% | 2 | | |
| | FT + IT | 42% | | 100% | | | |
| LAT | FT | 60% | 34.0 | 95% | 8 | | |
| | FT + IT | 61% | | 141% | 0 | | |
| X/A XX I | FF | | | | | | |
| WAIN | FT FT + IT | 14% 20% | 0.3 | 92% 145% | | | |
| | •• | | | 1.070 | | | |
| ELAT | FT | 66% | 318.7 | 91% | 8 | | |
| | FT + IT | 66% | | 120% | | | |
| TOTAL SYSTEM | FT | 74% | 15,885.1 | 74% | 15,24 | | |
| | | 75% | | 77% | | | |

***NOTE:**

1. FT includes all receipt and delivery Firm Transportation Services.

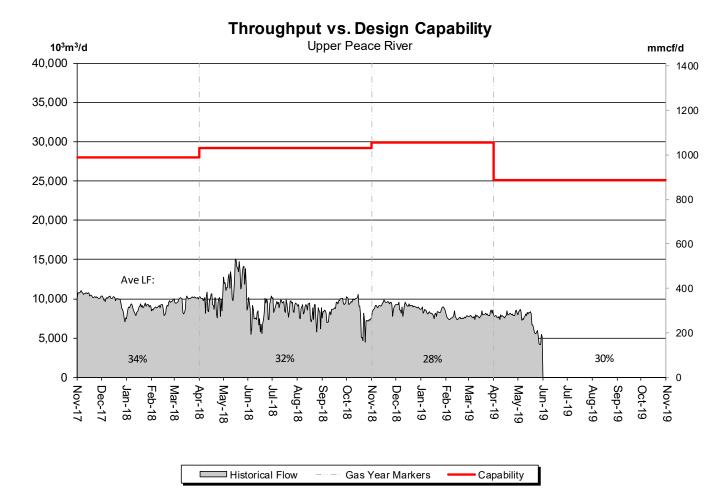
2. IT includes receipt and delivery Interruptible Services.

3. Utilization data is based on billed monthly volumes. Percent utilization calculated as FT and FT + IT billed volumes divided by applicable receipt or delivery Contract level.



DESIGN CAPABILITY UTILIZATION UPPER PEACE RIVER



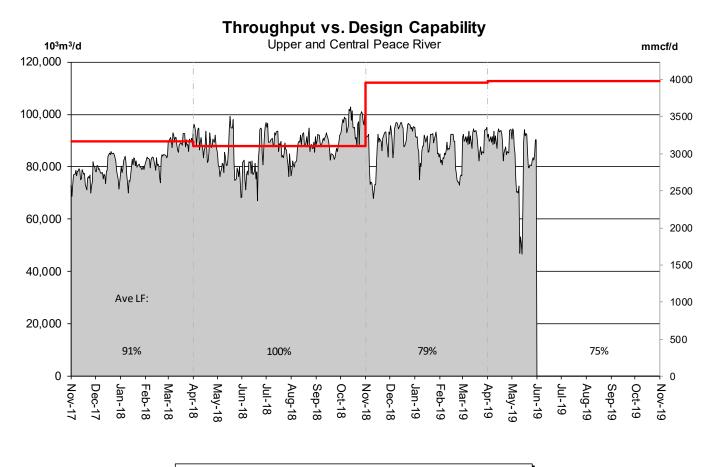


| % Design Capability Utilization | | | | | | | | | | |
|---------------------------------|-----|-----|-----|-----|-----|-----|--|--|--|--|
| Average | Dec | Jan | Feb | Mar | Apr | May | | | | |
| Flow/ | 30% | 28% | 26% | 27% | 32% | 28% | | | | |



DESIGN CAPABILITY UTILIZATION UPPER and CENTRAL PEACE RIVER



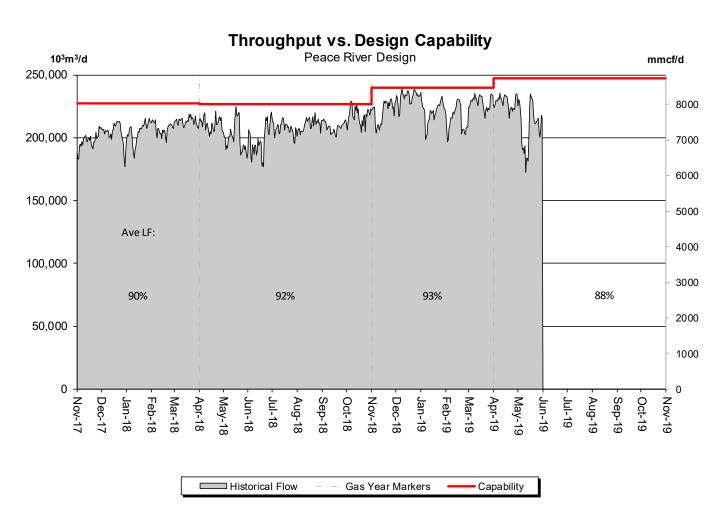


Historical Flow Gas Year Markers — Capability

| | % Design Capability Utilization | | | | | | | | | | |
|---------|---------------------------------|-----|-----|-----|-----|-----|--|--|--|--|--|
| Average | Dec | Jan | Feb | Mar | Apr | May | | | | | |
| Flow/ | 84% | 79% | 74% | 81% | 80% | 70% | | | | | |



DESIGN CAPABILITY UTILIZATION PEACE RIVER DESIGN (Upper, Central and Lower Peace River)

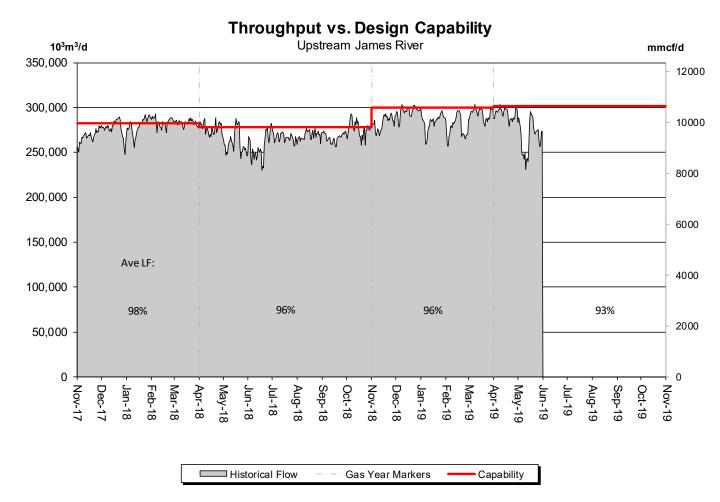


| % Design Capability Utilization | | | | | | | | | | |
|---------------------------------|-----|-----|-----|-----|-----|-----|--|--|--|--|
| Average | Dec | Jan | Feb | Mar | Apr | May | | | | |
| Flow/ | 97% | 92% | 89% | 95% | 92% | 85% | | | | |



DESIGN CAPABILITY UTILIZATION UPSTREAM JAMES RIVER (Edson Mainline, Peace River Design and Marten Hills)



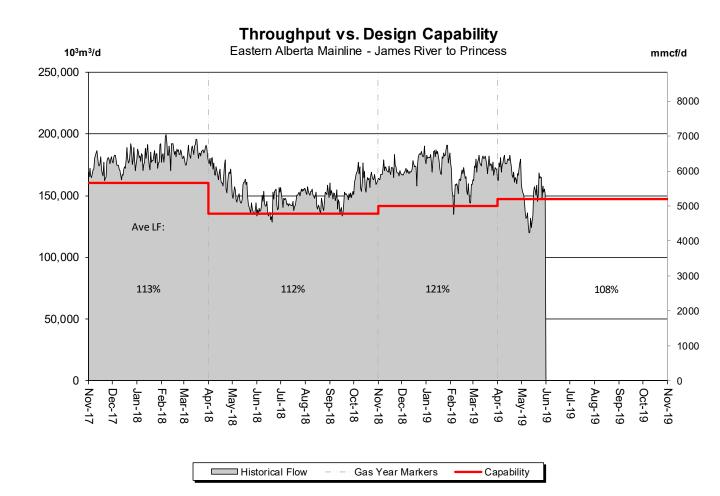


| % Design Capability Utilization | | | | | | | | | | |
|---------------------------------|-----|-----|-----|-----|-----|-----|--|--|--|--|
| Average | Dec | Jan | Feb | Mar | Apr | May | | | | |
| Flow/ | 99% | 95% | 93% | 98% | 97% | 88% | | | | |



DESIGN CAPABILITY UTILIZATION EASTERN ALBERTA MAINLINE (James River to Princess)



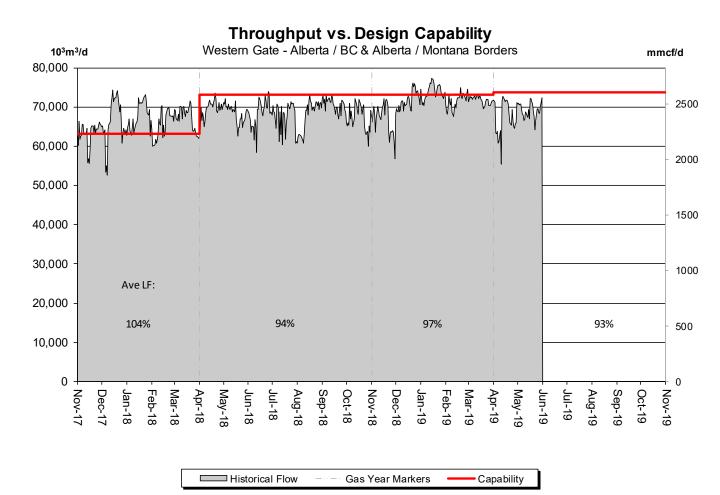


| % Design Capability Utilization | | | | | | | | | | |
|---------------------------------|------|------|------|------|------|------|--|--|--|--|
| Average | Dec | Jan | Feb | Mar | Apr | May | | | | |
| Flow/ | 123% | 128% | 112% | 123% | 117% | 100% | | | | |



DESIGN CAPABILITY UTILIZATION WESTERN ALBERTA MAINLINE (Alberta/B.C. and Alberta/Montana Borders)



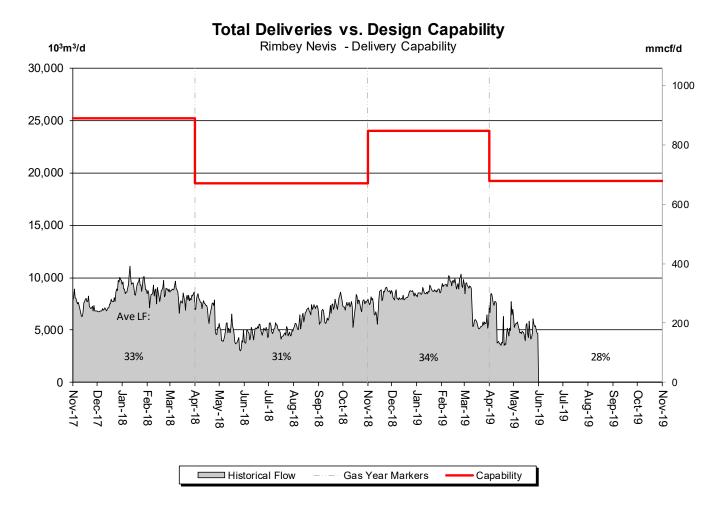


| | % Design Capability Utilization | | | | | | | | | | |
|---------|---------------------------------|------|-----|-----|-----|-----|--|--|--|--|--|
| Average | Dec | Jan | Feb | Mar | Apr | May | | | | | |
| Flow/ | 98% | 101% | 98% | 98% | 91% | 94% | | | | | |



DESIGN CAPABILITY UTILIZATION RIMBEY-NEVIS – FLOW WITHIN

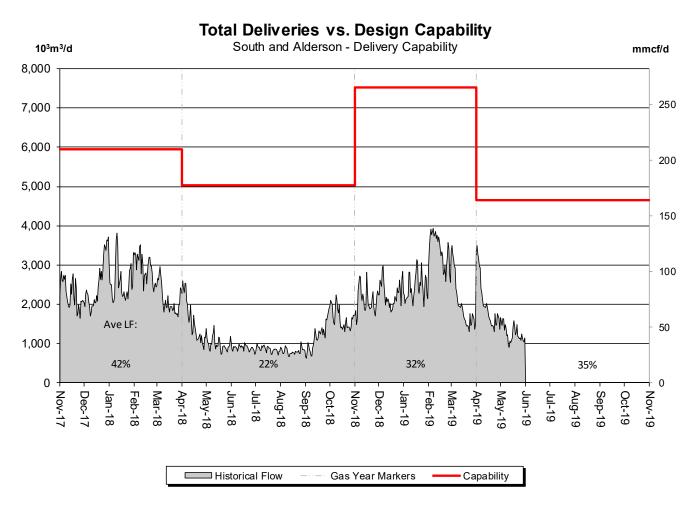




| % Design Capability Utilization | | | | | | | | | | |
|---------------------------------|-----|-----|-----|-----|-----|-----|--|--|--|--|
| Average | Dec | Jan | Feb | Mar | Apr | May | | | | |
| Flow/ | 34% | 36% | 40% | 28% | 29% | 26% | | | | |



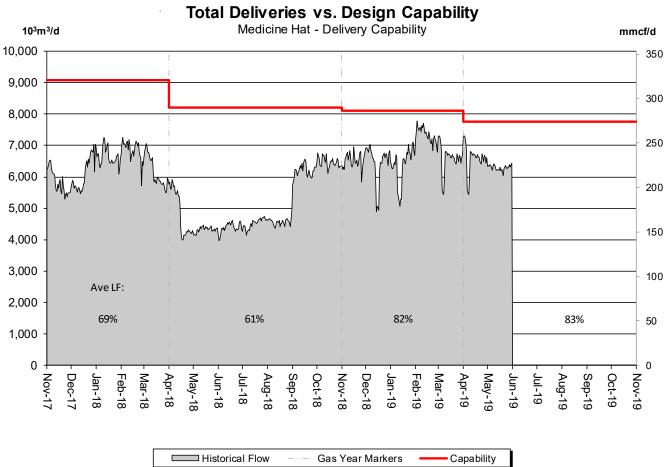
DESIGN CAPABILITY UTILIZATION SOUTH and ALDERSON – FLOW WITHIN



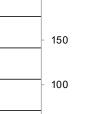
| % Design Capability Utilization | | | | | | | | | | |
|---------------------------------|-----|-----|-----|-----|-----|-----|--|--|--|--|
| Average | Dec | Jan | Feb | Mar | Apr | May | | | | |
| Flow/ | 30% | 32% | 45% | 27% | 43% | 27% | | | | |



DESIGN CAPABILITY UTILIZATION MEDICINE HAT – FLOW WITHIN



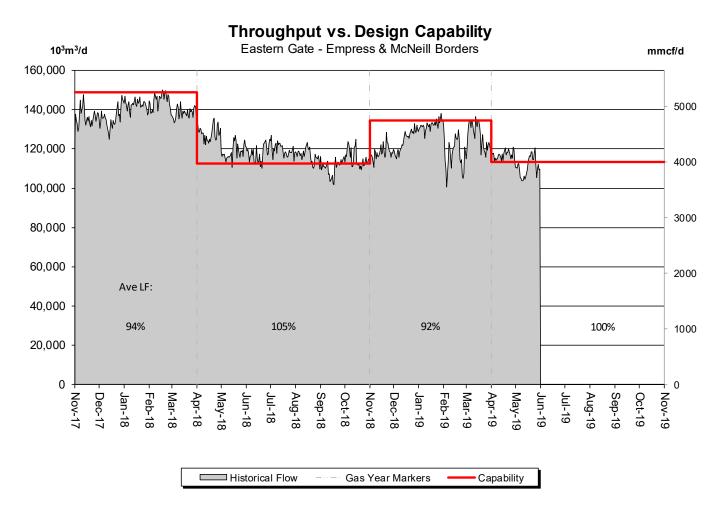
| % Design Capability Utilization | | | | | | | | | | |
|---------------------------------|-----|-----|-----|-----|-----|-----|--|--|--|--|
| Average | Dec | Jan | Feb | Mar | Apr | May | | | | |
| Flow/ | 79% | 79% | 90% | 81% | 85% | 81% | | | | |





DESIGN CAPABILITY UTILIZATION EASTERN ALBERTA MAINLINE (Princess to Empress / McNeill)

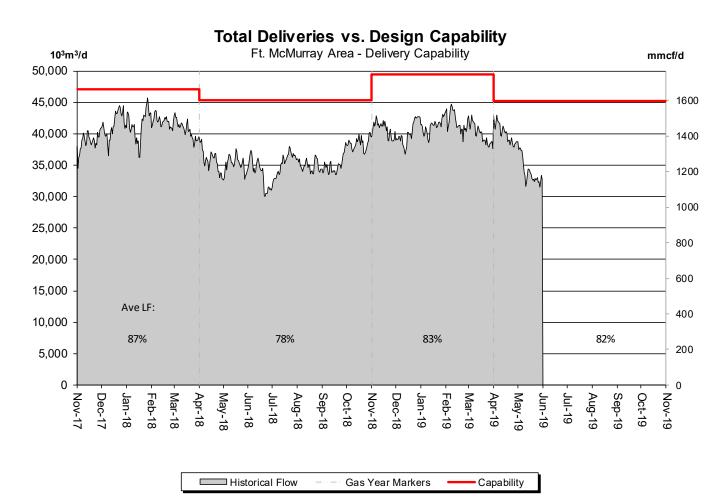




| % Design Capability Utilization | | | | | | | | |
|---------------------------------|-----|-----|-----|-----|------|-----|--|--|
| Average | Dec | Jan | Feb | Mar | Apr | May | | |
| Flow/ | 93% | 98% | 88% | 94% | 103% | 98% | | |



DESIGN CAPABILITY UTILIZATION FT. McMURRAY AREA – FLOW WITHIN

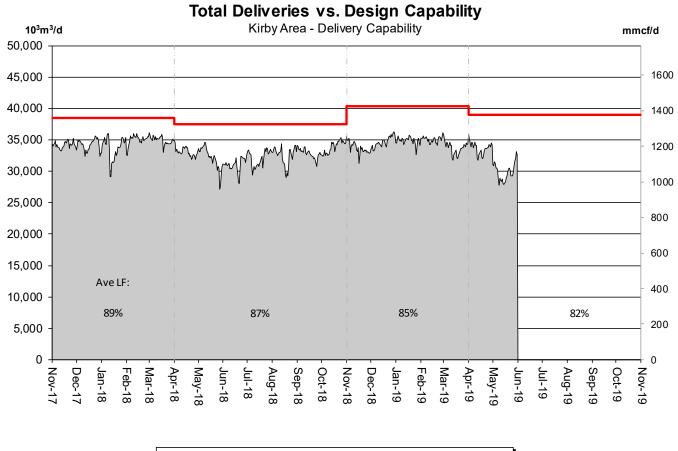


| % Design Capability Utilization | | | | | | | | |
|---------------------------------|-----|-----|-----|-----|-----|-----|--|--|
| Average | Dec | Jan | Feb | Mar | Apr | May | | |
| Flow/ | 81% | 83% | 85% | 81% | 89% | 75% | | |



DESIGN CAPABILITY UTILIZATION KIRBY AREA – FLOW WITHIN



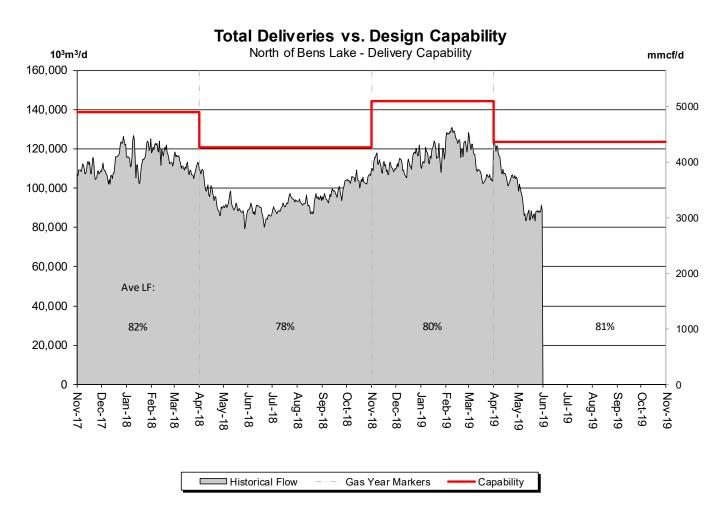


Historical Flow Gas Year Markers —— Capability

| % Design Capability Utilization | | | | | | | | |
|---------------------------------|-----|-----|-----|-----|-----|-----|--|--|
| Average | Dec | Jan | Feb | Mar | Apr | May | | |
| Flow/ | 86% | 86% | 87% | 84% | 86% | 77% | | |



DESIGN CAPABILITY UTILIZATION NORTH OF BENS LAKE – FLOW WITHIN

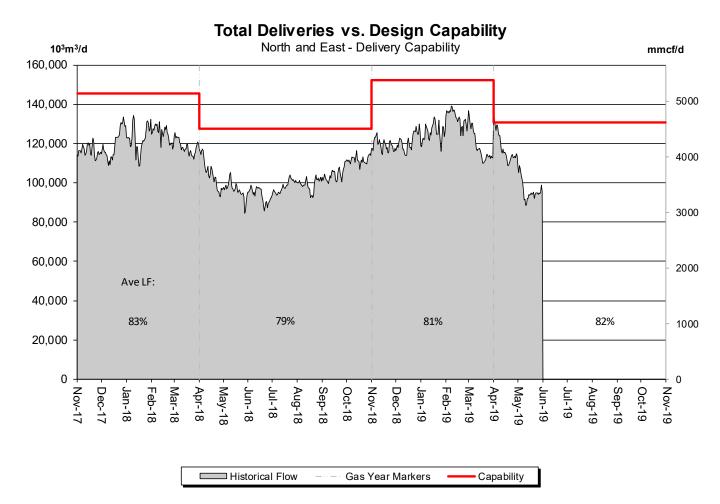


| % Design Capability Utilization | | | | | | | | |
|---------------------------------|-----|-----|-----|-----|-----|-----|--|--|
| Average | Dec | Jan | Feb | Mar | Apr | May | | |
| Flow/ | 79% | 81% | 87% | 77% | 89% | 72% | | |



DESIGN CAPABILITY UTILIZATION NORTH & SOUTH OF BENS LAKE – FLOW WITHIN





| % Design Capability Utilization | | | | | | | |
|---------------------------------|-----|-----|-----|-----|-----|-----|--|
| Average | Dec | Jan | Feb | Mar | Apr | May | |
| Flow/ | 80% | 82% | 87% | 78% | 90% | 74% | |



FUTURE FIRM TRANSPORTATION SERVICE AVAILABILITY

Please consult with your Customer Account Manager to discuss your Firm Transportation Service needs. Estimated Firm Transportation Service Availability

Please refer to the following web site for

current FT-R / FT-D Availability Maps:

http://www.tccustomerexpress.com/2801. html



HOW TO USE THIS REPORT

Overview

This report contains recent historical information on the level of utilization of firm transportation Service Agreements on the NGTL system, relative usage of interruptible service, level of utilization of design pipeline capacity.

Data is reported either by *Pipeline Segment* (25 segments make up the system) or *Design Area* (13 Design Areas for the system). Maps of both are included in the reference section.

Firm Transportation Service Contract Utilization

The Firm Transportation Service Contract Utilization report shows the percent utilization for each of the 25 NGTL pipeline segments and 3 major export delivery points comprising the total system. The utilization data is based on billed monthly volumes. Percent utilization is calculated as firm transportation service and firm transportation service + interruptible service divided by applicable receipt or delivery contract level. Historical Data involving billed volumes lags the current date by approximately two months.

Design Capability Utilization

The load factor/segment flow graphs show actual flow versus design capability values for various NGTL system areas. The graphs also show seasonal (winter/summer) design capability and average load factors (LF) for each season. Load factors are obtained by comparing the receipt, delivery, or throughput flow condition in each of the Alberta design areas against the corresponding design capability. Consequently, design capability utilization is measured as Average Actual Flow / Seasonal Design Capability. Data used in these reports lags the current date by at least one month.

Design Flow Capability utilization is a function of several factors that include:

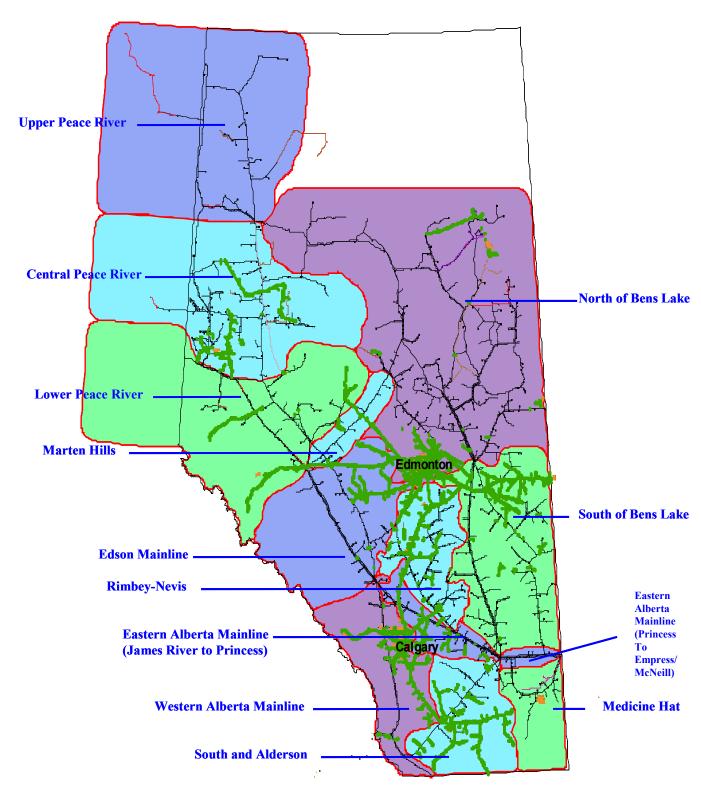
- Total market demand for Alberta natural gas.
- Seasonal changes in market demand for Alberta natural gas.
- Receipt nominating practices of customers individually and in aggregate to meet that level of demand.
- Scheduled maintenance which could effect actual flow requirement in a design area at any given time.
- Design assumptions used in determining required segment flow requirement.

Future Firm Transportation Service Availability

The Future Firm Transportation Service Availability report presents guidelines and timing for all future firm transportation service requests.



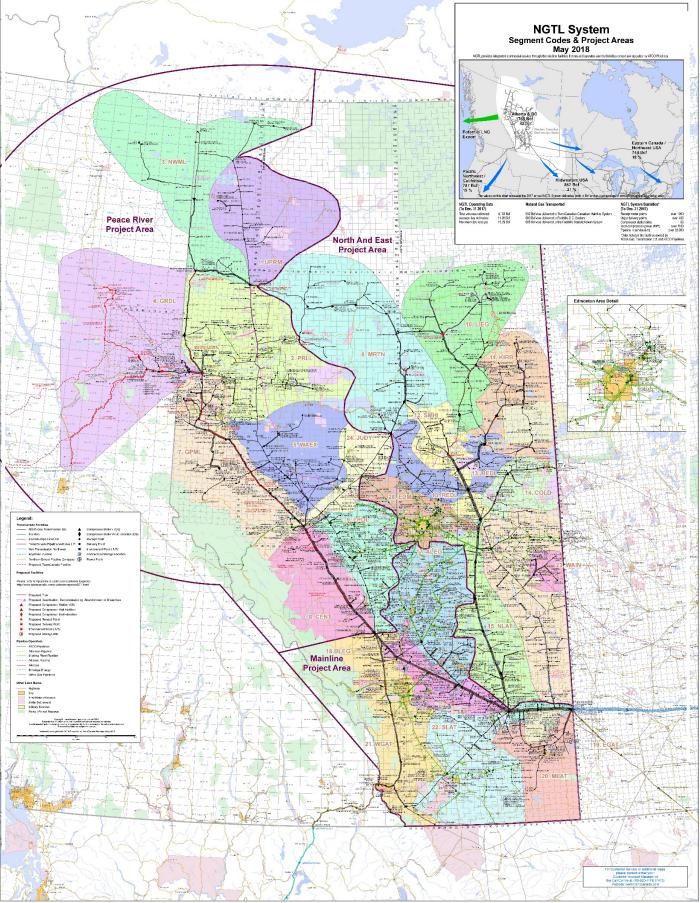
NGTL Design Areas



(Last updated Nov 2011)



Last Update May, 2018



DEFINITION OF TERMS

Design Capability Utilization

Actual Flow

The amount of gas flowing within or out of the design area.

Design Capability

The volume of gas that can be transported from the design area on the pipeline system considering given design assumptions.

AVGLF (Average Load Factor)

The ratio between average *Actual Flow* and *Design Capability*. It is calculated for every design season (summer/winter) as shown on the graphs.

Intra NGTL System Deliveries

The amount of sales gas flowing off the system within an area.

Receipt Flow

Aggregate of actual receipts within an area and the *Actual Flow* of the upstream area.

Other

System Load Factor

The volume weighted average of the Average Load Factor (AVGLF) of all design areas on the system

