# SYSTEM UTILIZATION AND RELIABILITY MONTHLY REPORT

for the month ending August, 2008

Published date:
December 19, 2008

#### **Highlights This Month:**

- Average Load Factors greater than 90% were experienced in a number of design areas during April 2008 – August 2008 [i.e. Upper Peace River, Upper and Central Peace River, Peace River Design, North and South of Bens Lake, Upstream James River, Eastern Alberta Mainline: James River to Princess, Eastern Alberta Mainline: Princess to Empress/McNeill, and South and Alderson].
- FT Receipt Availability over a 3 month average from June 1, 2008 August 31, 2008 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 June 1, 2008 August 31, 2008, were all deemed 100% available.

**NOVA** Gas Transmission Ltd.



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If you have any questions on the content of this report, contact Bob Haney at (403) 920-5317 or via fax at (403) 920-2380.



### FIRM TRANSPORTATION SERVICE<sup>1</sup> CONTRACT UTILIZATION<sup>2</sup>

**By NGTL Pipeline Segments** 

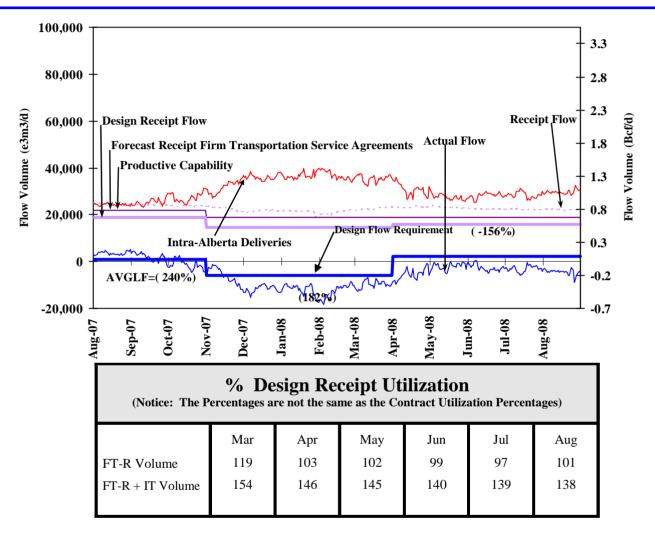
	Receipt							Aug CD
Segment	Contract	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08	(mmcf/d)
UPRM <sup>4</sup>	FT	95%	96%	93%	87%	95%	93%	163
a	FT + IT	111%	111%	113%	99%	111%	108%	
LPRM <sup>4</sup>	FT	92%	96%	96%	97%	96%	94%	22
DDII 4	FT + IT	113%	130%	133%	124%	123%	125%	202
PRLL <sup>4</sup>	FT FT + IT	93% 108%	94% 111%	90% 107%	93% 110%	93% 114%	94% 116%	203
NWML <sup>4</sup>								460
NWWILL	FT FT + IT	96% 106%	96% 118%	96% 116%	96% 112%	98% 113%	97% 111%	460
GRDL ⁴	FT	91%	91%	91%	87%	89%	88%	294
GKDL	FT + IT	108%	115%	116%	111%	128%	125%	294
WRSY 4	FT	94%	94%	90%	88%	93%	91%	35
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	$\mathbf{FT} + \mathbf{IT}$	143%	160%	147%	136%	135%	145%	32
WAEX	FT	92%	93%	92%	90%	94%	92%	273
	FT + IT	144%	154%	165%	143%	179%	175%	
JUDY	FT	99%	98%	98%	91%	87%	94%	87
	FT + IT	138%	140%	147%	140%	133%	160%	
GPML	FT	92%	93%	94%	91%	94%	96%	2,000
	FT + IT	108%	115%	114%	107%	116%	114%	
CENT	FT	96%	96%	95%	94%	96%	96%	1,097
	FT + IT	112%	117%	114%	110%	118%	114%	
LPOL	FT FT + IT	95% 123%	96% 128%	96% 125%	95% 125%	97% 128%	96% 1249/	476
WGAT	FT + 11	90%	91%	125% 85%	125% 90%	92%	124% 90%	257
WGAI	FT + IT	113%	91% 112%	85% 106%	90% 122%	92% 115%	90% 115%	357
ALEG	FT	94%	94%	92%	94%	95%	95%	1,119
ALEG	FT + IT	114%	117%	114%	121%	124%	125%	1,117
SLAT	FT	88%	94%	95%	89%	94%	94%	287
	FT + IT	112%	118%	133%	144%	137%	137%	
MLAT	FT	92%	92%	90%	90%	90%	92%	290
	FT + IT	108%	112%	109%	108%	106%	110%	
BLEG	$\mathbf{FT}$	95%	91%	91%	92%	93%	94%	648
	FT + IT	109%	106%	109%	114%	113%	114%	
EGAT	FT	93%	94%	94%	94%	92%	92%	56
	FT + IT	119%	129%	123%	122%	120%	119%	
MRTN	FT FT + IT	94% 108%	91%	96% 118%	95% 114%	96% 114%	95% 113%	164
LIEG	FT + 11	82%	116% 85%	84%	83%	89%	90%	96
LIEG	FT + IT	127%	138%	137%	137%	166%	136%	90
KIRB	FT	92%	91%	88%	88%	80%	88%	110
IIII	$\mathbf{FT} + \mathbf{IT}$	108%	149%	150%	134%	123%	126%	110
SMHI	$\mathbf{FT}$	92%	84%	86%	83%	82%	85%	117
	FT + IT	129%	114%	121%	123%	116%	117%	
REDL	$\mathbf{FT}$	94%	90%	90%	88%	88%	84%	88
	FT + IT	130%	130%	130%	135%	144%	134%	
COLD	FT	87%	93%	89%	91%	88%	89%	59
	FT + IT	109%	115%	113%	113%	110%	110%	
NLAT	FT	92%	94%	93%	92%	93%	94%	304
XX/ A XX/	FT + IT	119%	129%	129%	127%	125%	127%	21
WAIN	FT FT + IT	93% 151%	96% 156%	98% 154%	96% 147%	95% 139%	97% 133%	21
ELAT	FT	93%	93%	93%	94%	93%	92%	192
ELAI	FT + IT	133%	137%	135%	138%	137%	136%	192
TOTAL SYSTEM	FT	93%	94%	93%	92%	94%	94%	9,020
	$\mathbf{FT} + \mathbf{IT}$	114%	119%	119%	117%	122%	121%	- ,
Segment	Delivery							Aug CD
	Contract	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08	(GJ/d)
Empress	FT FT + IT	100%	100%	99% 122%	100%	99%	98% 116%	4,127,990
McNeill	FT + II	112% 96%	113% 83%	122% 78%	124% 73%	114% 82%	116% 83%	1,656,616
IVICINCIII	FT + IT	96% 104%	83% 94%	78% 90%	81%	82% 106%	85% 96%	1,030,010
ABC	FT	82%	90%	70%	67%	75%	79%	2,525,798
0	FT + IT	82%	94%	70%	67%	76%	79%	_,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
*NOTE:								
1. FT includes all receip	ot and export delivery F	irm Transportation	Services: FTR	, LRS, FTD.				
2 IT includes all receip								

- 2. IT includes all receipt and border delivery Interruptible Services: ITR, FRO, ITD, 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 FLOW REQUIREMENTS UTILIZATION NORTH OF BENS LAKE

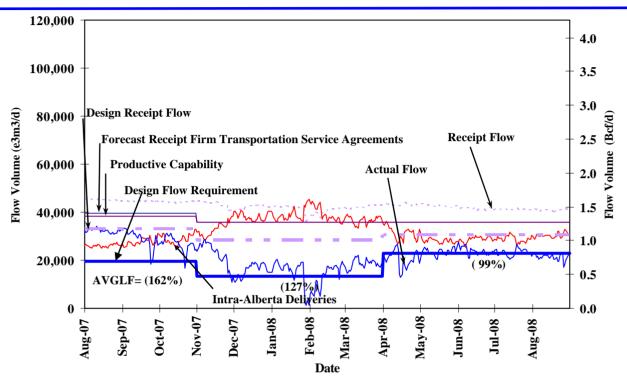


% Design Flow Requirements Utilization  Monthly Average Actual Flow as a Percentage of Design Flow Requirements							
Average Flow/	Mar	Apr	May	Jun	Jul	Aug	
Design Capacity	171	-238	-91	-118	-136	-196	





# DESIGN FLOW REQUIREMENTS UTILIZATION NORTH & SOUTH OF BENS LAKE



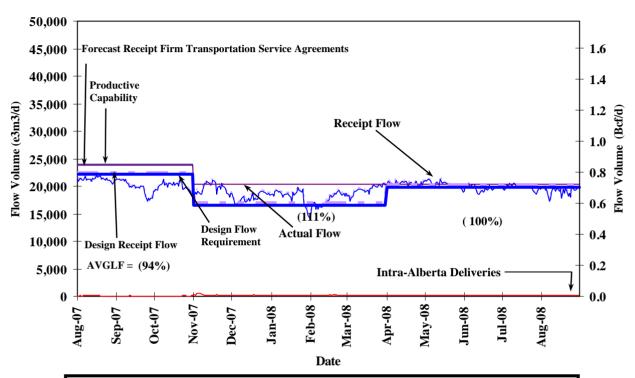
% Design Receipt Utilization (Notice: The Percentages are not the same as the Contract Utilization Percentages)									
	Mar Apr May Jun Jul Aug								
FT Volume	113	99	98	95	94	96			
FT-R + IT Volume	150	140	139	135	134	133			

% Design Flow Requirements Utilization  Monthly Average Actual Flow as a Percentage of Design Flow Requirements							
Average Flow/	Mar	Apr	May	Jun	Jul	Aug	
Design Capacity	137	91	103	105	102	94	





### DESIGN FLOW REQUIREMENTS UTILIZATION UPPER PEACE RIVER



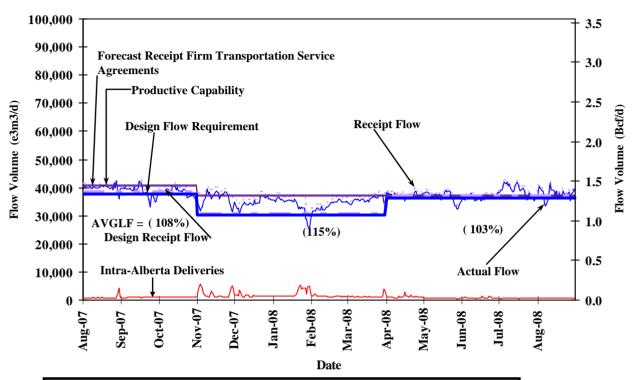
% Design Receipt Utilization (Notice: The Percentages are not the same as the Contract Utilization Percentages)								
	Mar Apr May Jun Jul Aug							
FT Volume	104	85	84	85	85	84		
FT-R + IT Volume	116	103	102	98	99	96		

% Design Flow Requirements Utilization  Monthly Average Actual Flow as a Percentage of Design Flow Requirements							
Average Flow/	Mar	Apr	May	Jun	Jul	Aug	
Design Capacity	117	103	103	99	100	96	





### DESIGN FLOW REQUIREMENTS UTILIZATION UPPER and CENTRAL PEACE RIVER



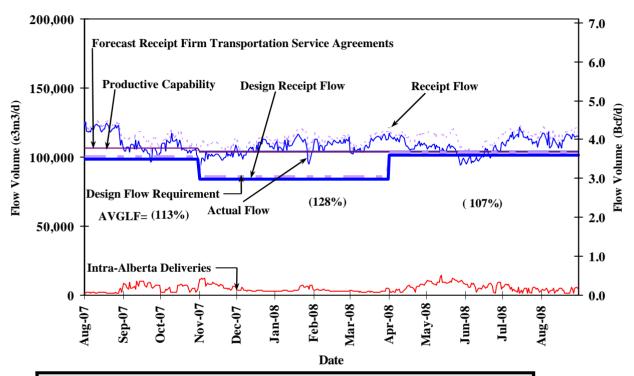
% Design Receipt Utilization (Notice: The Percentages are not the same as the Contract Utilization Percentages)									
	Mar Apr May Jun Jul Aug								
FT Volume	104	84	82	84	86	84			
FT-R + IT Volume	120	104	102	101	107	104			

% Design Flow Requirements Utilization Monthly Average Actual Flow as a Percentage of Design Flow Requirements						
Average Flow/	Mar	Apr	May	Jun	Jul	Aug
Design Capacity	118	102	101	100	107	104





### DESIGN FLOW REQUIREMENTS UTILIZATION PEACE RIVER



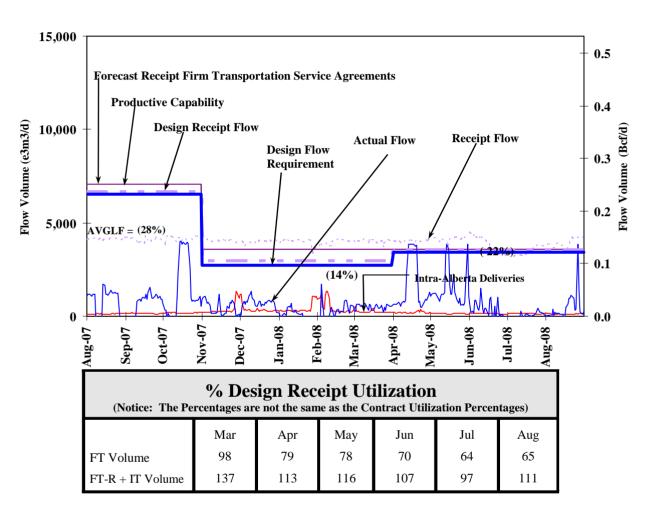
% Design Receipt Utilization (Notice: The Percentages are not the same as the Contract Utilization Percentages)								
	Mar Apr May Jun Jul Aug							
FT Volume	108	88	88	86	88	89		
FT-R + IT Volume	130	112	111	104	114	113		

% Design Flow Requirements Utilization Monthly Average Actual Flow as a Percentage of Design Flow Requirements							
Average Flow/	Mar	Apr	May	Jun	Jul	Aug	
Design Capacity	131	109	103	100	112	112	





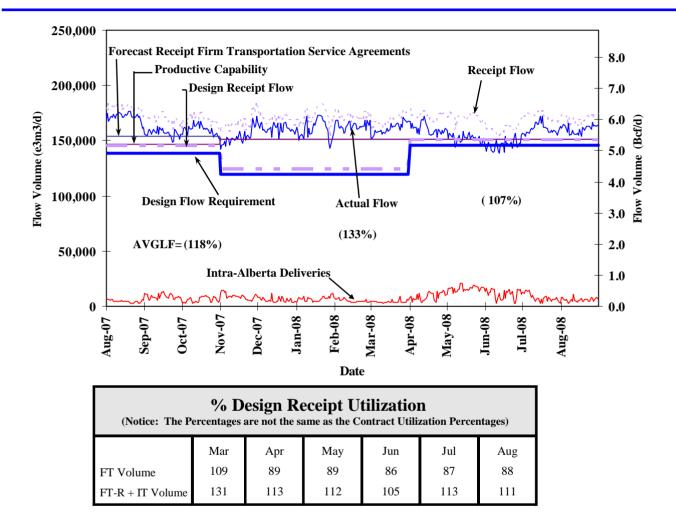
### DESIGN FLOW REQUIREMENTS UTILIZATION MARTEN HILLS



% Design Flow Requirements Utilization  Monthly Average Actual Flow as a Percentage of Design Flow Requirements								
Average Flow/	Mar	Apr	May	Jun	Jul	Aug		
Design Capacity	19	47	42	10	0	13		



# DESIGN FLOW REQUIREMENTS UTILIZATION EDSON M/L, PEACE RIVER, AND MARTEN HILLS

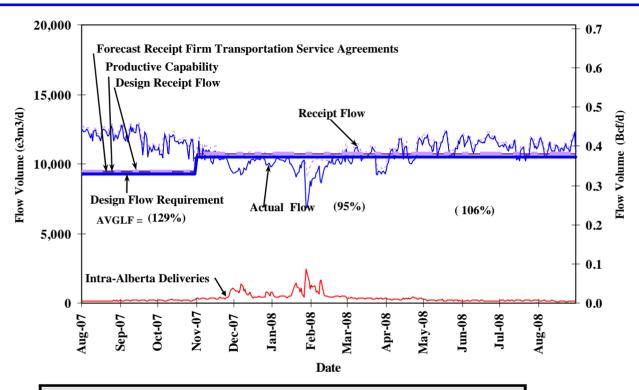


% Design Flow Requirements Utilization  Monthly Average Actual Flow as a Percentage of Design Flow Requirements						
Average Flow/	Mar	Apr	May	Jun	Jul	Aug
Design Capacity	134	110	105	100	110	110





### DESIGN FLOW REQUIREMENTS UTILIZATION SOUTH AND ALDERSON



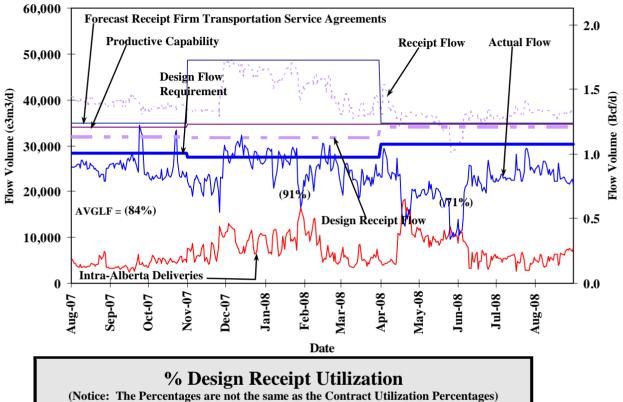
% Design Receipt Utilization (Notice: The Percentages are not the same as the Contract Utilization Percentages)							
	Mar	Apr	May	Jun	Jul	Aug	
FT Volume	79	83	77	69	73	73	
FT-R + IT Volume	100	104	108	110	105	106	

% Design Flow Requirements Utilization  Monthly Average Actual Flow as a Percentage of Design Flow Requirements						
Average Flow/	Mar	Apr	May	Jun	Jul	Aug
Design Capacity	98	103	108	110	105	106





# DESIGN FLOW REQUIREMENTS UTILIZATION RIMBEY-NEVIS



% Design Receipt Utilization (Notice: The Percentages are not the same as the Contract Utilization Percentages)						
	Mar	Apr	May	Jun	Jul	Aug
FT Volume	96	88	85	87	87	88
FT-R + IT Volume	115	109	106	112	115	115

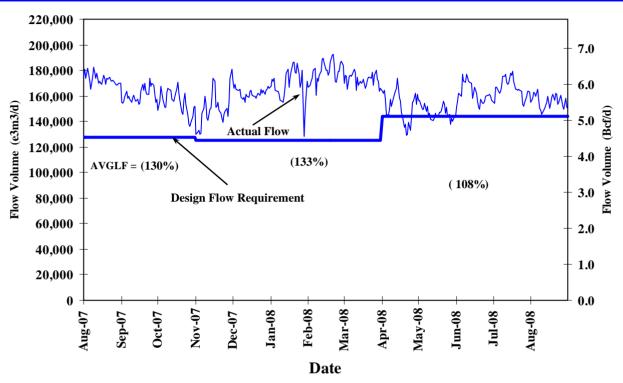
% Design Flow Requirements Utilization  Monthly Average Actual Flow as a Percentage of Design Flow Requirements						
Average Flow/	Mar	Apr	May	Jun	Jul	Aug
Design Capacity	83	70	58	68	80	78



# DESIGN FLOW REQUIREMENTS UTILIZATION EASTERN ALBERTA MAINLINE



(James River to Princess)

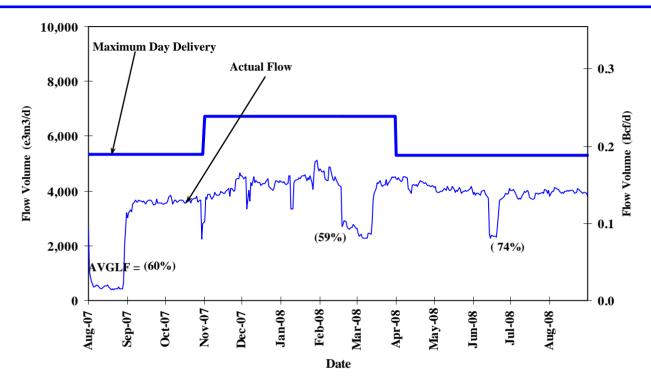


% Design Flow Requirements Utilization  Monthly Average Actual Flow as a Percentage of Design Flow Requirements						
Average Flow/	Mar	Apr	May	Jun	Jul	Aug
Design Capacity	138	105	102	112	115	108





# DESIGN FLOW REQUIREMENTS UTILIZATION MEDICINE HAT



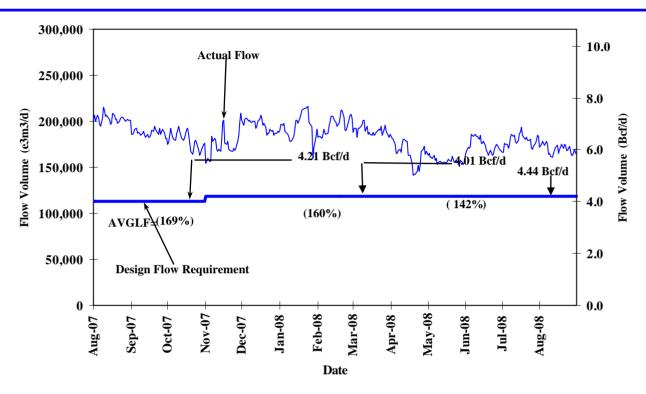
Design flow for the Medicine Hat area is the net flow to the area deliveries. Since all deliveries are intra-Alberta deliveries there are no Firm Service Delivery contracts in effect for this area. Consequently, contract utilization values are not available.



# DESIGN FLOW REQUIREMENTS UTILIZATION EASTERN ALBERTA MAINLINE



(Princess to Empress / McNeill)



% Design Delivery Utilization (Notice: Average Actual Flow as a Percentage of Design Flow Requirements)						
	Mar	Apr	May	Jun	Jul	Aug
FT <sup>1</sup> Volume	144	123	110	118	128	122
FT <sup>1</sup> + IT Volume	160	139	133	144	151	143

#### NOTE:

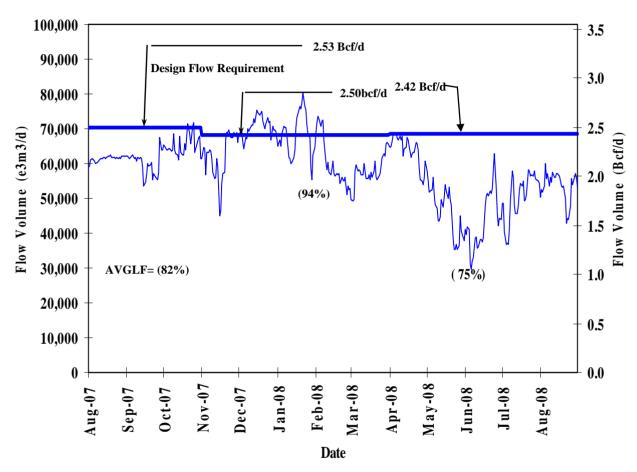
Utilization data is based upon billed monthly volumes expressed as a percentage of seasonal design delivery flow at Empress and McNeill Export delivery points.

1. FT includes year-round FT-D, STFT and LRS.



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





% Design Delivery Utilization (Notice: Average Actual Flow as a Percentage of Design Flow Requirements)							
	Mar	Apr	May	Jun	Jul	Aug	
FT <sup>1</sup> Volume	84	90	68	65	73	77	
FT <sup>1</sup> + IT Volume	85	93	68	65	74	78	

#### NOTE:

Utilization data is based upon billed monthly volumes expressed as a percentage of seasonal design delivery flow at Alberta/BC and Alberta/Montana Export delivery points.



#### HISTORICAL TRANSPORTATION SERVICE AVAILABILITY

June 1, 2008 to August 31, 2008 (3 Month Average)

Receipt Area		IT-R Service	Firm Service	Firm Service	%(	CD	Causes/Comment
		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	
	WRSY26	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

SLAT 22

WGAT 21

Available (2)

(% of time)

availability during partial restrictions.

Western Mainline

Empress/McNeill

Alberta-BC

**Borders** 



Causes/Comment

0

0

0

Firm Service

Restriction

(% of time)

0

0

0

100

100

100

Firm Service

Available

(% of time)

100

100

100

100

100

100

IT-D Service

Available<sup>(2)</sup>

(% of time)

100

100

0

0

0

Max

0

0

0

% CD Restricted<sup>(1)</sup>

0

0

Average

0

0

0

<sup>100</sup> Gordondale

<sup>(1)</sup>Percentage of CD restricted during periods of restriction. (2) Represents percent of time full IT-D nominated available, does not include

<sup>(3)</sup> Pertains to FS Restrictions.

# FUTURE FIRM TRANSPORTATION SERVICE AVAILABILITY (MAINLINE RESTRICTIONS)

### **Export Firm Transportation Guidelines**

Firm	Authorize Firm	To Ensure Firm
Transportation	Transportation	Transportation
Service Type	Service By	Service By
Export Delivery	August 1, 2006 August 1, 2007	November 2007 November 2008

### **Receipt Firm Transportation Guidelines**

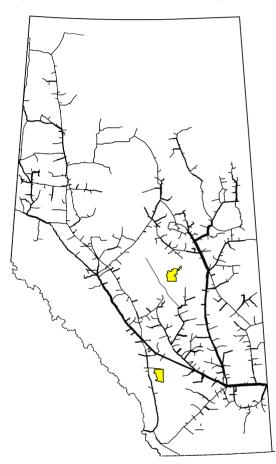
Firm Transportation Service Type	Authorize Firm Transportation Service By	To Ensure Firm Transportation Service By
Receipt - Summer construction (generally south of Edmonton)	November 1, 2006 November 1, 2007	November 2007 November 2008
Receipt - Winter construction (generally north of Edmonton)	April 1, 2006 April 1, 2007	April 2007 April 2008

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 as of December, 2006

(last revision November 2005)



**Firm Transportation - Receipt Lead Time** 



#### 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 26NGTL 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 Flow Requirements Utilization**

The load factor/segment flow graphs show actual flow versus design values for various NGTL system areas. For comparison, the graphs also include design area receipt firm transportation service agreements and productive capability. The graphs also show seasonal (summer/winter) design flows and average load factors for each season. Data used in these reports lags the current date by one month.

Design Flow Requirements 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

#### **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.

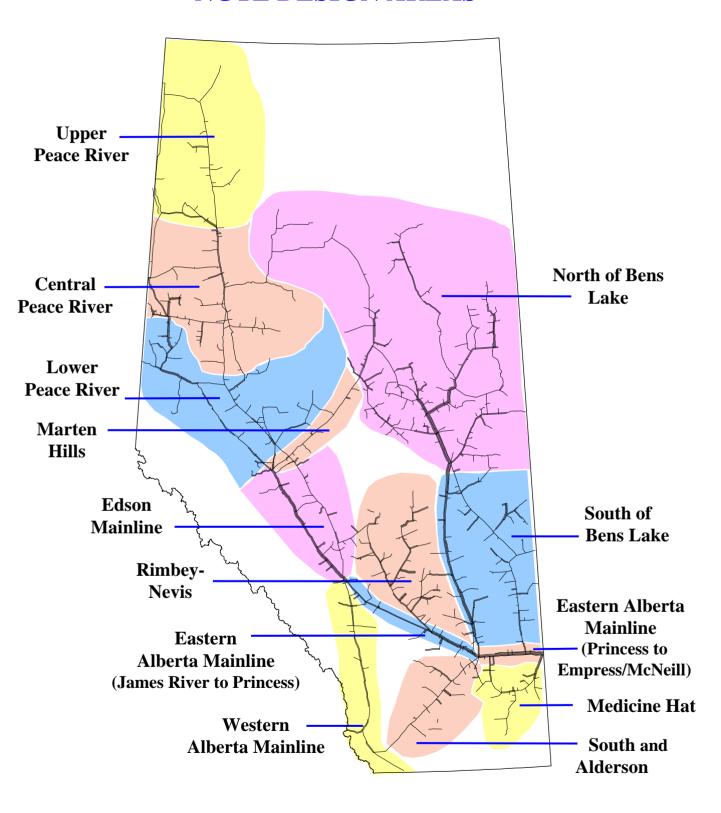
As a monthly feature the Historical Transportation Service Availability is shown as a three-month rolling average of transportation availability.

#### **Future Firm Transportation Service Availability**

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

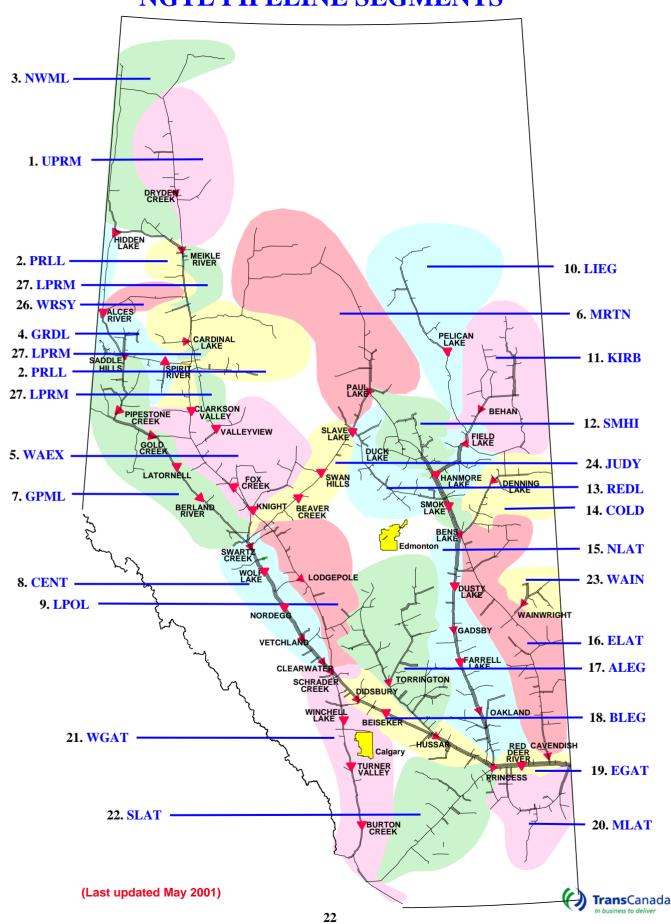


### **NGTL DESIGN AREAS**





### **NGTL PIPELINE SEGMENTS**



#### **DEFINITION OF TERMS**

#### Design Capacity Utilization

#### Actual Flow

The amount of gas flowing out of an area.

### AVGLF (Average Load Factor)

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

#### Design Flow Requirements

The forecast of Firm Requirements that is required to be transported in a pipeline system considering design assumptions.

#### Design Receipt Flow

The amount of receipt flow for which the area was designed.

#### **Productive Capability**

The lesser of forecast field deliverability and the forecast of aggregate Receipt Contract Demand under Firm Service Agreements held at each receipt point.

#### Forecast Receipt Firm Transportation Service Agreements

The forecast sum of all the receipt firm service contracts within and upstream of an area used in mainline facility design.

#### 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.

#### 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.

#### Other

#### System Load Factor

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

