

# SYSTEM UTILIZATION AND RELIABILITY MONTHLY REPORT

for the month ending

November 2014

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

*Published date:*

**February 13<sup>th</sup>, 2014**

## Highlights This Month:

- As November 2014 represents the start of a new gas year, all charts have been shifted to accommodate the next year's data and design capabilities have been provided for the Winter 2014/15 season.
- The increase in Ft. McMurray & Kirby delivery capability is the result of new facilities (Chinchaga Loop No.3, Leming Lake Lateral Loop, Sunday Creek South Loop No.3, Denning Lake CS, and Moosa cross-over).
- The decrease in Upper Peace River and Upper & Central Peace River capability is the result of changes in the supply forecast.
- The increase in South & Alderson delivery capability is the result of further realized flexibility provided by the addition of a control valve at the Princess Compressor Station in 2013.
- Design capabilities are based on assumptions regarding facility availability, storage, ambient air and ground temperatures, flow distribution, design area boundary conditions, and local area supply and deliveries. Actual flows may exceed the design capability due to flow conditions that deviate from these assumptions (e.g. the Eastern Alberta Mainline and the Eastern and Western Gates). Similarly, design capability may exceed actual operational capability in areas when conditions deviate from these assumptions (e.g. derates, outages)

NOVA Gas Transmission Ltd.

# TABLE OF CONTENTS

---

<b><u>MONTHLY FEATURES</u></b>	<b>PAGE</b>
Firm Transportation Service Contract Utilization .....	3
Design Capability Utilization	
Ft. McMurray Area – Flow Within.....	4
Kirby Area – Flow Within.....	5
North of Bens Lake – Flow Within.....	6
North & South of Bens Lake – Flow Within.....	7
Upper Peace River .....	8
Upper & Central Peace River .....	9
Peace River Design .....	10
Upstream James River .....	11
South & Alderson – Flow Within .....	12
Rimbey Nevis – Flow Within .....	13
Eastern Alberta Mainline (James River to Princess) .....	14
Medicine Hat - Flow Within .....	15
Eastern Alberta Mainline (Princess to Empress/McNeill) .....	16
Western Alberta Mainline (AB/BC & AB/Montana Borders) .....	17
Future Firm Transportation Service Availability.....	18
How to Use This Report .....	19
<b><u>REFERENCES</u></b>	
NGTL Design Areas Map .....	20
NGTL Pipeline Segments Map .....	21
Definition of Terms .....	22

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>

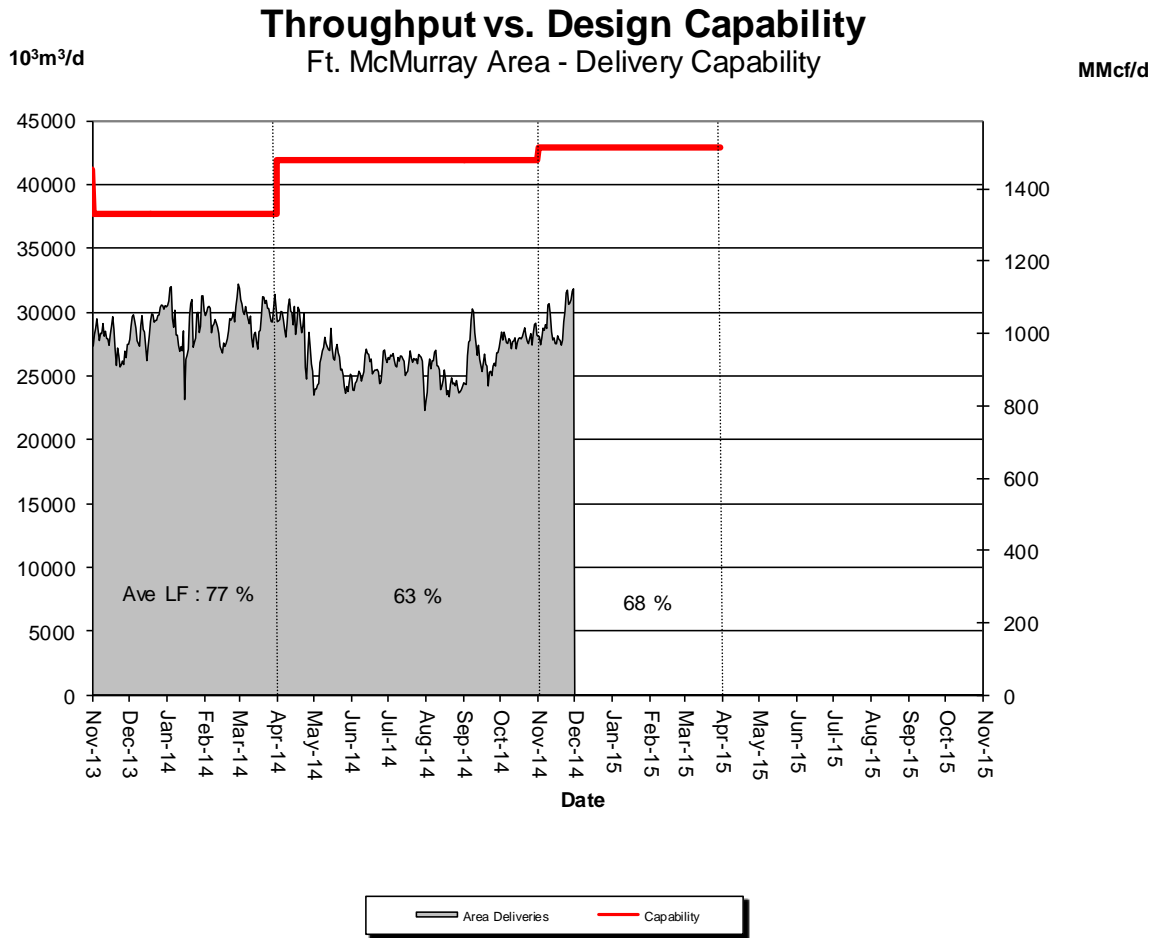
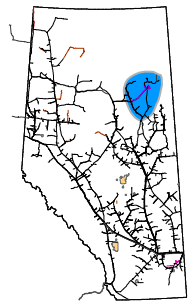
By NGTL Pipeline Segments  
November 2014

Segment	Contract	Delivery		Receipt	
		Utilization	Nov CD (TJ/d)	Utilization	Nov CD (MMcf/d)
UPRM	FT	7%	22.8	91%	58
	FT + IT <sup>2</sup>	11%		106%	
PRLL	FT	49%	41.8	93%	95
	FT + IT	49%		117%	
NWML	FT	53%	9.3	61%	584
	FT + IT	55%		62%	
GRDL	FT	37%	9.0	79%	2,023
	FT + IT	59%		92%	
WRSY	FT	0%	0.0	81%	17
	FT + IT	0%		116%	
WAEX	FT	19%	13.7	83%	415
	FT + IT	50%		116%	
JUDY	FT	46%	29.6	92%	63
	FT + IT	55%		123%	
GPML	FT	51%	168.0	85%	3,165
	FT + IT	58%		93%	
CENT	FT	0%	0.0	91%	1,081
	FT + IT	0%		123%	
LPOL	FT	49%	76.9	91%	729
	FT + IT	64%		112%	
WGAT	FT	77%	3,438.2	95%	309
	FT + IT	80%		115%	
ALEG	FT	59%	350.0	93%	768
	FT + IT	65%		131%	
SLAT	FT	44%	178.8	90%	217
	FT + IT	45%		110%	
MLAT	FT	62%	262.5	84%	219
	FT + IT	66%		92%	
BLEG	FT	70%	133.1	94%	555
	FT + IT	71%		106%	
EGAT	FT	97%	4,787.3	83%	33
	FT + IT	107%		98%	
MRTN	FT	28%	37.6	79%	63
	FT + IT	29%		116%	
LIEG	FT	80%	1,344.6	51%	37
	FT + IT	87%		111%	
KIRB	FT	72%	1,338.4	70%	43
	FT + IT	74%		111%	
SMHI	FT	61%	12.0	90%	29
	FT + IT	61%		144%	
REDL	FT	8%	10.0	70%	42
	FT + IT	29%		114%	
COLD	FT	40%	119.5	84%	19
	FT + IT	60%		122%	
EDM	FT	52%	1,752.8	90%	44
	FT + IT	53%		128%	
NLAT	FT	38%	14.7	94%	127
	FT + IT	38%		130%	
WAIN	FT	39%	0.4	85%	9
	FT + IT	39%		139%	
ELAT	FT	87%	269.1	94%	108
	FT + IT	89%		149%	
TOTAL SYSTEM	FT	78%	14,420.3	85%	10,849
	FT + IT	84%		103%	

\*NOTE:

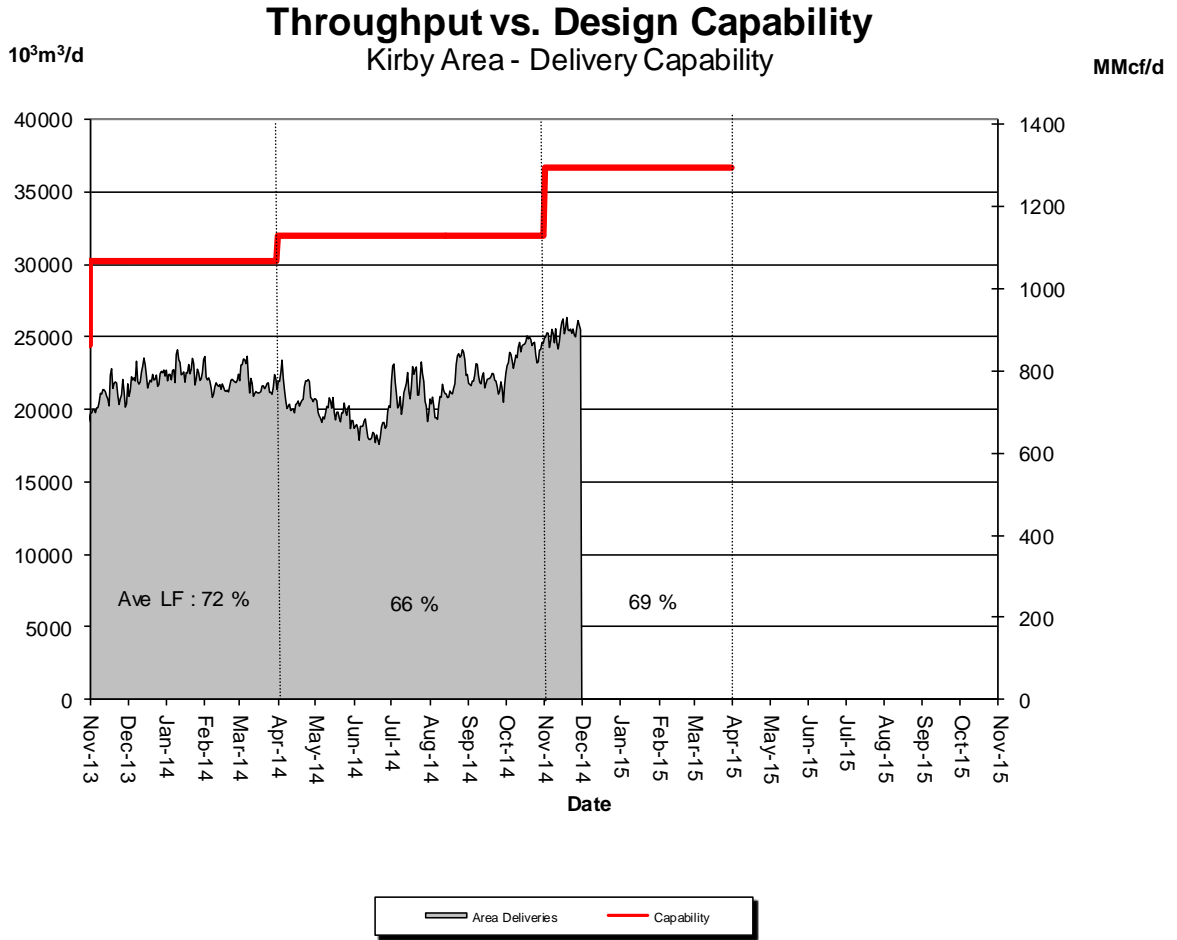
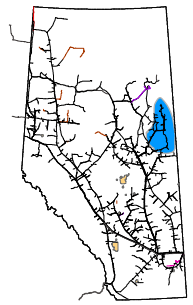
1. FT includes all receipt and delivery Firm Transportation Services: FTR, FTRN, LRS, FTD1,
2. IT includes receipt and delivery Interruptible Services: IT-R and IT-D respectively.
3. Utilization data is based on billed monthly volumes. Percent utilization calculated as FT and FT + IT billed volumes divided by applicable receipt or delivery Contract level.

# DESIGN CAPABILITY UTILIZATION FT. McMURRAY AREA – FLOW WITHIN



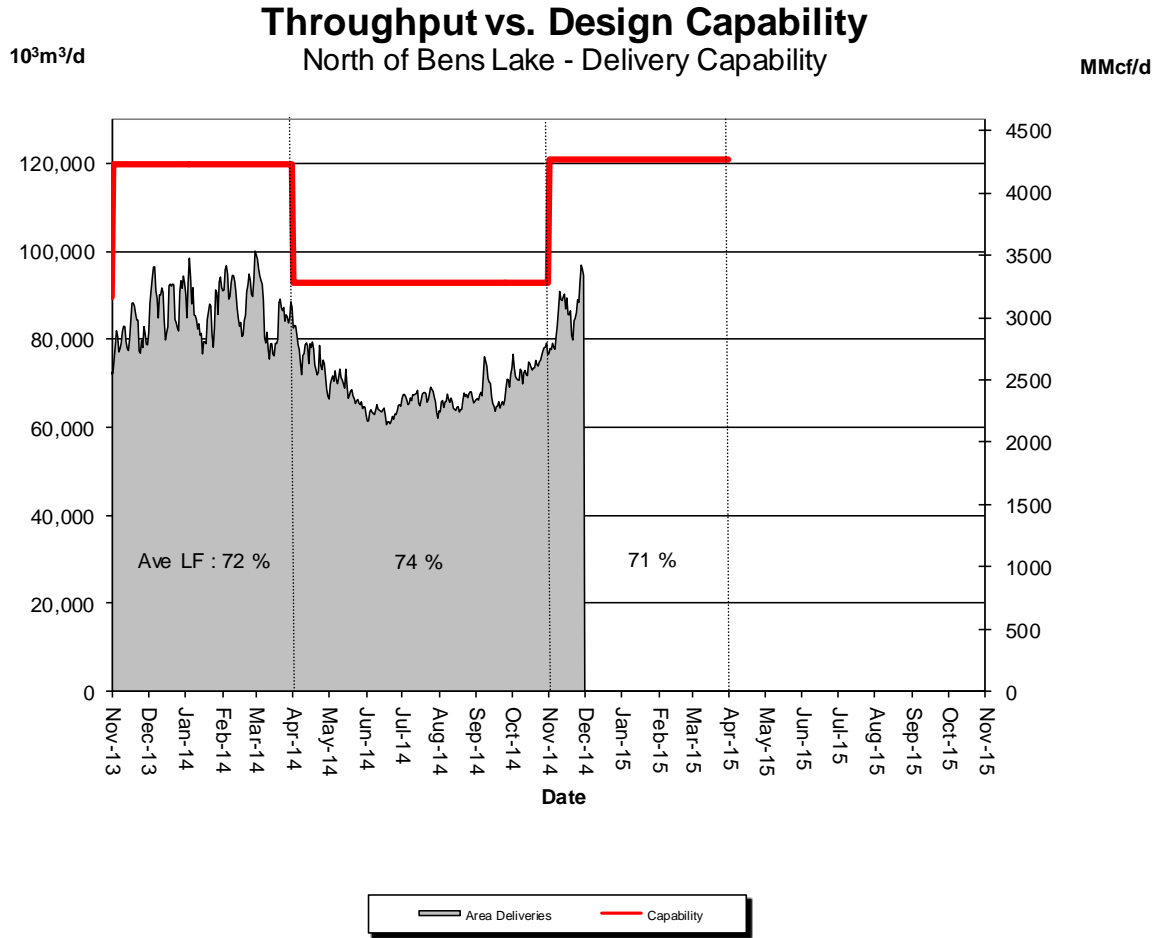
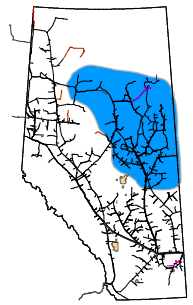
% Design Capability Utilization Monthly Average Area Deliveries as a Percentage of Design Capability						
Average Flow/ Design Capability	Jun	Jul	Aug	Sep	Oct	Nov
	61%	62%	59%	63%	67%	68%

# DESIGN CAPABILITY UTILIZATION KIRBY AREA – FLOW WITHIN



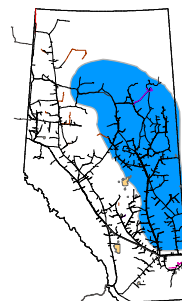
<b>% Design Capability Utilization</b>						
Monthly Average Area Deliveries as a Percentage of Design Capability						
Average Flow/ Design Capability	Jun	Jul	Aug	Sep	Oct	Nov
	58%	67%	68%	69%	75%	69%

# DESIGN CAPABILITY UTILIZATION NORTH OF BENS LAKE – 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
	68%	72%	71%	73%	80%	71%

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

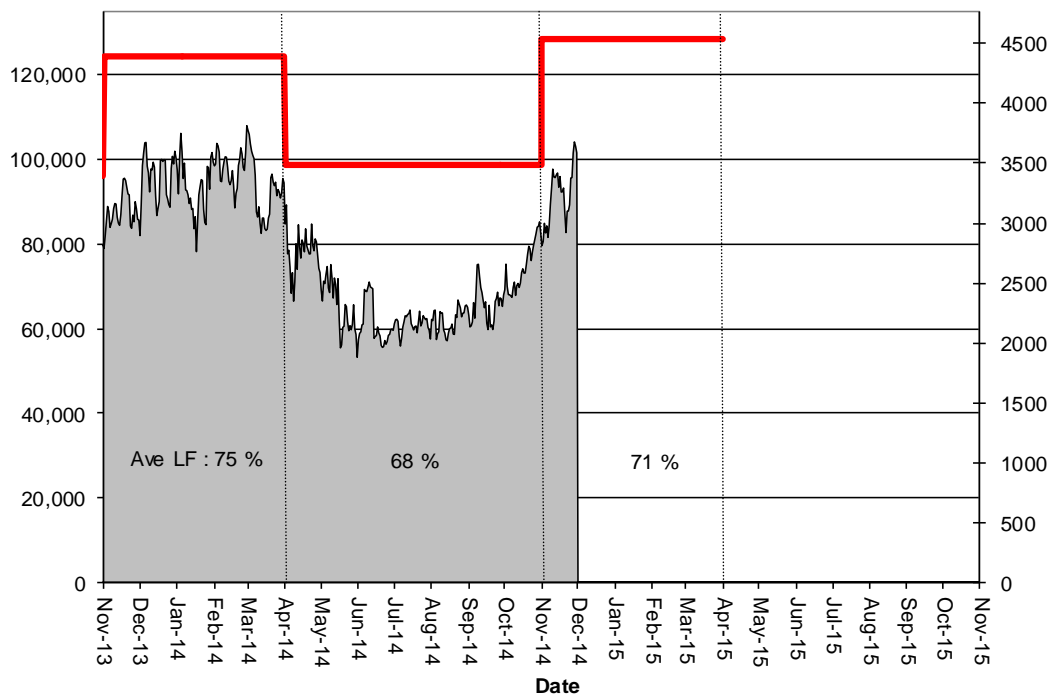


## Throughput vs. Design Capability

10<sup>3</sup>m<sup>3</sup>/d

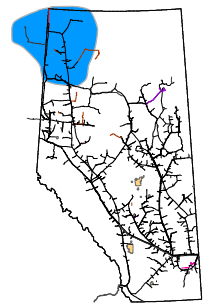
North and East - Delivery Capability

MMcf/d

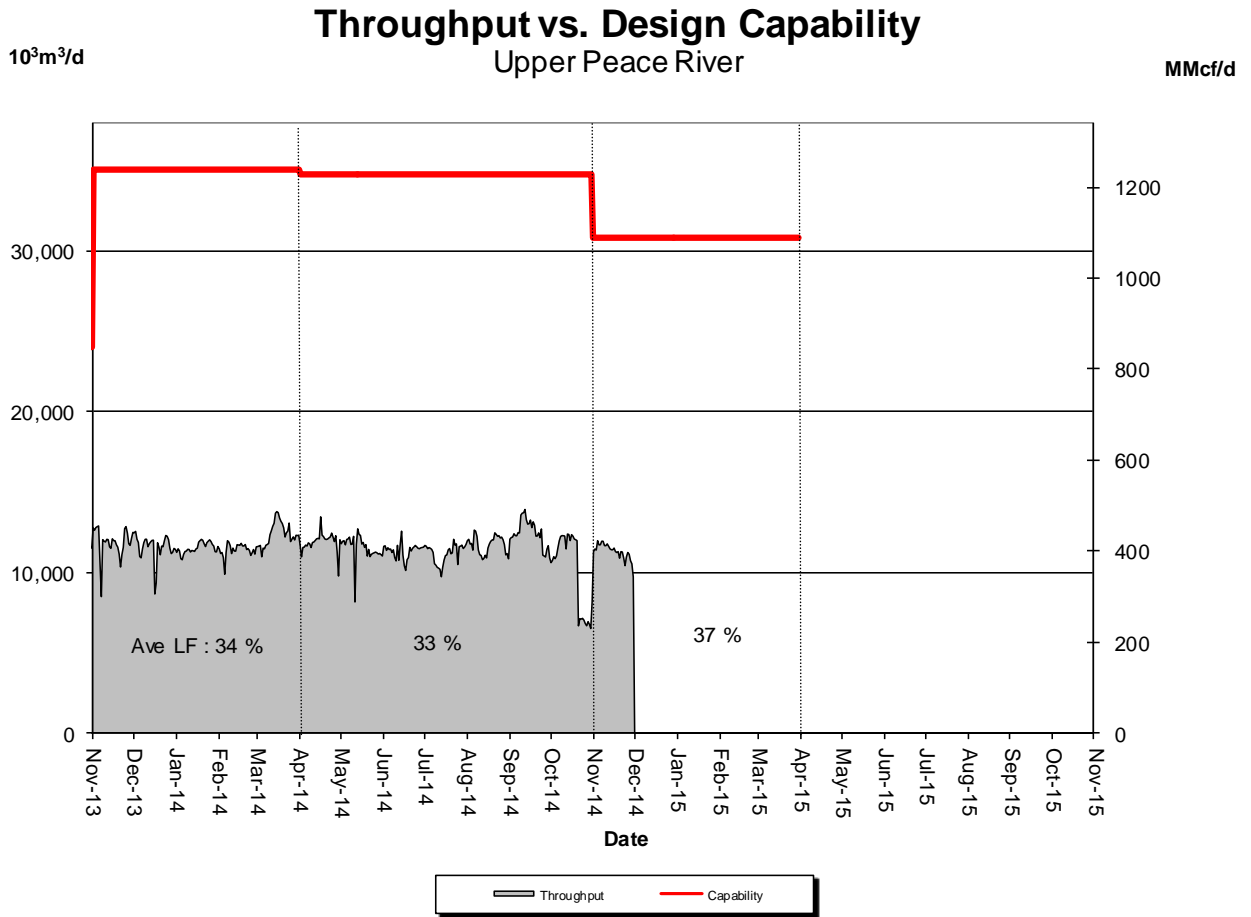


Area Deliveries      Capability

% Design Capability Utilization						
Monthly Average Area Deliveries as a Percentage of Design Capability						
Average Flow/ Design Capability	Jun	Jul	Aug	Sep	Oct	Nov
	62%	62%	63%	66%	76%	71%



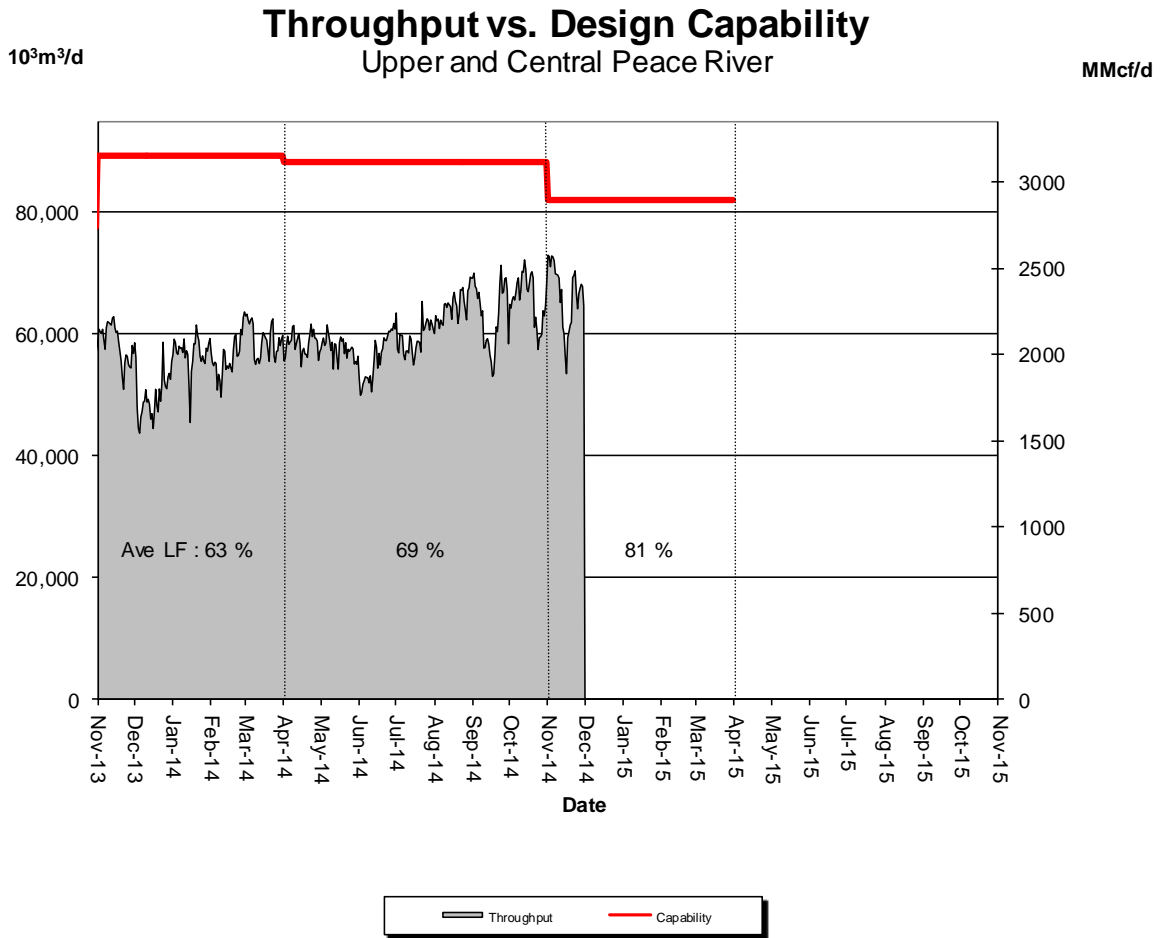
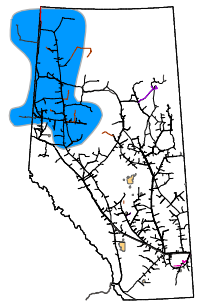
# DESIGN CAPABILITY UTILIZATION UPPER PEACE RIVER



<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
	33%	32%	34%	36%	29%	37%

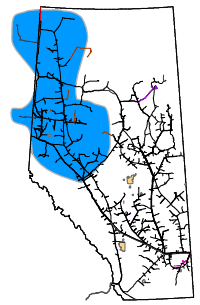


# DESIGN CAPABILITY UTILIZATION UPPER and CENTRAL PEACE RIVER

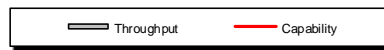
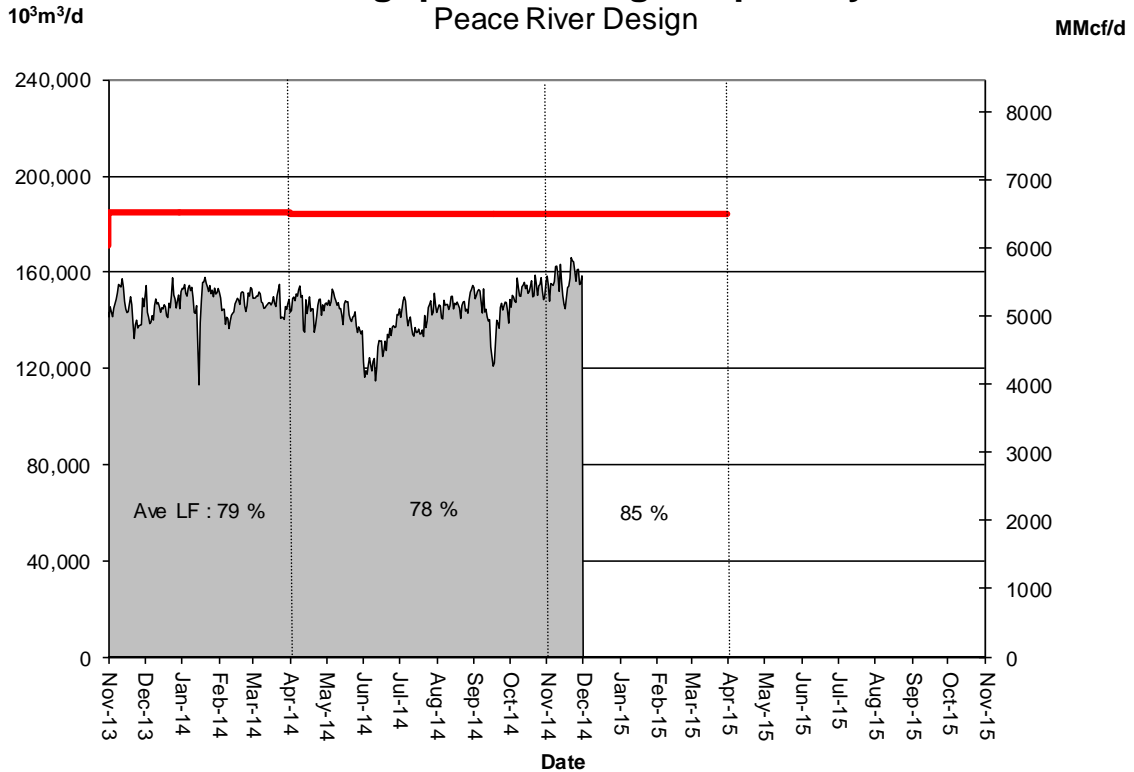


<b>% Design Capability Utilization</b>						
Monthly Average Area Deliveries as a Percentage of Design Capability						
Average Flow/ Design Capability	Jun	Jul	Aug	Sep	Oct	Nov
	63%	67%	73%	71%	75%	81%

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



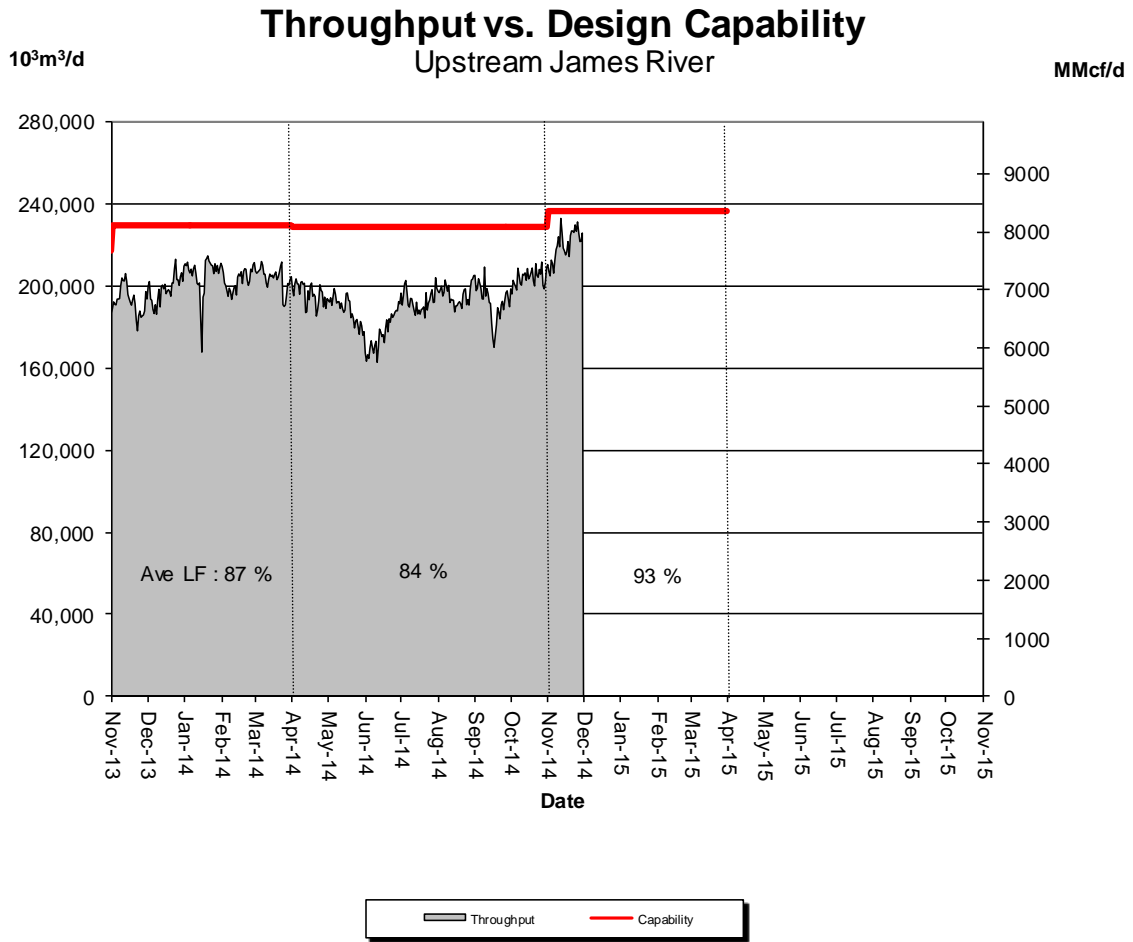
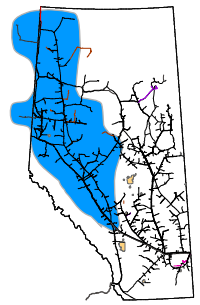
## Throughput vs. Design Capability Peace River Design



% Design Capability Utilization Monthly Average Area Deliveries as a Percentage of Design Capability						
Average Flow/ Design Capability	Jun	Jul	Aug	Sep	Oct	Nov
	70%	76%	80%	77%	83%	85%

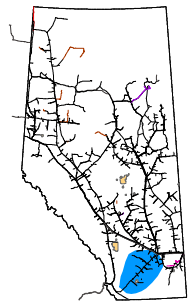
# DESIGN CAPABILITY UTILIZATION UPSTREAM JAMES RIVER

(Edson Mainline, Peace River Design and Marten Hills)

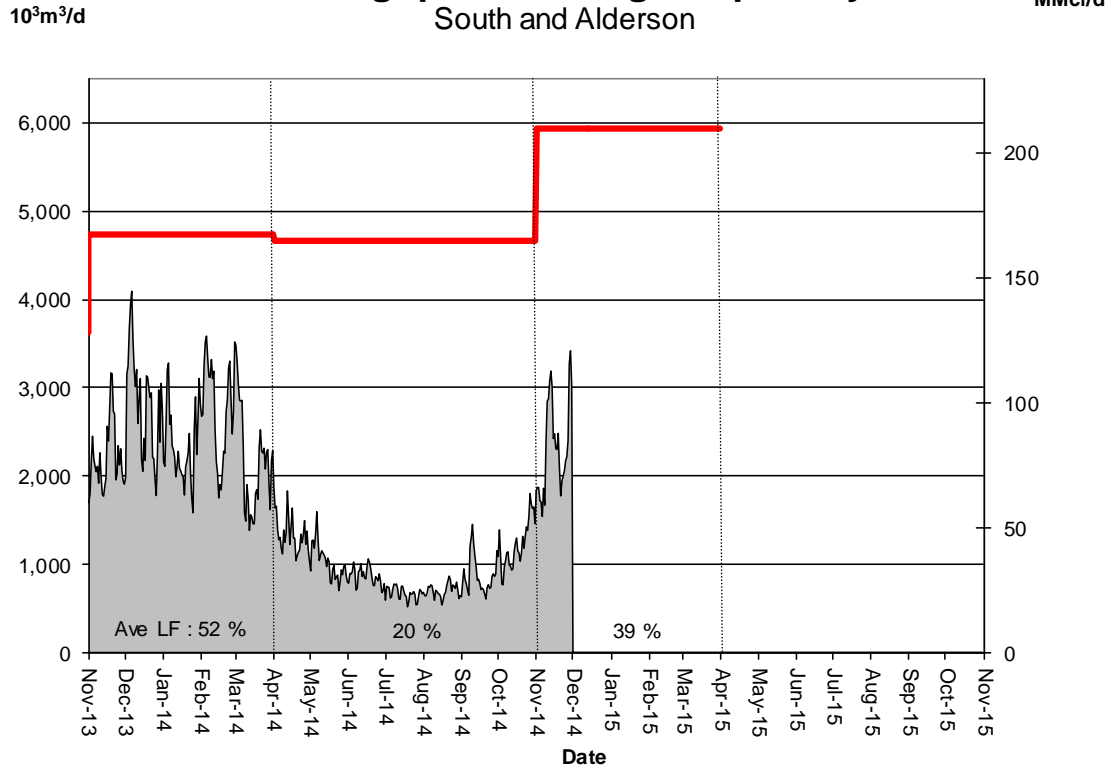


% Design Capability Utilization						
Monthly Average Area Deliveries as a Percentage of Design Capability						
Average Flow/ Design Capability	Jun	Jul	Aug	Sep	Oct	Nov
	77%	84%	85%	84%	89%	93%

# DESIGN CAPABILITY UTILIZATION SOUTH and ALDERSON – FLOW WITHIN

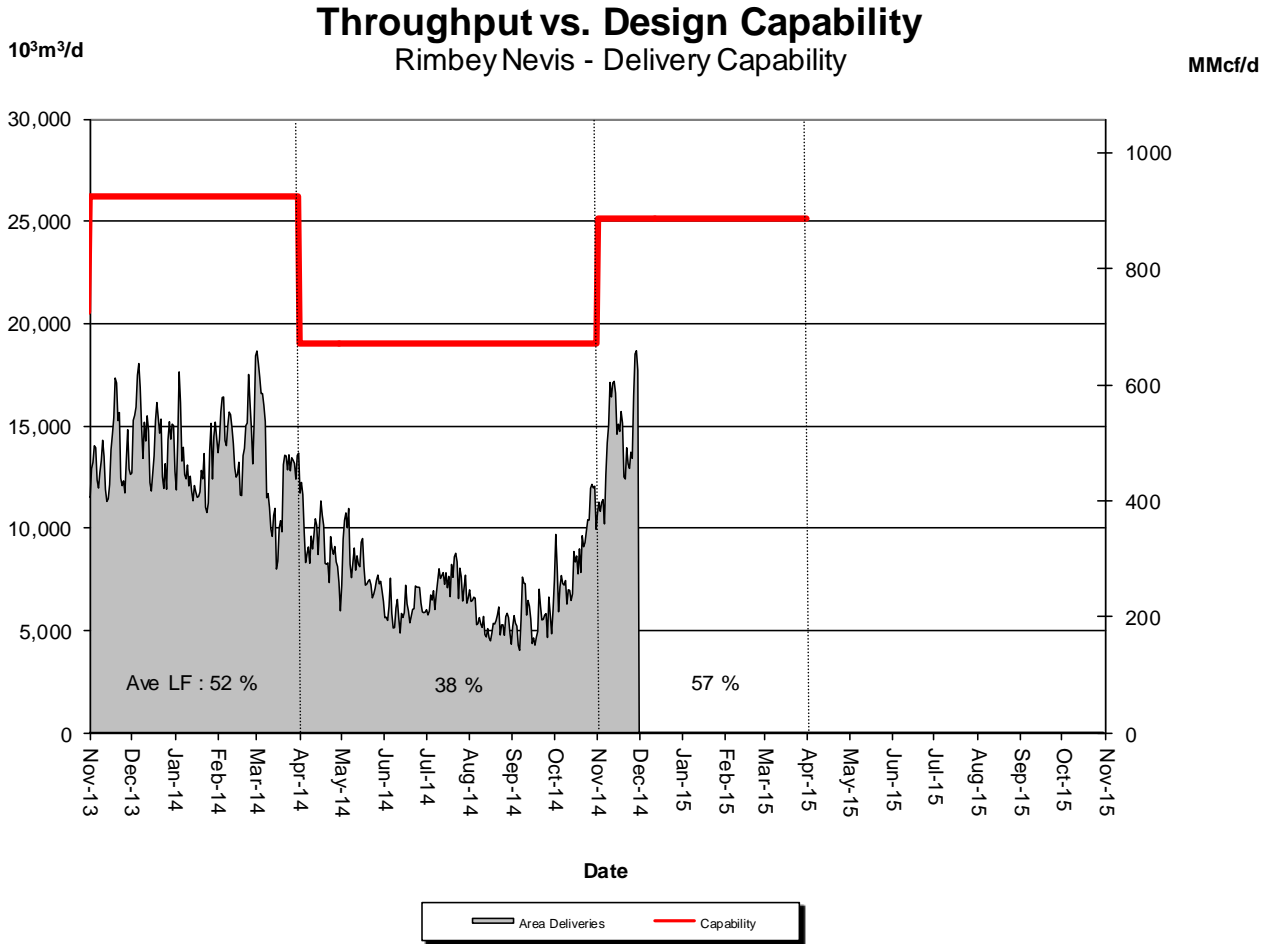
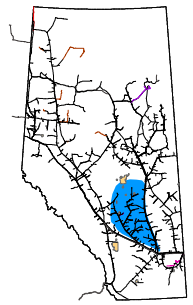


## Throughput vs. Design Capability South and Alderson



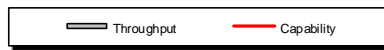
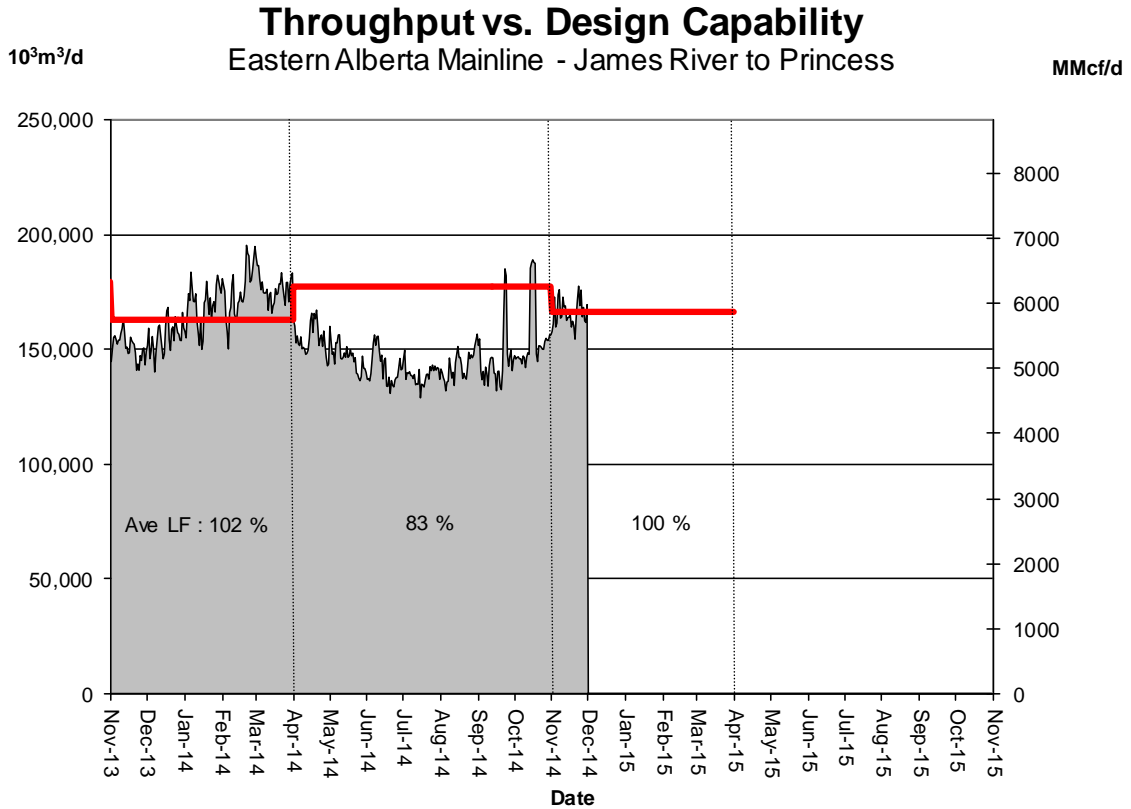
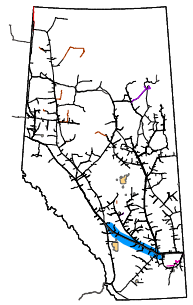
% Design Capability Utilization Monthly Average Area Deliveries as a Percentage of Design Capability						
Average Flow/ Design Capability	Jun	Jul	Aug	Sep	Oct	Nov
	19%	14%	15%	19%	26%	39%

# DESIGN CAPABILITY UTILIZATION RIMBEY-NEVIS – FLOW WITHIN



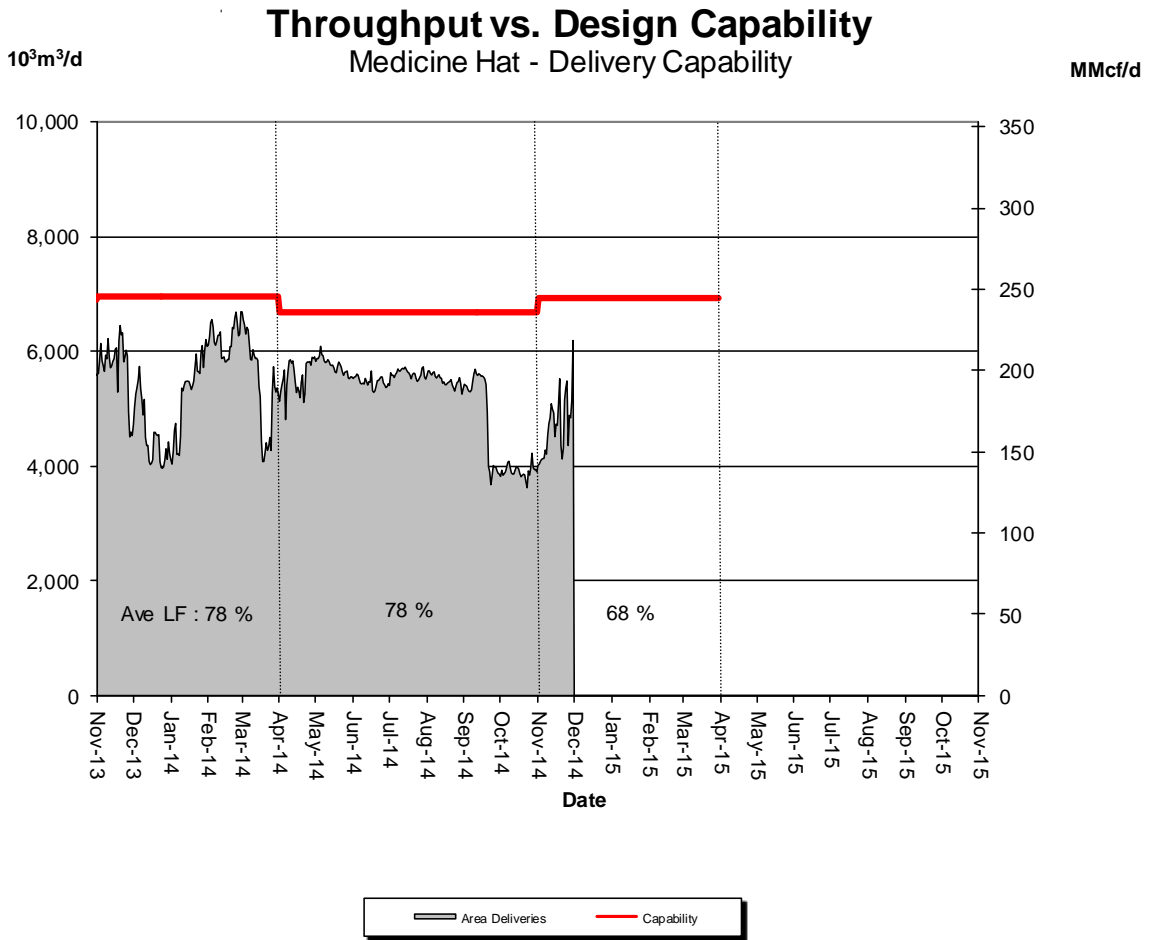
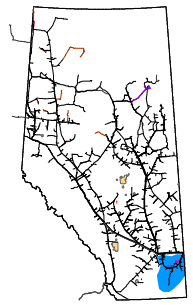
% Design Capability Utilization Monthly Average Area Deliveries as a Percentage of Design Capability						
Average Flow/ Design Capability	Jun	Jul	Aug	Sep	Oct	Nov
	32%	38%	29%	29%	46%	57%

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



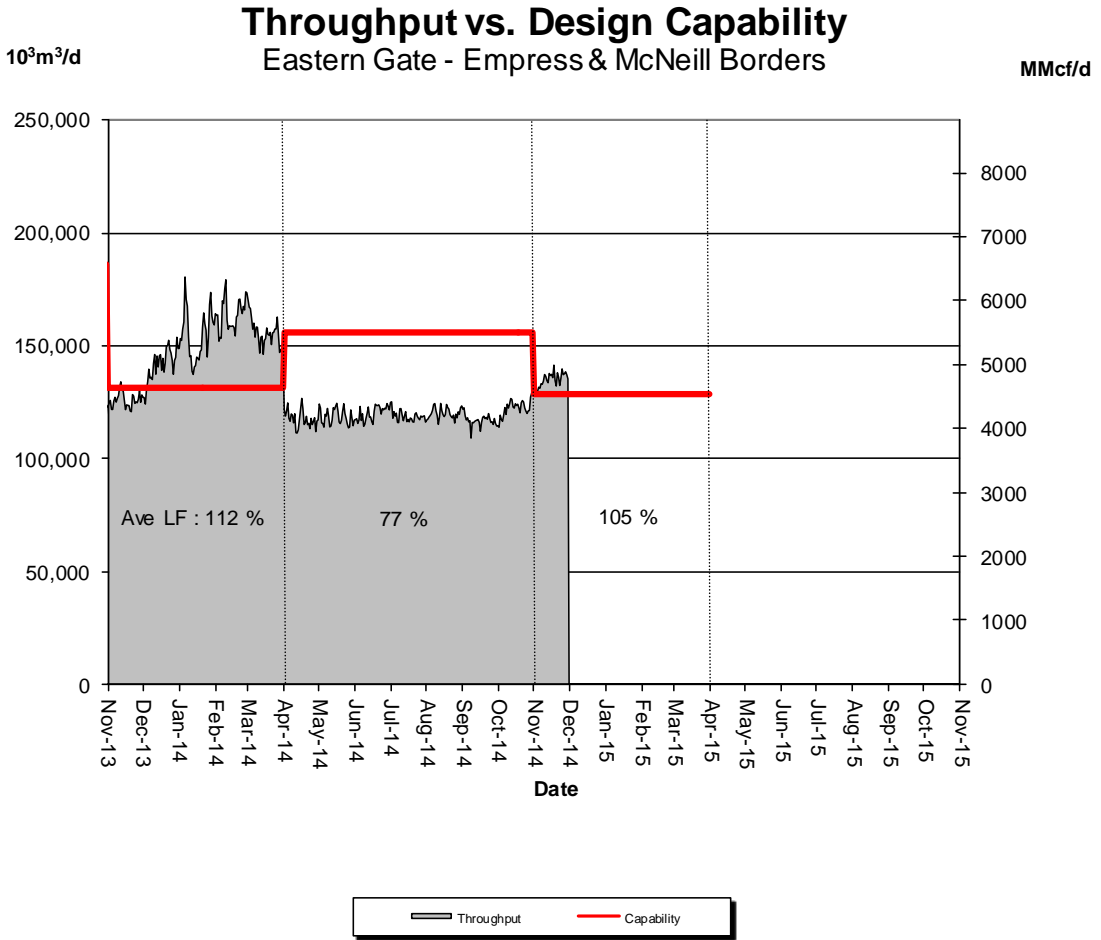
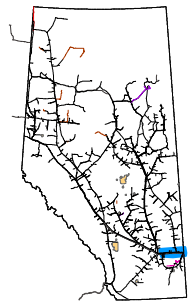
% Design Capability Utilization Monthly Average Area Deliveries as a Percentage of Design Capability						
Average Flow/ Design Capability	Jun	Jul	Aug	Sep	Oct	Nov
	80%	78%	81%	82%	88%	100%

# DESIGN CAPABILITY UTILIZATION MEDICINE HAT – 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
	82%	84%	82%	74%	58%	68%

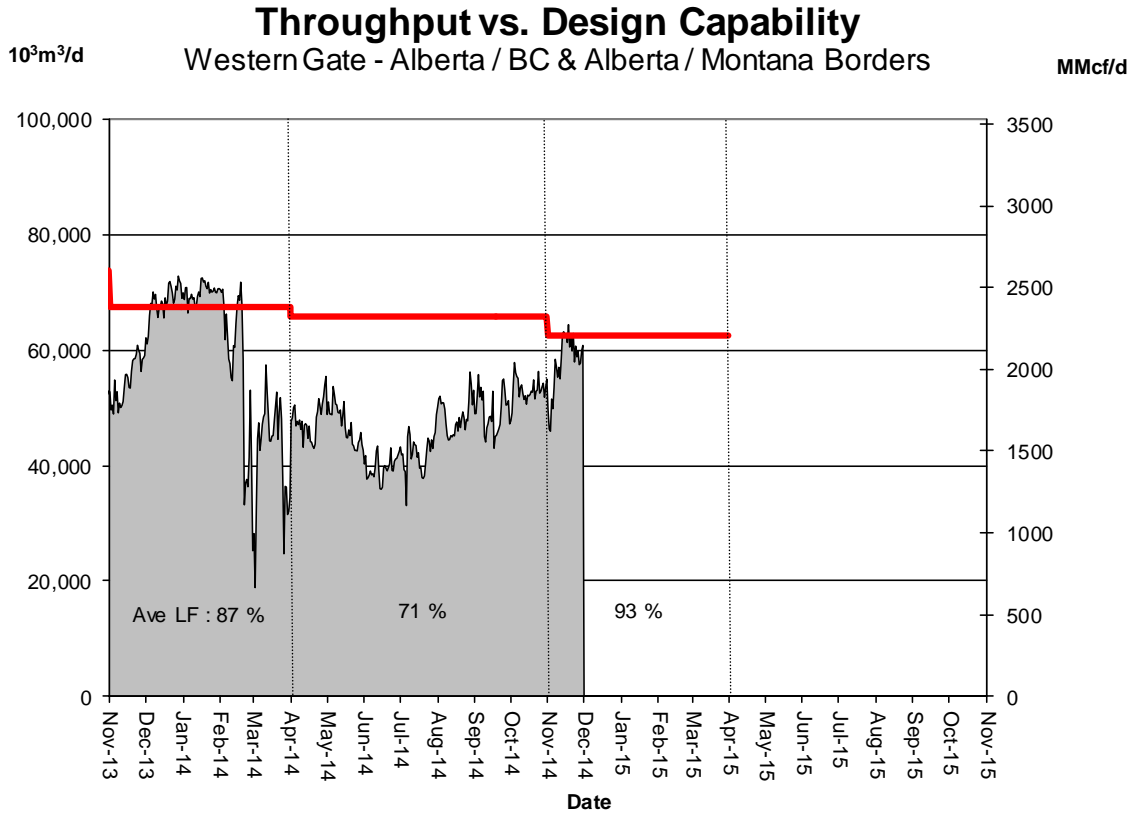
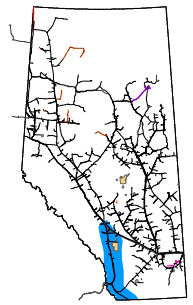
# DESIGN CAPABILITY UTILIZATION EASTERN ALBERTA MAINLINE (Princess to Empress / McNeill)



% Design Capability Utilization						
Monthly Average Area Deliveries as a Percentage of Design Capability						
Average Flow/ Design Capability	Jun	Jul	Aug	Sep	Oct	Nov
	77%	76%	77%	75%	79%	105%



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



% Design Capability Utilization						
Monthly Average Area Deliveries as a Percentage of Design Capability						
Average Flow/ Design Capability	Jun	Jul	Aug	Sep	Oct	Nov
	60%	64%	74%	75%	81%	93%

# 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 2014	November 2016
Winter construction (generally north of Edmonton)	November 2014	April 2017

## Estimated Firm Transportation Service Availability

Please refer to the following web site for  
current FT-R / FT-D Availability Maps:

<http://www.transcanada.com/customerexpress/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

---

## 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* (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 (LF) for each season. Load factors are obtained by comparing the dominant 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.

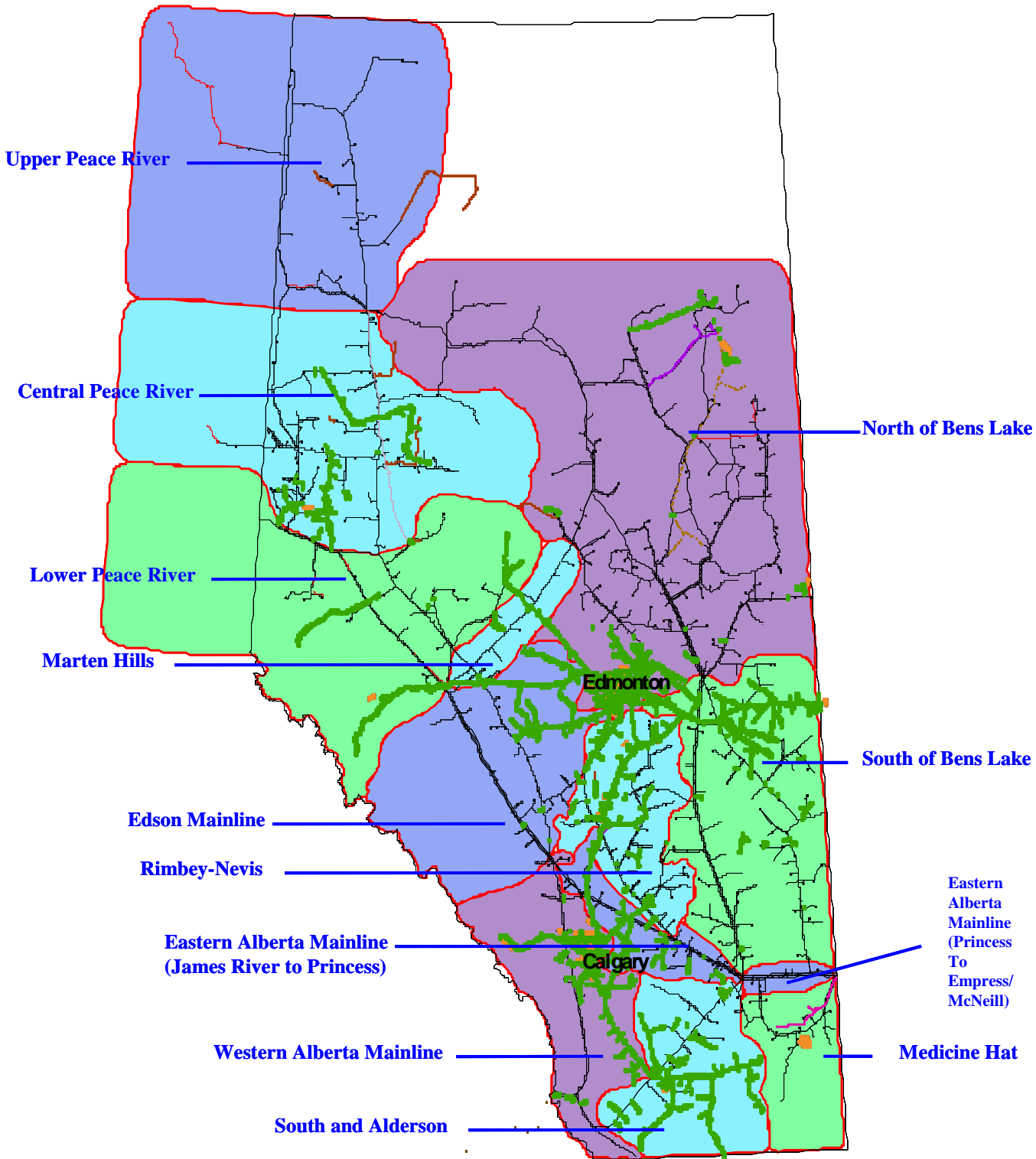
Design Flow Capability utilization is a function of several factors that include:

- 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.
- 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.

## Future Firm Transportation Service Availability

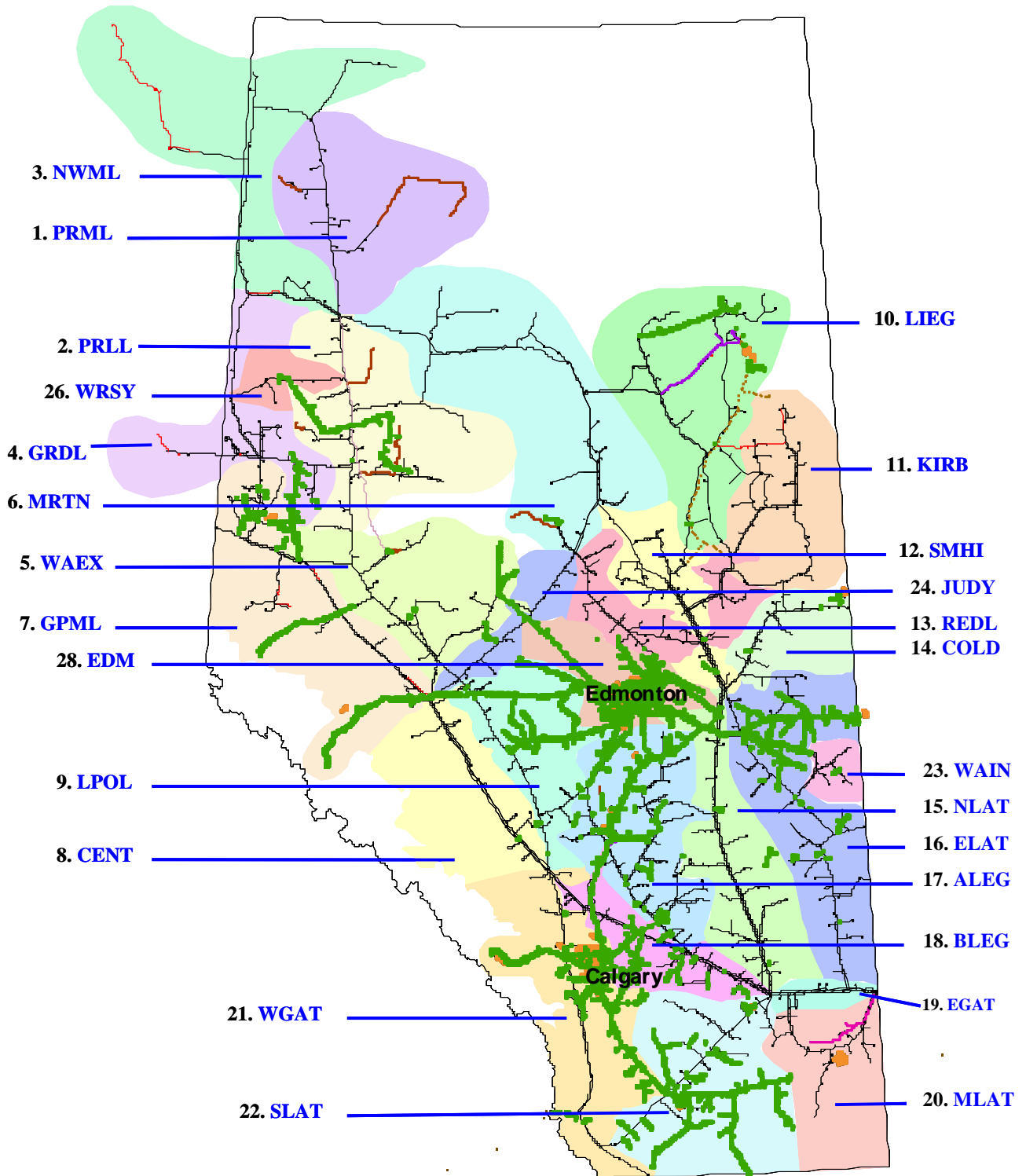
The Future Firm Transportation Service Availability report presents guidelines and timing for all future firm transportation service requests.

# 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 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

---