## SYSTEM UTILIZATION AND RELIABILITY MONTHLY REPORT

#### for the month ending May, 2007

Published date: February 01, 2008

### **Highlights This Month:**

- Average Load Factors greater than 90% were experienced in a number of design areas during April, 2007 May, 2007 [i.e. Upper Peace River, Upper and Central Peace River, Peace River Design, North of Bens Lake, 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 March 1, 2007 May 31, 2007 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, 2007 May 31, 2007, 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. If you wish to address a question at the FLC meeting, call Bob one week prior to the next meeting. Generally, meetings are scheduled for the second Wednesday of every other month (ie. Jan, Mar, May, etc).



#### Receipt May CD Segment Contract Dec-06 Jan-07 Feb-07 Mar-07 Apr-07 M a y - 07 (m m c f/d)UPRM<sup>4</sup> FΤ 88% 88% 87% 81% 87% 87% 223 FT + IT92% 92% 91% 85% 94% 93% LPRM<sup>4</sup> FΤ 94% 88% 92% 96% 95% 95% 24 FT + IT129% 130% 133% 139% 146% 139% PRLL<sup>4</sup> FТ 88% 88% 92% 92% 92% 91% 233 FT + IT109% 111% 112% 116% 118% 115% NWML<sup>4</sup> FТ 93% 93% 94% 96% 96% 91% 546 FT + IT98% 100% 101% 103% 107% 101% GRDL<sup>4</sup> FΤ 85% 90% 93% 94% 94% 94% 362 FT + IT109% 112% 118% 127% 117% 126% WRSY<sup>4</sup> FΤ 94% 97% 94% 89% 92% 95% 36 FT + IT146% 134% 131% 132% 157% 158% WAEX FΤ 88% 83% 89% 93% 93% 91% 316 FT + IT137% 124% 136% 144% 162% 144% JUDY FΤ 96% 96% 98% 94% 95% 97% 104 FT + IT122% 126% 124% 121% 118% 129% 93% FТ 94% 95% 95% 93% 93% GPML 1.937 FT + IT106% 108% 109% 112% 118% 116% FΤ 95% 97% 95% 95% 96% 96% CENT 1.222 FT + IT 112% 111% 110% 111% 111% 112% FΤ 94% 94% 93% 94% 94% LPOL 92% 478 FT + IT 120% 122% 120% 123% 129% 134% FΤ 95% 94% 95% WGAT 94% 94% 93% 467 FT + IT116% 109% 111% 111% 110% 110% 90% FТ 88% 88% 87% 92% 91% 1.255 ALEG FT + IT 105% 103% 102% 107% 111% 111% SLAT FΤ 85% 84% 85% 92% 92% 93% 360 FT + IT 110% 104% 103% 113% 112% 117% FΤ 96% 96% 95% 95% 95% 95% MLAT 318 FT + IT108% 105% 105% 106% 103% 103% BLEG FΤ 97% 97% 97% 97% 97% 96% 676 FT + IT109% 107% 107% 106% 105% 108% EGAT FТ 97% 92% 94% 96% 95% 94% 63 FT + IT114% 106% 107% 109% 110% 112% MRTN FΤ 86% 87% 87% 88% 87% 88% 197 FT + IT100% 101% 102% 103% 112% 104% LIEG FΤ 73% 73% 74% 75% 79% 82% 108 FT + IT 118% 115% 115% 123% 140% 133% KIRB FТ 72% 83% 80% 83% 91% 86% 120 FT + IT96% 135% 122% 119% 135% 139% FΤ 90% 91% 90% 91% 94% 96% SMHI 111 FT + IT153% 147% 148% 150% 140% 155% REDL FТ 89% 85% 93% 93% 91% 91% 94 FT + IT141% 134% 130% 142% 140% 136% COLD FΤ 77% 78% 84% 86% 86% 80% 70 FT + IT114% 106% 105% 110% 106% 113% 90% NLAT FΤ 93% 93% 92% 93% 93% 378 FT + IT126% 121% 115% 116% 116% 117% WAIN FΤ 85% 85% 87% 91% 82% 86% 22 FΤ + IT 126% 127% 127% 137% 132% 131% ELAT FΤ 88% 90% 91% 91% 92% 91% 232 FT + IT127% 129% 129% 128% 130% 126% FΤ TOTAL SYSTEM 91% 92% 92% 93% 93% 93% 9,952 FT + IT113% 115% 111% 110% 111% 117% Delivery Segment May CD Dec-06 Feb-07 Apr-07 $(\dot{\mathbf{G}} \mathbf{J}/\mathbf{d})$ Jan-07 Mar-07 May-07 Contract Empress FΤ 99% 100% 99% 99% 97% 100%4,398,353 FT + IT113% 121% 123% 118% 121%119% M cN eill FΤ 94% 91% 99% 84% 82% 86% 1,783,228 FT + IT100% 113% 86% 82% 96% 102% FΤ 67% 2,523,845 A B C 92% 95% 88% 72% 79%

#### FIRM TRANSPORTATION SERVICE<sup>1</sup> CONTRACT UTILIZATION<sup>2</sup> By NGTL Pipeline Segments

\*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.

FT + IT

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.

4. Boundaries for pipe segments UPRM, LPRM, PRLL, NWML, GRDL and WRSY changed in November 2000.

93%



79%

102%

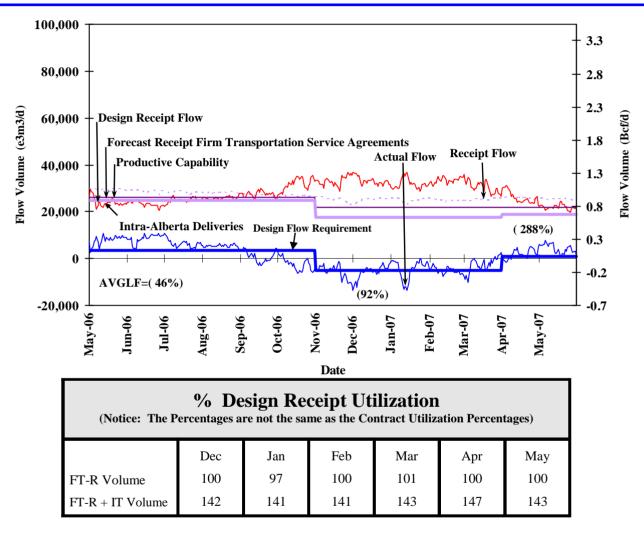
89%

67%

72%



## DESIGN FLOW REQUIREMENTS UTILIZATION NORTH OF BENS LAKE



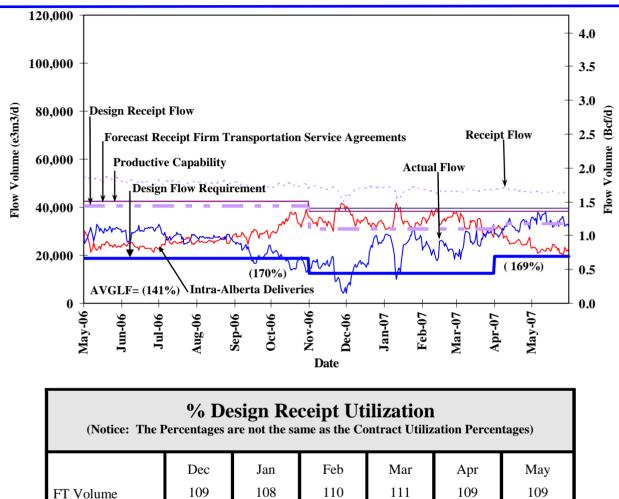
<u>NOTE</u>: Utilization data is based upon billed monthly volumes expressed as a percentage of design receipt flow. Design receipt flow is the amount of receipt flow for which the area was designed.

% Design Flow Requirements Utilization Monthly Average Actual Flow as a Percentage of Design Flow Requirements						
Average Flow/	Dec	Jan	Feb	Mar	Apr	May
Design Capacity	111	88	100	52	178	395





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



<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.

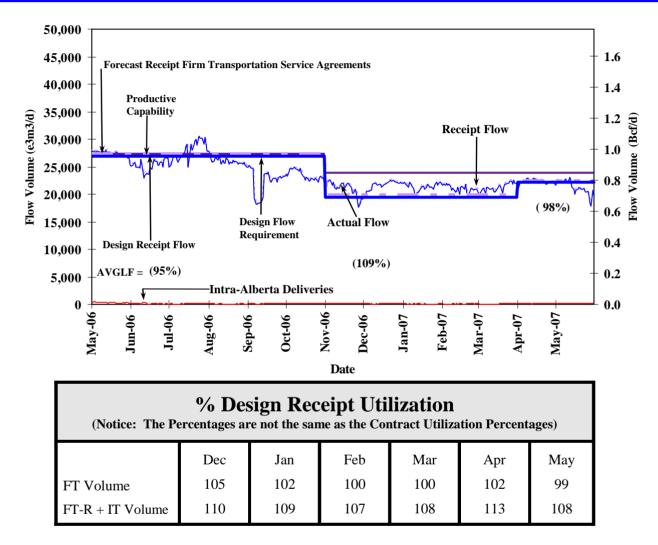
FT-R + IT Volume

	<b>Design Fl</b> rerage Actual	-				S
Average Flow/	Dec	Jan	Feb	Mar	Apr	May
Design Capacity	147	195	181	215	162	176





# DESIGN FLOW REQUIREMENTS UTILIZATION UPPER PEACE RIVER

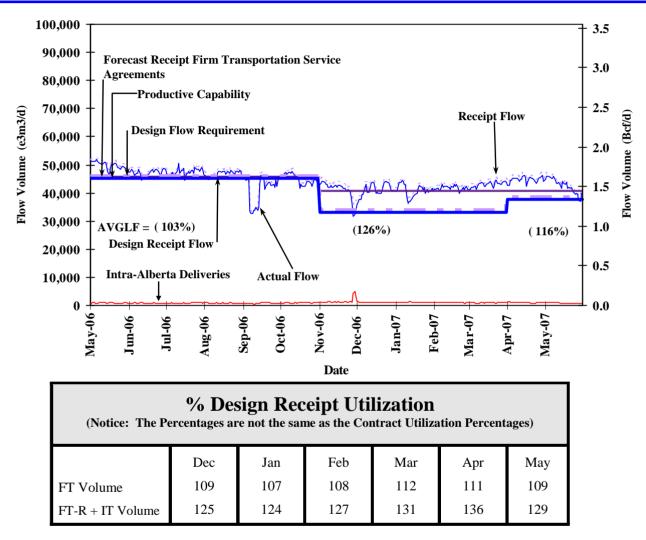


% De Monthly Ave	U	-	<b>uiremen</b> rcentage of E			ents
Average Flow/	Dec	Jan	Feb	Mar	Apr	May
Design Capacity	111	110	108	109	100	96





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

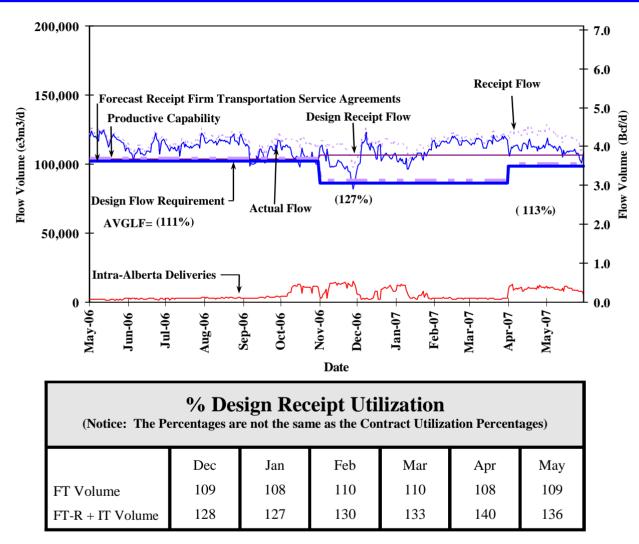


% Do Monthly Ave	esign Flo rage Actual 1	-				ents
Average Flow/	Dec	Jan	Feb	Mar	Apr	May
Design Capacity	124	124	127	130	119	113





## DESIGN FLOW REQUIREMENTS UTILIZATION PEACE RIVER

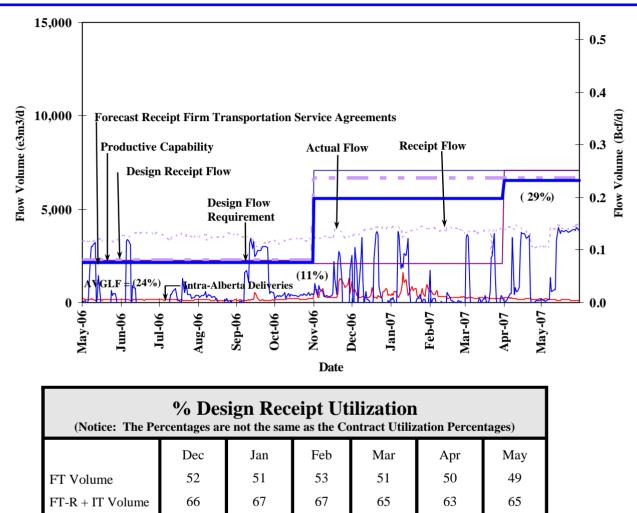


% D Monthly Ave	esign Fl erage Actual	-				nents
Average Flow/	Dec	Jan	Feb	Mar	Apr	May
Design Capacity	126	122	135	136	114	112





## DESIGN FLOW REQUIREMENTS UTILIZATION MARTEN HILLS



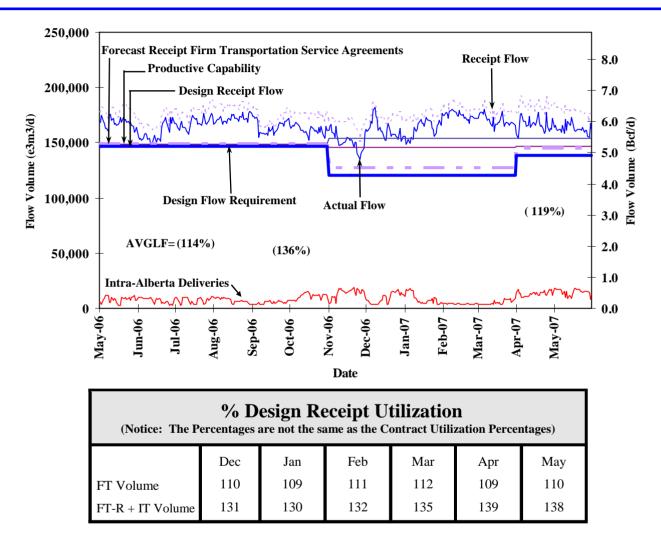
<u>NOTE</u>: Utilization data is based upon billed monthly volumes expressed as a percentage of design receipt flow. Design receipt flow is the amount of receipt flow for which the area was designed.

	% Design Flow Requirements Utilization Monthly Average Actual Flow as a Percentage of Design Flow Requirements								
Average Flow/	Dec	Jan	Feb	Mar	Apr	May			
Design Capacity	17	15	2	11	19	38			





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

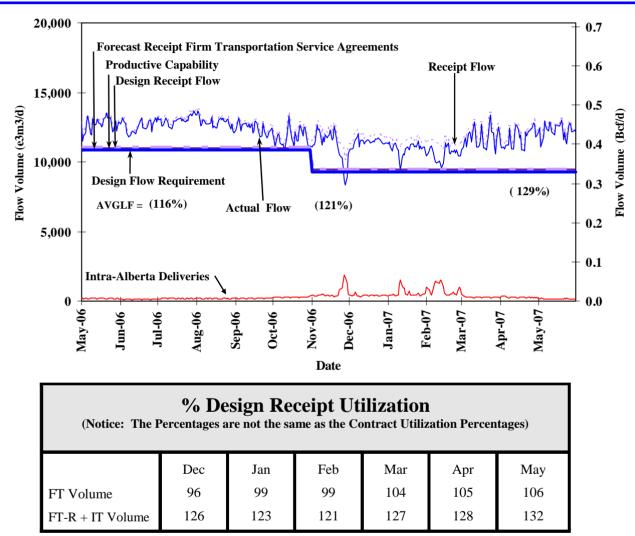


	% Design Flow Requirements Utilization Monthly Average Actual Flow as a Percentage of Design Flow Requirements							
Average Flow/	Dec	Jan	Feb	Mar	Apr	May		
Design Capacity	134	136	145	141	121	118		





## DESIGN FLOW REQUIREMENTS UTILIZATION SOUTH AND ALDERSON

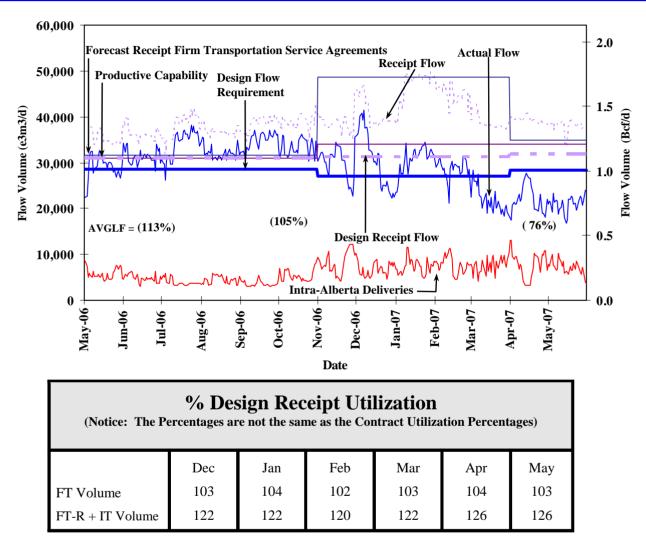


% Design Flow Requirements Utilization Monthly Average Actual Flow as a Percentage of Design Flow Requirements							
Average Flow/	Dec	Jan	Feb	Mar	Apr	May	
Design Capacity	123	118	114	126	127	132	





## DESIGN FLOW REQUIREMENTS UTILIZATION RIMBEY-NEVIS

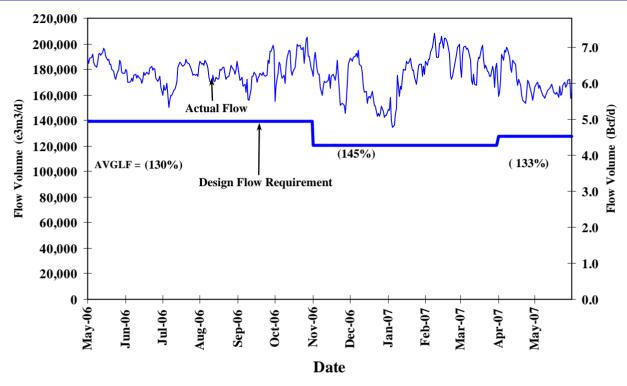


	U	low Req I Flow as a P	-			nts
Average Flow/	Dec	Jan	Feb	Mar	Apr	May
Design Capacity	114	114	107	81	78	74





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

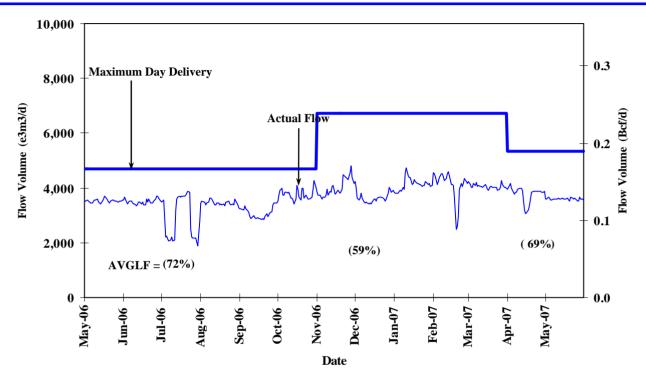


	% Design Flow Requirements Utilization Monthly Average Actual Flow as a Percentage of Design Flow Requirements							
Average Flow/	Dec	Jan	Feb	Mar	Apr	May		
Design Capacity	137	140	160	152	136	129		





## DESIGN FLOW REQUIREMENTS UTILIZATION MEDICINE HAT

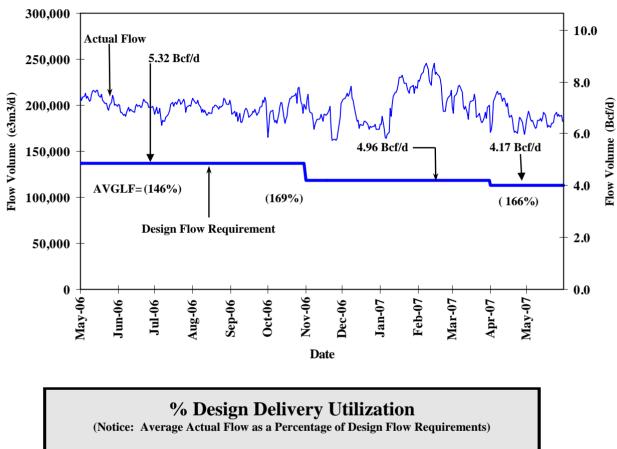


Design flow for the Medicine Hat area is the net flow to the area deliveries. Since all deliveries are intra-Alberta deliveries there are no Firm Service Delivery contracts in effect for this area. Consequently, contract utilization values are not available.





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



	Dec	Jan	Feb	Mar	Apr	May
FT <sup>1</sup> Volume	143	146	155	146	129	133
FT <sup>1</sup> + IT Volume	160	173	187	168	161	156

#### NOTE:

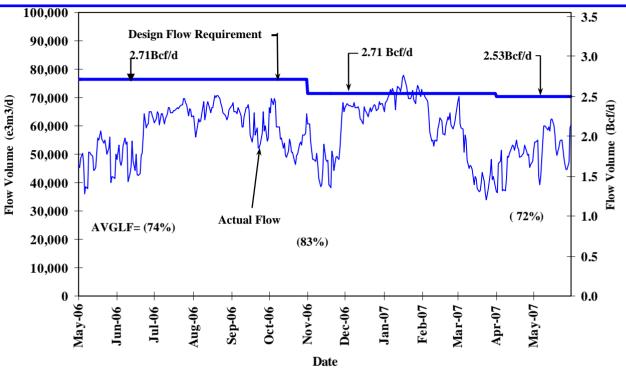
Utilization data is based upon billed monthly volumes expressed as a percentage of seasonal design delivery flow at Empress and McNeill Export delivery points.

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	91	93	85	64	67	74
FT <sup>1</sup> + IT Volume	93	100	86	64	67	75

#### 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.

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



### HISTORICAL TRANSPORTATION SERVICE AVAILABILTY

March 1, 2007 to May 31, 2007 (3 Month Average)

Receipt Area		IT-R Service	Firm Service	Firm Service	% (	D
		Available	Available	Restriction	Restricted <sup>(1)</sup>	
	Segment	(% of time)	(% of time)	(% of time)	Max	Average
Peace River	UPRM 1	99	99	1	61	61
	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
R im b e y/N e v is	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>
	A v a i la b le <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
					<u> </u>	~

(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**

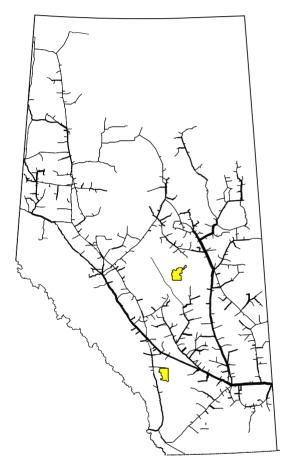
Firm Transportation Service Type	Authorize Firm Transportation Service By	To Ensure Firm Transportation Service By
Receipt - Summer construction (generally south of Edmonton)	November 1, 2006 November 1, 2007	November 2007 November 2008
Receipt - Winter construction (generally north of Edmonton)	April 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* (24 on the system) or *Design Area* (11 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 24 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 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.

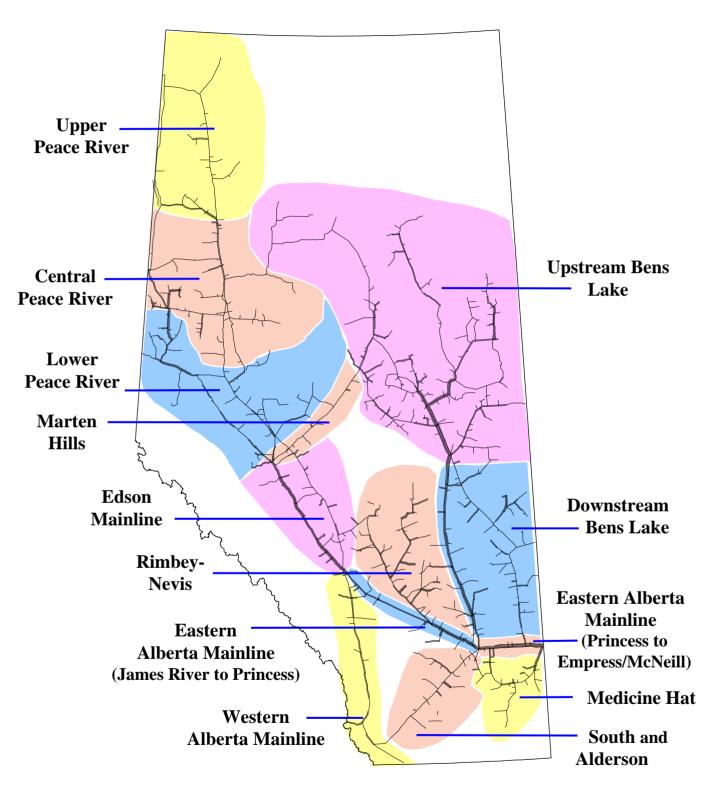
As a monthly feature the Historical Transportation Service Availability is shown as a three-month rolling average of transportation availability.

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

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



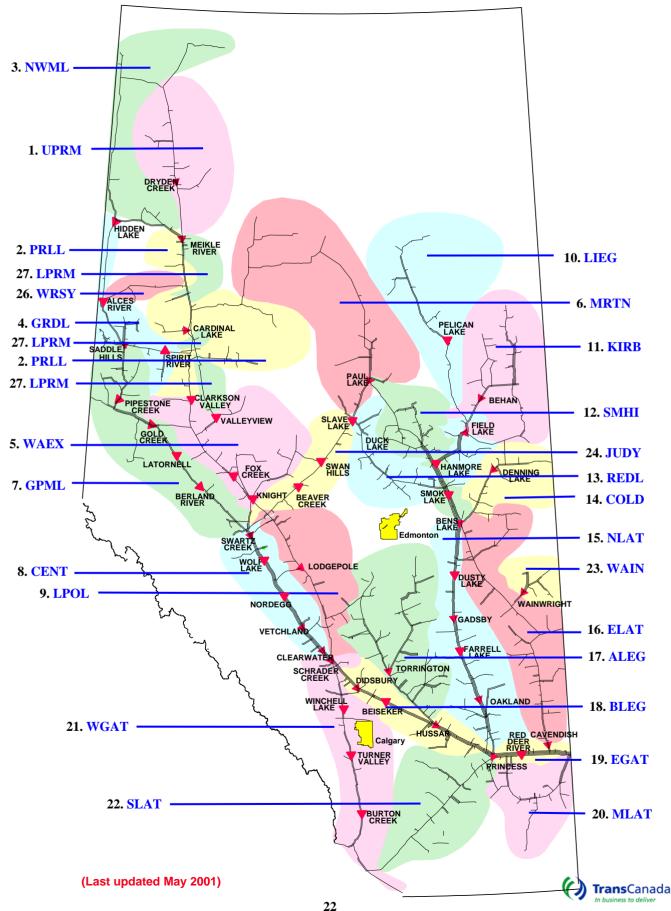
## **NGTL DESIGN AREAS**





(Last updated February 2001)

## **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.

