# SYSTEM UTILIZATION AND RELIABILITY MONTHLY REPORT

## for the month ending April 2013

http://www.transcanada.com/customerexpress/2885.html

Published date: July 16, 2013

## **Highlights This Month:**

- The average actual flow for the dominant flow condition in each of the Alberta design areas is compared against the corresponding design capability to obtain a measure of pipeline utilization. Consequently, design capability utilization is measured as Average Actual Flow / Seasonal Design Capability.
- FT Receipt Availability over a 3 month average from February 1, 2013 April 30, 2013 was deemed to be 100% available in all pipe segments.
- Border Availability at Empress/McNeill, Gordondale and Alberta/BC, over a 3 month average from February 1, 2013 April 30, 2013 were all deemed 100% available.
- The Firm Transportation service contract utilization table (page 3 of this report) illustrates the FT and FT + IT utilization for receipts and deliveries. Segment code "LPRM" has been remove from the table as it is no longer used.
- Design methodology for The Marten Hills Area is currently being reviewed. The chart currently displays up to date throughput without a corresponding Capability value.

NOVA Gas Transmission Ltd.



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If you have any questions on the content of this report, contact Winston Cao at (403) 920-5315 or via fax at (403) 920-2357.



## FIRM TRANSPORTATION SERVICE<sup>1</sup> CONTRACT UTILIZATION<sup>3</sup> By NGTL Pipeline Segments April 2013

				Receipt			
		Deli	very Apr CD	Rece	Apr CD		
Segment	Contract	Utilization	(TJ/d)	Utilization (1			
UPRM	FT	9%	25.4	95%	63		
	$FT + IT^2$	15%		113%			
PRLL	FT	42%	42.2	94%	117		
	FT + IT	46%		105%			
NWML	FT	28%	5.0	43%	714		
	FI FT + IT	28% 32%	5.0	45%	/14		
GRDL	FT FT + IT	14% 15%	8.9	77% 79%	1,787		
	FI + II	1376		1370			
WRSY	FT	0%	0.0	82%	23		
	FT + IT	0%		101%			
WAEX	FT	25%	15.4	72%	319		
	FT + IT	81%		97%			
JUDY	FT	31%	46.1	95%	106		
	FT + IT	34%		115%			
CDMI	FT	40%	164 5	91%	2.026		
GPML	FI FT + IT	40% 53%	164.5	91% 98%	3,036		
CENT	FT	8%	10.4	98%	815		
	FT + IT	13%		130%			
LPOL	FT	32%	81.8	93%	492		
	FT + IT	40%		129%			
WGAT	FT	71%	3,214.4	87%	441		
	FT + IT	79%	-,	104%			
ALEG	FT	470/	2166	069/	860		
ALEG	FI FT + IT	47% 66%	316.6	96% 119%	860		
SLAT	FT FT	30%	169.2	95%	240		
	FT + IT	31%		114%			
MLAT	FT	76%	262.1	84%	198		
	FT + IT	85%		100%			
BLEG	FT	64%	144.2	95%	600		
	FT + IT	71%		109%			
EGAT	FT	93%	3,407.9	85%	34		
JGAT	FT + IT	109%	3,407.9	117%	34		
MRTN	FT FT + IT	16% 22%	38.8	88% 114%	76		
	11 + 11	2270		114 /0			
LIEG	FT	80%	1,146.5	63%	28		
	FT + IT	88%		204%			
KIRB	FT	73%	890.8	71%	39		
	FT + IT	78%		120%			
SMHI	FT	74%	12.0	82%	36		
	FT + IT	92%	12.0	149%	50		
		220/	10.1	=1.07			
REDL	FT FT + IT	32% 42%	13.1	71% 121%	44		
		4270		121 /0			
COLD	FT	73%	55.7	71%	34		
	FT + IT	127%		97%			
EDM	FT	47%	1,692.5	94%	65		
	FT + IT	48%		124%			
NLAT	FT	43%	15.4	97%	142		
	FT + IT	45%	1011	128%			
VAIN	FT FT + IT	22% 22%	0.4	76% 154%	8		
		22 /0		13770			
ELAT	FT	76%	258.2	89%	141		
	FT + IT	76%		118%			
FOTAL SYSTEM		72%	12,037.7	86%	10,456		
	FT + IT	82%		100%			

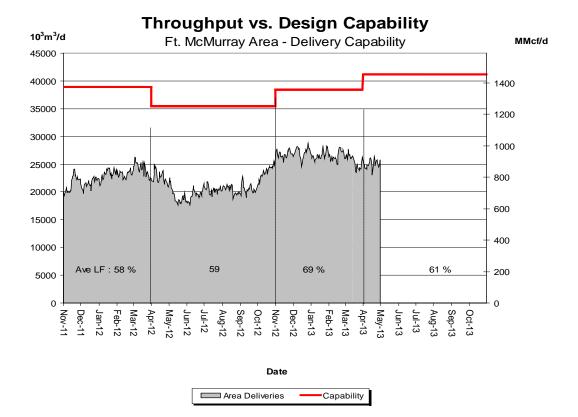
\*NOTE:

 FT includes all receipt and delivery Firm Transportation Services: FTR, FTRN, LRS, FTD1, FTD2,
IT includes all receipt and delivery Interruptible Services: ITR, FRO, ITD1, ITD2, and FDO.
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 FT. McMURRAY AREA – FLOW WITHIN



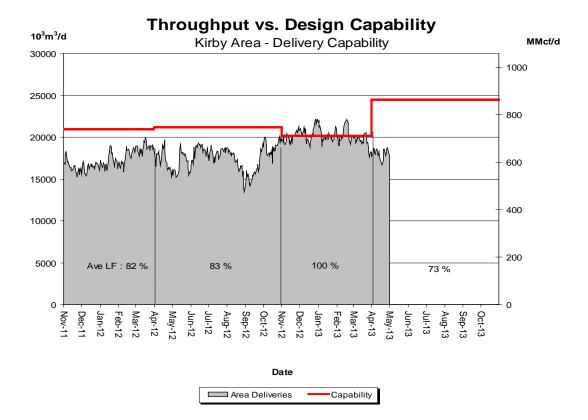


% Design Capability Utilization Monthly Average Area Deliveries as a Percentage of Design Capability									
Average Flow/	Nov	Dec	Jan	Feb	Mar	Apr			
Design Capability	70	70	69	69	66	61			



# DESIGN CAPABILITY UTILIZATION KIRBY AREA – FLOW WITHIN



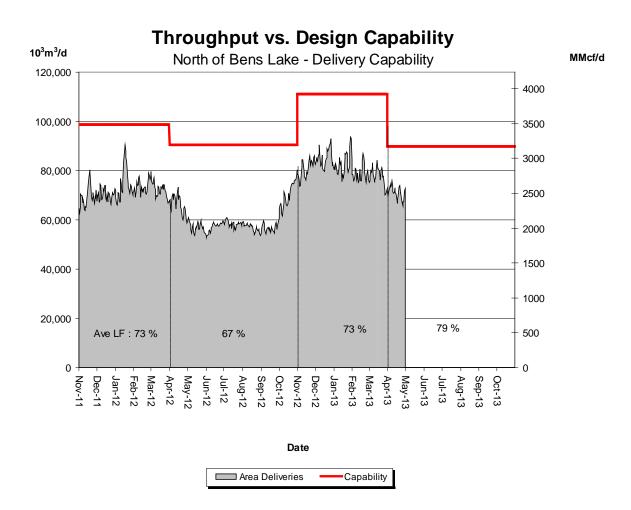


% Design Capability Utilization Monthly Average Area Deliveries as a Percentage of Design Capability								
Average Flow/	Nov	Dec	Jan	Feb	Mar	Apr		
Design Capability	99	102	101	101	97	73		



# DESIGN CAPABILITY UTILIZATION NORTH OF BENS LAKE – FLOW WITHIN

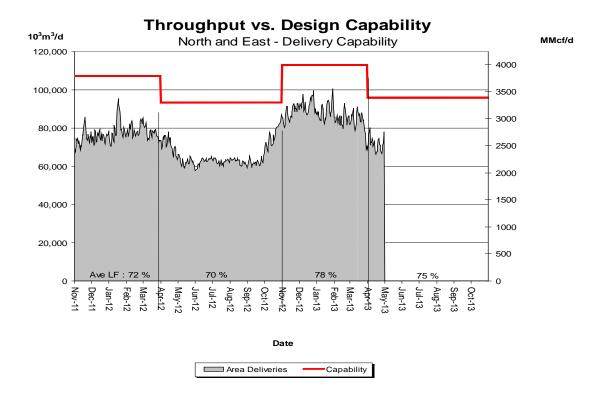




% Design Capability Utilization Monthly Average Area Deliveries as a Percentage of Design Capability							
Average Flow/	Nov	Dec	Jan	Feb	Mar	Apr	
Design Capability	73	77	75	71	70	79	



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

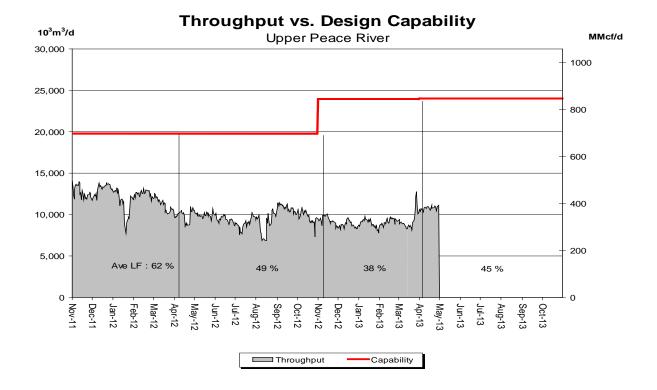


% Design Capability Utilization Monthly Average Actual Area Deliveries as a Percentage of Design Capability								
Average Flow/	Nov	Dec	Jan	Feb	Mar	Apr		
Design Capability	78	81	79	75	74	75		



# DESIGN CAPABILITY UTILIZATION UPPER PEACE RIVER



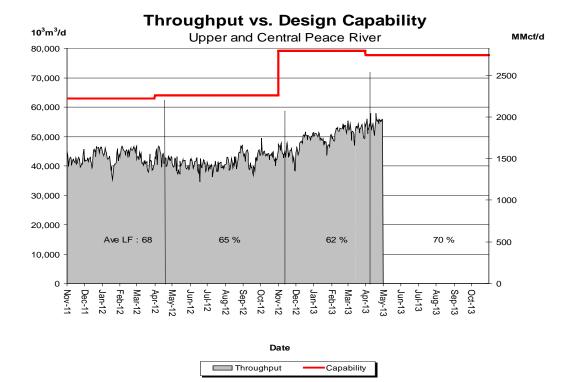


% Design Capability Utilization Monthly Average Actual Flow as a Percentage of Design Capability							
Average Flow/	Nov	Dec	Jan	Feb	Mar	Apr	
Design Capability	39	37	37	38	39	45	



# **DESIGN CAPABILITY UTILIZATION UPPER and CENTRAL PEACE RIVER**



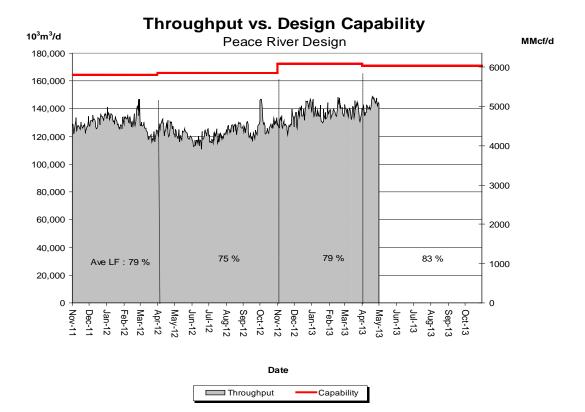


% Design Capability Utilization Monthly Average Actual Flow as a Percentage of Capability							
Average Flow/	Nov	Dec	Jan	Feb	Mar	Apr	
Design Capability	56	61	62	65	66	70	



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



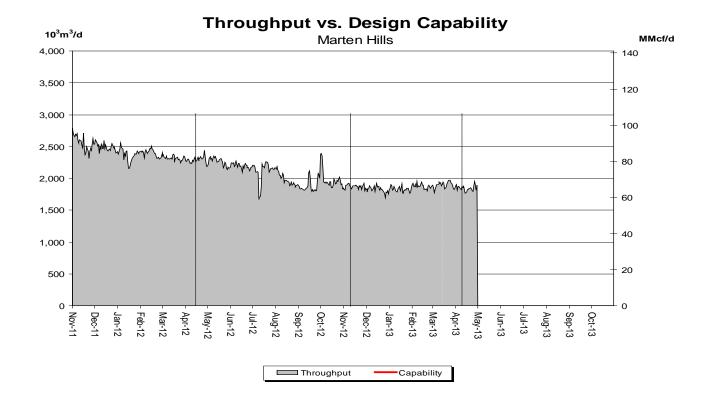


% Design Capability Utilization Monthly Average Actual Flow as a Percentage of Design Capability								
Average Flow/	Nov	Dec	Jan	Feb	Mar	Apr		
Design Capability	75	80	79	81	80	83		



# DESIGN CAPABILITY UTILIZATION MARTEN HILLS





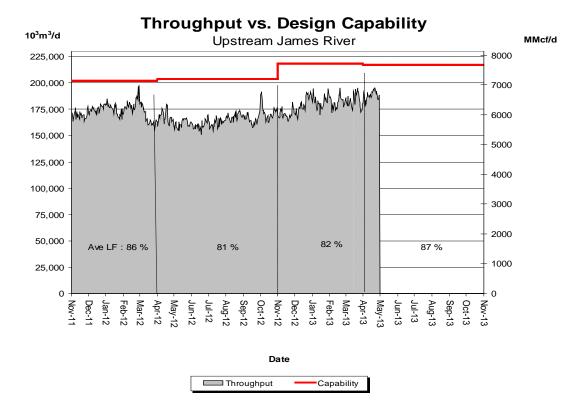
Design methodology for Marten Hills Area currently being reviewed. Chart currently displays up to date throughput without a corresponding Capability value.



# DESIGN CAPABILITY UTILIZATION UPSTREAM JAMES RIVER



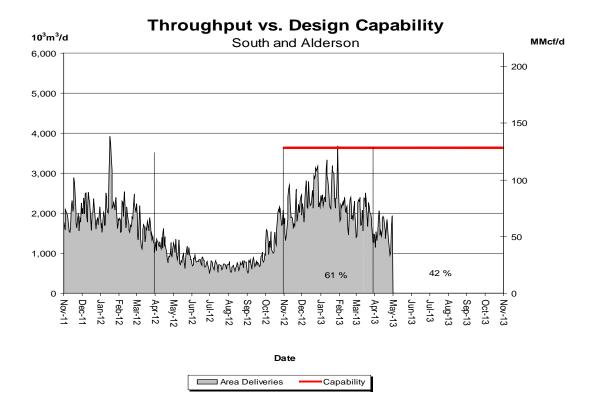




% Design Capability Utilization Monthly Average Actual Flow as a Percentage of Design Capability								
Average Flow/	Nov	Dec	Jan	Feb	Mar	Apr		
Design Capability	78	82	83	82	84	87		



# DESIGN CAPABILITY UTILIZATION SOUTH and ALDERSON – FLOW WITHIN

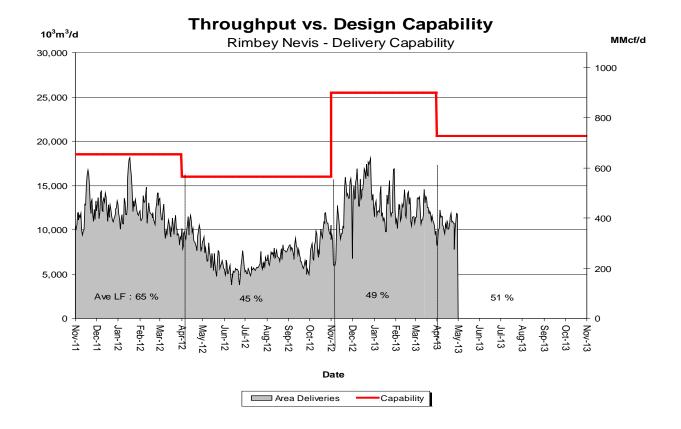


% Design Capability Utilization Monthly Average Actual Flow as a Percentage of Design Capability								
Average Flow/	Nov	Dec	Jan	Feb	Mar	Apr		
Design Capability	55	67	72	57	53	42		



# DESIGN CAPABILITY UTILIZATION RIMBEY-NEVIS – FLOW WITHIN





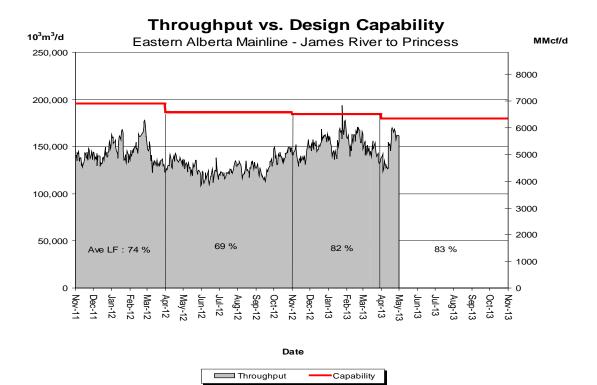
% Design Capability Utilization Monthly Average Area Deliveries as a Percentage of Design Capability							
Average Flow/	Nov	Dec	Jan	Feb	Mar	Apr	
Design Capability	44	58	50	48	47	51	



# DESIGN CAPABILITY UTILIZATION EASTERN ALBERTA MAINLINE

(James River to Princess)



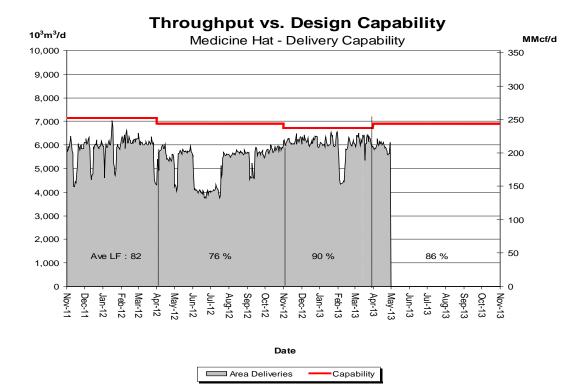


% Design Capability Utilization Monthly Average Actual Flow as a Percentage of Design Capability							
Average Flow/	Nov	Dec	Jan	Feb	Mar	Apr	
Design Capability	76	84	85	86	79	83	



## **DESIGN CAPABILITY UTILIZATION MEDICINE HAT – FLOW WITHIN**





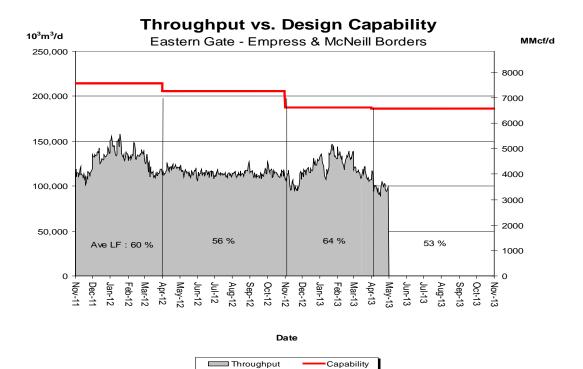
% Design Capability Utilization Monthly Average Area Deliveries as a Percentage of Design Capability							
Average Flow/	Nov	Dec	Jan	Feb	Mar	Apr	
Design Capability	91	91	91	81	92	86	



# DESIGN CAPABILITY UTILIZATION EASTERN ALBERTA MAINLINE

(Princess to Empress / McNeill)



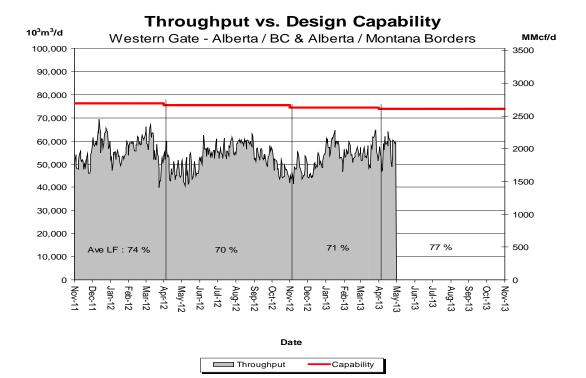


% Design Capability Utilization Average Actual Flow as a Percentage of Design Capability							
Average Flow /	Nov	Dec	Jan	Feb	Mar	Apr	
Design Capability	56	64	69	71	61	53	



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





% Design Capability Utilization Average Actual Flow as a Percentage of Design Capability								
Average Flow /	Nov	Dec	Jan	Feb	Mar	Apr		
Design Capability	64	66	77	74	74	77		



# HISTORICAL TRANSPORTATION SERVICE AVAILABILITY

## February 1, 2013 to April 30, 2013 (3 Month Average)

Receipt Area		IT-R Service	Firm Service	Firm Service	%(	CD	Causes/Comments <sup>(3)</sup>
		Available	Available	Restriction	Restri	cted <sup>(1)</sup>	
	Segment	(% of time)	(% of time)	(% of time)	Max	Average	
Peace River	UPRM 1	100	100	0	0	0	
	PRLL 2	100	100	0	0	0	
	NWML 3	100	100	0	0	0	
	GRDL 4	100	100	0	0	0	
	WAEX 5	100	100	0	0	0	
	JUDY 24	100	100	0	0	0	
	WRSY 26	100	100	0	0	0	
	LPRM 27	100	100	0	0	0	
	GPML 7	100	100	0	0	0	
Central	CENT 8	100	100	0	0	0	
	LPOL 9	100	100	0	0	0	
North & East Upstream	LIEG 10	100	100	0	0	0	
of Bens Lake	KIRB 11	100	100	0	0	0	
	MRTN 6	100	100	0	0	0	
	SMHI 12	100	100	0	0	0	
	REDL 13	100	100	0	0	0	
	COLD 14	100	100	0	0	0	
Downstream of	NLAT 15	100	100	0	0	0	
Bens Lake	ELAT 16	100	100	0	0	0	
	WAIN 23	100	100	0	0	0	
Rimbey/Nevis	ALEG 17	100	100	0	0	0	
Eastern Mainline	BLEG 18	100	100	0	0	0	
	EGAT 19	100	100	0	0	0	
	MLAT 20	100	100	0	0	0	
	SLAT 22	100	100	0	0	0	
Western Mainline	WGAT 21	100	100	0	0	0	
Borders		IT-D Service	Firm Service	Firm Service	% CD Re	stricted <sup>(1)</sup>	Causes/Comments <sup>(3)</sup>
	Available <sup>(2)</sup>	Available <sup>(2)</sup>	Available	Restriction			
	(% of time)	(% of time)	(% of time)	(% of time)	Max	Average	
Empress/McNeill		100	100	0	0	0	
Alberta-BC		100	100	0	0	0	
Gordondale		100	100	0	0	0	



## FUTURE FIRM TRANSPORTATION SERVICE AVAILABILITY (MAINLINE RESTRICTIONS)

## **Receipt and Delivery Firm Transportation Guidelines**

Firm Transportation Location	Authorize Firm Transportation Service By	To Ensure Firm Transportation Service By
Summer construction (generally south of Edmonton)	November 2013	November 2015
Winter construction (generally north of Edmonton)	November 2013	April 2016

> If your needs for firm transportation service arise after the above dates to "Authorize Firm Transportation Service By", NGTL will evaluate your new receipt firm transportation service or firm service transfer requests on a date-stamped basis.

Please consult with your Customer Sales Representative 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://staging.transcanada.com/customer express/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, and the availability of transportation services as an indication of system reliability.

Data is reported either by *Pipeline Segment* (26 on the system) or *Design Area* (13 on 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 26 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 for each season. Data used in these reports lags the current date by 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.
- Effect of scheduled maintenance on actual flow requirement in a design area at any given time.
- Design assumptions used in determining required segment flow requirement.



## Historical Transportation Service Availability

Transportation Service Availability is a system utilization measure that identifies the degree to which firm and interruptible transportation services are available on the NGTL system. It includes the historical frequency of service restriction experienced by the gas transmission network by service type and by pipeline segment.

The data shows the percentage of a given time period that a service type was available for a given section of the system. Service availability less than 100 percent means that some level of transportation service has been restricted for a portion of the time period.

Priority of transportation service on the NGTL system is firm transportation service, and then interruptible (IT). If transportation is restricted within a segment, all service within that segment of a lower priority will be affected.

Service availability is affected by a number of factors including scheduled and unscheduled maintenance, construction or other outages.

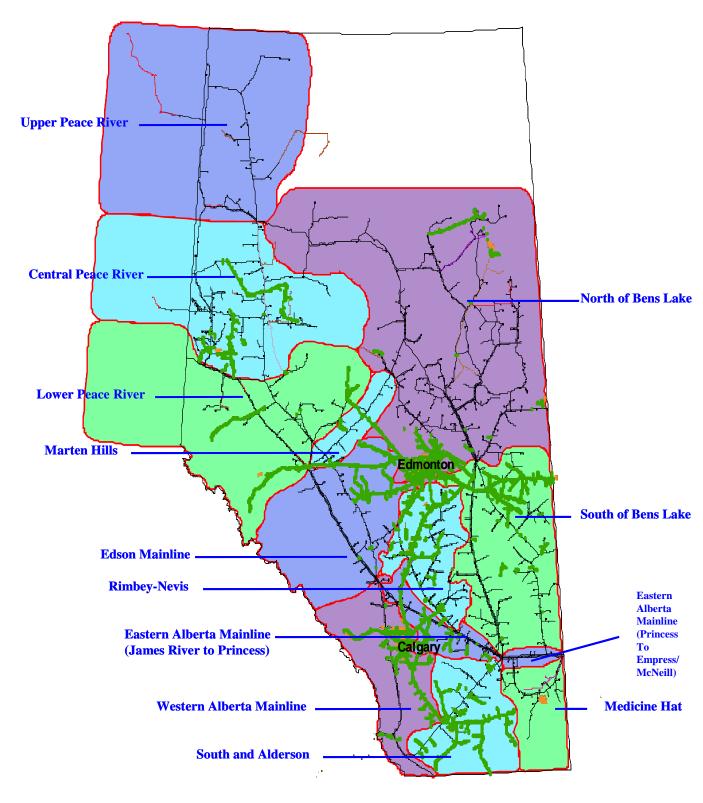
As a monthly feature the Historical Transportation Service Availability is shown as a three-month rolling average of transportation availability.

## **Future Firm Transportation Service Availability**

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



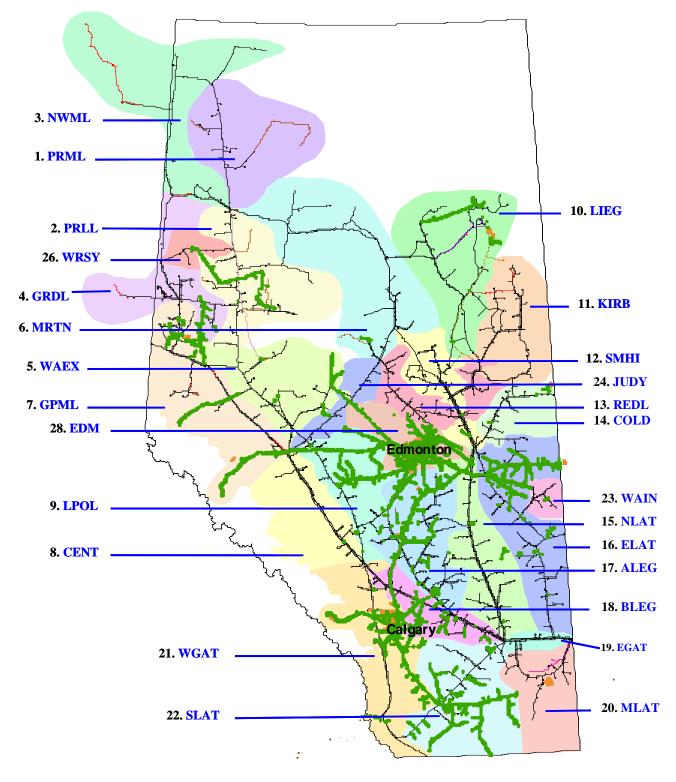
# **NGTL Design Areas**



(Last updated Nov 2011)



# **NGTL Pipeline Segments**





(Last updated Nov 2011)

# **DEFINITION OF TERMS**

## Design Capability Utilization

### Actual Flow

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

### Design Capability

The volume of gas that can be transported at various points on the pipeline system considering 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-Alberta 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.

## Historical Transportation Service Availability

#### Average % CD Restricted

The average percentage of the entire segment receipt contract demand restricted during periods of restriction.

### Firm Service Available

The percentage of time that all requested firm transportation service requests were transported within a segment.

## Other

### System Load Factor

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

### Firm Service Restriction

Percentage of time firm service is restricted.

#### IT-2 Service Available

The percentage of time that IT-2 service requests were transported.

#### Max % CD Restricted

The maximum percentage to which the entire segment contract demand was restricted.

