# SYSTEM UTILIZATION AND RELIABILITY MONTHLY REPORT

for the month ending February, 2009

Published date: April 7, 2009

### **Highlights This Month:**

- Average Load Factors greater than 90% were experienced in a number of design areas during November 2008 February 2009 [i.e. Upper Peace River, Upper and Central Peace River, Peace River Design, 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 December 1, 2008 February 28, 2009 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 December 1, 2008 February 28, 2009, 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										
Segment	Receipt Contract	Sep-08	Oct-08	Nov-08	Dec-08	Jan-09	Feb-09	Feb CD (mmcf/d)		
UPRM <sup>4</sup>	FT FT + IT	92% 105%	91% 98%	84% 91%	76% 82%	89% 104%	86% 105%	133		
LPRM <sup>₄</sup>	FT FT + IT	93% 129%	95% 129%	96% 124%	82% 99%	93% 117%	95% 128%	20		
PRLL ⁴	FT FT + IT	93% 114%	93% 115%	95% 123%	93% 115%	94% 115%	95% 119%	192		
NWML <sup>4</sup>	FT FT + IT	96% 115%	96% 105%	96% 106%	92% 97%	94% 100%	96% 107%	435		
GRDL ⁴	FT FT + IT	89% 120%	89% 110%	84% 116%	86% 109%	86% 111%	88% 113%	269		
WRSY <sup>4</sup>	FT FT + IT	94% 156%	94% 157%	95% 166%	94% 160%	95% 140%	98% 159%	34		
WAEX	FT FT + IT	90% 157%	93% 160%	93% 174%	85% 133%	88% 140%	95% 164%	260		
JUDY	FT FT + IT	96% 164%	96% 153%	97% 157%	97% 148%	96% 148%	96% 149%	96		
GPML	FT FT + IT	95% 113%	95% 112%	93% 109%	89% 102%	93% 105%	95% 109%	2,083		
CENT	FT FT + IT	95% 115%	96% 115%	94% 116%	92% 112%	96% 119%	97% 122%	1,015		
LPOL	FT FT + IT	94% 123%	96% 128%	97% 129%	95% 119%	94% 121%	97% 125%	473		
WGAT	FT FT + IT	88% 111%	86% 105%	87% 103%	87% 107%	90% 109%	91% 119%	305		
ALEG	FT FT + IT	94% 122%	93% 117%	94% 121%	92% 115%	93% 120%	95% 123%	1,029		
SLAT	FT FT + IT	96% 134%	97% 130%	98% 129%	94% 117%	95% 120%	97% 122%	268		
MLAT	FT FT + IT	91% 109%	91% 109%	90% 112%	89% 102%	90% 104%	92% 107%	280		
BLEG	FT FT + IT	93% 114%	94% 112%	96% 113%	94% 105%	94% 108%	96% 111%	640		
EGAT	FT FT + IT	92% 118%	94% 122%	92% 131%	89% 114%	90% 127%	90% 137%	51		
MRTN	FT FT + IT	96% 113%	95% 112%	94% 108%	90% 98%	88% 97%	92% 108%	152		
LIEG	FT FT + IT	83% 121%	92% 136%	90% 116%	84% 103%	83% 105%	80% 113%	111		
KIRB	FT FT + IT	88% 122%	91% 131%	94% 133%	81% 97%	81% 107%	82% 108%	100		
SMHI	FT FT + IT	83% 114%	79% 109%	82% 118%	71% 106%	79% 106%	80% 138%	97		
REDL	FT FT + IT	85% 133%	85% 138%	84% 146%	77% 137%	82% 152%	84% 155%	73		
COLD	FT FT + IT	89% 110%	89% 108%	90% 106%	81% 96%	77% 98%	79% 97%	62		
NLAT	FT FT + IT	94% 128%	92% 124%	94% 130%	92% 120%	91% 120%	92% 121%	293		
WAIN	FT FT + IT	96% 141%	94% 138%	96% 164%	85% 139%	82% 136%	86% 132%	19		
ELAT	FT FT + IT	92% 135%	92% 141%	91% 141%	91% 131%	92% 141%	93% 142%	176		
TOTAL SYSTEM	FT FT + IT	93% 119%	94% 117%	93% 118%	90% 110%	92% 114%	94% 118%	8,667		
Segment Empress	Delivery Contract FT	Sep-08 99%	Oct-08 98%	Nov-08 99%	Dec-08 98%	Jan-09 96%	Feb-09 97%	Feb CD (GJ/d) 4,498,209		
McNeill	FT FT + IT FT	118% 82%	9876 111% 95%	99% 120% 98%	98%	90%	115% 100%	1,084,766		
ABC	FT + IT FT	94% 77%	113% 67%	113% 72%	116% 88%	138% 87%	154% 91%	2,459,582		
-	$\mathbf{FT} + \mathbf{IT}$	77%	67%	73%	94%	88%	92%	_,,		

**\*NOTE:** 

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

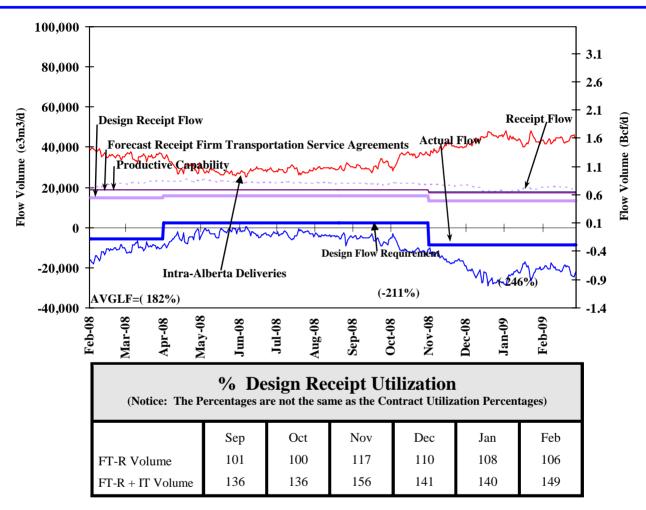
2. IT includes all receipt and border delivery Interruptible Services: ITR, FRO, ITD, FDO.

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 – FLOW THROUGH

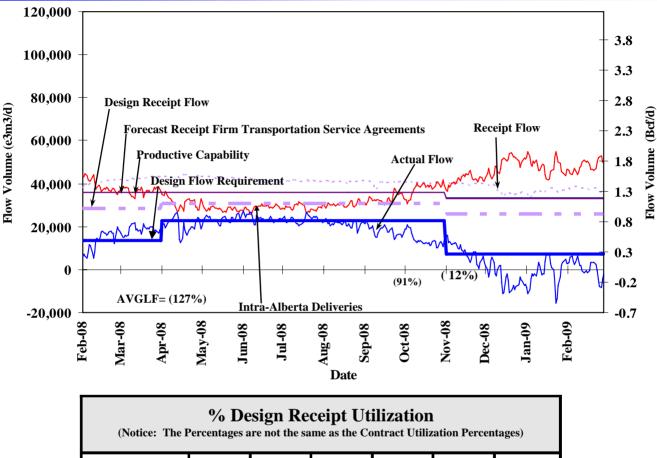


% Design Flow Requirements Utilization Monthly Average Actual Flow as a Percentage of Design Flow Requirements							
Average Flow/	Sep	Oct	Nov	Dec	Jan	Feb	
Design Capacity	-225	-445	181	292	263	245	





### DESIGN FLOW REQUIREMENTS UTILIZATION NORTH & SOUTH OF BENS LAKE – FLOW THROUGH



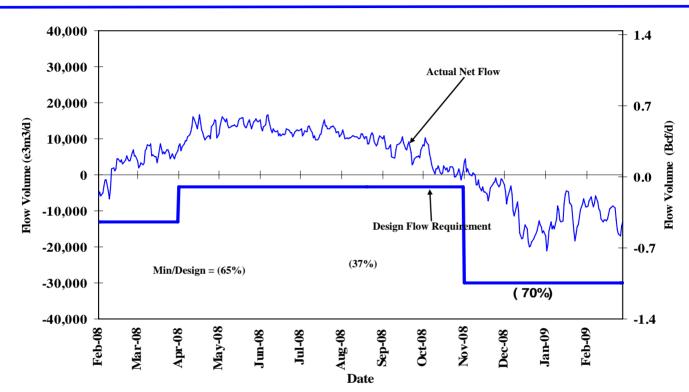
	Sep	Oct	Nov	Dec	Jan	Feb
FT Volume	95	95	112	108	105	104
FT-R + IT Volume	131	132	156	142	142	147

	<b>Design Fl</b> rerage Actual	-				S
Average Flow/	Sep	Oct	Nov	Dec	Jan	Feb
Design Capacity	79	61	113	-54	-20	11





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

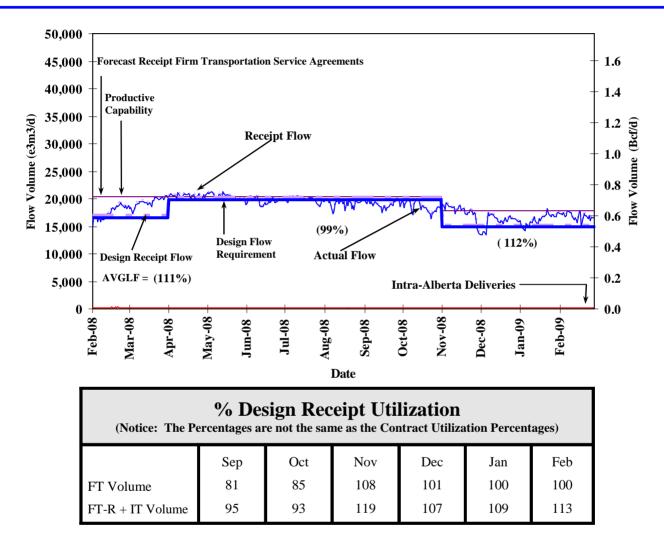


	Design Fl Actual Minim	-	v as a Percen			
Minimum Flow/	Sep	Oct	Nov	Dec	Jan	Feb
Design Net Flow	-207	37	24	66	70	56





# DESIGN FLOW REQUIREMENTS UTILIZATION UPPER PEACE RIVER

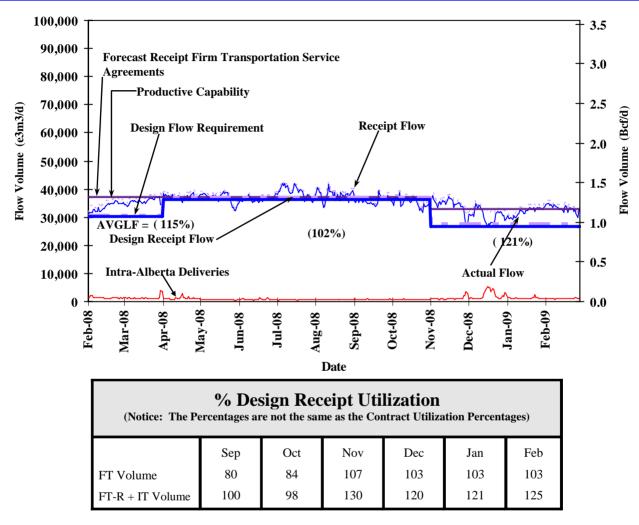


% Do Monthly Ave	U	-	<b>iiremen</b> rcentage of D			ents
Average Flow/	Sep	Oct	Nov	Dec	Jan	Feb
Design Capacity	96	93	119	107	109	113





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



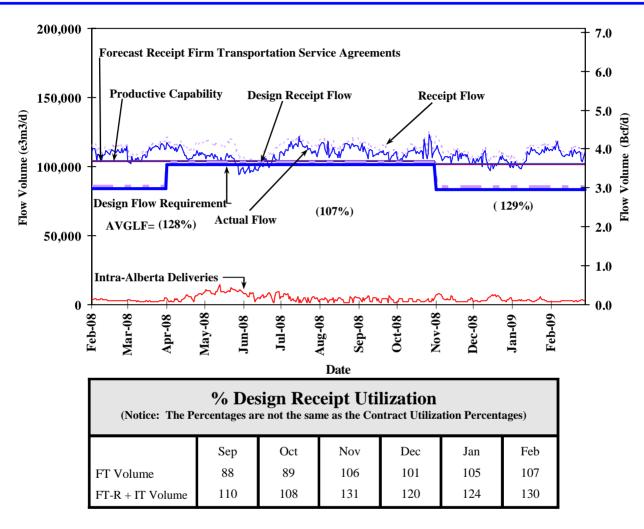
<u>NOTE</u>: Utilization data is based upon billed monthly volumes expressed as a percentage of design receipt flow. Design receipt flow is the amount of receipt flow for which the area was designed.

% Design Flow Requirements Utilization Monthly Average Actual Flow as a Percentage of Design Flow Requirements							
Average Flow/	Sep	Oct	Nov	Dec	Jan	Feb	
Design Capacity	99	97	129	114	119	123	





# DESIGN FLOW REQUIREMENTS UTILIZATION PEACE RIVER

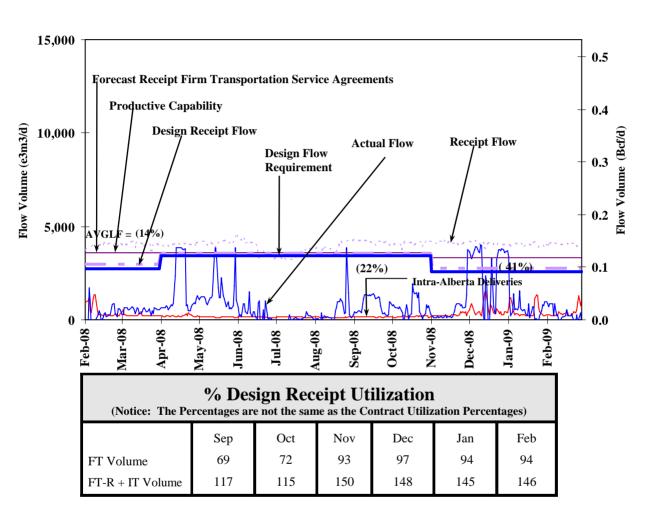


	% Design Flow Requirements Utilization Monthly Average Actual Flow as a Percentage of Design Flow Requirements						
Average Flow/	Sep	Oct	Nov	Dec	Jan	Feb	
Design Capacity	108	108	129	125	129	132	





# DESIGN FLOW REQUIREMENTS UTILIZATION MARTEN HILLS



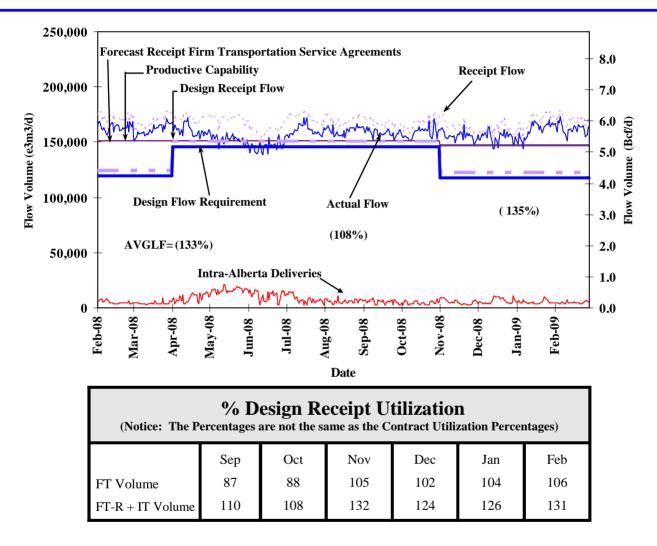
<u>NOTE</u>: Utilization data is based upon billed monthly volumes expressed as a percentage of design receipt flow. Design receipt flow is the amount of receipt flow for which the area was designed.

	% Design Flow Requirements Utilization Monthly Average Actual Flow as a Percentage of Design Flow Requirements									
Average Flow/	Sep	Oct	Nov	Dec	Jan	Feb				
Design Capacity	24	19	21	105	25	11				





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

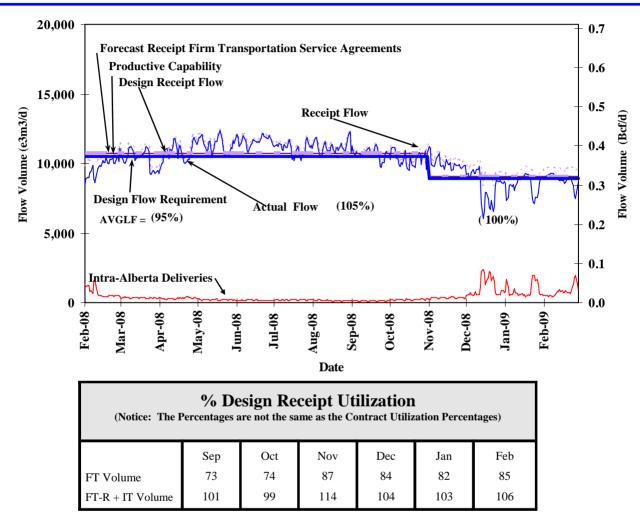


	% Design Flow Requirements Utilization Monthly Average Actual Flow as a Percentage of Design Flow Requirements							
Average Flow/	Sep	Oct	Nov	Dec	Jan	Feb		
Design Capacity	109	109	132	131	137	138		





# DESIGN FLOW REQUIREMENTS UTILIZATION SOUTH AND ALDERSON

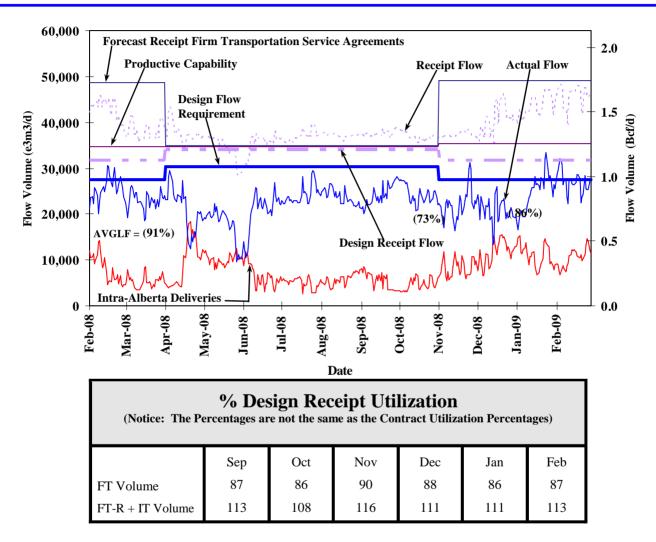


% Design Flow Requirements Utilization Monthly Average Actual Flow as a Percentage of Design Flow Requirements							
Average Flow/	Sep	Oct	Nov	Dec	Jan	Feb	
Design Capacity	102	98	112	93	95	99	





# DESIGN FLOW REQUIREMENTS UTILIZATION RIMBEY-NEVIS



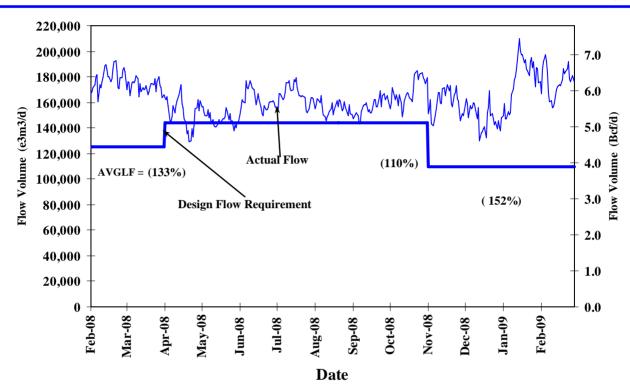
<u>NOTE</u>: Utilization data is based upon billed monthly volumes expressed as a percentage of design receipt flow. Design receipt flow is the amount of receipt flow for which the area was designed.

% Design Flow Requirements Utilization Monthly Average Actual Flow as a Percentage of Design Flow Requirements						
Average Flow/	Sep	Oct	Nov	Dec	Jan	Feb
Design Capacity	80	80	80	75	90	98





# **DESIGN FLOW REQUIREMENTS UTILIZATION EASTERN ALBERTA MAINLINE (James River to Princess)**

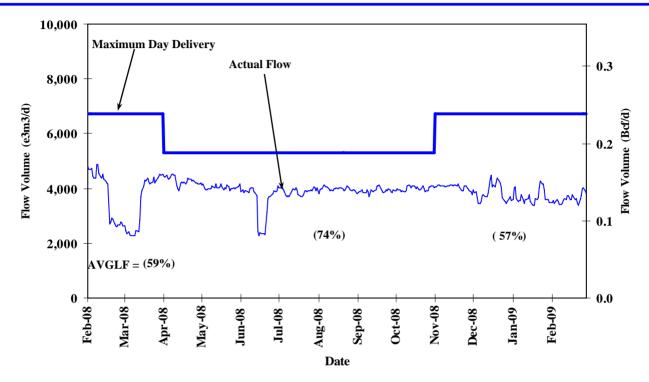


% Design Flow Requirements Utilization Monthly Average Actual Flow as a Percentage of Design Flow Requirements							
Average Flow/	Sep	Oct	Nov	Dec	Jan	Feb	
Design Capacity	108	117	146	136	163	161	





# DESIGN FLOW REQUIREMENTS UTILIZATION MEDICINE HAT

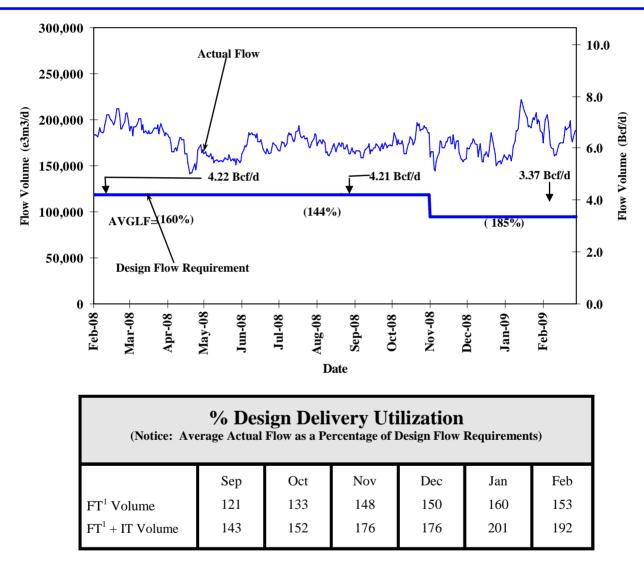


Design flow for the Medicine Hat area is the net flow to the area deliveries. Since all deliveries are intra-Alberta deliveries there are no Firm Service Delivery contracts in effect for this area. Consequently, contract utilization values are not available.





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



### NOTE:

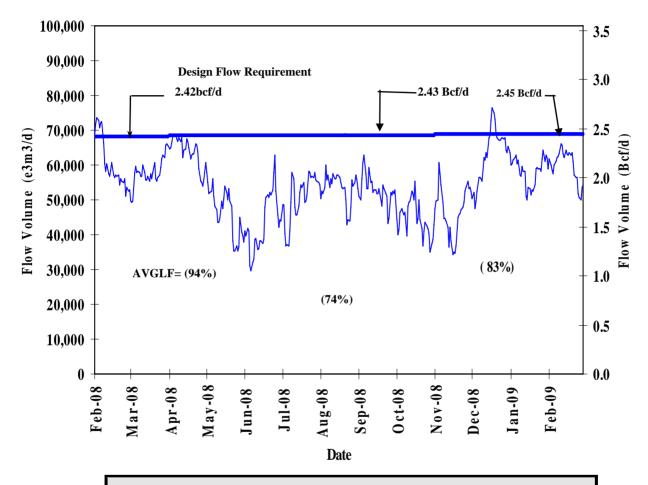
Utilization data is based upon billed monthly volumes expressed as a percentage of seasonal design delivery flow at Empress and McNeill Export delivery points.

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



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





### % Design Delivery Utilization

(Notice: Average Actual Flow as a Percentage of Design Flow Requirements)

	Sep	Oct	Nov	Dec	Jan	Feb
FT <sup>1</sup> Volume	76	64	67	87	83	85
FT <sup>1</sup> + IT Volume	77	65	68	92	84	87

### 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

### 2008 to Feb 28, 2009 (3 Month Average)

Receipt Area		IT-R Service	Firm Service	Firm Service	%	CD	Causes/Comments (3)
		Available	Available	Restriction	Restricted <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	

(1) Percentage of CD restricted during periods of restriction.

(2) Represents percent of time full IT-D nominated available, does not include availability during partial restrictions.

(3) 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**

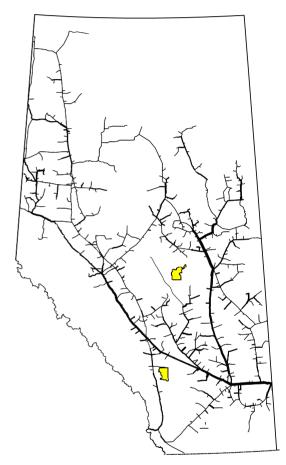
Firm Transportation Service Type	Authorize Firm Transportation Service By	To Ensure Firm Transportation Service By
Receipt - Summer construction (generally south of Edmonton)	November 1, 2006 November 1, 2007	November 2007 November 2008
Receipt - Winter construction (generally north of Edmonton)	April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



### **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.

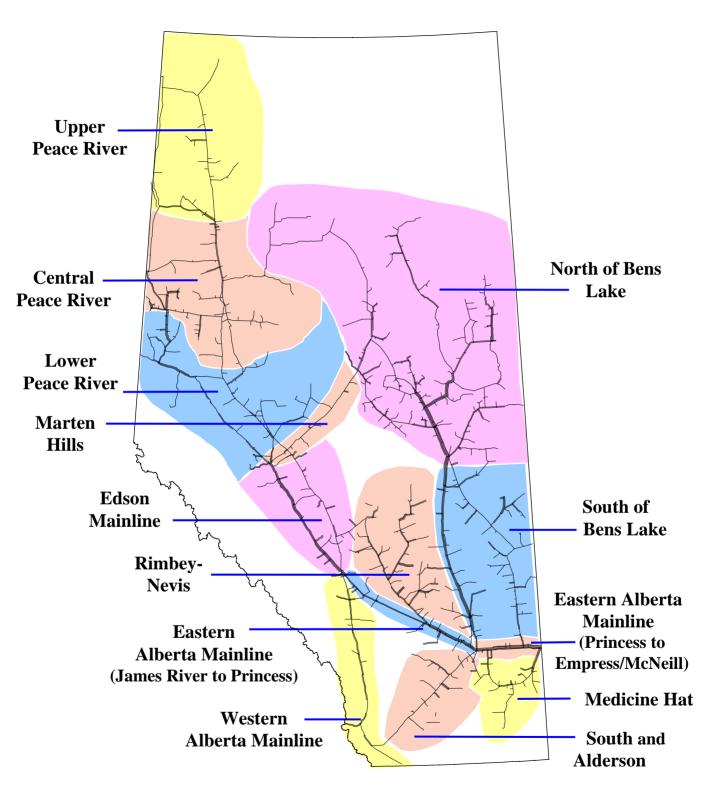
As a monthly feature the Historical Transportation Service Availability is shown as a three-month rolling average of transportation availability.

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

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

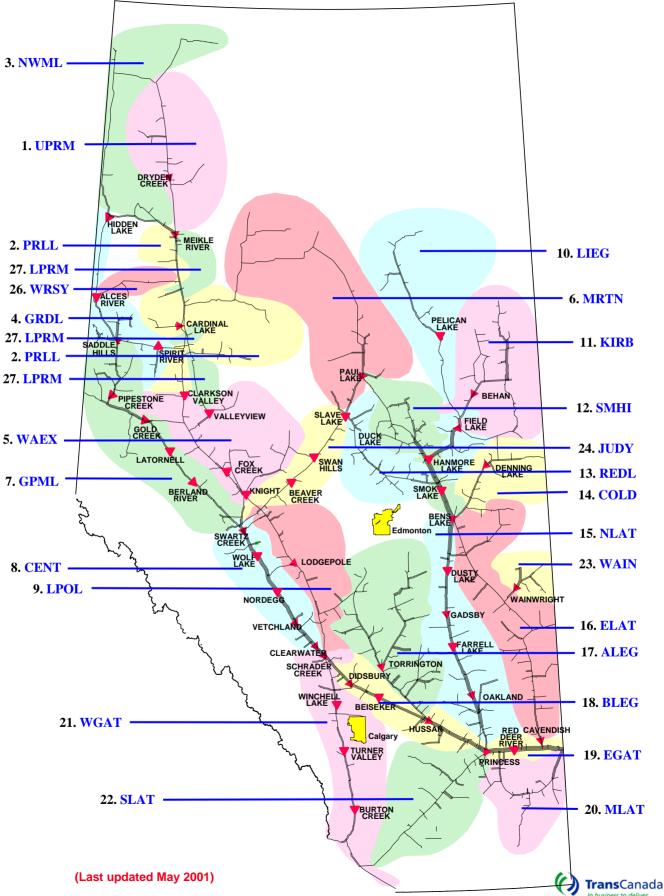


# **NGTL DESIGN AREAS**





### **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.

### 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.

