CHAPTER 3 - DESIGN FORECAST

3.1 Introduction

This Annual Plan is based on NGTL's June 2006 design forecast of gas receipts and deliveries, which in turn is based on supply and market assessments completed in May 2006.

From a receipt perspective, the forecasts of field deliverability, average receipts and FS productive capability used in this Annual Plan are subject to numerous uncertainties. Producer success in developing new supply, actual levels of new firm transportation Service Agreements and changes in market demand may result in deviations from forecast values.

From a delivery perspective, the maximum day delivery forecasts at the Export Delivery Points as shown in Chapter 3, Section 3.4.2 are equal to the forecasts of FT-D contracts at those Export Delivery Points and do not include STFT or FT-DW contracts. Estimates of FT-D contracts at the Export Delivery Points have become difficult to forecast given the significant gap between these contracts and the actual gas flows at the major Export Delivery Points due to the preponderance of short term contracting.

NGTL will continue to closely monitor industry activity, contracting levels, and design implications throughout the year in order to anticipate and respond to Customer needs in a timely manner.

NGTL's June 2006 design forecast of gas receipt and delivery applies to the transportation design process for facilities to be in-service for the 2007/08 Gas Year. The June 2006 design forecast comprises two principal parts. The first part is the gas delivery forecast (Sections 2.9.4.3 and 3.4), which is a forecast of the natural gas volumes to be delivered at all Delivery Points on the Alberta System. The second part is the receipt forecast, comprised of field deliverability, average receipts and FS productive capability forecasts (Sections 2.9.4.1, 2.9.4.2 and 3.5) for all Receipt Points on the Alberta System.

An overview of the June 2006 design forecast was presented at the November 21, 2006 TTFP meeting. This chapter presents a detailed description of the June 2006 design forecast.

The June 2006 design forecast includes winter and summer seasonal forecasts of maximum, average, and minimum day delivery for all Delivery Points and a forecast of field deliverability, average receipts and FS productive capability for all Receipt Points on the Alberta System. Refer to Section 2.9.4 for further details on the relationship between field deliverability, average receipts, FS productive capability and Receipt Contract Demand under firm transportation Service Agreements for all Receipt Points on the Alberta System.

Gas from Storage Facilities remains a significant source of winter supply. Currently connected Storage Facilities have a maximum receipt meter capacity of 154.0 $10^6m^3/d$ (5.47 Bcf/d). Actual maximum day receipts from storage will be dependent upon market conditions, storage working gas levels, storage compression power, and Alberta System operations. A discussion of the maximum day receipt meter capability associated with Storage Facilities is provided for information purposes in Section 3.6. Refer to Section 2.6.4 for further details on the treatment of storage in the system design.

3.2 Economic Assumptions

3.2.1 General Assumptions

Underlying the forecast of receipts and deliveries are assumptions concerning broader trends in the North American economy and energy markets.

These assumptions, developed in May 2006, include:

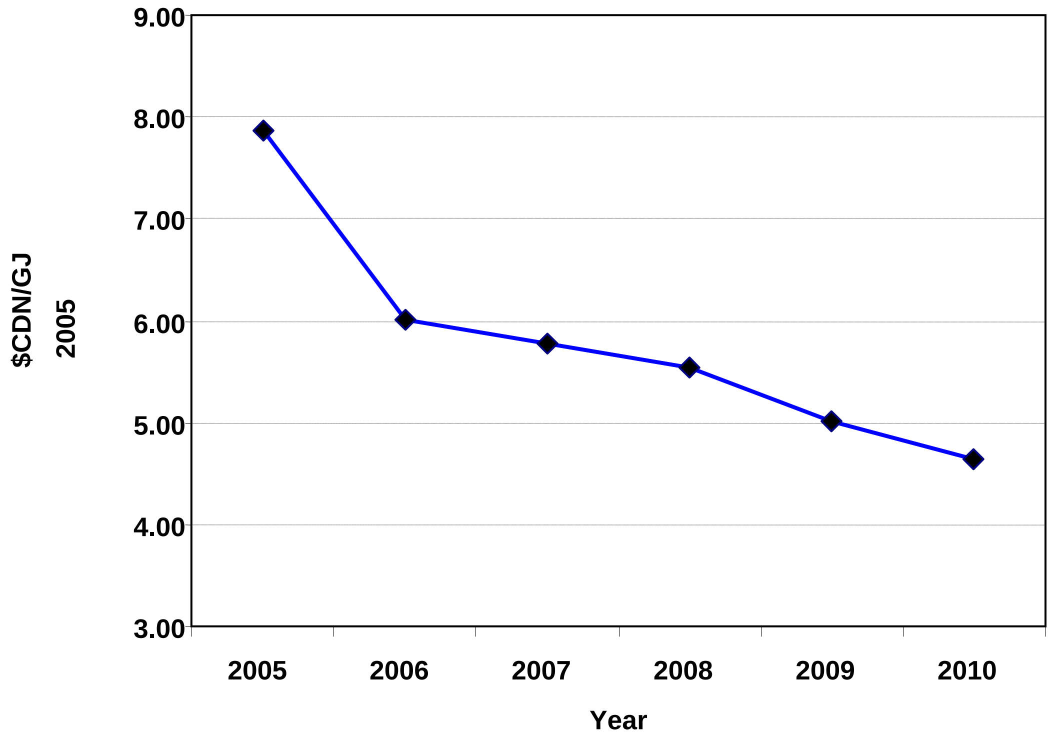
- World oil prices are forecasted to peak in 2006 at an average $U.S. 67.50/bbl for West Texas Intermediate ("WTI"), up from $U.S. 56.45/bbl in 2005. Going forward, world oil demand growth will remain strong, averaging around 2% per year. Non-OPEC oil supply is expected to grow significantly over the next several years, resulting in a slowly growing call on OPEC oil. OPEC has many projects underway to increase oil production capacity; as these come on-stream, OPEC's spare capacity will increase, removing the fear or security premium in prices. Shortfalls in refining capacity, especially to manufacture a higher proportion of light clean products and to upgrade heavy fuel oil are forecasted to be resolved over the next five years due to large investments in OPEC and in the rapidly industrializing countries of Asia. In addition, significant investment is occurring in North American refining to utilize the increasing volumes of heavy oil/bitumen from the Alberta oil sands. For these reasons, prices are expected to moderate going forward, declining to $U.S. 45.00/bbl or $U.S. 40.00 (real 2005) in 2010.
- A peak in U.S. gas prices was reached in 2005 with an average of $U.S. 8.62/MMBTU for NYMEX Henry Hub, while 2006 prices are forecasted to be lower, at $US 7.15/MMBTU. Prices will continue to slowly decline over the next five years due to the general decline in oil prices and the rising influx of liquefied natural gas ("LNG"). Prices reach $U.S. 5.80/MMBTU by 2010. This equates to $U.S. 5.16/MMBTU in real 2005 terms.

- Gas demand is expected to increase with continued economic and population growth in both the U.S. and Canada. U.S. gas demand growth will be predominately in the electricity generation sector. Western Canadian industrial gas demand is expected to grow significantly, driven by oil sands and heavy oil activity.
- The U.S. is expected to be able to supply most of its natural gas needs by drawing from its extensive gas resource base, with production from basins in the Rocky Mountains showing significant growth. Much of the new supply will be from unconventional gas – coal bed methane and tight gas. However, U.S. domestic supply is expected to decline slowly in aggregate and will be unable to satisfy the growth in demand. Imported LNG will play a significant role in providing additional supply to U.S. markets. A large number of new projects have received Federal Energy Regulatory Commission or other necessary regulatory approvals and several are already under construction. Three of the four existing onshore U.S. receiving terminals have numerous expansions recently completed or underway. A wave of new LNG receiving capacity will become operational in the U.S. and Mexico from 2006/07 onward. By 2008/09, this additional LNG supply will help to moderate gas prices in the North American market.

3.2.2 Gas Price

A gas price forecast is used by NGTL to determine gas demand, to evaluate the viability of gas supply development for the June 2006 design forecast, and in the economic evaluation of facilities. The gas price forecast is based on an assessment of North American gas supply and demand. The gas price represents an Alberta average field price at a point just prior to receipt onto the Alberta System. The gas price forecast, shown in Figure 3.2.2, was developed in May 2006 and reflects the general assumptions from Section 3.2.1.

Figure 3.2.2
NGTL Gas Price Forecast
Alberta Average Field Price (Alberta Reference Price)



The Alberta average field price in 2006 (in real 2005 $) is forecasted at $6.02 Cdn/GJ, down from the peak of $7.87 Cdn/GJ in 2005. Alberta prices decline over the next five years in line with the drop in NYMEX gas prices, but the differential narrows. By 2010, Alberta prices have declined to $4.64/GJ in real 2005 terms.

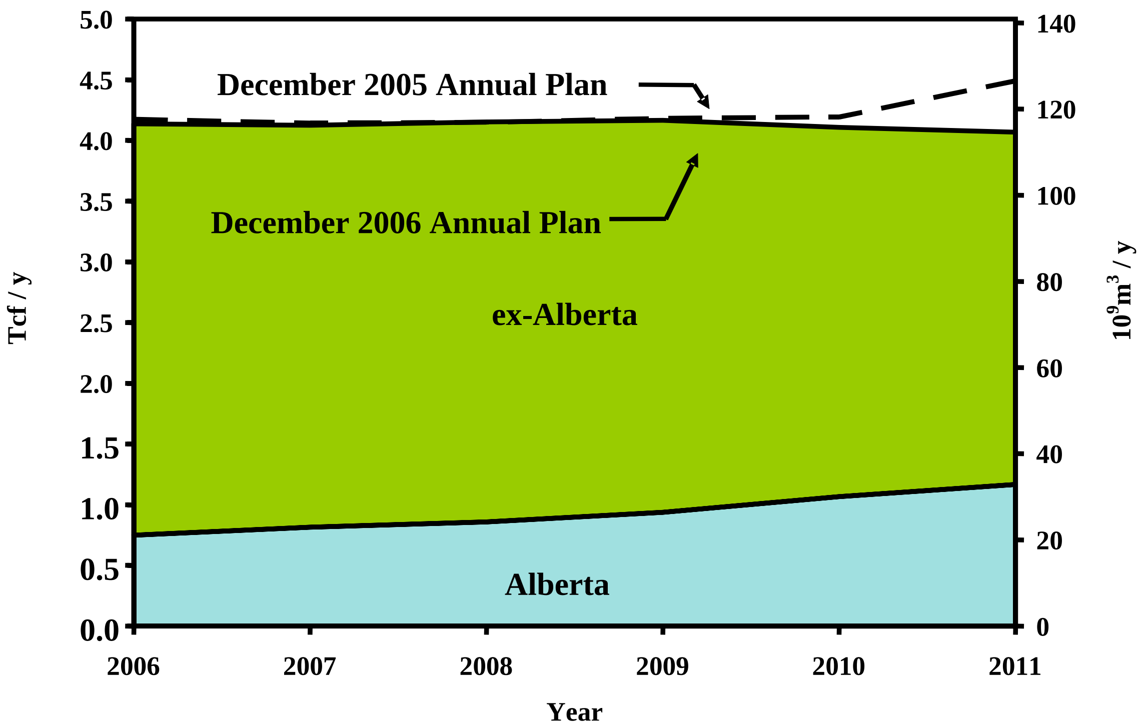
The gas price forecast affects NGTL's receipt and delivery forecast, and is used as input into the economic analysis for new facilities. The level of the gas price affects anticipated producer activity to support continuing production from connected supplies, connection of unconnected reserves, and the activity required to discover and to develop new reserves.

3.3 System Annual Throughput

NGTL's forecast of system annual throughput is included for informational purposes. The system annual throughput forecast projects the total amount of gas to be transported by NGTL in future years and is the basis for the forecast of unit volume cost (Section 7.3).

System annual throughput (Figure 3.3.1) is expected to remain relatively flat at approximately 117 $10^9 m^3/y$ (4.1 Tcf/y) over the design forecast period.

Figure 3.3.1
System Annual Throughput



3.4 Gas Delivery Forecast

The gas delivery forecast describes one of the two principal components of the June 2006 design forecast. The second component, the receipt forecast, is described in Section 3.5.

3.4.1 System Maximum Day Delivery Forecast

The system maximum day delivery forecast projects aggregate maximum day delivery for the entire Alberta System in each of the winter and summer seasons for the 2006/07 through 2010/11 Gas Years. NGTL does not anticipate delivering the maximum day delivery at all Delivery Points simultaneously, although the maximum day delivery at individual Delivery Points may occur at some time during a season.

A breakdown of the system maximum day delivery forecast for both the winter and summer seasons of the 2007/08 Gas Year is provided in Tables 3.4.2.1 and 3.4.2.2. The June 2006 forecast indicates a winter system maximum day delivery of 316.6 $10^6 m^3/d$ (11.25 Bcf/d) for the 2007/08 Gas Year. This represents an increase of 3.3 $10^6 m^3/d$ (0.13 Bcf/d), or 1.1 percent from the winter system maximum day delivery in the June 2006 forecast for the 2006/07 Gas Year.

NGTL's June 2006 forecast of winter system maximum day delivery for the 2007/08 Gas Year includes deliveries to the major Export Delivery Points (Empress, McNeill, Alberta/British Columbia) of 184.3 $10^6 m^3/d$ (6.55 Bcf/d), deliveries to other Export Delivery Points of 0.0 $10^6 m^3/d$ (0.00 Bcf/d), and deliveries to Alberta Delivery Points of 132.3 $10^6 m^3/d$ (4.70 Bcf/d.).

The June 2006 summer system maximum day delivery forecast for the 2007/08 Gas Year is 280.6 $10^6 m^3/d$ (9.97 Bcf/d). This represents an increase of 7.6 $10^6 m^3/d$ (0.27

Bcf/d), or 2.8 percent, from the summer system maximum day delivery forecast for the 2006/07 Gas Year.

NGTL's June 2006 forecast of summer system maximum day delivery for the 2007/08 Gas Year includes deliveries to the major Export Delivery Points (Empress, McNeill, Alberta/British Columbia) of 179.3 10^6m^3/d (6.37 Bcf/d), deliveries to other Export Delivery Points of 0.0 10^6m^3/d (0.0 Bcf/d) and deliveries to Alberta Delivery Points of 101.3 10^6m^3/d (3.60 Bcf/d).

3.4.2 Export Delivery Points

The June 2006 forecast of maximum day delivery at the Export Delivery Points is consistent with NGTL's downstream capacity assumption (Section 2.6.1.3).

Table 3.4.2.1
Winter System Maximum Day Delivery Forecast

	June 2006 Design Forecast				
Gas Year	**06/07**	**07/08**	**08/09**	**09/10**	**10/11**
(Volumes in $10^6 m^3$/d at 101.325 kPa and 15°C)					
Empress	81.0	75.4	78.0	72.0	66.2
McNeill	37.6	37.6	38.2	37.7	37.4
Alberta/B.C.	71.3	71.3	61.2	60.3	59.2
Boundary Lake	0.0	0.0	0.0	0.0	0.0
Unity	0.0	0.0	0.0	0.0	0.0
Cold Lake	0.0	0.0	0.0	0.0	0.0
Gordondale	0.0	0.0	0.0	0.0	0.0
Alberta/Montana	0.0	0.0	0.0	0.0	0.0
Alberta	123.4	132.3	142.3	150.6	163.5
TOTAL SYSTEM	**313.3**	**316.6**	**319.7**	**320.6**	**326.3**
(Volumes in Bcf/d at 14.65 psia and 60°F)					
Empress	2.87	2.68	2.77	2.56	2.35
McNeill	1.34	1.34	1.36	1.34	1.33
Alberta/B.C.	2.53	2.53	2.17	2.14	2.10
Boundary Lake	0.00	0.00	0.00	0.00	0.00
Unity	0.00	0.00	0.00	0.00	0.00
Cold Lake	0.00	0.00	0.00	0.00	0.00
Gordondale	0.00	0.00	0.00	0.00	0.00
Alberta/Montana	0.00	0.00	0.00	0.00	0.00
Alberta	4.38	4.70	5.05	5.35	5.80
TOTAL SYSTEM	**11.12**	**11.25**	**11.35**	**11.39**	**11.58**

NOTES:

- Delivery volumes shown are not anticipated to occur simultaneously but may occur at some time during the winter season.
- Numbers may not add due to rounding.

Table 3.4.2.2
Summer System Maximum Day Delivery Forecast

	June 2006 `Design Forecast				
Gas Year	**06/07**	**07/08**	**08/09**	**09/10**	**10/11**
(Volumes in $10^6 m^3/d$ at 101.325 kPa and 15°C)					
Empress	75.4	72.1	66.9	61.8	57.7
McNeill	37.6	37.4	37.2	36.2	36.2
Alberta/B.C.	70.4	69.8	57.0	52.6	51.3
Boundary Lake	0.0	0.0	0.0	0.0	0.0
Unity	0.0	0.0	0.0	0.0	0.0
Cold Lake	0.0	0.0	0.0	0.0	0.0
Gordondale	0.0	0.0	0.0	0.0	0.0
Alberta/Montana	0.0	0.0	0.0	0.0	0.0
Alberta	89.6	101.3	109.7	117.6	129.3
TOTAL SYSTEM	**273.0**	**280.6**	**270.8**	**268.2**	**274.5**
(Volumes in Bcf/d at 14.65 psia and 60°F)					
Empress	2.68	2.56	2.37	2.19	2.05
McNeill	1.34	1.33	1.32	1.29	1.28
Alberta/B.C.	2.50	2.48	2.02	1.87	1.82
Boundary Lake	0.00	0.00	0.00	0.00	0.00
Unity	0.00	0.00	0.00	0.00	0.00
Cold Lake	0.00	0.00	0.00	0.00	0.00
Gordondale	0.00	0.00	0.00	0.00	0.00
Alberta/Montana	0.00	0.00	0.00	0.00	0.00
Alberta	3.18	3.60	3.89	4.17	4.59
TOTAL SYSTEM	**9.70**	**9.97**	**9.60**	**9.52**	**9.74**

NOTES:
- Delivery volumes shown are not anticipated to occur simultaneously but may occur at some time during the summer season.
- Numbers may not add due to rounding.

3.4.2.1 Empress

The forecast of maximum day delivery at the Empress Export Delivery Point reflects the forecast level of firm transportation Service Agreements at the Empress Export Delivery Point.

The June 2006 forecast winter maximum day delivery for the 2007/08 Gas Year at the Empress Export Delivery Point is 75.4 $10^6m^3/d$ (2.68 Bcf/d). This represents a decrease of 5.6 $10^6m^3/d$ (0.19 Bcf/d), or 6.9 percent, from the winter season maximum day delivery in the June 2006 forecast for the 2006/07 Gas Year.

The June 2006 forecast summer maximum day delivery for the 2007/08 Gas Year at the Empress Export Delivery Point is 72.1 $10^6m^3/d$ (2.56 Bcf/d). This represents a decrease of 3.3 $10^6m^3/d$ (0.12 Bcf/d), or 4.4 percent, from the summer season maximum day delivery in the June 2006 forecast for the 2006/07 Gas Year.

3.4.2.2 McNeill

The forecast of maximum day delivery at the McNeill Export Delivery Point for 2007/08 reflects the forecast level of firm transportation Service Agreements at the McNeill Export Delivery Point.

The June 2006 forecast winter maximum day delivery for the 2007/08 Gas Year at the McNeill Export Delivery Point is 37.6 $10^6m^3/d$ (1.34 Bcf/d). This represents an essentially flat forecast of winter season maximum day delivery in the June 2006 forecast when compared to the 2006/07 Gas Year.

The June 2006 forecast summer maximum day delivery for the 2007/08 Gas Year at the McNeill Export Delivery Point is 37.4 $10^6m^3/d$ (1.33 Bcf/d). This represents a decrease of 0.2 $10^6m^3/d$ (0.01 Bcf/d), or 0.5 percent, from the summer season maximum day delivery in the June 2006 forecast for the 2006/07 Gas Year.

3.4.2.3 Alberta/British Columbia

The forecast of maximum day delivery at the Alberta/British Columbia Export Delivery Point reflects the forecast level of firm transportation Service Agreements at the Alberta/British Columbia Export Delivery Point.

The June 2006 forecast winter maximum day delivery for the 2007/08 Gas Year at the Alberta/British Columbia Export Delivery Point is 71.3 $10^6m^3/d$ (2.53 Bcf/d). This represents an essentially flat forecast of winter season maximum day delivery in the June 2006 forecast when compared to the 2006/07 Gas Year.

The June 2006 forecast summer maximum day delivery for the 2007/08 Gas Year at the Alberta/British Columbia Export Delivery Point is 69.8 $10^6m^3/d$ (2.48 Bcf/d). This represents a decrease of 0.6 $10^6m^3/d$ (0.02 Bcf/d), or 0.9 percent, from the summer season maximum day delivery in the June 2006 forecast for the 2006/07 Gas Year.

3.4.2.4 Other Exports

Boundary Lake, Unity, Cold Lake, Gordondale and Alberta/Montana

The June 2006 forecast maximum day delivery for the 2007/08 Gas Year for each of the Boundary Lake, Unity, Cold Lake, Gordondale and Alberta/Montana Export Delivery Points is zero. This is unchanged from the maximum day delivery forecast for the 2006/07 Gas Year.

3.4.3 Alberta Deliveries

The June 2006 Alberta maximum day delivery forecast for the winter season of the 2007/08 Gas Year is 132.3 $10^6m^3/d$ (4.70 Bcf/d). This is an increase of 8.9 $10^6m^3/d$

(0.32 Bcf/d), or 7.2 percent, from the 2006/07 Gas Year winter season value in the June 2006 forecast. The June 2006 Alberta maximum day delivery forecast for the summer season of the 2007/08 Gas Year is 101.3 $10^6 m^3/d$ (3.60 Bcf/d). This is an increase of 11.7 $10^6 m^3/d$ (0.42 Bcf/d), or 13.1 percent, from the 2006/07 Gas Year summer season value in the June 2006 forecast.

NGTL considered several sources of information in developing its Alberta maximum day delivery forecast. First, operators of downstream facilities such as connecting pipelines and industrial plant operators were requested to provide a forecast of their maximum, average, and minimum requirements for deliveries from NGTL over the next ten years. NGTL analyzed the forecasts and compared them to historical flow patterns at the Alberta Delivery Points. In cases where NGTL's analysis differed substantially with the operator's forecast, NGTL contacted the operator and either the operator's forecast was revised or NGTL adjusted its analysis. In cases where the operator did not provide a forecast, NGTL based its forecast on growth rates for specific demand sectors.

A summary of winter and summer maximum day delivery for Alberta Deliveries from the June 2006 design forecast by NGTL project area is shown in Tables 3.4.3.1, and 3.4.3.2, respectively.

Table 3.4.3.1
Winter Maximum Day Delivery Forecast

Project Area	June 2006 Design Forecast ($10^6m^3/d$)	
	2006/07	**2007/08**
Peace River	6.5	6.4
North and East	57.7	66.9
Mainline	54.4	54.1
Gas taps	4.8	4.9
TOTAL ALBERTA	**123.4**	**132.3**
Project Area	**June 2006 Design Forecast (Bcf/d)**	
	2006/07	**2007/08**
Peace River	0.23	0.23
North and East	2.05	2.37
Mainline	1.93	1.92
Gas taps	0.17	0.17
TOTAL ALBERTA	**4.38**	**4.70**

NOTES:
- Numbers may not add due to rounding.
- Gas taps are located in all areas of the province.

Table 3.4.3.2
Summer Maximum Day Delivery Forecast

Project Area	June 2006 Design Forecast ($10^6m^3/d$)	
	2006/07	**2007/08**
Peace River	4.3	4.2
North and East	50.5	62.7
Mainline	32.6	32.2
Gas taps	2.2	2.3
TOTAL ALBERTA	**89.6**	**101.3**
Project Area	**June 2006 Design Forecast (Bcf/d)**	
	2006/07	**2007/08**
Peace River	0.15	0.15
North and East	1.79	2.22
Mainline	1.16	1.14
Gas taps	0.08	0.08
TOTAL ALBERTA	**3.18**	**3.60**

NOTES:
- Numbers may not add due to rounding.
- Gas taps are located in all areas of the province.

3.5 Receipt Forecast

The following receipt forecasts comprise the second principal part of the June 2006 design forecast.

3.5.1 System FS Productive Capability Forecast

The system FS productive capability forecast from the June 2006 design forecast is 281.4 $10^6 m^3/d$ (9.99 Bcf/d) in the 2007/08 Gas Year. This is up slightly from the 2006/07 Gas Year forecast of 276.0 $10^6 m^3/d$ (9.80 Bcf/d) in the June 2006 forecast.

A summary of system FS productive capability from the June 2006 design forecast by NGTL project area is shown in Table 3.5.1.

Table 3.5.1
System FS Productive Capability Forecast

Project Area	June 2006 Design Forecast ($10^6 m^3/d$)				
	2006/07	**2007/08**	**2008/09**	**2009/10**	**2010/11**
Peace River	113.4	117.4	115.6	110.0	110.5
North and East	38.2	37.4	34.0	32.7	31.7
Mainline	124.5	126.6	128.2	130.4	129.7
TOTAL SYSTEM	**276.0**	**281.4**	**277.7**	**273.1**	**271.9**
Project Area	**June 2006 Design Forecast (Bcf/d)**				
	2006/07	**2007/08**	**2008/09**	**2009/10**	**2010/11**
Peace River	4.02	4.17	4.10	3.91	3.92
North and East	1.35	1.33	1.21	1.16	1.13
Mainline	4.42	4.49	4.55	4.63	4.61
TOTAL SYSTEM	**9.80**	**9.99**	**9.86**	**9.70**	**9.65**

NOTE:
- Numbers may not add due to rounding.

3.5.2 System Field Deliverability Forecast

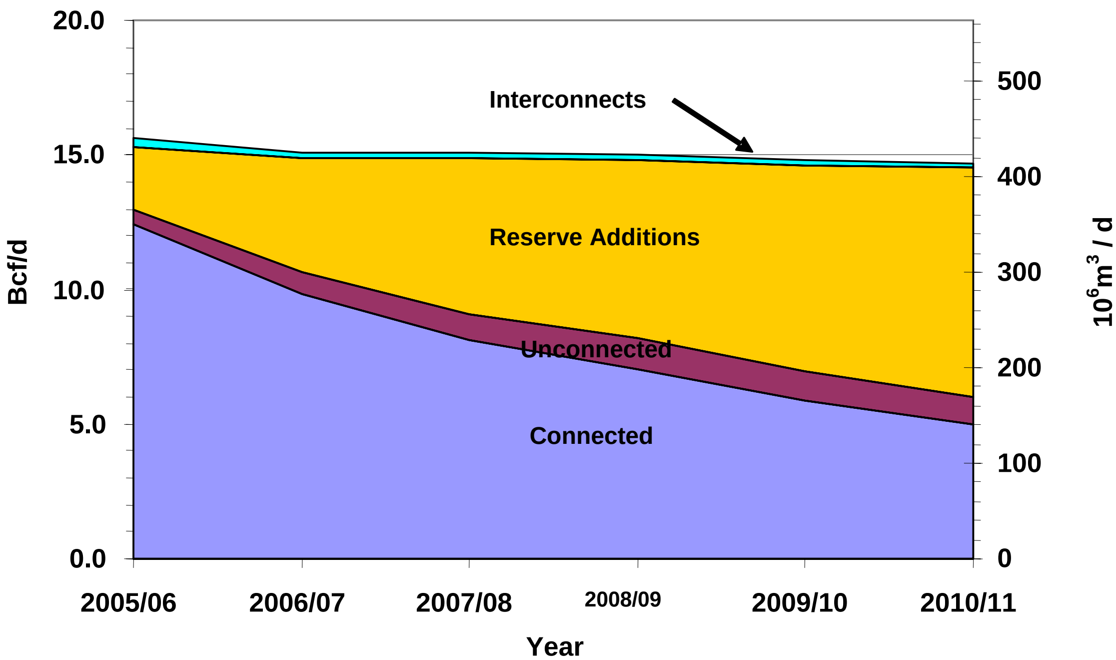
In updating the field deliverability for the June 2006 design forecast, three major sources of gas supply were included:

- Connected and Unconnected Reserves – supply from established reserves upstream of NGTL's Receipt Points.
- Reserve Additions - supply from undiscovered reserves, including unconventional coalbed methane and tight gas.
- Interconnections - supply from interconnections with other pipeline systems.

Incremental supply from reserve additions and from the unconnected component of discovered reserves are expected to become available to offset declines in field deliverability from connected established reserves as economics permit.

Figure 3.5.2 shows the system field deliverability and its composition by supply source. In aggregate, NGTL expects the WCSB field deliverability to remain relatively flat over the forecast period.

Figure 3.5.2
System Field Deliverability by Component



Gas supplied from Storage Facilities has not been included in the data presented in this section. Information pertaining to gas supply from Storage is contained in Section 3.6.

Supply from reserve additions was forecast on an area basis, based on economic potential estimates from the Canadian Gas Potential Committee Report – Natural Gas Potential in Canada – 2001, and from expected delivery requirements. The supply from reserve additions was then allocated to each Receipt Point within the forecast area. The allocated supply from reserve additions was combined with the established supply forecast from connected gas and existing economic unconnected gas to provide a forecast of future supply at each Receipt Point.

A summary of system field deliverability from the June 2006 forecast by NGTL project area is shown in Table 3.5.2.

Table 3.5.2
System Field Deliverability Forecast

Project Area	**June 2006 Design Forecast ($10^6m^3/d$)**				
	2006/07	**2007/08**	**2008/09**	**2009/10**	**2010/11**
Peace River	161.0	163.9	163.5	156.4	157.2
North and East	68.7	67.6	62.1	60.6	58.2
Mainline	194.9	193.8	197.1	199.5	198.1
TOTAL SYSTEM	**424.6**	**425.3**	**422.7**	**416.5**	**413.5**
Project Area	**June 2006 Design Forecast (Bcf/d)**				
	2006/07	**2007/08**	**2008/09**	**2009/10**	**2010/11**
Peace River	5.7	5.8	5.8	5.6	5.6
North and East	2.4	2.4	2.2	2.1	2.1
Mainline	6.9	6.9	7.0	7.1	7.0
TOTAL SYSTEM	**15.1**	**15.1**	**15.0**	**14.8**	**14.7**

NOTES:
- Numbers may not add due to rounding.
- Includes unconventional gas.

3.5.3 Firm Transportation Service Agreements

The following is a summary of the aggregate Receipt Contract Demand forecast to be held under firm transportation Service Agreements on the Alberta System.

The June 2006 forecast of aggregate Receipt Contract Demand under firm transportation Service Agreements is 283.3 $10^6m^3/d$ (10.06 Bcf/d) for the 2007/08 Gas Year, as shown in Table 3.5.3. This is an increase of 4.8 $10^6m^3/d$ (0.18 Bcf/d), or 1.7 percent, from the 2006/07 Gas Year and reflects the net effect of both new and non-renewing firm transportation Service Agreements.

Table 3.5.3
Forecast of Receipt Contract Demand under Firm Transportation Service Agreements

Gas Year	June 2006 Design Forecast	
	($10^6 m^3$/d)	(Bcf/d)
2006/07	278.5	9.88
2007/08	283.3	10.06
2008/09	279.5	9.92
2009/10	274.8	9.75
2010/11	273.7	9.71

NOTE:
- Represents Alberta System peak values anticipated in Gas Year.

3.5.4 System Average Receipts

The system average receipt forecast from the June 2006 design forecast is 320.8 $10^6 m^3$/d (11.39 Bcf/d) in the 2007/08 Gas Year. This is up slightly from the 2006/07 Gas Year forecast of 317.0 $10^6 m^3$/d (11.25 Bcf/d) in the June 2006 forecast.

A summary of system average receipts from the June 2006 design forecast by NGTL project area is shown in Table 3.5.4.

Table 3.5.4
System Average Receipts

	June 2006 Design Forecast ($10^6m^3/d$)				
Project Area	**2006/07**	**2007/08**	**2008/09**	**2009/10**	**2010/11**
Peace River	122.3	125.8	126.4	121.2	121.6
North and East	49.0	49.2	45.5	44.4	42.9
Mainline	145.7	145.8	149.1	151.3	150.3
TOTAL SYSTEM	**317.0**	**320.8**	**321.1**	**316.9**	**314.8**
	June 2006 Design Forecast (Bcf/d)				
Project Area	**2006/07**	**2007/08**	**2008/09**	**2009/10**	**2010/11**
Peace River	4.34	4.47	4.49	4.30	4.32
North and East	1.74	1.75	1.62	1.57	1.52
Mainline	5.17	5.17	5.29	5.37	5.34
TOTAL SYSTEM	**11.25**	**11.39**	**11.40**	**11.25**	**11.17**

3.5.5 Established Natural Gas Reserves

Table 3.5.5.1 presents a summary of remaining established gas reserves in Alberta by NGTL project area as of October 2005. This summary is based on NGTL's assessment of available information. The Board estimates 1099.7 10^9m^3 (39.0 Tcf) of CBM and conventional gas reserves to year end 2004. NGTL's estimate is based on the Board's established reserves which existed at year end 2004 augmented by more recent data provided by NGTL customers and by additional reserves discovered as of October 2005. The reserves have been adjusted for production to October 2005.

NGTL's estimate of 1128.0 10^9m^3 (40.0 Tcf) remaining established gas reserves in Alberta is a decrease of about 3.0 10^9m^3 (0.1 Tcf), or 0.3 percent, from the 1131.0 10^9m^3 (40.1 Tcf) reported in the December 2005 Annual Plan.

Table 3.5.5.1
Remaining Established Alberta Gas Reserves by Project Area

Project Area	NGTL Estimate (10^9m^3)	NGTL Estimate (Tcf)
Peace River	182	6.5
North & East	200	7.1
Mainline	468	16.6
Other[1]	278	9.9
Total[2]	**1128**	**40.0**

NOTES:
1 Reserves not directed to NGTL.
2 Numbers may not add due to rounding.

Table 3.5.5.2 presents the estimate of remaining established reserves. For British Columbia and the lower Northwest Territories, the estimate is limited to areas connected or likely to be connected to the Alberta System.

Table 3.5.5.2
Remaining Established Reserves

Reserve Basis	Alberta		B.C. and N.W.T.		Total	
	10^9m^3	Tcf	10^9m^3	Tcf	10^9m^3	Tcf
Remaining Established Reserves connected to NGTL [1,2]	850	30.2	81	2.9	930	33.0
Remaining Established Reserves not connected to NGTL [3,4]	278	9.9	-	-	278	9.9
TOTAL	**1128**	**40.0**	**81**	**2.9**	**1209**	**42.9**

NOTES:
1 The remaining established reserves are those connected and those expected to be connected to the Alberta System and include reserve estimates from NGTL initiated reserve studies.
2 Reserves not connected to the Alberta System are those which would be transported on other systems.
3 NGTL does not estimate B.C. reserves that are not forecasted to flow on its pipeline system.
4 Numbers may not add due to rounding.

3.6 Storage Facilities

There are seven storage facilities presently connected to the Alberta System, as shown in Table 3.6.1. They are located at the AECO ‘C’, Big Eddy, Carbon, Chancellor, Crossfield East #2, January Creek and Severn Creek Meter Stations (Figure 2.6.1.4). The total deliverability from Storage Facilities is significant when compared to the field deliverability available from other Receipt Points on the Alberta System.

The maximum receipt meter capacity for each of the connected Storage Facilities for the 2007/08 Gas Year is shown in Table 3.6.1.

Table 3.6.1
Receipt Capacity from Storage Facilities

	Maximum Receipt Meter Capacity from Storage Facilities 2007/08	
	$10^6 m^3/d$	**Bcf/d**
AECO C	50.7	1.80
Big Eddy	20.5	0.73
Carbon	13.8	0.49
Chancellor	35.2	1.25
Crossfield East #2	14.1	0.50
January Creek	14.1	0.50
Severn Creek	5.6	0.21
TOTAL	**154.0**	**5.47**

NOTES:
- Storage is presently considered as an interruptible supply source. Refer to Section 2.6.4 for details on the treatment of storage in the system design.
- Numbers may not add due to rounding.

3.7 Receipt to Delivery Comparisons

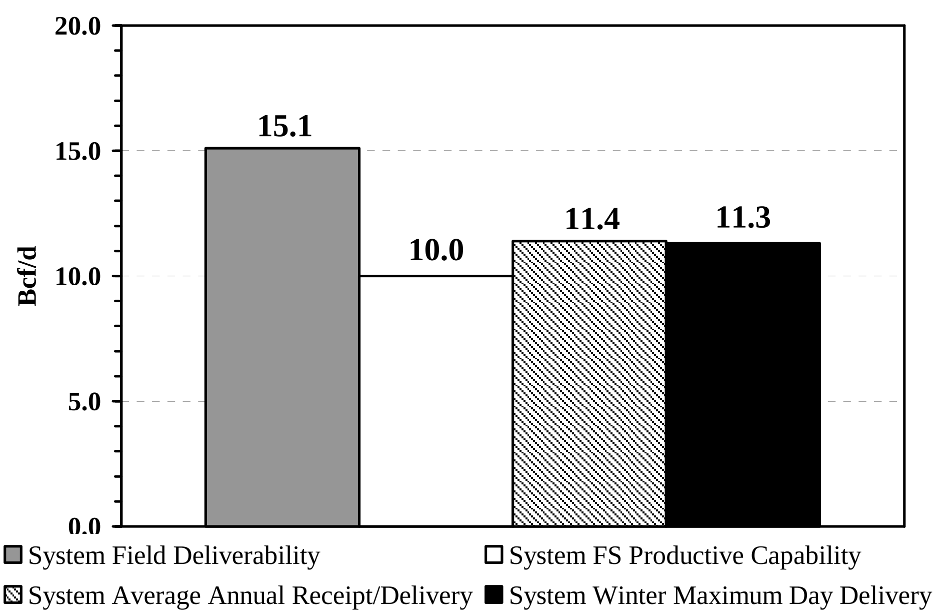
This section discusses the relative levels of gas receipt and delivery forecasts for the Alberta System, as were described in Sections 3.4 and 3.5, based on the June 2006 design forecast.

For illustrative purposes, Figure 3.7.1 also shows the forecast of the system FS productive capability, system field deliverability, the system average annual delivery and the system winter maximum day delivery for the 2007/08 Gas Year.

It should be noted that Storage Facilities are anticipated to contribute significant additional receipts to the pipeline system during peak demand conditions. As described in Section 2.6.1.4, gas deliverability from Storage Facilities is provided as an interruptible service on the Alberta System. The capability of the system to receive large withdrawals from Storage Facilities will be dependent upon the prevailing operating conditions and corresponding ability to move interruptible volumes at the time the withdrawals are requested. For this reason, the potential receipt contribution from Storage Facilities is not shown in Figure 3.7.1.

System field deliverability is projected to be 425.3 $10^6 m^3/d$ (15.1 Bcf/d) as shown in Figure 3.7.1. Based on the aggregate of each Receipt Point's FS productive capability forecast, the system FS productive capability is 281.4 $10^6 m^3/d$ (10.0 Bcf/d). Average annual receipt volumes are equal to the average annual delivery volumes and are projected to be 320.8 $10^6 m^3/d$ (11.4 Bcf/d). The winter maximum day delivery volume is projected to be 316.6 $10^6 m^3/d$ (11.3 Bcf/d).

Figure 3.7.1
Receipt/Delivery Comparison
2007/08 Gas Year



NOTE:
- Storage excluded.