# SYSTEM UTILIZATION AND RELIABILITY MONTHLY REPORT

for the month ending May, 2008

Published date:
December 3, 2008

### **Highlights This Month:**

- Average Load Factors greater than 90% were experienced in a number of design areas during April 2008 – May 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, Western Alberta Mainline, and South and Alderson].
- FT Receipt Availability over a 3 month average from March 1, 2008 May 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 March 1, 2008 May 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** 

		Dy IV	O I L I Ipcini	c beginents				
Segment	Receipt Contract	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08	<b>May-08</b>	May CD (mmcf/d)
UPRM <sup>4</sup>	FT	89%	88%	86%	95%	96%	93%	159
	FT + IT	92%	92%	90%	111%	111%	113%	
LPRM <sup>4</sup>	FT	90%	91%	81%	92%	96%	96%	21
4	FT + IT	104%	104%	98%	113%	130%	133%	
PRLL <sup>4</sup>	FT FT + IT	90% 109%	92% 108%	91%	93% 108%	94%	90% 107%	200
NWML <sup>4</sup>	FT + 11	90%	91%	106% 92%	96%	111% 96%	96%	471
INVIVIL	FT + IT	90% 98%	91% 96%	92%	106%	90% 118%	96% 116%	4/1
GRDL 4	FT	87%	87%	89%	91%	91%	91%	263
	FT + IT	110%	108%	108%	108%	115%	116%	
WRSY 4	FT	94%	94%	91%	94%	94%	90%	36
	FT + IT	143%	137%	131%	143%	160%	147%	
WAEX	FT	90%	89%	88%	92%	93%	92%	266
******	FT + IT	137%	125%	120%	144%	154%	165%	400
JUDY	FT FT + IT	97% 132%	96% 131%	97% 134%	99% 138%	98% 140%	98% 147%	100
GPML	FT + II	93%	92%	92%	92%	93%	94%	2,016
GIML	FT + IT	104%	104%	104%	108%	115%	114%	2,010
CENT	FT	95%	95%	96%	96%	96%	95%	1,113
	FT + IT	113%	110%	110%	112%	117%	114%	, -
LPOL	FT	95%	94%	95%	95%	96%	96%	478
	FT + IT	119%	121%	120%	123%	128%	125%	
WGAT	FT	83%	86%	81%	90%	91%	85%	364
	$\mathbf{FT} + \mathbf{IT}$	97%	105%	100%	113%	112%	106%	
ALEG	FT	92%	92%	93%	94%	94%	92%	1,123
SLAT	FT + IT FT	109% 84%	109% 85%	130% 86%	114% 88%	117% 94%	114% 95%	300
SLAI	FT + IT	106%	106%	107%	112%	118%	133%	300
MLAT	FT	93%	93%	92%	92%	92%	90%	290
	FT + IT	104%	104%	104%	108%	112%	109%	
BLEG	FT	96%	96%	96%	95%	91%	91%	645
	FT + IT	106%	104%	105%	109%	106%	109%	
EGAT	<b>FT</b>	92%	91%	90%	93%	94%	94%	56
	FT + IT	108%	108%	112%	119%	129%	123%	
MRTN	FT FT + IT	88% 94%	90% 98%	89% 97%	94% 108%	91% 116%	96% 118%	165
LIEG	FT + II	80%	75%	79%	82%	85%	84%	97
LIEG	FT + IT	118%	111%	110%	127%	138%	137%	71
KIRB	FT	89%	89%	90%	92%	91%	88%	101
	FT + IT	107%	109%	104%	108%	149%	150%	
SMHI	FT	89%	90%	91%	92%	84%	86%	121
	FT + IT	126%	125%	123%	129%	114%	121%	
REDL	FT	90%	91%	90%	94%	90%	90%	92
COLD	FT + IT	125%	124%	124%	130%	130%	130%	
COLD	FT FT + IT	84% 101%	82% 101%	84% 103%	87% 109%	93% 115%	89% 113%	60
NLAT	FT + II FT	91%	90%	91%	92%	94%	93%	308
ILAI	FT + IT	116%	113%	116%	119%	129%	129%	300
WAIN	FT	94%	92%	87%	93%	96%	98%	19
	FT + IT	135%	133%	134%	151%	156%	154%	
ELAT	FT	92%	92%	88%	93%	93%	93%	203
	FT + IT	124%	123%	123%	133%	137%	135%	
TOTAL SYSTEM	FT	92%	91%	92%	93%	94%	93%	9,067
Segment	FT + IT Delivery	109%	108%	111%	114%	119%	119%	May CD
Segment	Contract	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08	May-08	(GJ/d)
Empress	FT	99%	99%	100%	100%	100%	99%	3,883,130
	FT + IT	108%	104%	114%	112%	113%	122%	
McNeill	FT	95%	97%	97%	96%	83%	78%	1,348,743
ADC	FT + IT	104%	114%	106%	104%	94%	90%	2 510 014
ABC	FT FT + IT	95% 98%	92% 94%	85% 85%	82% 82%	90% 94%	70% 70%	2,510,814
*NOTE:		2070	> <b>-</b> 7.0	35 /0	32 /0	J470	7070	
1417 1 15.								

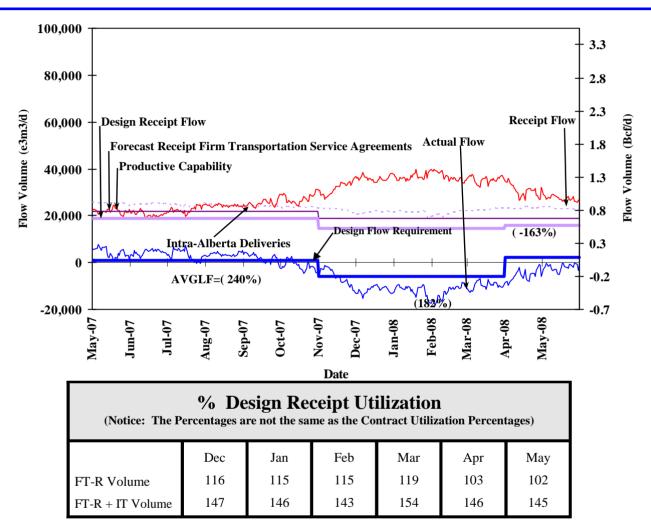
#### \*NOTE:

- 1. FT includes all receipt and export delivery Firm Transportation Services: FTR, LRS, FTD.
- 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

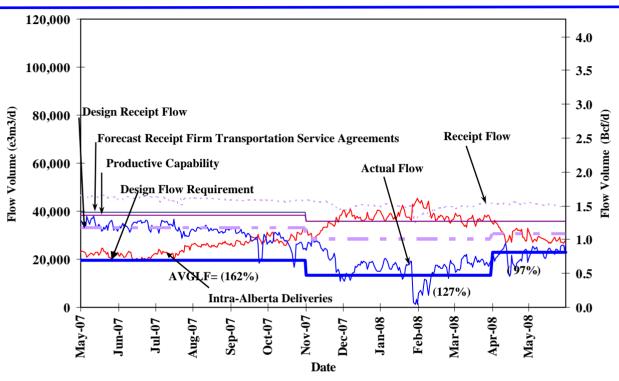


% Design Flow Requirements Utilization  Monthly Average Actual Flow as a Percentage of Design Flow Requirements						
Average Flow/	Dec	Jan	Feb	Mar	Apr	May
Design Capacity	205	208	221	171	-238	-91





# DESIGN FLOW REQUIREMENTS UTILIZATION NORTH & SOUTH OF BENS LAKE



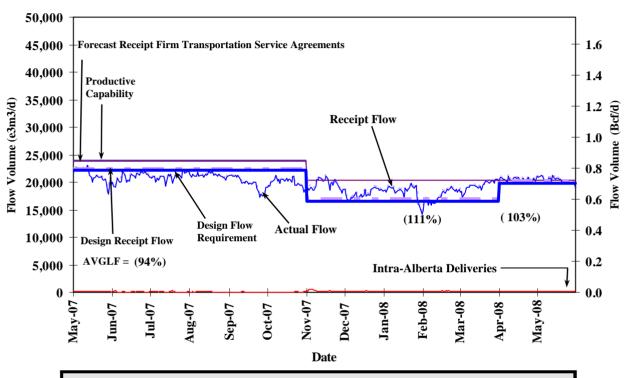
(Notice: The I	% Design Receipt Utilization (Notice: The Percentages are not the same as the Contract Utilization Percentages)								
	Dec	Jan	Feb	Mar	Apr	May			
FT Volume	116	114	111	113	99	98			
FT-R + IT Volume	149	147	143	150	140	139			

	<b>Design Fl</b> verage Actual	_				t <b>s</b>
Average Flow/	Dec	Jan	Feb	Mar	Apr	May
Design Capacity	119	111	100	137	91	103





# DESIGN FLOW REQUIREMENTS UTILIZATION UPPER PEACE RIVER



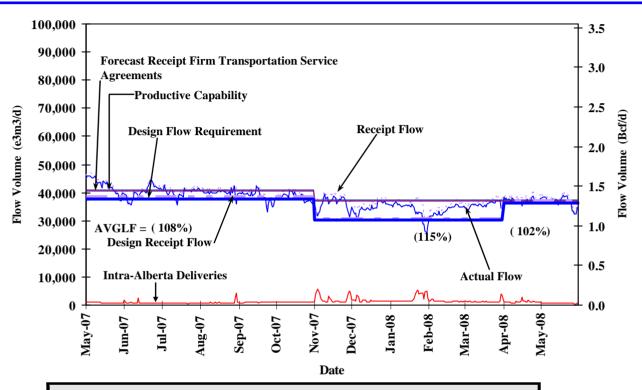
% Design Receipt Utilization (Notice: The Percentages are not the same as the Contract Utilization Percentages)								
	Dec	Jan	Feb	Mar	Apr	May		
FT Volume	100	104	98	104	85	84		
FT-R + IT Volume	107	109	105	116	103	102		

% Do Monthly Ave	_	ow Requ Flow as a Per				ents
Average Flow/	Dec	Jan	Feb	Mar	Apr	May
Design Capacity	107	109	105	117	103	103





# DESIGN FLOW REQUIREMENTS UTILIZATION UPPER and CENTRAL PEACE RIVER



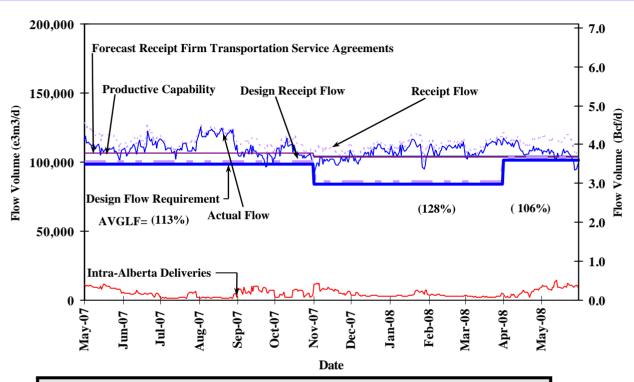
(Notice: The Po	% Design Receipt Utilization (Notice: The Percentages are not the same as the Contract Utilization Percentages)								
Dec Jan Feb Mar Apr May									
FT Volume	102	104	100	104	84	82			
FT-R + IT Volume	118	118	114	120	104	102			

% Do Monthly Ave	0	_	iiremen rcentage of D			ents
Average Flow/	Dec	Jan	Feb	Mar	Apr	May
Design Capacity	115	112	112	118	102	101





# DESIGN FLOW REQUIREMENTS UTILIZATION PEACE RIVER



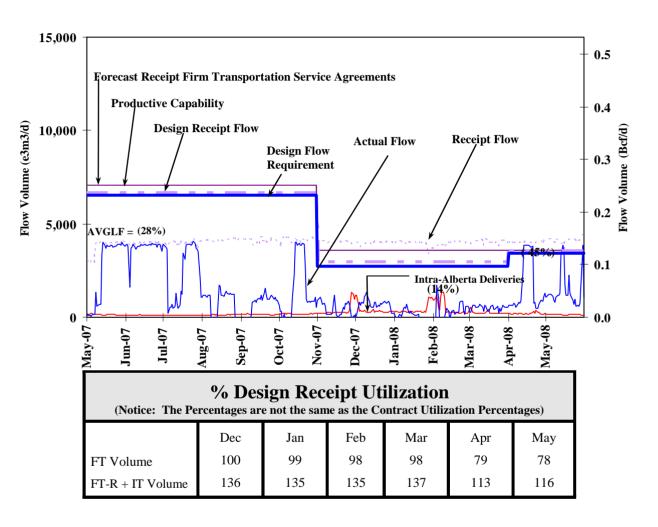
(Notice: The Po	% Design Receipt Utilization (Notice: The Percentages are not the same as the Contract Utilization Percentages)								
Dec Jan Feb Mar Apr May									
FT Volume	108	106	106	108	88	88			
FT-R + IT Volume	126	123	123	130	112	111			

	% Design Flow Requirements Utilization  Monthly Average Actual Flow as a Percentage of Design Flow Requirements							
Average Flow/	Dec	Jan	Feb	Mar	Apr	May		
Design Capacity	127	130	132	131	109	103		





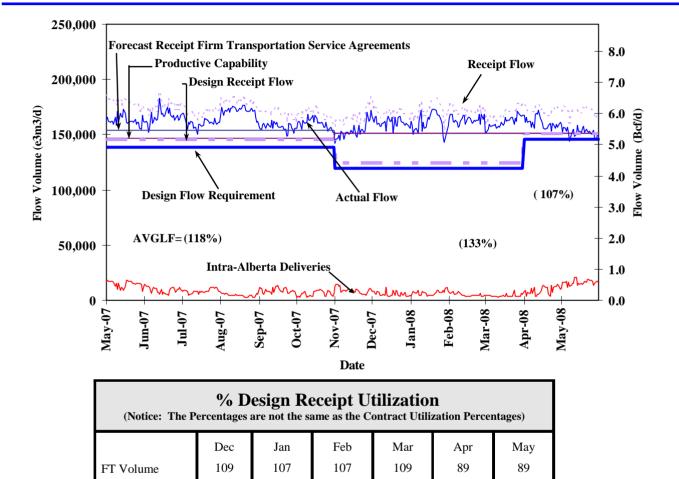
# DESIGN FLOW REQUIREMENTS UTILIZATION MARTEN HILLS



	% Design Flow Requirements Utilization Monthly Average Actual Flow as a Percentage of Design Flow Requirements								
Average Flow/	Dec	Jan	Feb	Mar	Apr	May			
Design Capacity	25	-1	10	19	47	42			



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



 $\underline{\text{NOTE}}$ : Utilization data is based upon billed monthly volumes expressed as a percentage of design receipt flow. Design receipt flow is the amount of receipt flow for which the area was designed.

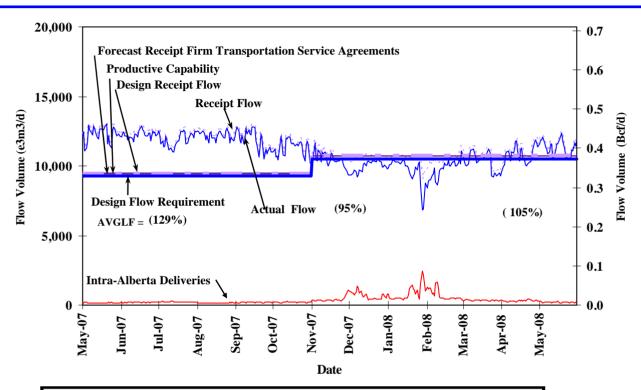
	Design F verage Actua		_			nts
Average Flow/	Dec	Jan	Feb	Mar	Apr	May
Design Capacity	134	134	137	134	110	105

FT-R + IT Volume





# DESIGN FLOW REQUIREMENTS UTILIZATION SOUTH AND ALDERSON



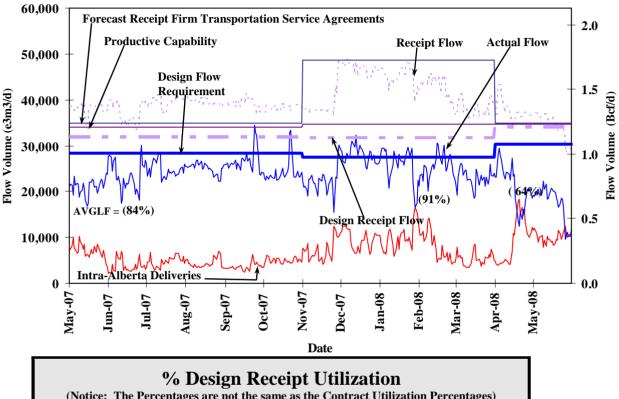
% Design Receipt Utilization (Notice: The Percentages are not the same as the Contract Utilization Percentages)							
	Dec	Jan	Feb	Mar	Apr	May	
FT Volume	82	80	80	79	83	77	
FT-R + IT Volume	101	99	98	100	104	108	

% Design Flow Requirements Utilization  Monthly Average Actual Flow as a Percentage of Design Flow Requirements						
Average Flow/	Dec	Jan	Feb	Mar	Apr	May
Design Capacity	94	92	93	98	103	108





# DESIGN FLOW REQUIREMENTS UTILIZATION RIMBEY-NEVIS



% Design Receipt Utilization (Notice: The Percentages are not the same as the Contract Utilization Percentages)							
	Dec	Jan	Feb	Mar	Apr	May	
FT Volume	98	96	95	96	88	85	
FT-R + IT Volume	117	114	133	115	109	106	

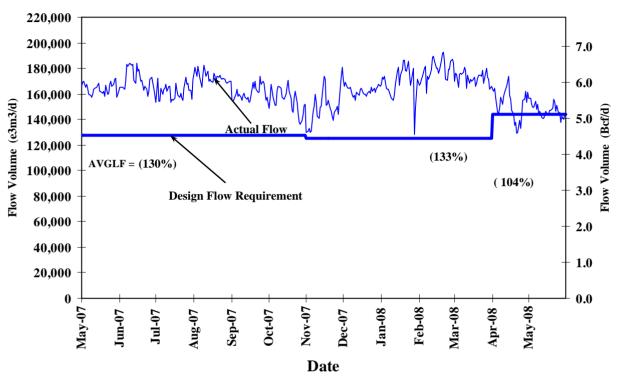
% Design Flow Requirements Utilization Monthly Average Actual Flow as a Percentage of Design Flow Requirements						
Average Flow/	Dec	Jan	Feb	Mar	Apr	May
Design Capacity	102	94	93	83	70	58



# DESIGN FLOW REQUIREMENTS UTILIZATION EASTERN ALBERTA MAINLINE



(James River to Princess)

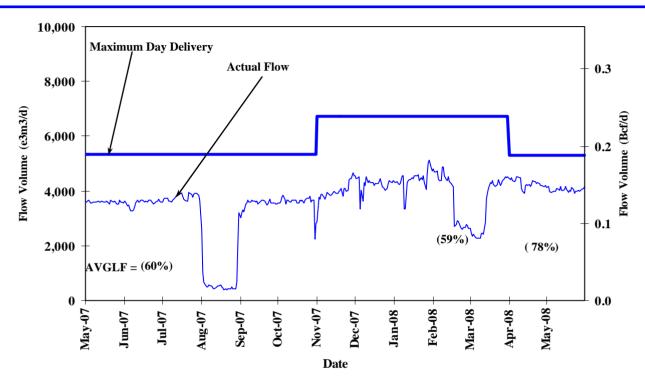


% Design Flow Requirements Utilization  Monthly Average Actual Flow as a Percentage of Design Flow Requirements							
Average Flow/	Dec	Jan	Feb	Mar	Apr	May	
Design Capacity	130	135	143	138	105	102	





# DESIGN FLOW REQUIREMENTS UTILIZATION MEDICINE HAT



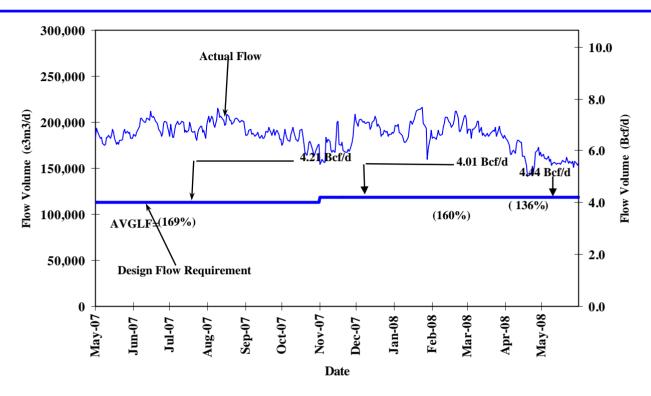
Design flow for the Medicine Hat area is the net flow to the area deliveries. Since all deliveries are intra-Alberta deliveries there are no Firm Service Delivery contracts in effect for this area. Consequently, contract utilization values are not available.



# 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)								
	Dec	Jan	Feb	Mar	Apr	May		
FT <sup>1</sup> Volume	150	150	146	144	123	110		
FT <sup>1</sup> + IT Volume	164	164	164	160	139	133		

#### NOTE:

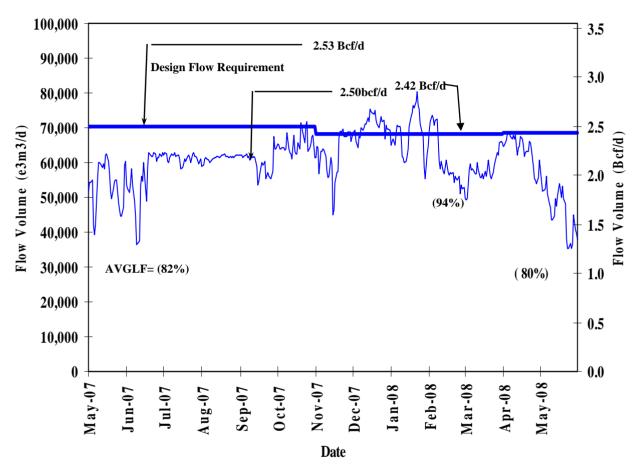
Utilization data is based upon billed monthly volumes expressed as a percentage of seasonal design delivery flow at Empress and McNeill Export delivery points.

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)								
	Dec	Jan	Feb	Mar	Apr	May		
FT <sup>1</sup> Volume	100	97	88	84	90	68		
FT <sup>1</sup> + IT Volume	103	99	89	85	93	68		

#### 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

IT-R Service Firm Service Firm Service

Firm Service

Restriction

(% of time)

Mar 1, 2008 to May 31, 2008 (3 Month Average)

		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

Average

Max

% CD Restricted(1)

%CD

Causes/Comments (3)

Causes/Comments (3)

**Trans**Canada

Central
North & East Upstre

Western Mainline

Empress/McNeill

Alberta-BC

Gordondale

**Borders** 

CENT 8

LPOL 9

WGAT 21

Available<sup>(2)</sup>

(% of time)

**IT-D Service** 

Available<sup>(2)</sup>

(% of time)

Firm Service

Available

(% of time)

**Receipt Area** 

eam LIEG 10 of Bens Lake KIRB 11 MRTN 6 SMHI12 REDL 13 COLD 14 NLAT 15 Downstream of ELAT 16 Bens Lake WAIN 23 Rimbey/Nevis ALEG 17 **Eastern Mainline** BLEG 18 EGAT 19 MLAT 20 SLAT 22 

# 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**

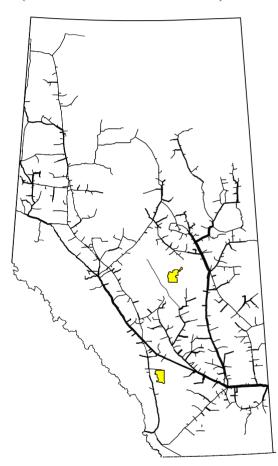
Firm Transportation Service Type	Authorize Firm Transportation Service By	To Ensure Firm Transportation Service By
Receipt - Summer construction (generally south of Edmonton)	November 1, 2006 November 1, 2007	November 2007 November 2008
Receipt - Winter construction (generally north of Edmonton)	April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

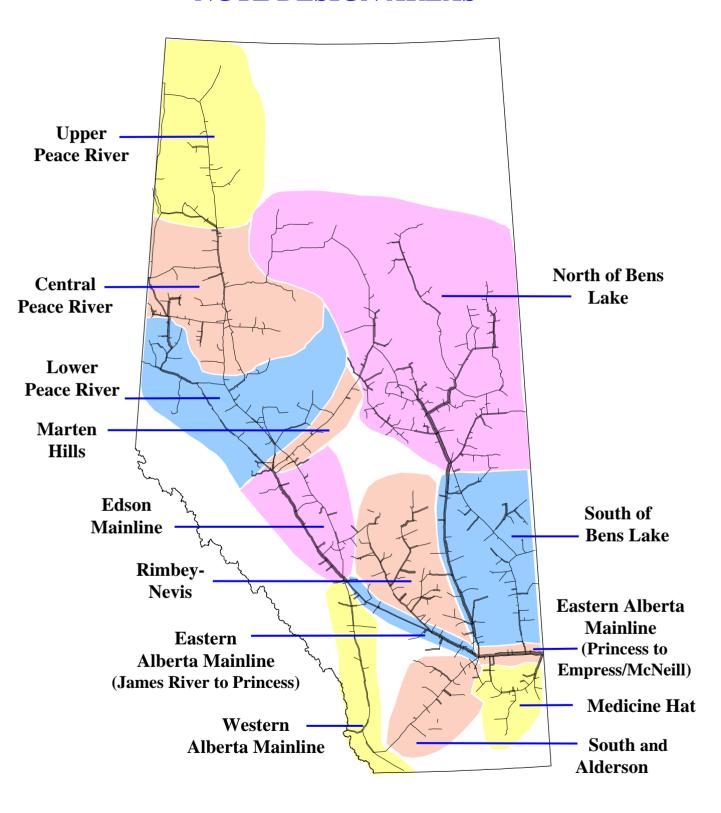
As a monthly feature the Historical Transportation Service Availability is shown as a three-month rolling average of transportation availability.

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

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

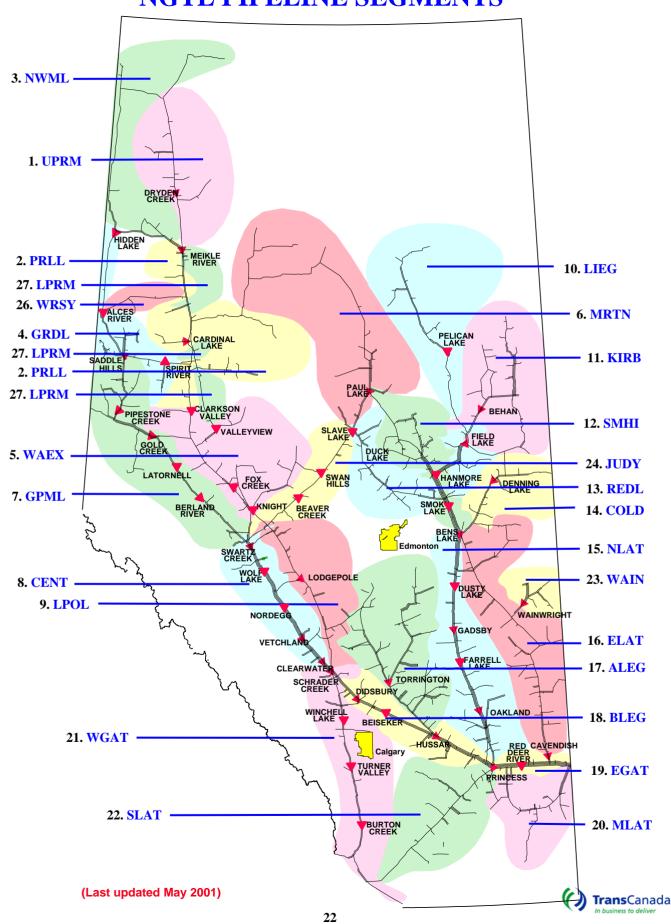


### **NGTL DESIGN AREAS**





### **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

