

# SYSTEM UTILIZATION AND RELIABILITY MONTHLY REPORT

for the month ending  
November , 2012

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

*Published date:*  
**March 27, 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 September 1, 2012 – November 30, 2012 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 September 1, 2012 – November 30, 2012 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.
- Design methodology for Marten Hills Area is currently being reviewed. The chart currently displays up to date throughput without a corresponding Capability value.
- Design methodology for South and Alderson Area has been updated to a Flow Within condition. The chart now shows Area Deliveries and corresponding Delivery Capability.

**NOVA Gas Transmission Ltd.**

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# FIRM TRANSPORTATION SERVICE<sup>1</sup> CONTRACT UTILIZATION<sup>3</sup>

By NGTL Pipeline Segments  
November 2012

Segment	Contract	Delivery		Receipt	
		Utilization	Nov CD (TJ/d)	Utilization (MMcf/d)	Nov CD
UPRM	FT	7%	25.4	86%	81
	FT + IT <sup>2</sup>	11%		92%	
LPRM	FT	0%	0.0	0%	0
	FT + IT	0%		0%	
PRLL	FT	46%	48.1	92%	130
	FT + IT	50%		105%	
NWML	FT	30%	5.0	40%	667
	FT + IT	34%		41%	
GRDL	FT	42%	4.7	76%	1,366
	FT + IT	59%		82%	
WRSY	FT	0%	0.0	87%	25
	FT + IT	0%		103%	
WAEX	FT	26%	43.4	72%	391
	FT + IT	40%		96%	
JUDY	FT	58%	16.6	92%	65
	FT + IT	61%		107%	
GPML	FT	48%	172.8	85%	3,058
	FT + IT	57%		91%	
CENT	FT	6%	10.4	93%	829
	FT + IT	8%		115%	
LPOL	FT	43%	82.6	92%	519
	FT + IT	64%		122%	
WGAT	FT	72%	3,165.9	82%	439
	FT + IT	74%		98%	
ALEG	FT	54%	389.5	96%	903
	FT + IT	60%		119%	
SLAT	FT	40%	178.3	96%	239
	FT + IT	41%		118%	
MLAT	FT	83%	262.1	84%	219
	FT + IT	86%		97%	
BLEG	FT	66%	142.2	97%	628
	FT + IT	70%		110%	
EGAT	FT	99%	3,348.0	97%	42
	FT + IT	117%		113%	
MRTN	FT	28%	28.1	85%	76
	FT + IT	42%		95%	
LIEG	FT	81%	1,099.2	65%	30
	FT + IT	99%		223%	
KIRB	FT	81%	805.6	76%	42
	FT + IT	96%		139%	
SMHI	FT	80%	12.1	83%	45
	FT + IT	85%		121%	
REDL	FT	76%	13.1	78%	47
	FT + IT	105%		119%	
COLD	FT	73%	56.8	71%	33
	FT + IT	136%		110%	
EDM	FT	57%	1,706.9	88%	63
	FT + IT	59%		132%	
NLAT	FT	51%	16.0	97%	145
	FT + IT	51%		136%	
WAIN	FT	32%	0.5	82%	8
	FT + IT	32%		177%	
ELAT	FT	86%	257.8	88%	149
	FT + IT	86%		121%	
TOTAL SYSTEM	FT	77%	11,891.2	83%	10,238
	FT + IT	87%		98%	

\*NOTE:

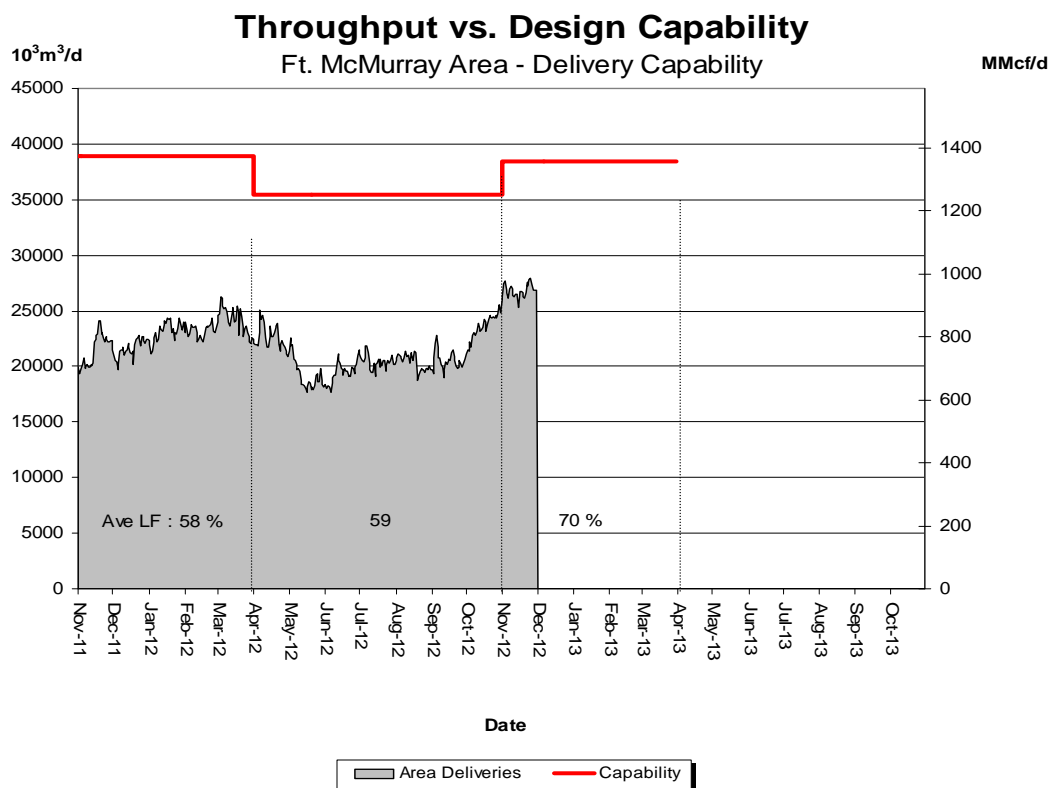
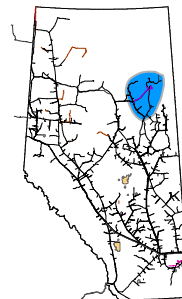
1. FT includes all receipt and delivery Firm Transportation Services: FTR, FTRN, LRS, FTD1, FTD2, FTD3

2. IT includes all receipt and delivery Interruptible Services: ITR, FRO, ITD1, ITD2, and FDO.

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

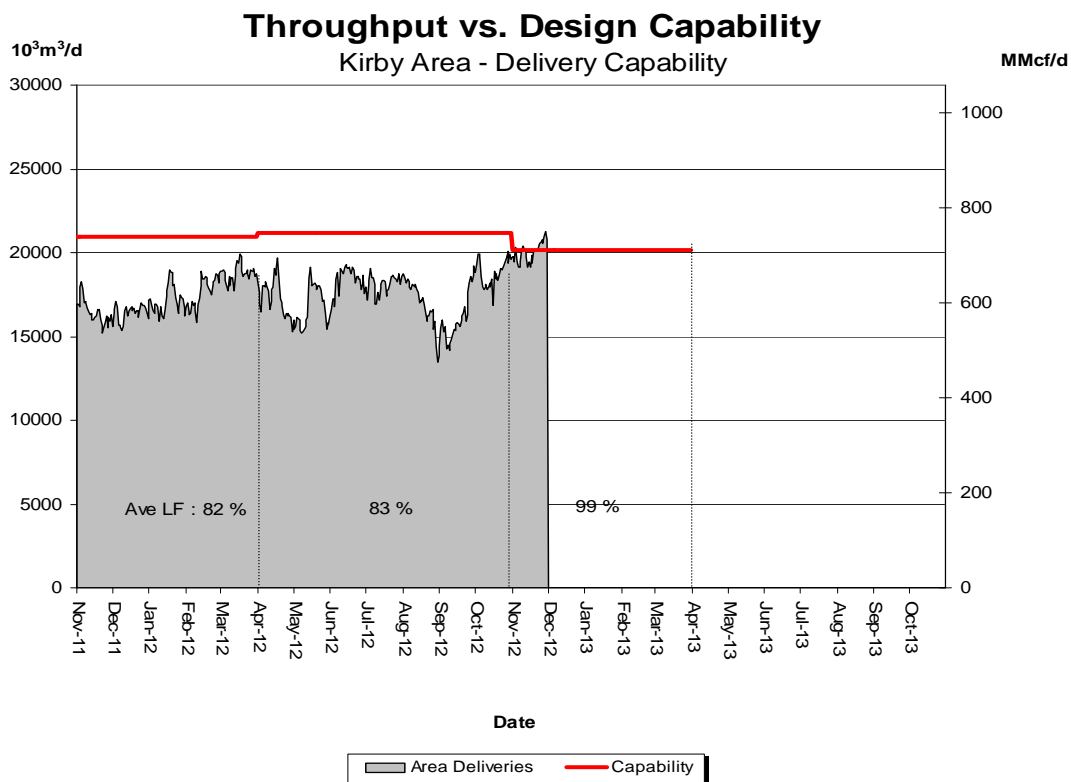
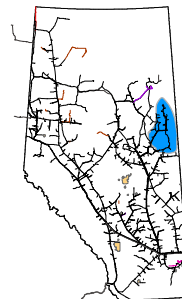
## FT. McMURRAY AREA – FLOW WITHIN



<b>% Design Capability Utilization</b> Monthly Average Area Deliveries as a Percentage of Design Capability						
Average Flow/ Design Capability	Jun	Jul	Aug	Sep	Oct	Nov
	55	57	57	58	66	70

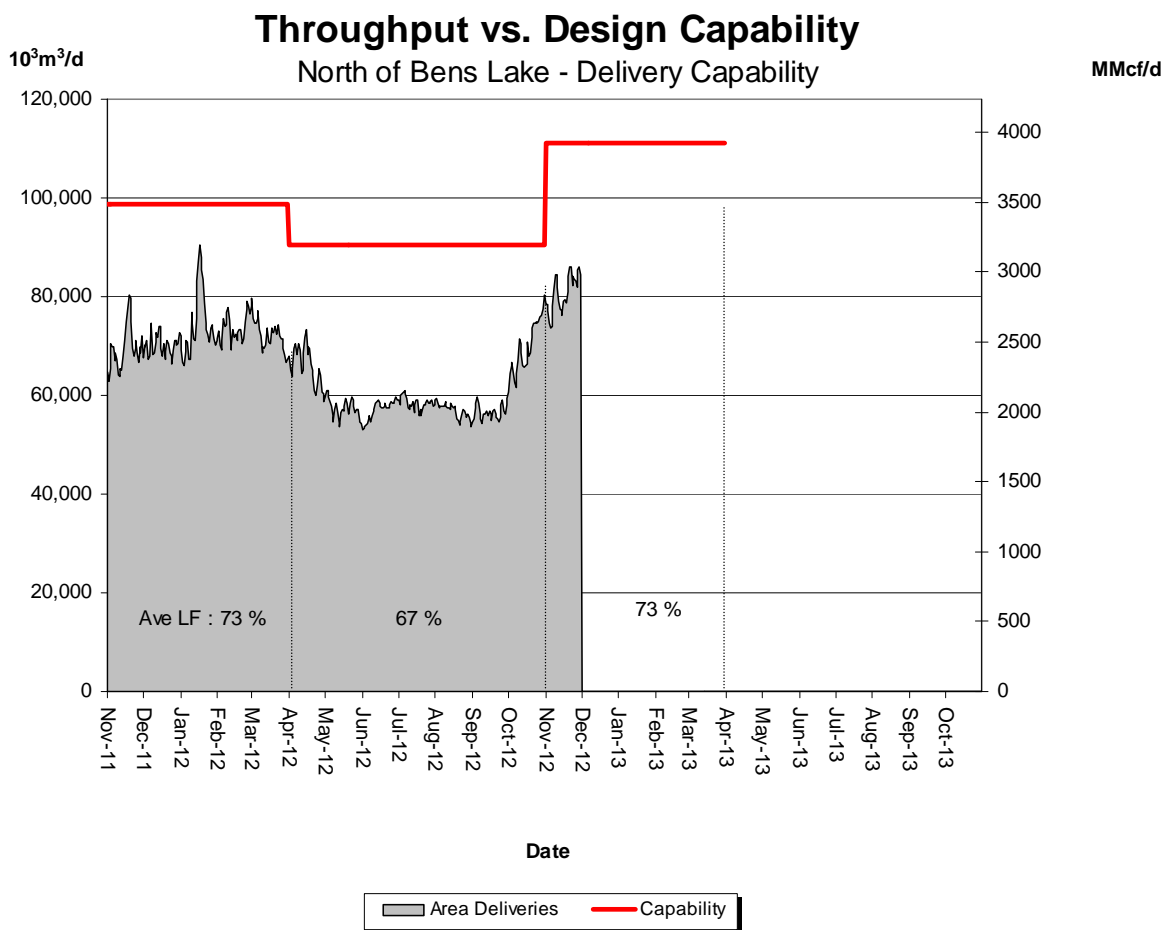
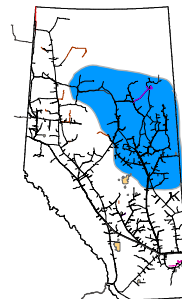
# DESIGN CAPABILITY UTILIZATION

## KIRBY AREA – FLOW WITHIN



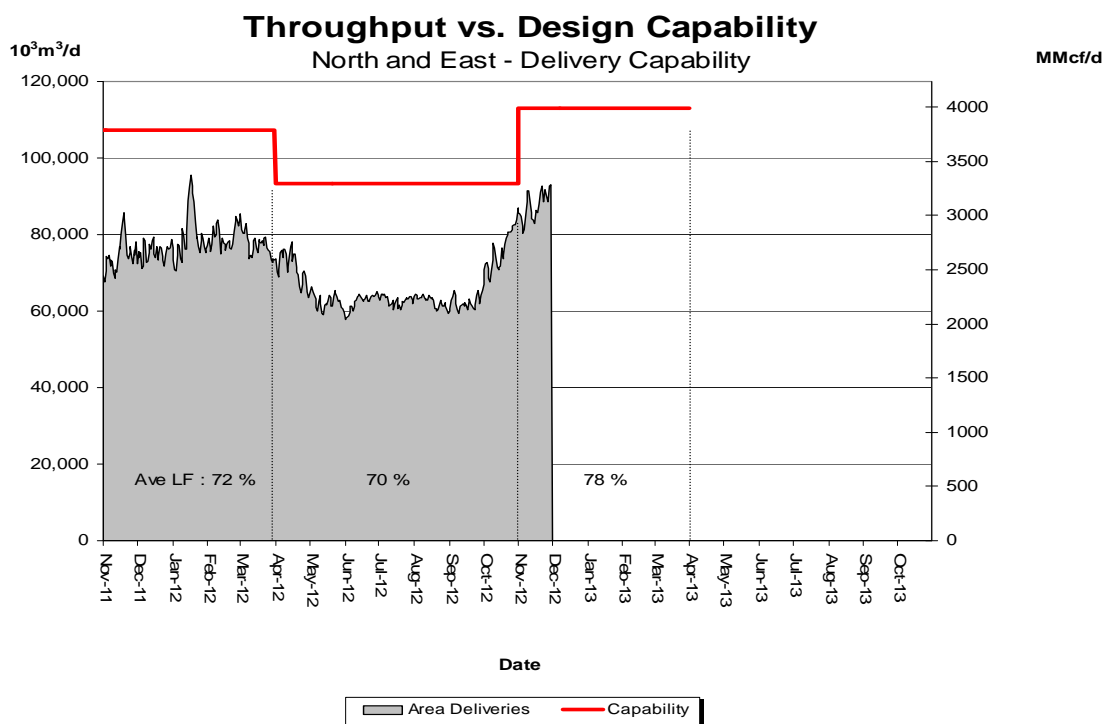
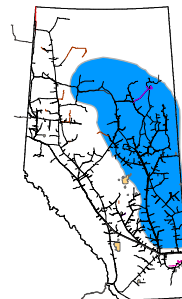
<b>% Design Capability Utilization</b> Monthly Average Area Deliveries as a Percentage of Design Capability						
Average Flow/ Design Capability	Jun	Jul	Aug	Sep	Oct	Nov
	87	86	80	76	89	99

# DESIGN CAPABILITY UTILIZATION NORTH OF BENS LAKE – FLOW WITHIN



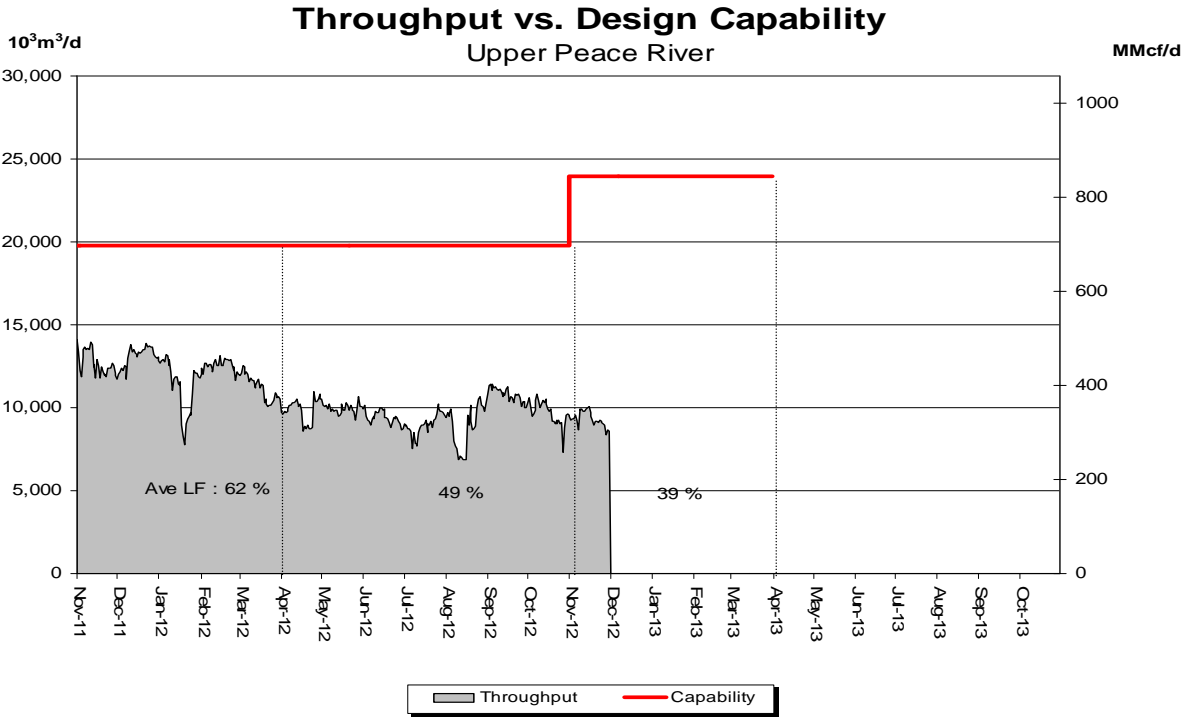
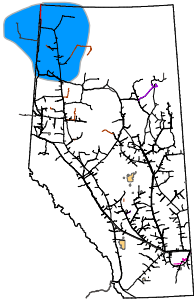
<b>% Design Capability Utilization</b> Monthly Average Area Deliveries as a Percentage of Design Capability						
Average Flow/ Design Capability	Jun	Jul	Aug	Sep	Oct	Nov
	63	64	63	62	77	73

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



<b>% Design Capability Utilization</b> Monthly Average Actual Area Deliveries as a Percentage of Design Capability						
Average Flow/ Design Capability	Jun	Jul	Aug	Sep	Oct	Nov
	67	67	67	67	81	78

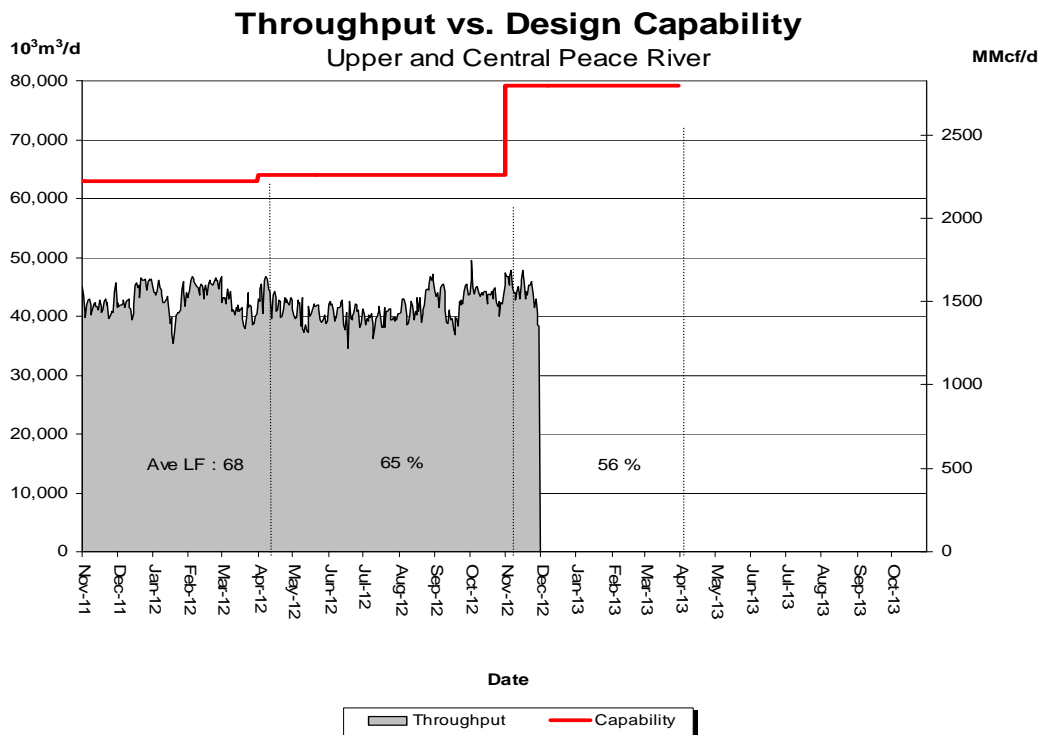
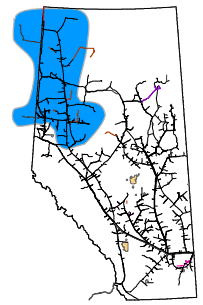
# DESIGN CAPABILITY UTILIZATION UPPER PEACE RIVER



% Design Capability Utilization						
Monthly Average Actual Flow as a Percentage of Design Capability						
Average Flow/ Design Capability	Jun 48	Jul 45	Aug 45	Sep 55	Oct 49	No 39



# DESIGN CAPABILITY UTILIZATION UPPER and CENTRAL PEACE RIVER

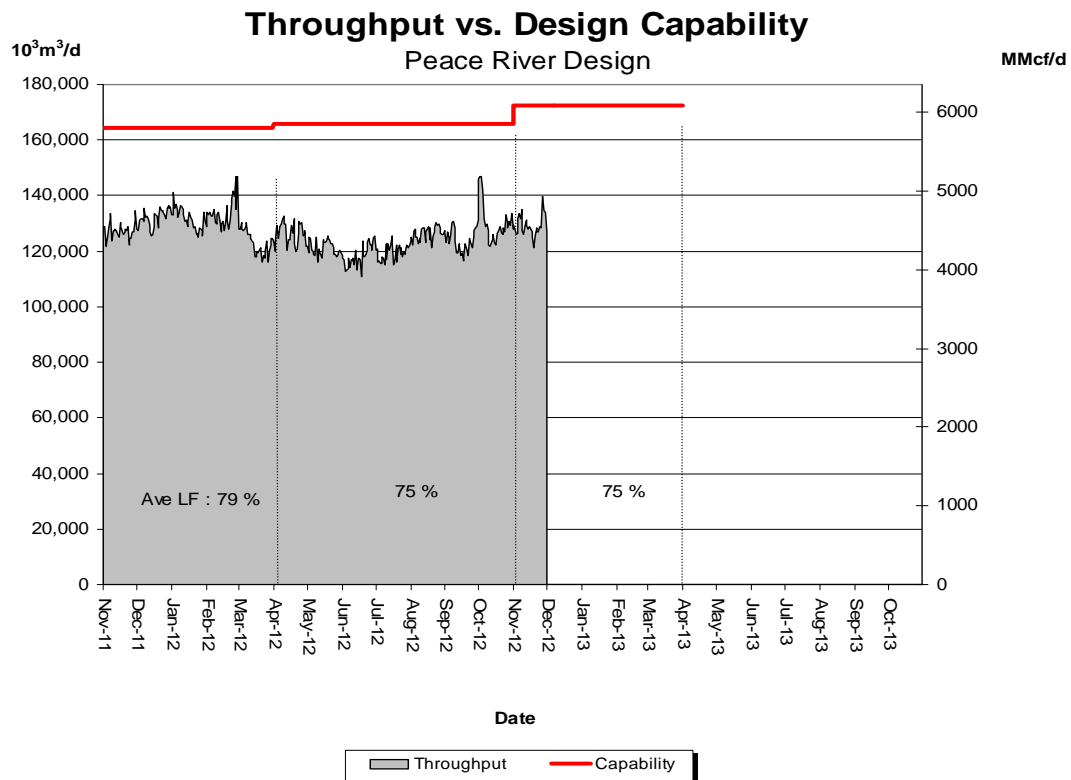
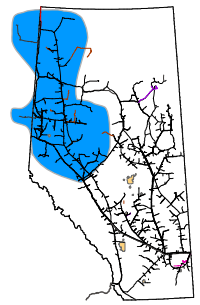


<b>% Design Capability Utilization</b> Monthly Average Actual Flow as a Percentage of Capability						
Average Flow/ Design Capability	Jun	Jul	Aug	Sep	Oct	Nov
	63	62	66	66	68	56

# DESIGN CAPABILITY UTILIZATION

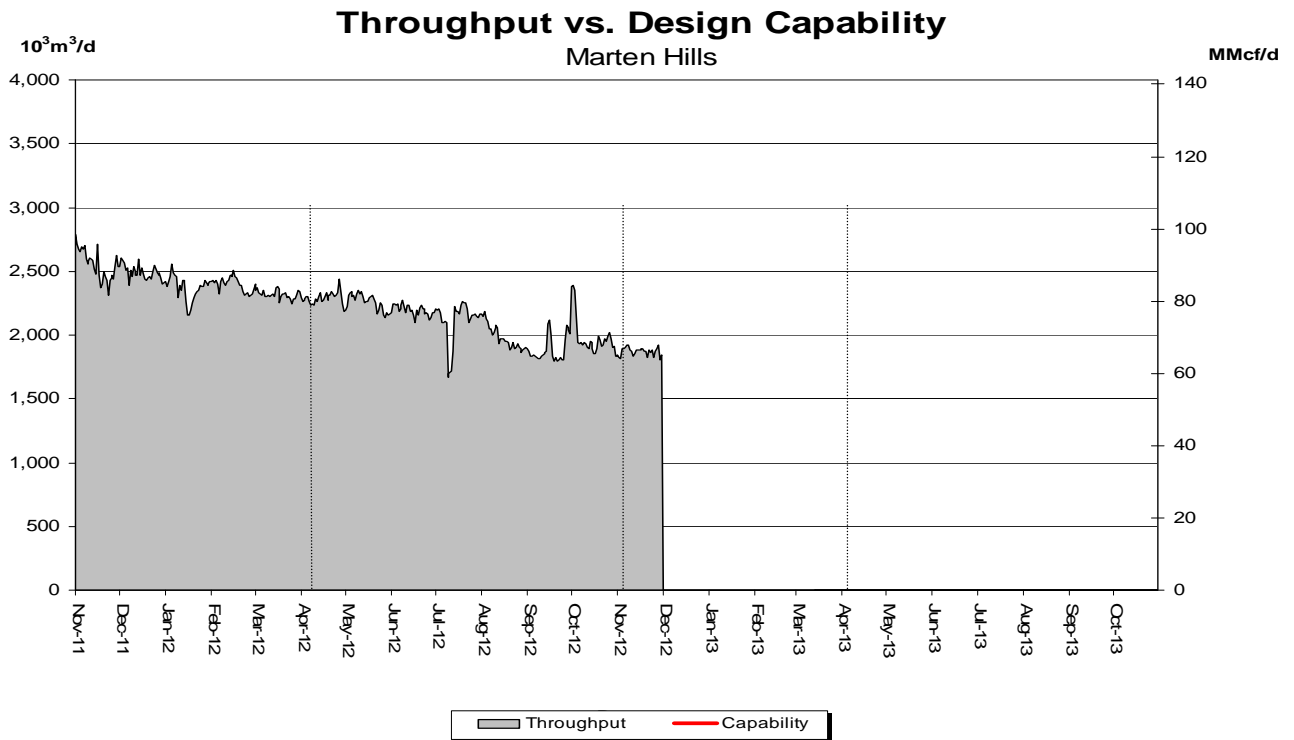
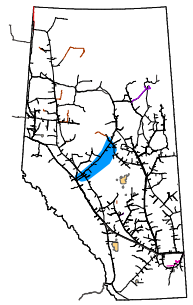
## PEACE RIVER DESIGN

(Upper, Central and Lower Peace River)



% Design Capability Utilization Monthly Average Actual Flow as a Percentage of Design Capability						
Average Flow/ Design Capability	Jun	Jul	Aug	Sep	Oct	Nov
	71	72	76	75	78	75

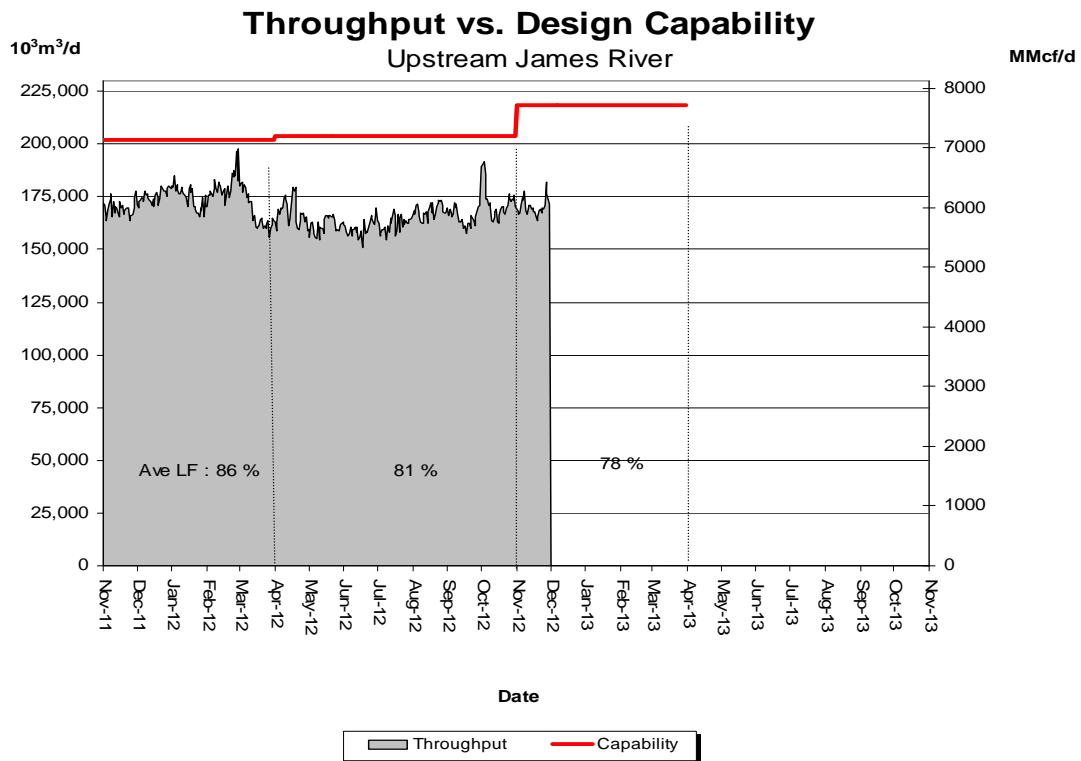
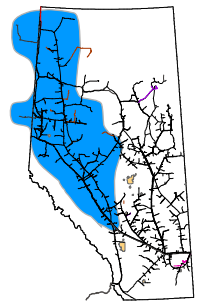
# DESIGN CAPABILITY UTILIZATION MARTEN HILLS



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

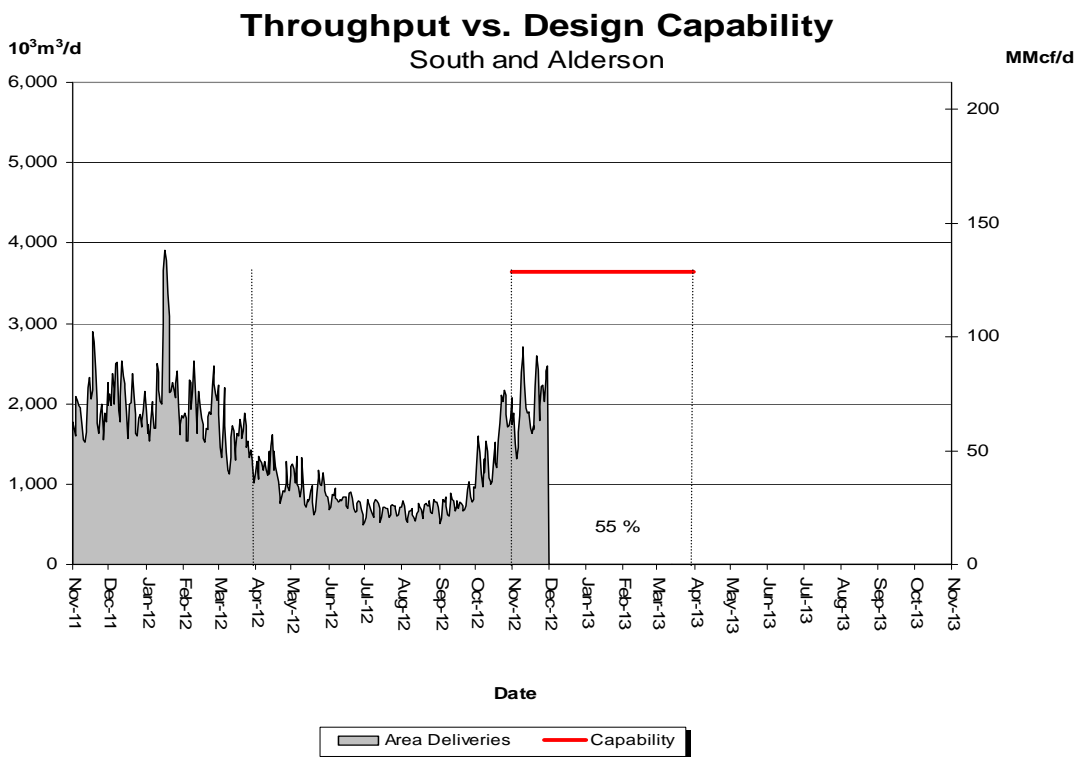
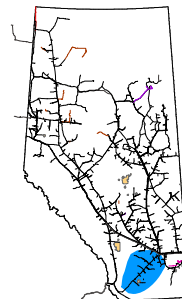
# DESIGN CAPABILITY UTILIZATION UPSTREAM JAMES RIVER

(Edson Mainline, Peace River Design and Marten Hills)



<b>% Design Capability Utilization</b> Monthly Average Actual Flow as a Percentage of Design Capability						
Average Flow/ Design Capability	Jun	Jul	Aug	Sep	Oct	Nov
	78	79	82	81	84	78

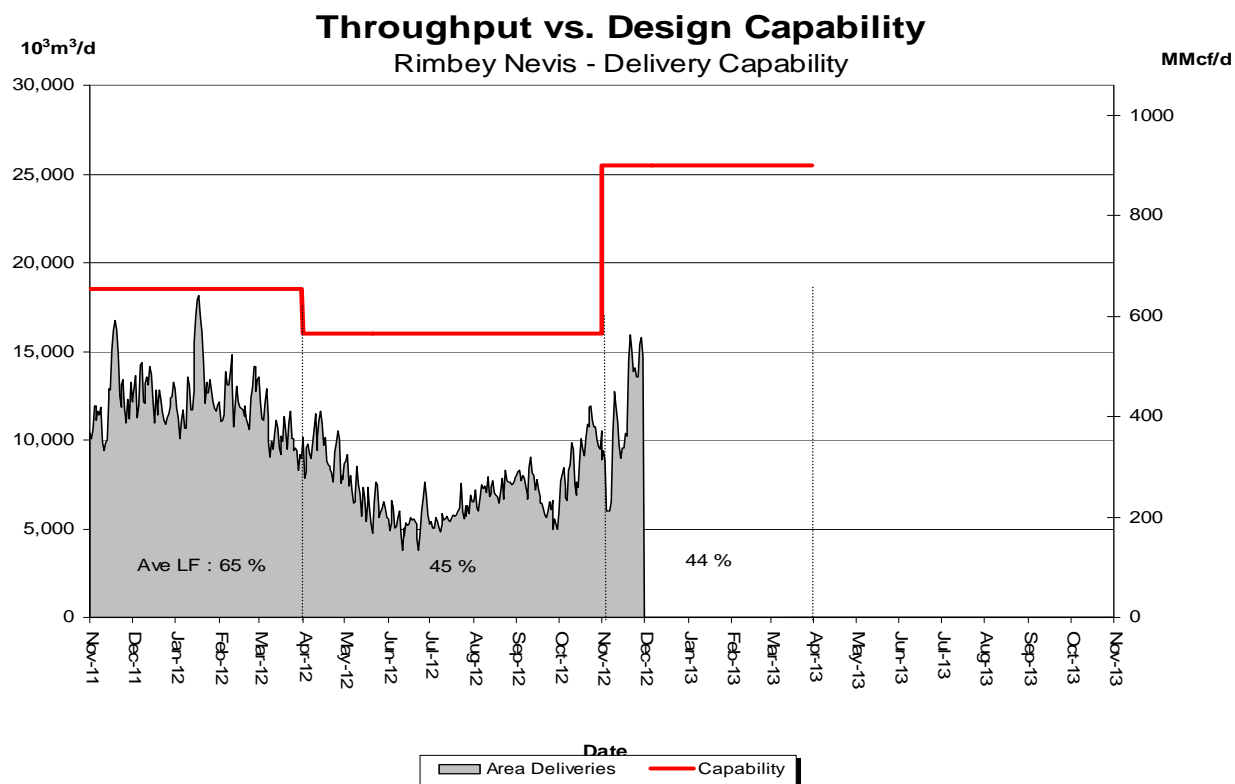
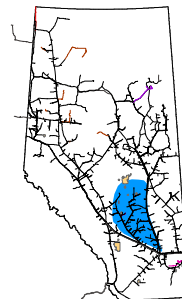
# DESIGN CAPABILITY UTILIZATION SOUTH and ALDERSON – FLOW WITHIN



<b>% Design Capability Utilization</b> Monthly Average Actual Flow as a Percentage of Design Capability						
Average Flow/ Design Capability	Jun	Jul	Aug	Sep	Oct	Nov
						55

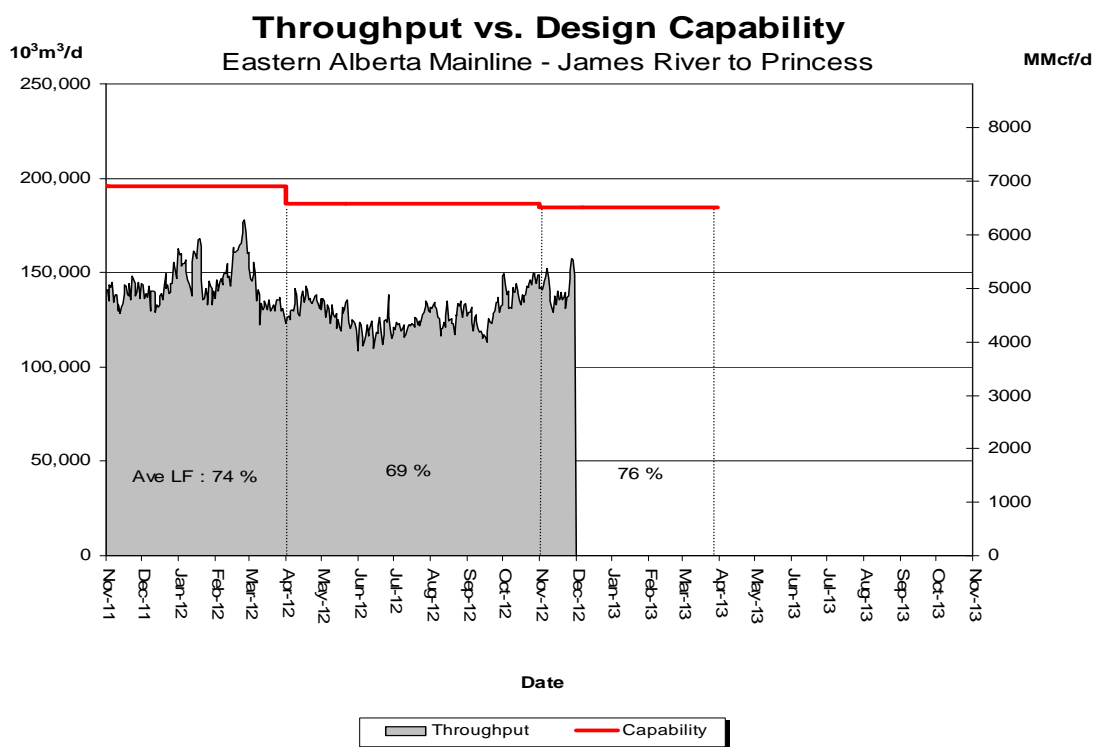
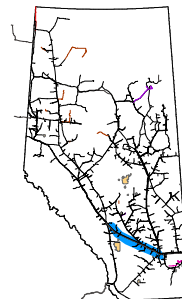
# DESIGN CAPABILITY UTILIZATION

## RIMBEY-NEVIS – FLOW WITHIN



% Design Capability Utilization Monthly Average Area Deliveries as a Percentage of Design Capability						
Average Flow/ Design Capability	Jun	Jul	Aug	Sep	Oct	Nov
	34	36	45	43	58	44

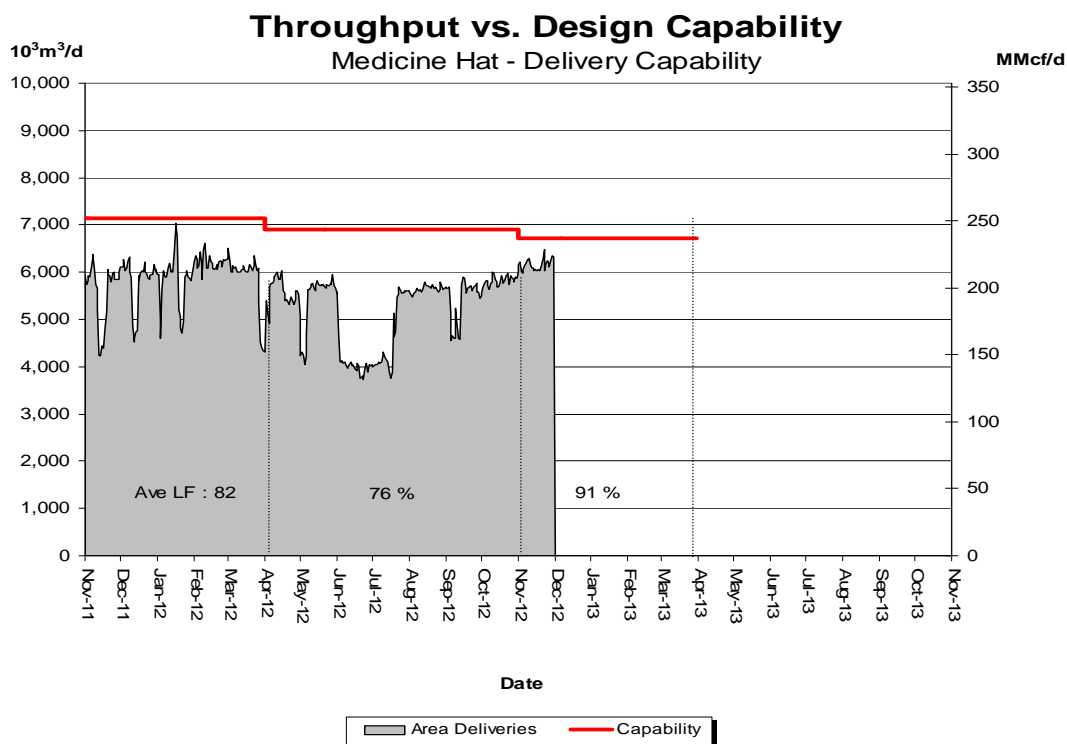
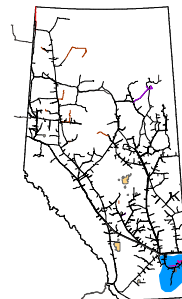
# DESIGN CAPABILITY UTILIZATION EASTERN ALBERTA MAINLINE (James River to Princess)



% Design Capability Utilization Monthly Average Actual Flow as a Percentage of Design Capability						
Average Flow/ Design Capability	Jun 64	Jul 66	Aug 68	Sep 67	Oct 76	Nov 76

# DESIGN CAPABILITY UTILIZATION

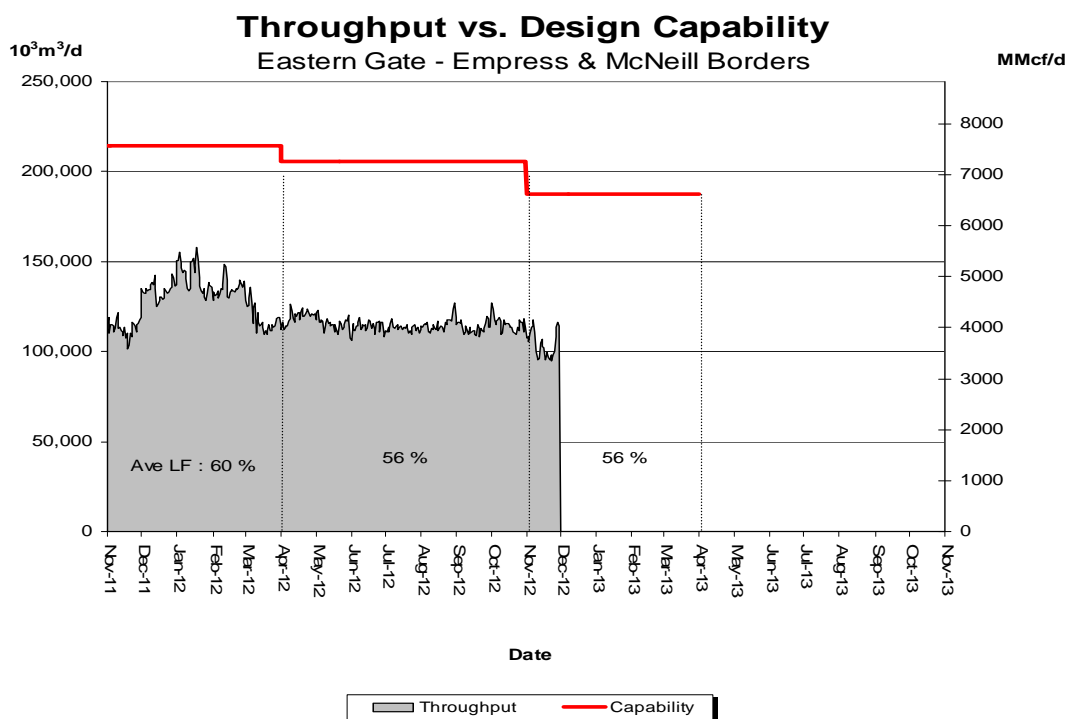
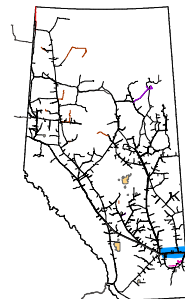
## MEDICINE HAT – FLOW WITHIN



<b>% Design Capability Utilization</b> Monthly Average Area Deliveries as a Percentage of Design Capability						
Average Flow/ Design Capability	Jun	Jul	Aug	Sep	Oct	Nov
	59	68	82	78	84	91

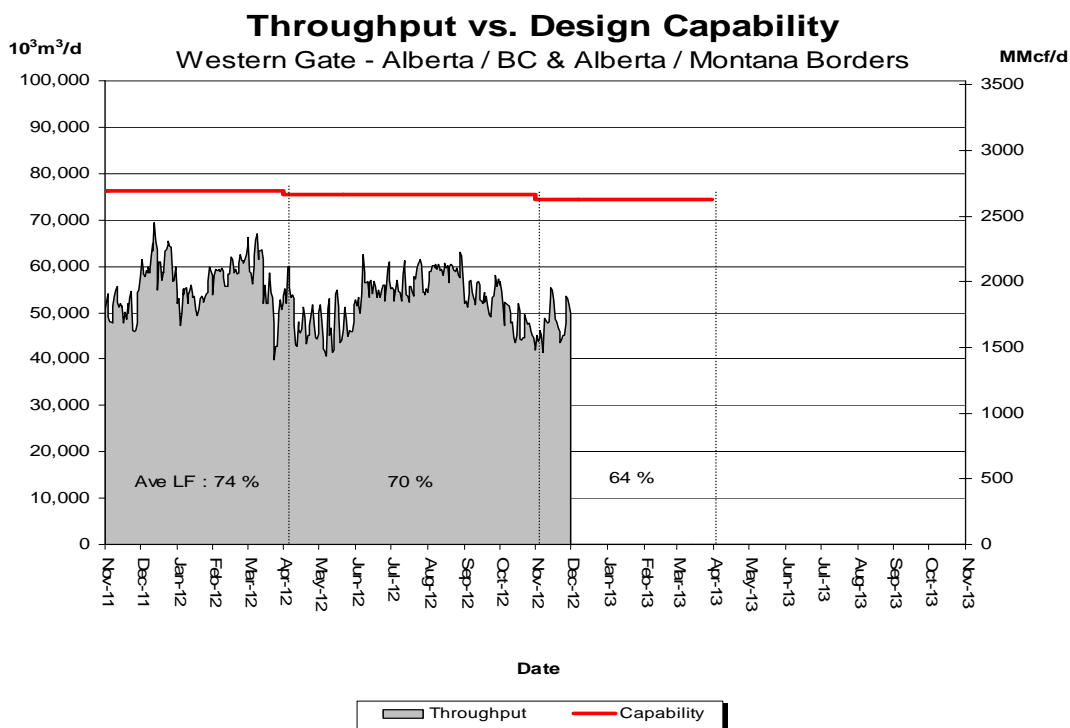
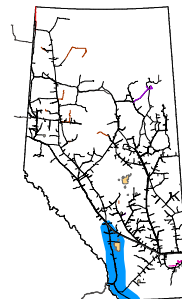


# DESIGN CAPABILITY UTILIZATION EASTERN ALBERTA MAINLINE (Princess to Empress / McNeill)



<b>% Design Capability Utilization</b> Average Actual Flow as a Percentage of Design Capability						
Average Flow / Design Capability	Jun	Jul	Aug	Sep	Oct	Nov
	55	55	56	55	56	56

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



<b>% Design Capability Utilization</b> Average Actual Flow as a Percentage of Design Capability						
Average Flow / Design Capability	Jun	Jul	Aug	Sep	Oct	Nov
	73	74	78	71	64	64

# **HISTORICAL TRANSPORTATION SERVICE AVAILABILITY**

September 1, 2012 to November 30, 2012 (3 Month Average)

Receipt Area		IT-R Service	Firm Service	Firm Service	% CD		Causes/Comments <sup>(3)</sup>
		Available	Available	Restriction	Restricted <sup>(1)</sup>		
		(% 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 of Bens Lake	LIEG 10	100	100	0	0	0	
	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 Bens Lake	NLAT 15	100	100	0	0	0	
	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 Restricted <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 2012	November 2014
Winter construction (generally north of Edmonton)	November 2012	April 2015

## 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>

➤ 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.*

# HOW TO USE THIS REPORT

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## **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.

# HOW TO USE THIS REPORT - continued

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## **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.

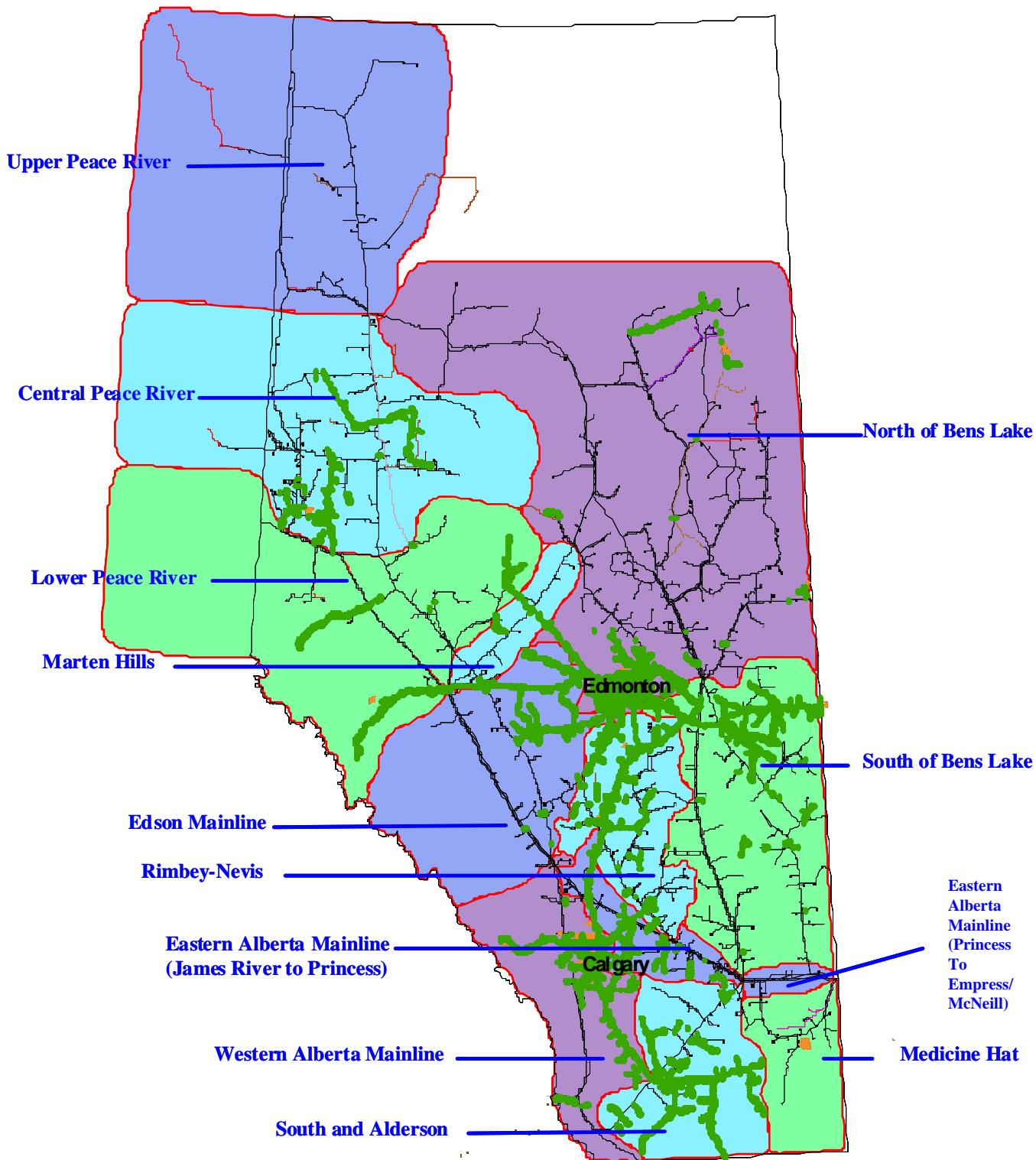
Service availability is affected by a number of factors including scheduled and unscheduled maintenance, construction or other outages.

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**

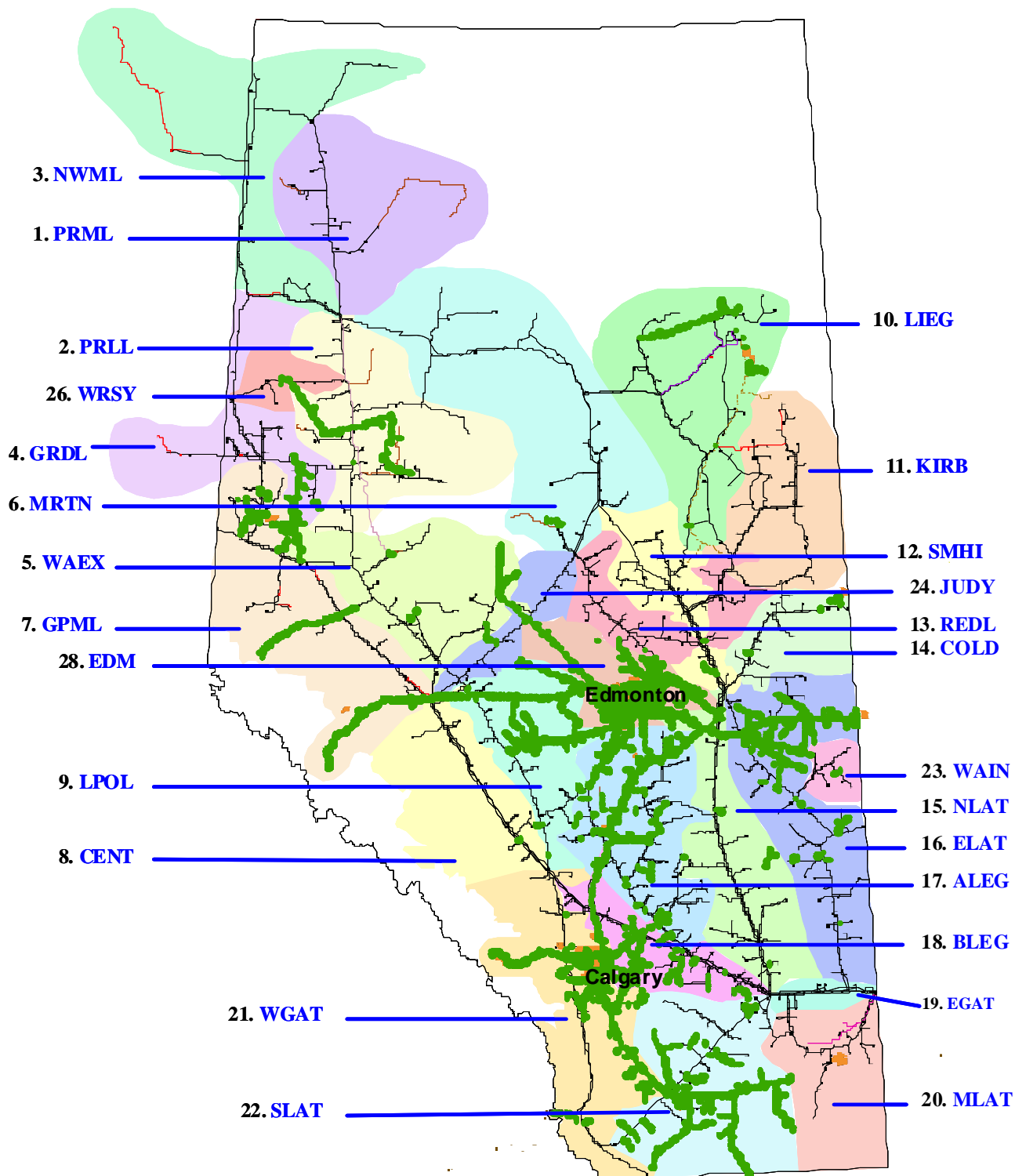
The Future Firm Transportation Service Availability report presents guidelines and timing for all future firm transportation service requests.

# NGTL Design Areas



(Last updated Nov 2011)

# NGTL Pipeline Segments



(Last updated Nov 2011)



# DEFINITION OF TERMS

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## *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.

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## *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.

### ***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.

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## ***Other***

### ***System Load Factor***

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