

Second Quarter  
Variance Report  
Redacted

September 2015  
through  
November 2015  
Docket No. 15-057-07

Questar Gas Company  
Second Quarter Variance Report  
September 2015 – November 2015

Questar Gas Company (Questar Gas or Company) respectfully submits this Second Quarter Variance Report for the period September – November 2015. This report identifies the variance between the actual results and the projections set forth in the 2015 Integrated Resource Plan (IRP).

Weather

Exhibits 1.1 – 1.3.

Exhibit 1.1 shows that the weather in September and October was significantly warmer than normal with October having 215 fewer heating degree days than the forecast. November had substantially the same heating degree days as the forecast.

Gas Storage

Exhibits 2.1 – 2.4.

Exhibit 2.1 shows that Clay Basin inventory peaked in September due to higher than forecasted summer production, the lack of Ryckman storage, and low demand early in the quarter. Questar Gas eased the effects of the high production and the Ryckman impact by acquiring a 500,000 Dth Park and Loan contract at Clay Basin in October.

The actual November inventory in Clay Basin was significantly lower than what was forecast in the IRP. A column showing the three-year average ending inventory has been added to Exhibits 2.1 through 2.4 to show how the storage activity in this quarter compares to what has happened historically. Four items encountered in the course of business led to the decision to reduce Clay Basin inventory at a higher-than-normal rate in November. First, the modeled forecast was based on the price forecast that was available in June, 2015. This forecast reflected prices increasing in November, December and January. The actual prices actually decreased in October and November and all fundamentals at that point were indicating that trend to continue. Second, the cold weather in November allowed Questar Gas to withdraw some of the excess storage that had built up as a result of the warm weather and the absence of Ryckman storage. Third, withdrawals were increased based on concerns that the warm weather that had been persistent throughout 2015 would continue through the heating season, and not allow Clay Basin to be ready to receive injections in the spring of 2016. Finally, withdrawals were increased to free up storage space in December for an additional 500,000 Dth of gas that QGC purchased in an auction from Questar Pipeline Company (Questar Pipeline). When the 3<sup>rd</sup> Quarter variance report is filed, the December balance will include this additional 500,000 Dth.

Aquifer inventory was higher than the forecast for September and fell lower than the forecast in October and November. September injections into Leroy and Coalville began earlier than modeled start times to manage higher than forecasted cost-of-service production. See Exhibit 2.2.

#### Firm Sales

Exhibits 3.1 – 3.4.

The first two months of the quarter were much warmer than normal, particularly in the month of October where the disparity was 215 heating degree days. The resulting usage was about 24% below the projected level through those two months. Heating degree days in November were very close to the normal baseline, and usage was only slightly below the projection due to slightly lower than normal usage per GS customer.

#### Gas Purchased from Third Parties Volume Variance

Exhibits 4.1 – 4.3.

Exhibit 4.1 shows low use of third party purchases in September and October. Questar Gas also only purchased half of the gas in the November forecast. Small purchases in September and October were due to warm temperatures. In November, normal demand was supplemented by withdrawals from Clay Basin.

#### Gas Purchased from Third Parties Cost Variance

Exhibits 5.1 – 5.3.

Total costs for third party purchases were lower than forecast due to the combination of lower volumes being purchased (see section 4) and low cost of gas in November (see section 6).

#### Gas Purchased from Third Parties Unit Cost Variance

Exhibits 6.1, 6.2.

Unit costs for September and October were slightly higher than the forecast by \$0.03 and \$0.11 respectively. For November, the unit cost was lower than the forecast by \$0.41.

#### Cost-of-Service Gas

Exhibits 7.1 – 7.3.

Actual September cost-of-service volumes were slightly higher than the forecast. Shut-in volumes were greater than forecasts due to warm weather, higher than estimated production and near-full Clay Basin storage. October production was less than forecast due to shut-in production. Shut-ins were not anticipated but occurred again due to warm weather, high production and near full storage. November production was higher than forecast and at full production without shut-ins. Higher production in November came from flush production created when shut-in wells were brought back on. In general the Church Buttes, Canyon Creek, Powder Wash and Trail fields performed above estimates due to field operation improvements such as compression, targeting problem wells by reducing water loading and tubing replacement.

Table 1 summarizes estimated average daily shut-in verses actual average daily shut-in during the quarter. The higher shut-in amounts are due to warmer than normal temperatures, higher than forecast production and the lack of storage options.



TABLE 1

		September	October	November	Quarter
<b>Forecasted Shut-ins</b>	Dth/Day	1,025	-	-	
	Total Dth	30,750	-	-	30,750
<b>Actual Shut-in</b>	Dth/Day	15,989	15,473	-	
	Total Dth	479,670	479,663	-	959,333

#### Cost-of-Service Gas New Drill Component

Exhibits 8.1 – 8.3.

For the quarter, new drill was below projections due to natural decline in Pinedale wells that came on in the spring ahead of schedule.

Table 2 summarizes purchase and cost-of-service volume variances using IRP projections and actual results as a percent of total. The Q2 number on line 4 is a percent of total and not an average.

TABLE 2

		Actual Purchase as Percent of Total	IRP Forecast (Normal) Purchase as Percent of Total	Actual Cost-of- Service Into-Pipe as Percent of Total	IRP Forecast (Normal) Cost-of- Service Into-Pipe as Percent of Total
1	Sep-15	0.14%	15.44%	99.86%	84.56%
2	Oct-15	0.18%	43.60%	99.82%	56.40%
3	Nov-15	45.32%	61.41%	54.68%	38.59%
4	Q2	22.78%	45.97%	77.22%	54.03%

#### Supplemental Graphs

Exhibits 9.1 – 9.3.

Confidential Exhibits 9.1 and 9.2 show the total production and new drill by nominations group. Confidential Exhibit 9.3 shows detailed information related to gas purchases.

#### Purchased Gas and Cost-of-Service Price Comparison

Exhibits 10.1, 10.2.

Confidential Exhibit 10.1 shows the price difference between cost-of-service gas and purchased gas. Confidential Exhibit 10.2 compares the actual price of purchased gas with the trailing twelve months (TTM) price of cost-of-service gas. The Company has continued to research and refine its into-pipe volumes. After comparing the receipt volumes reported by Questar Pipeline to the reconciliation efforts by Questar Gas, the Company determined that at this time the best way to calculate into-pipe volumes is to use confirmed receipt volumes at the same point where gas is purchased. The volume reported by Questar Pipeline is a more accurate measure of into-pipe volumes than adjusting wellhead volumes with an estimated reduction to convert the number to into-pipe. The Company has used receipt volumes from Questar Pipeline's invoice in this report for 2011-2015, which represent the dates for which the data is available. The Company will continue to use the estimated reduction of 3.8% for years prior to 2011. The company will continue to monitor the TTM

price of cost-of-service gas. Future IRP variance reports will be calculated using the receipt volumes reflected on the Questar Pipeline invoices.

#### Gathering

Pursuant to Commission order in Docket No. 12-057-07, the Company provides the following update regarding the Questar Gas Company v. QEP Field Services Company (QEP) lawsuit. Following completion of discovery and exchange of expert reports, Questar Gas Company and QEP each filed three motions for partial summary judgment. The Court issued its Memorandum Decision on December 2, 2014, granting two of Questar Gas' three motions and denying all three of QEP's motions. With leave of Court, Questar Gas and Wexpro filed an additional motion for partial summary judgment regarding QEP's counterclaim. QEP filed a motion for clarification or reconsideration regarding one of the Court's rulings in the Memorandum Decision. Briefing on both motions has been completed.

The court heard Questar Gas' and Wexpro's motion on QEP's counterclaim and QEP's motion for reconsideration on October 29, 2015. On December 23, 2015, the Court denied the Company's motion for partial summary judgment and denied QEP's motion for reconsideration. The trial has been scheduled for April 2016.

#### DNG Action Plan Variance Report

The first quarter variance report provided details on the following projects: NO0001 District Regulator Station, North Ogden; TG0003 Kern River Tap, Saratoga; and Lark Compressor Station. All other projects were on schedule and on budget during the second quarter.

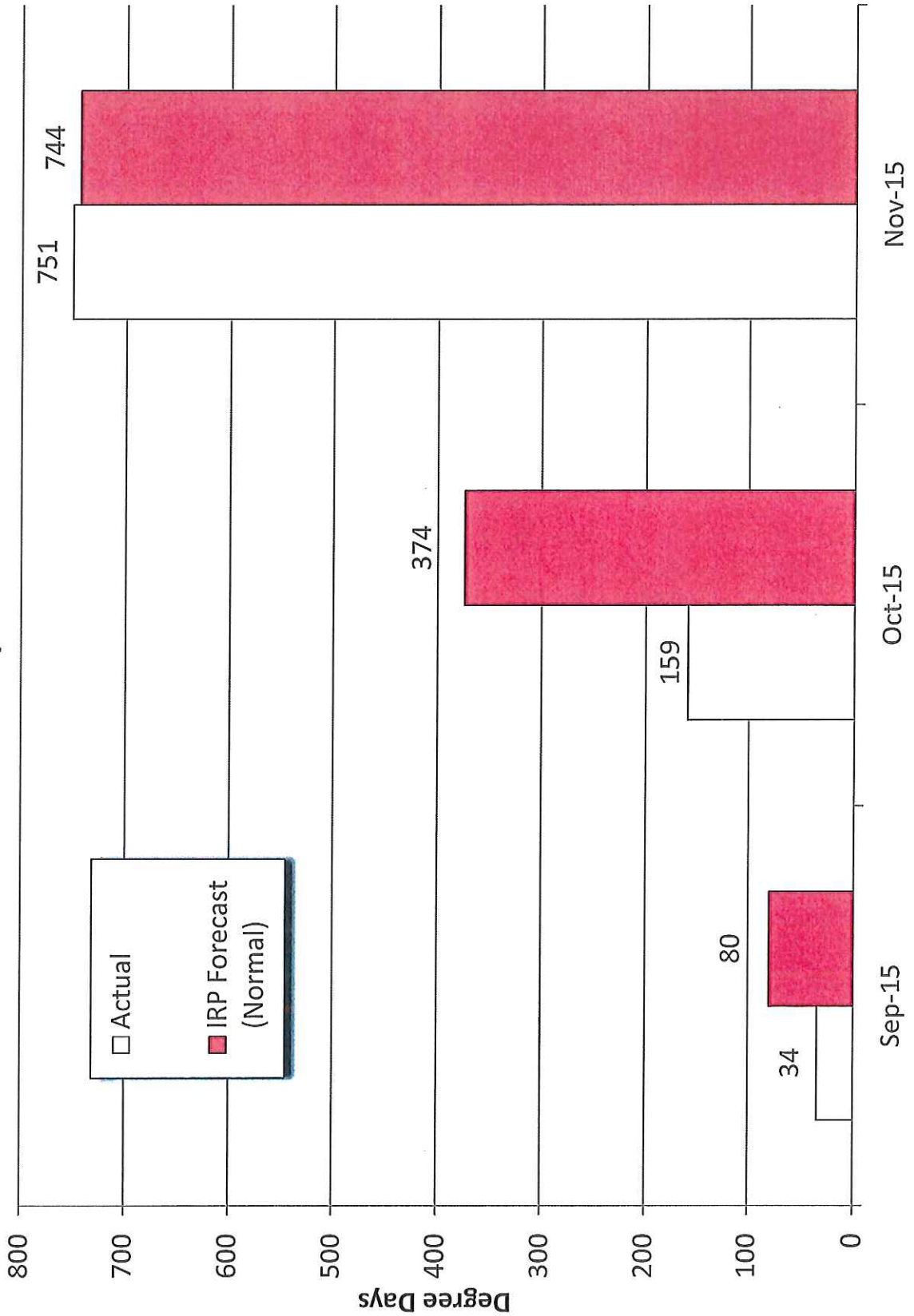


# Heating Degree Day Graphs

Exhibit 1.1 – 1.3

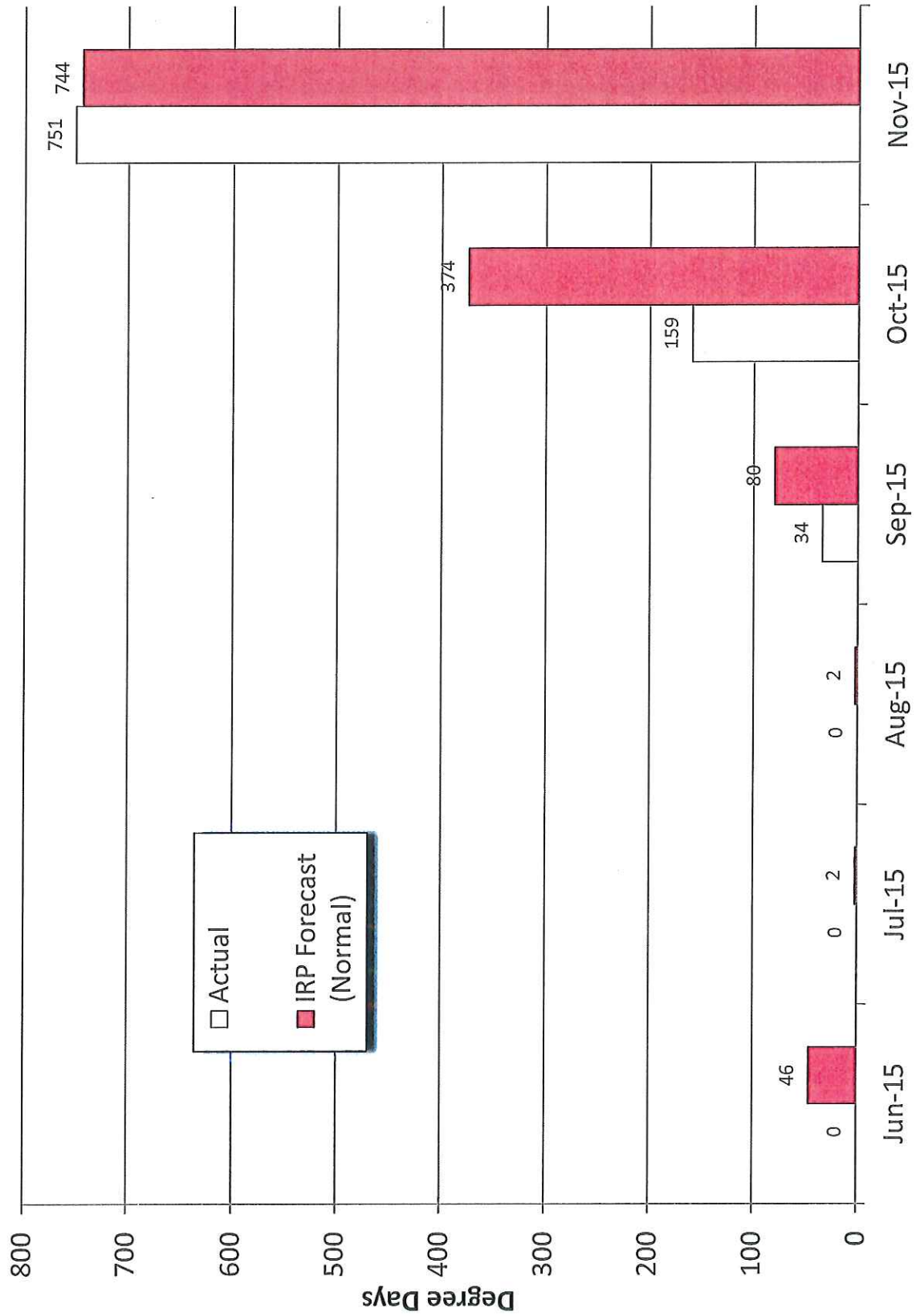
Docket No. 15-057-07

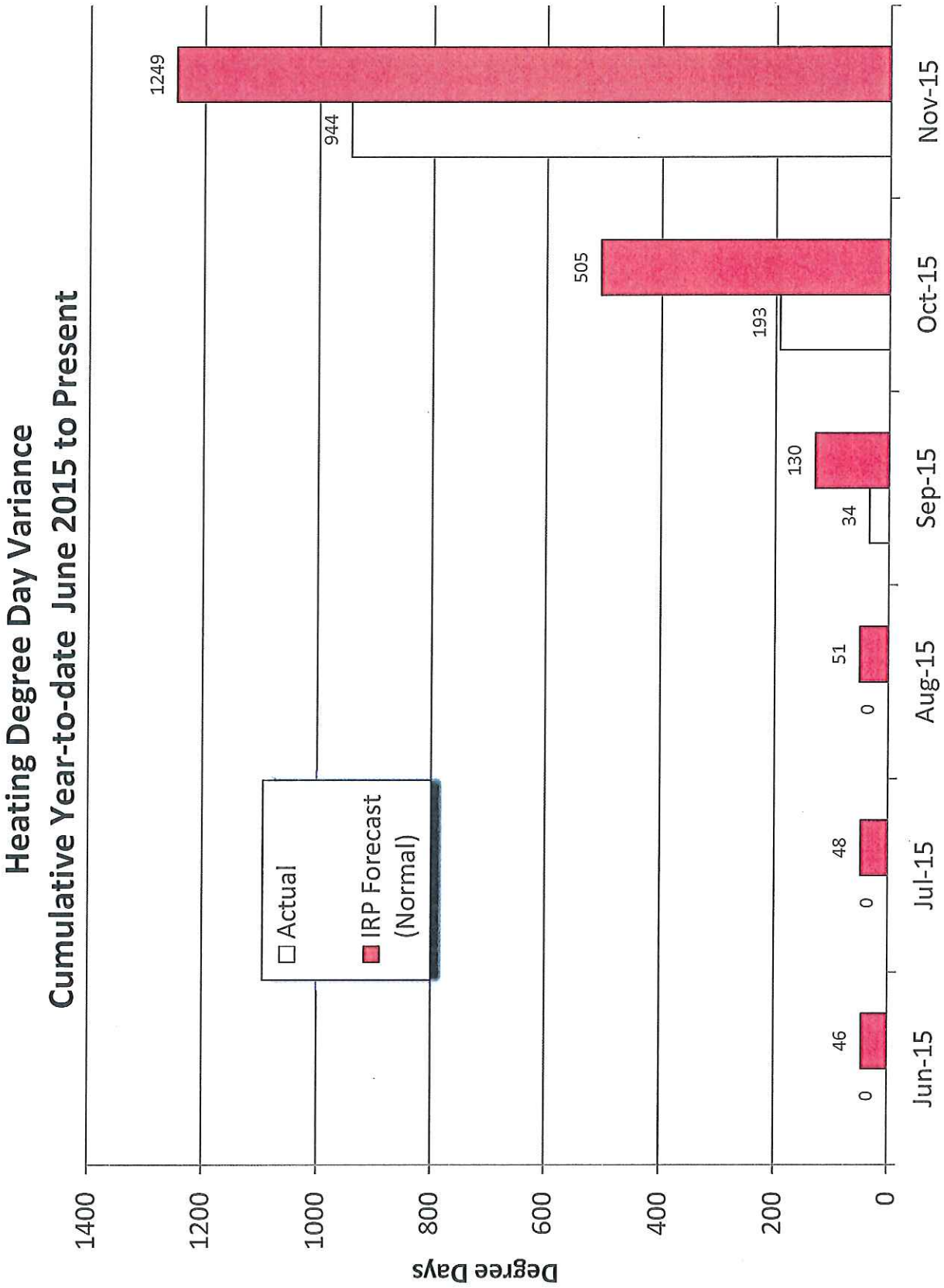
# Heating Degree Day Variance IRP Second Quarter: September to November





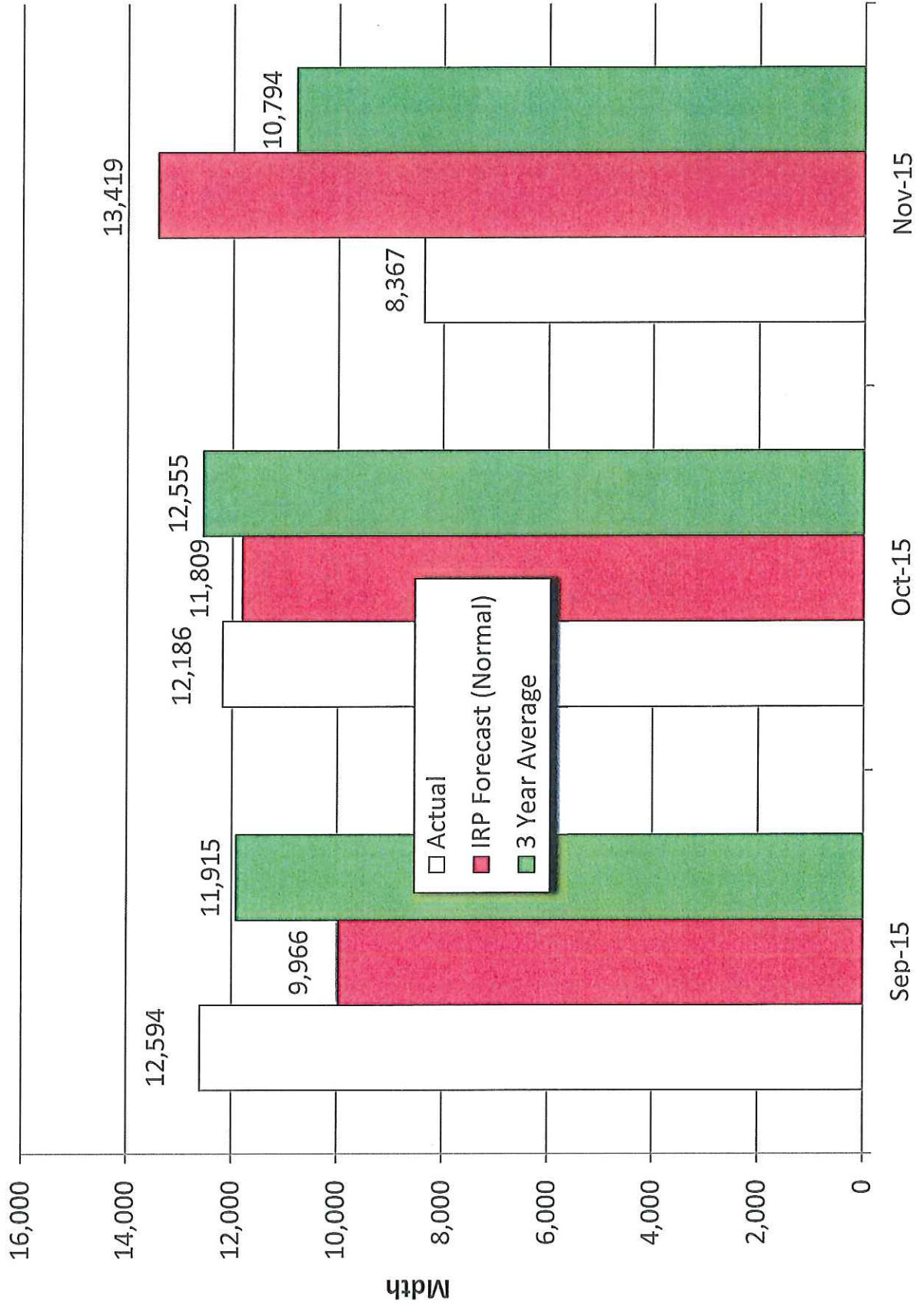
# Heating Degree Day Variance IRP Year: June 2015 to Present





Gas Storage Graphs  
Exhibits 2.1 – 2.4  
Docket No. 15-057-07

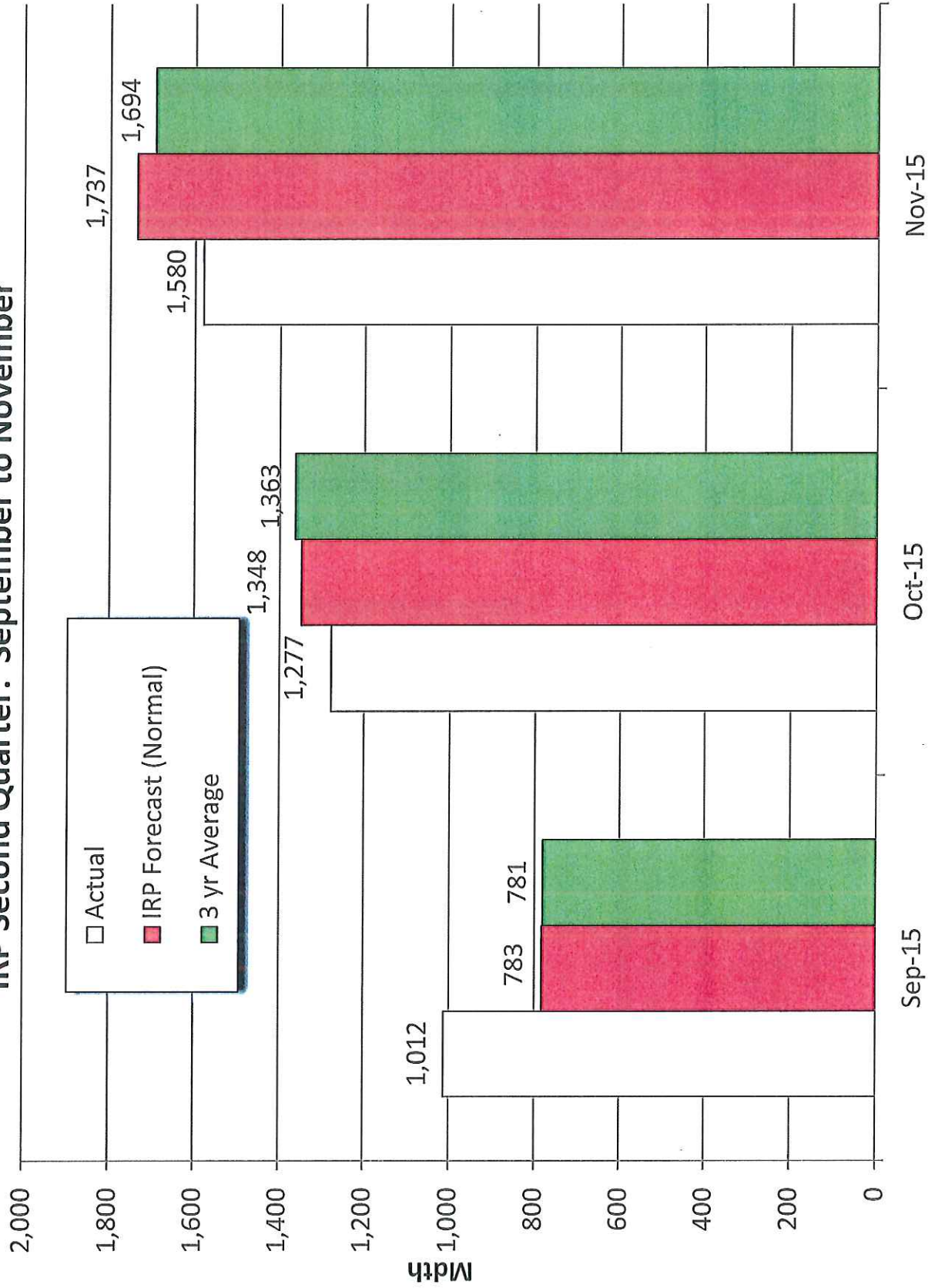
# Clay Basin Month End Inventory IRP Second Quarter: September to November





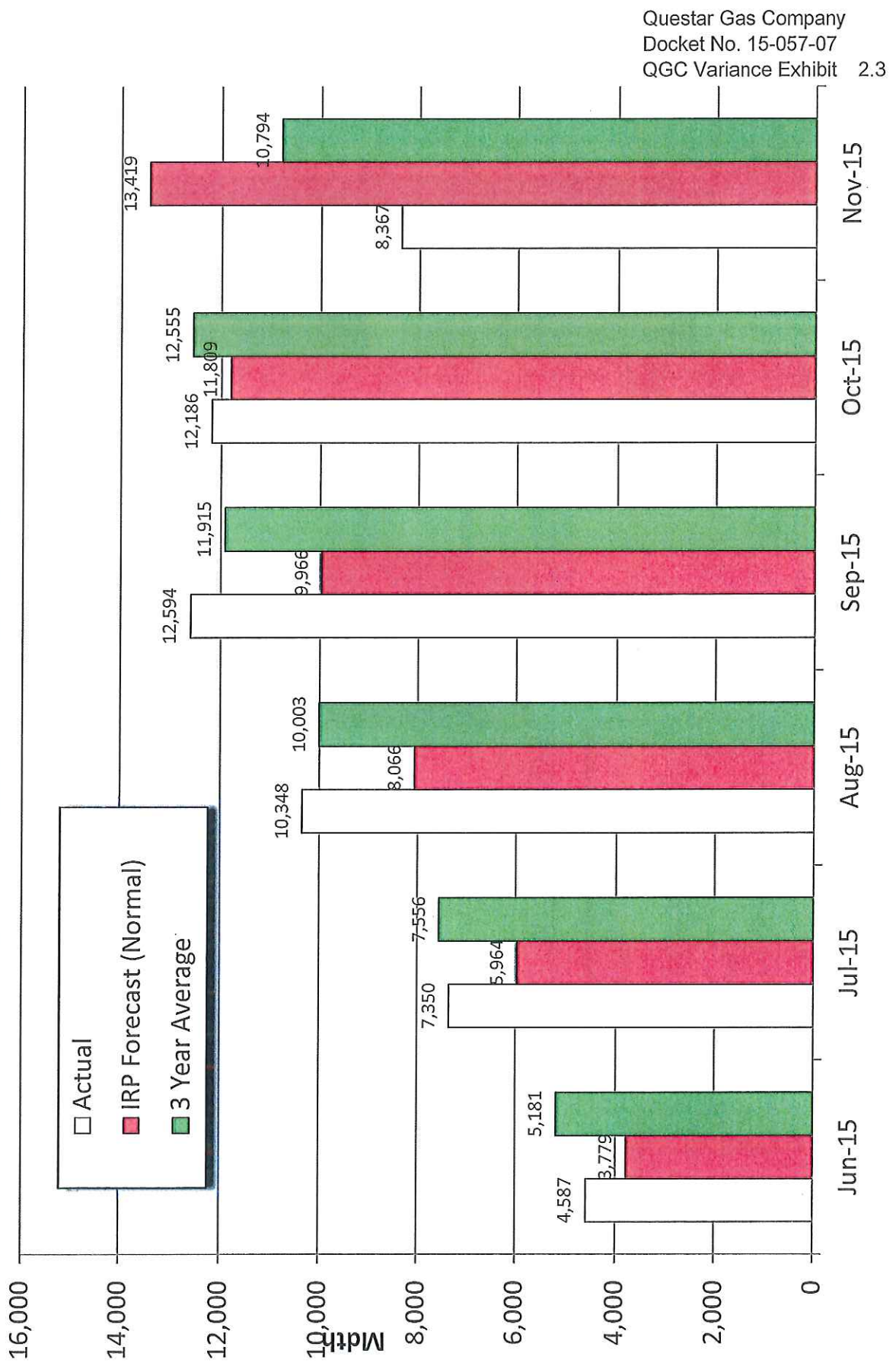
# Aquifer Month End Inventory

## IRP Second Quarter: September to November



# Clay Basin Month End Inventory

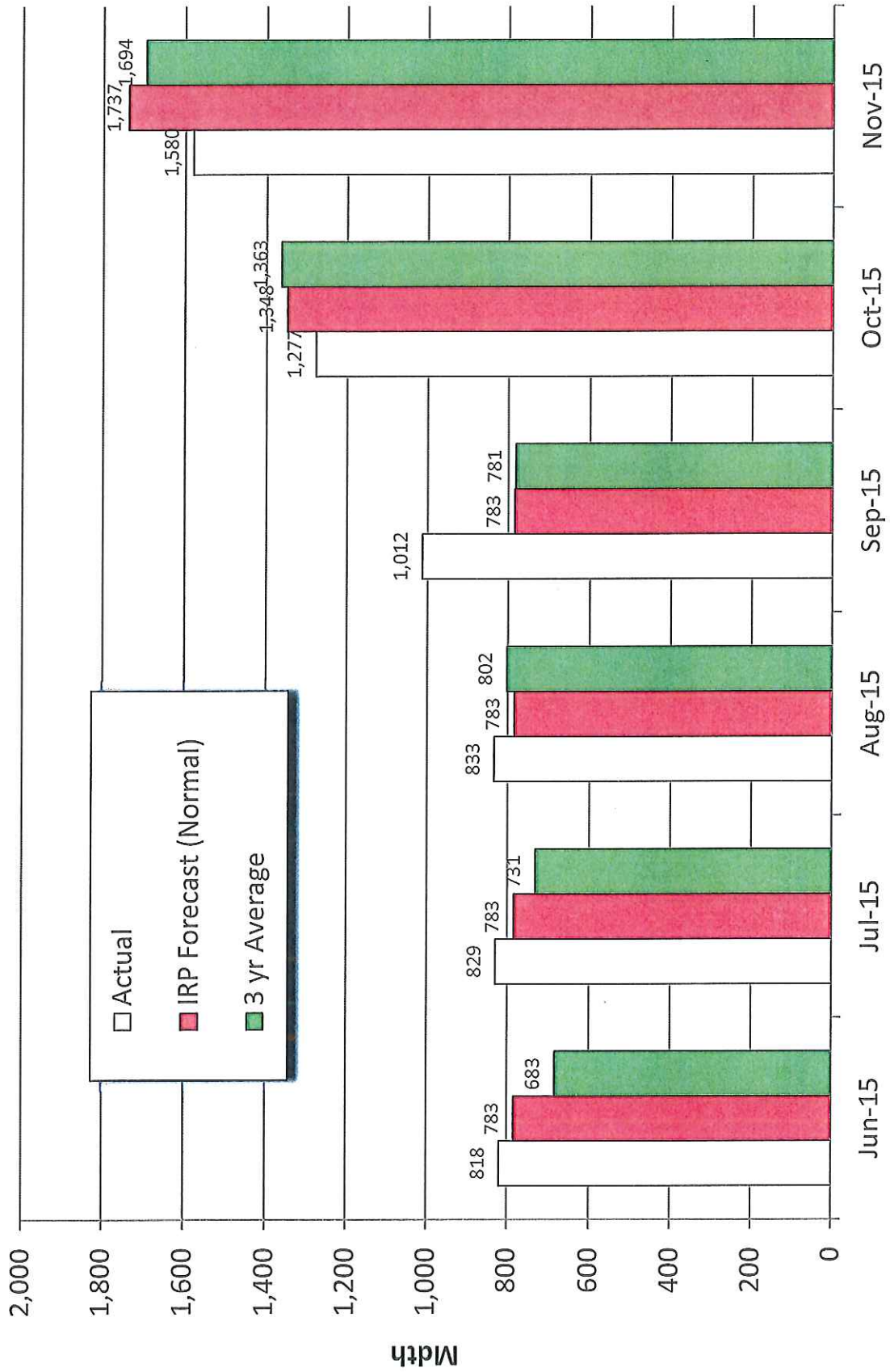
## IRP Year: June 2015 to Present



# Aquifer Month End Inventory

## IRP Year: June 2015 to Present

Questar Gas Company  
Docket No. 15-057-07  
QGC Variance Exhibit 2.4

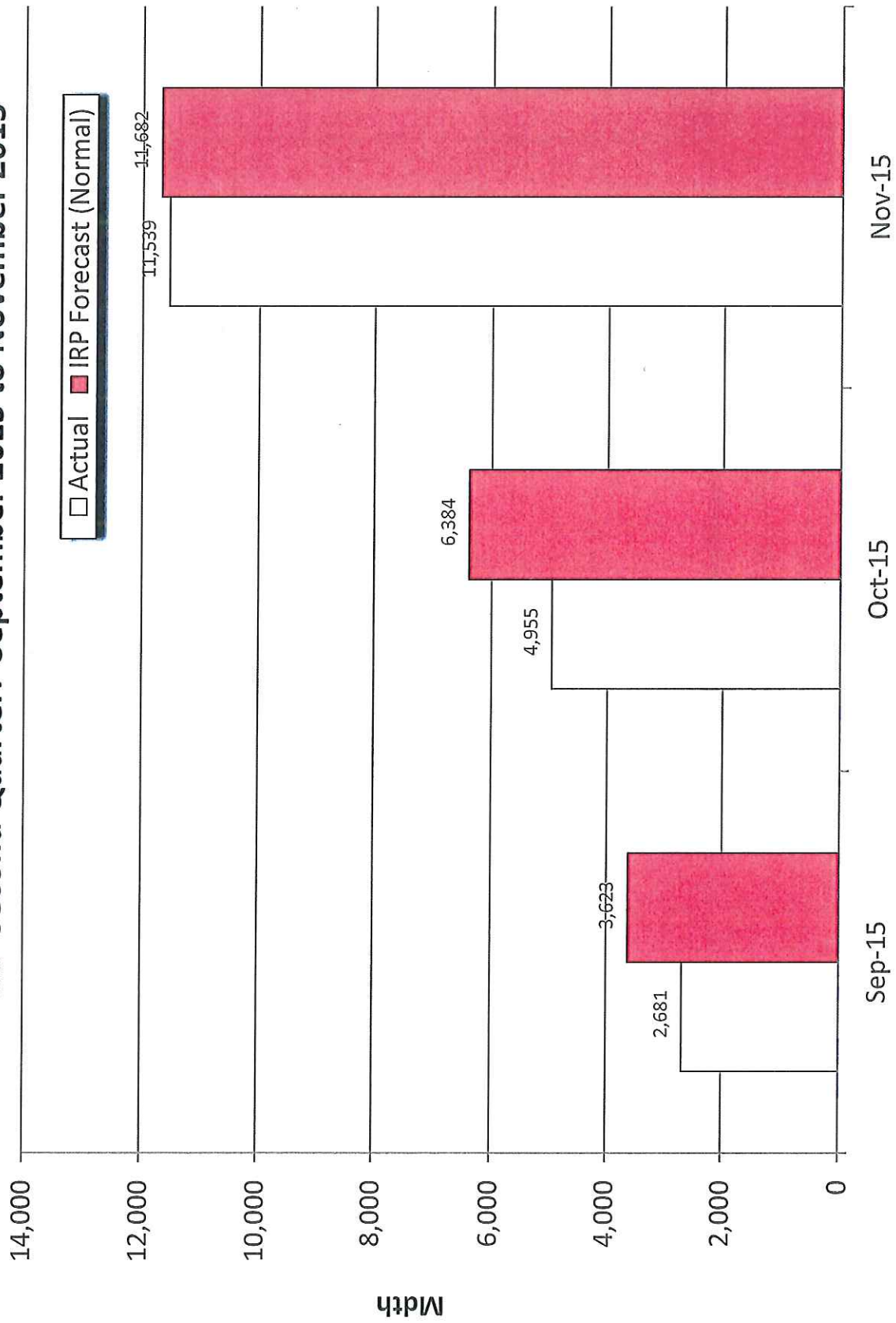


Firm Sales Graphs  
Exhibits 3.1 – 3.4  
Docket No. 15-057-07

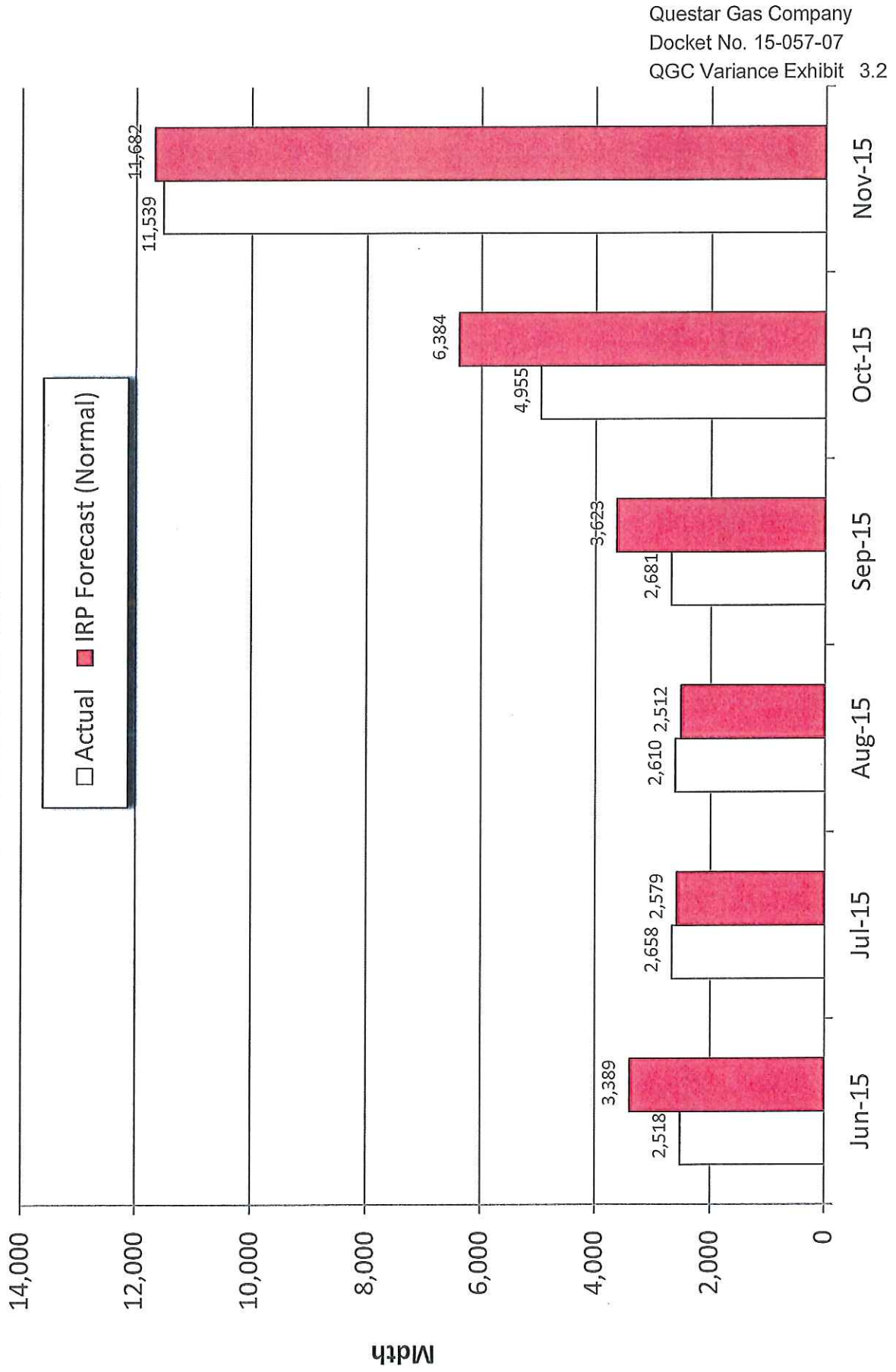


# Firm Sales Variance

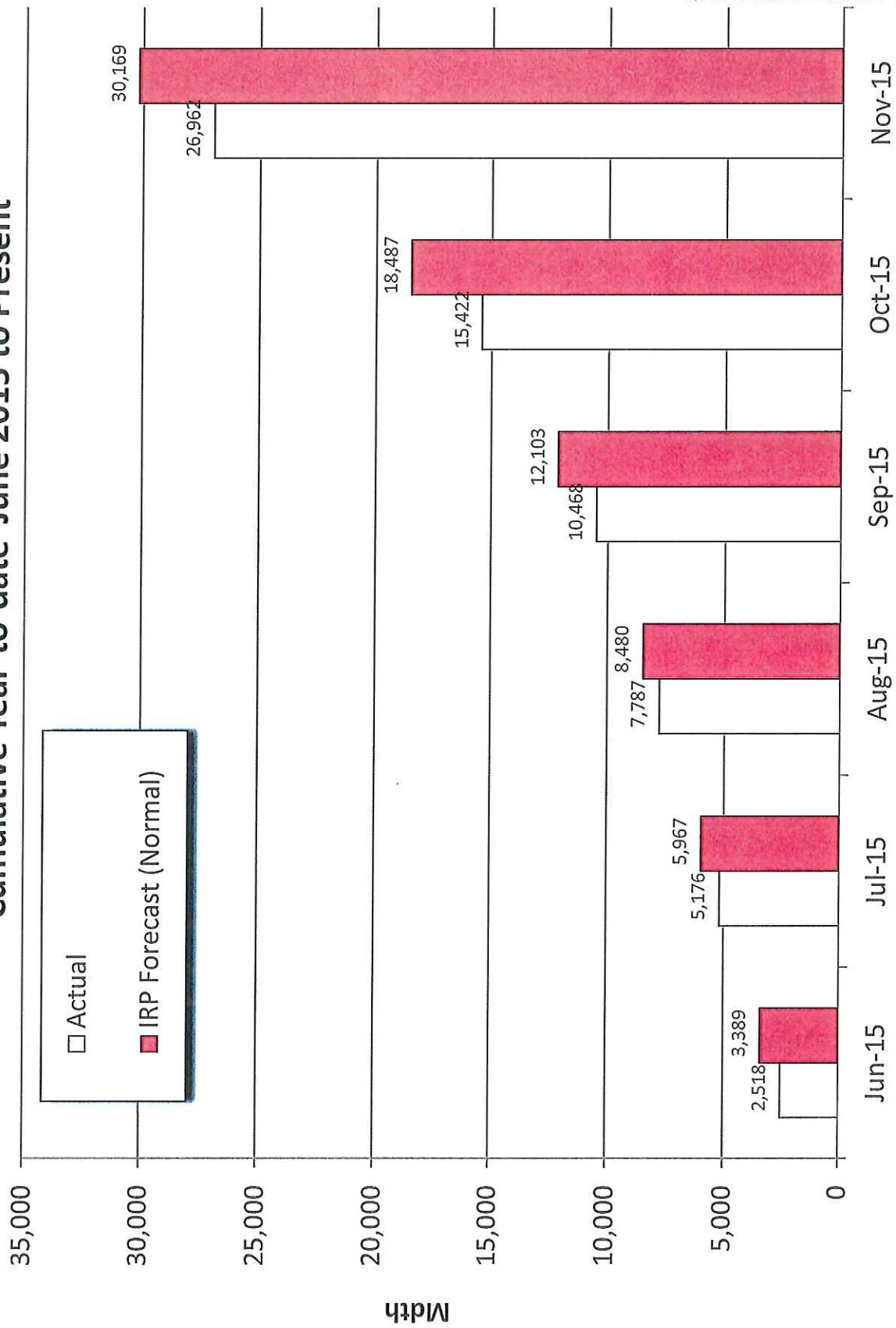
## IRP Second Quarter: September 2015 to November 2015



# Firm Sales Variance IRP Year: June 2015 to Present



# Firm Sales Variance Cumulative Year-to-date June 2015 to Present



IRP Variance

Actual Results

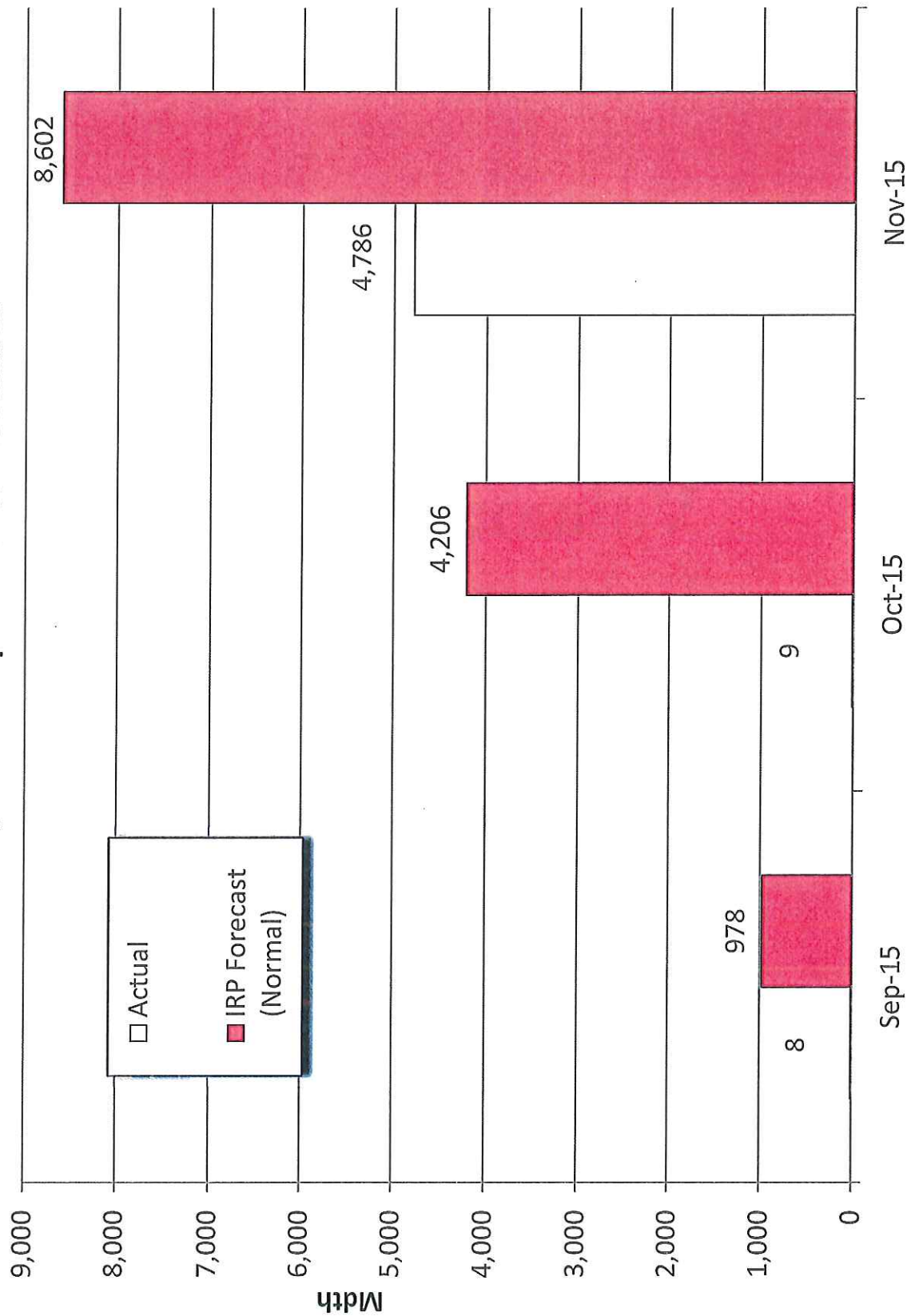
	Sep-15		Oct-15		Nov-15	
SUPPLY	Actual	IRP	Actual	IRP	Actual	IRP
1 Cost of Service Prod (Mbtu)	5,588	5,559	4,624	5,649	5,753	5,611
2 Purchases (Mbtu)	8	978	9	4,206	4,786	8,602
3 Clay Basin With (Mbtu)	-	-	871	-	3,939	-
4 Aquifers With (Mbtu)	3	-	-	-	121	-
5 Ryckman With (Mbtu)	-	-	-	-	-	-
6 Off-System	63	85	58	87	79	84
7 Total Supply	5,662	6,622	5,562	9,942	14,678	14,297
DEMAND						
8 Firm Sales (Mbtu)	2,681	3,623	4,955	6,384	11,539	11,682
9 Interruptible Sales (Mbtu)	87	115	101	123	102	149
10 Clay Basin Inj (Mbtu)	2,247	1,900	464	1,842	120	1,610
11 Aquifers Inj (Mbtu)	189	-	277	565	494	389
12 Ryckman Inj (Mbtu)	-	600	-	620	-	-
13 Off-System	63	82	58	84	79	80
14 Fuel	143	281	106	290	180	323
15 Company Use / L&U	252	20	(398)	34	2,162	62
16 Total Demand	5,662	6,622	5,562	9,942	14,677	14,296
17 Clay Basin Fuel Usage Adjustment	(0)	-	(0)	-	(1)	-
18 Clay Basin Transfers	-	-	-	-	-	-
19 Aquifers Fuel Usage Adjustment	(7)	-	(12)	-	(70)	-
20 Aquifers Transfers	-	-	-	-	-	-
21 Clay Basin Current Balance	12,594	9,966	12,186	11,809	8,367	13,419
22 Aquifers Current Balance	1,012	783	1,277	1,348	1,580	1,737
23 Purchases(\$/Dth)	2.70	2.67	2.58	2.47	2.16	2.57
24 Purchases \$ (000)	22	2,611	23	10,389	10,338	22,107
Variances						
25 Cost of service volumes	29	-	-	-	142	-
26 Purchase volumes	-	-	-	-	-	-
27 Purchase \$ Act over (under) IRP	\$ -	\$ (2,590)	\$ -	\$ (10,366)	\$ -	\$ (11,769)
28 Vol Variance	\$ -	\$ (2,590)	\$ -	\$ (10,367)	\$ -	\$ (9,807)
29 \$ Variance	\$ -	\$ 0	\$ -	\$ 1	\$ -	\$ (1,962)
30 Check	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
31 Quarter Variance					\$ (24,725)	
32 Vol Variance					\$ (22,764)	
33 \$ Variance					\$ (1,961)	
34 Check					\$ -	



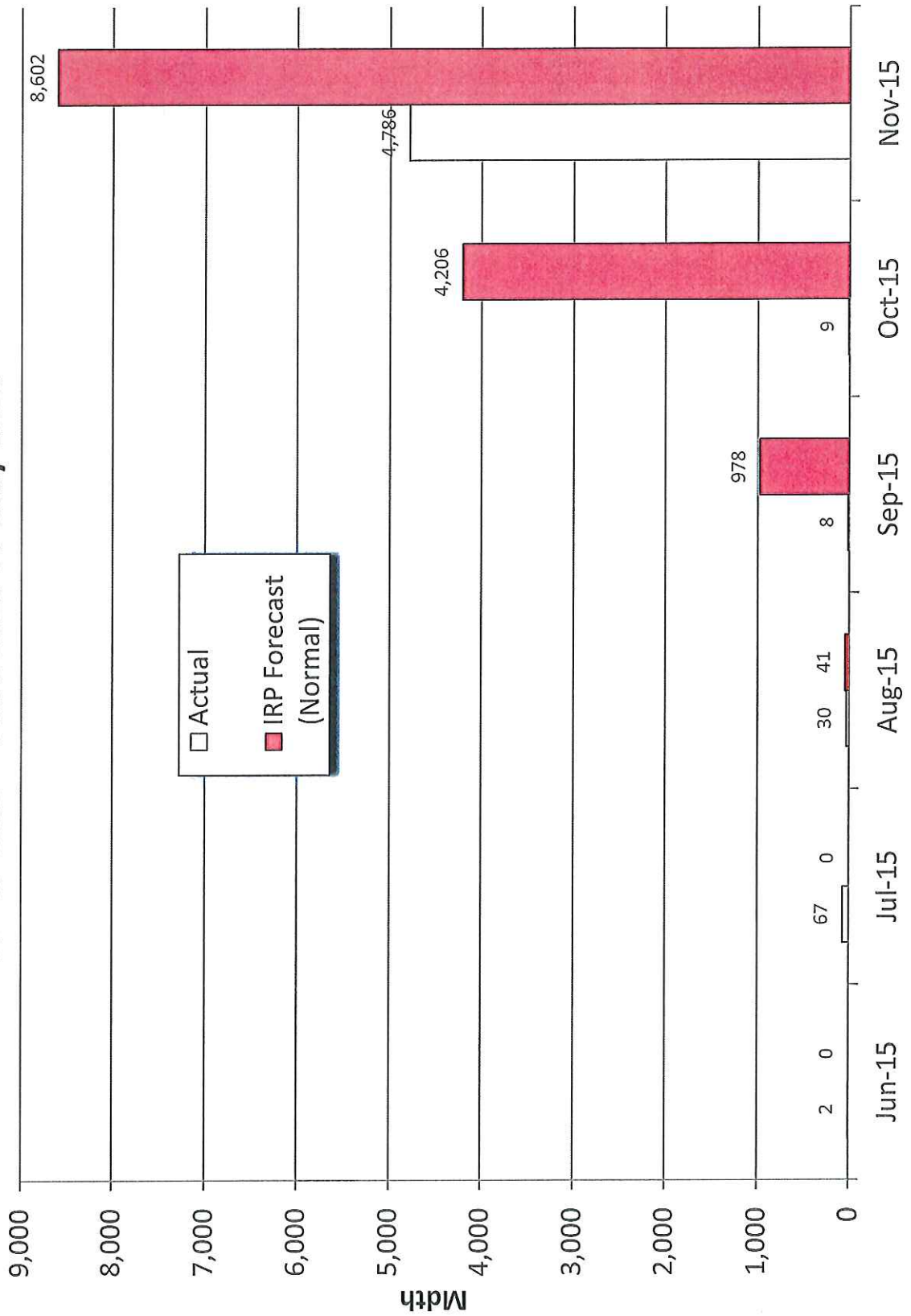
Gas Purchased  
From Third Parties

Volume Variance  
Exhibits 4.1 – 4.3  
Docket No. 15-057-07

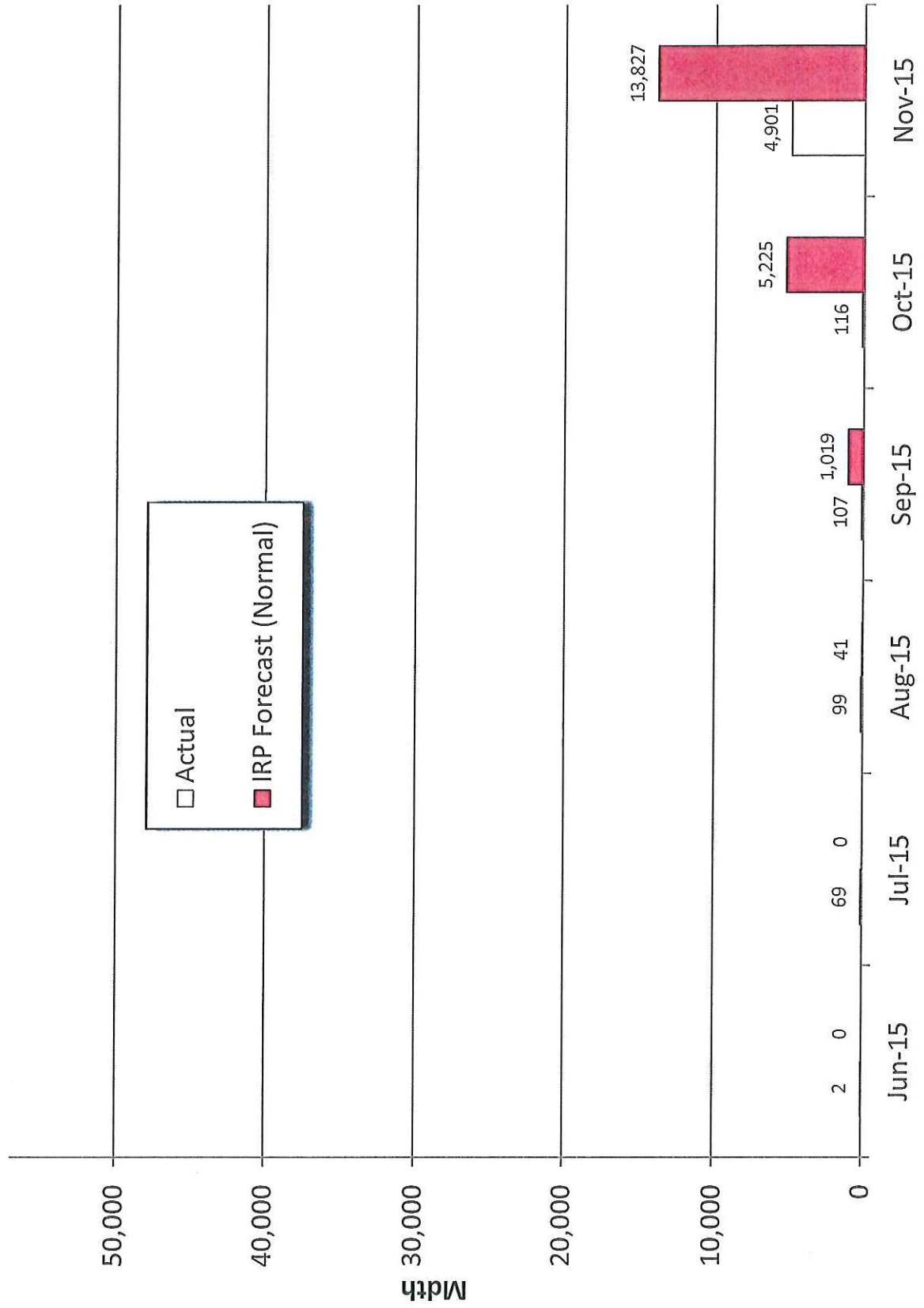
Purchased Gas Variance  
IRP Second Quarter: September to November



# Purchased Gas Variance Year to date - June 2015 to May 2016



# Purchased Gas Variance Cumulative Year-to-date June 2015 to Present



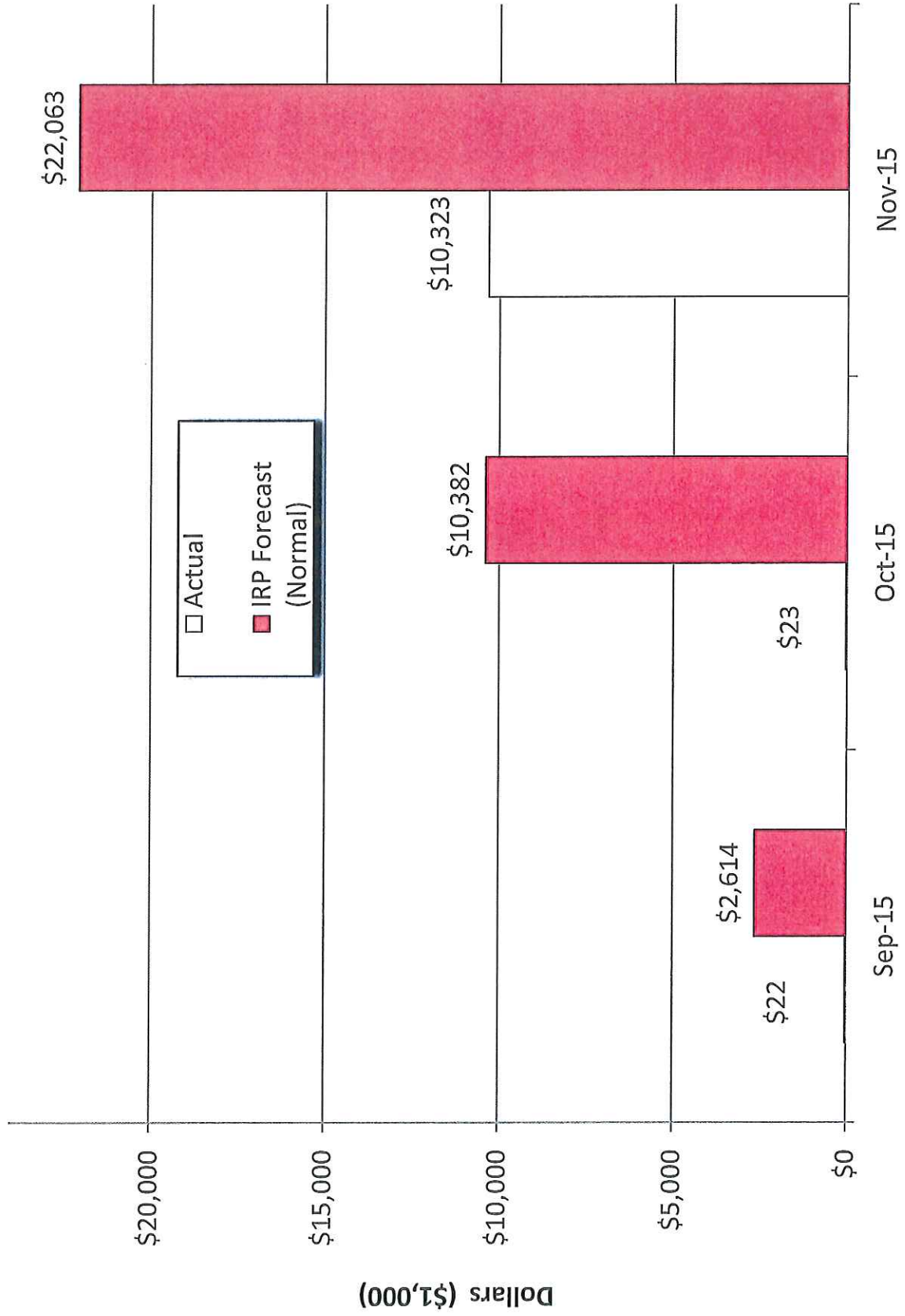


Gas Purchased  
From Third Parties

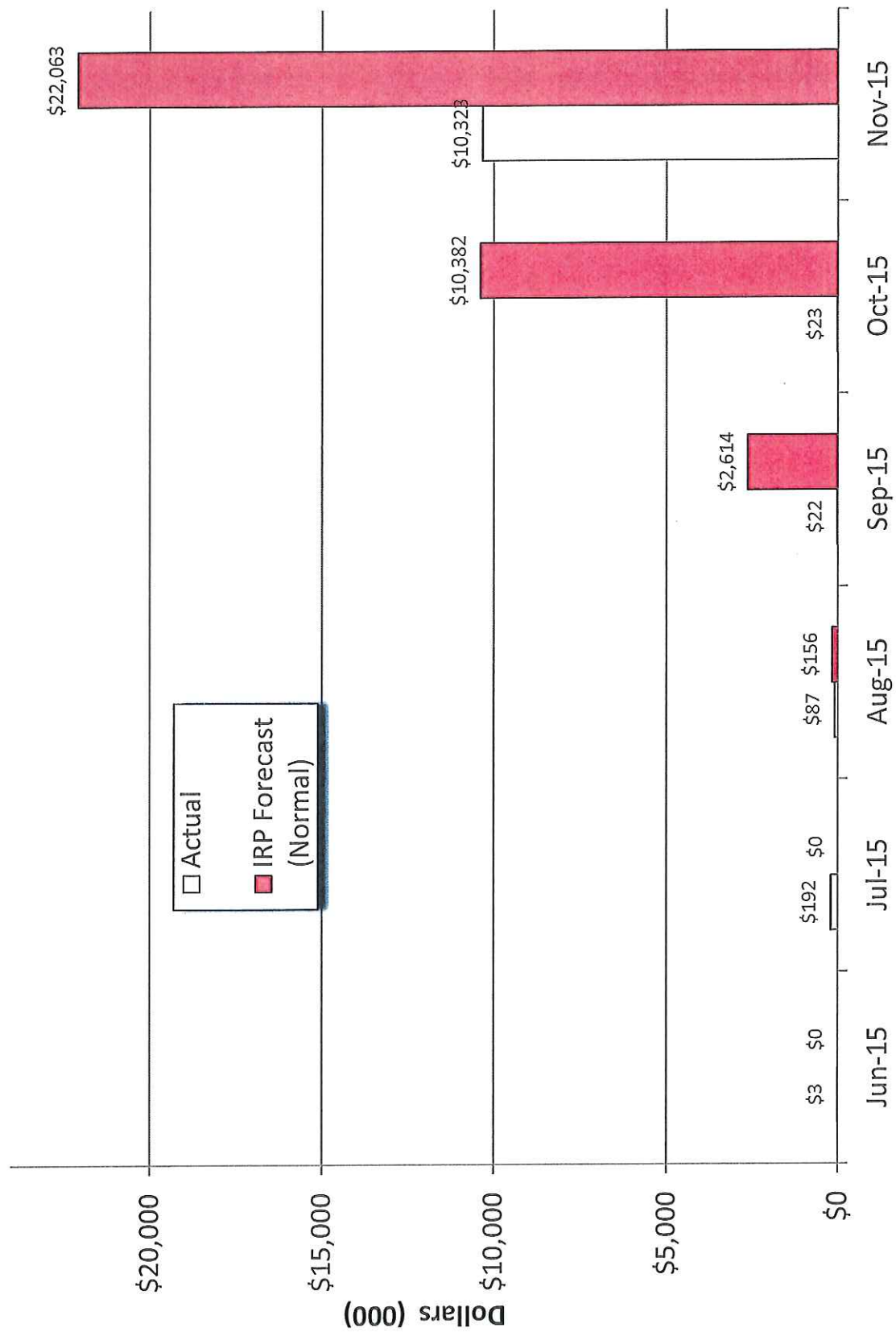
Cost Variance  
Exhibits 5.1 – 5.3  
Docket No. 15-057-07

# Purchased Gas Cost Variance IRP Second Quarter: September to November

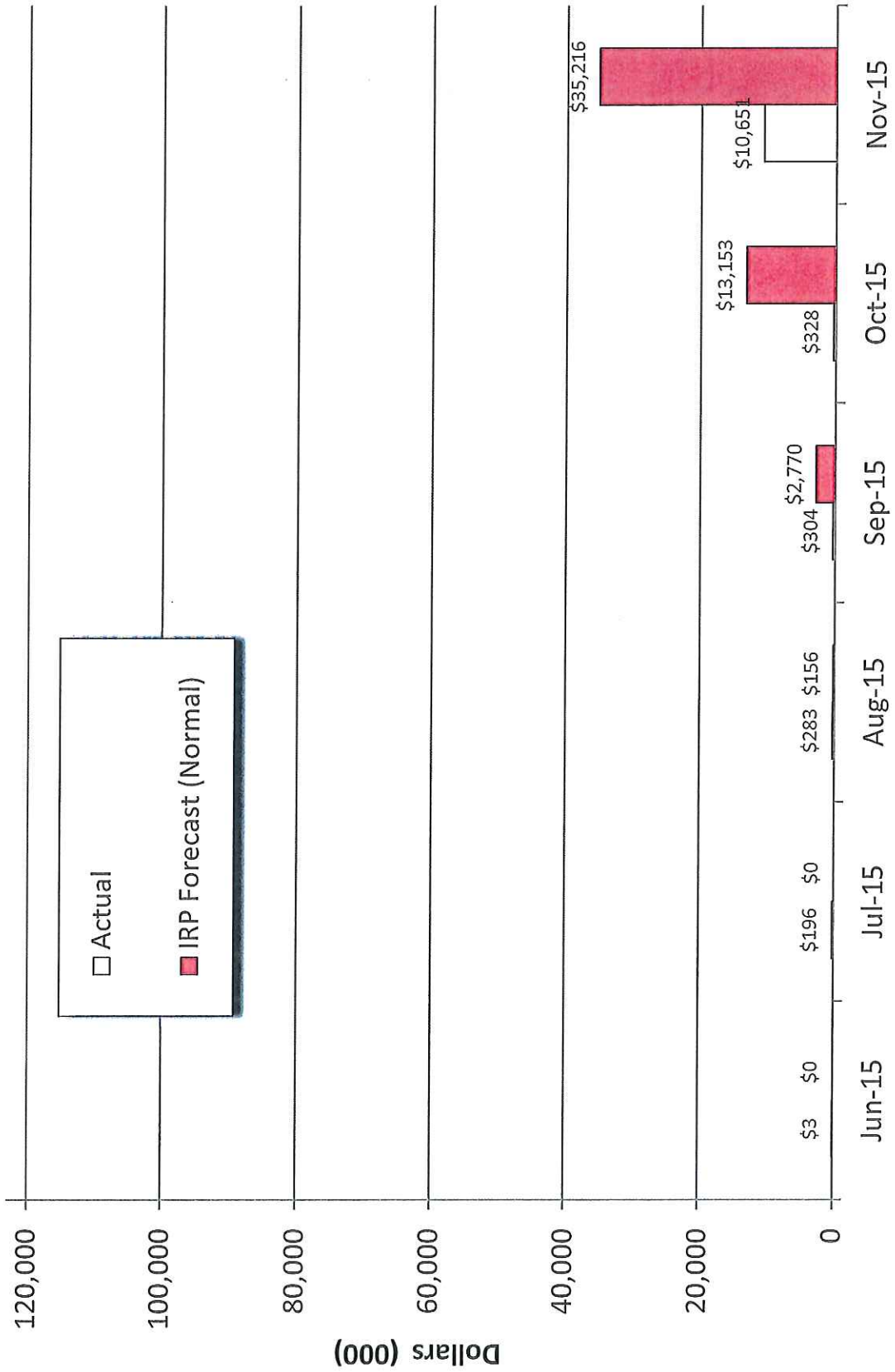
Questar Gas Company  
Docket No. 15-057-07  
QGC Variance Exhibit 5.1



# Purchased Gas Cost Variance Year to date - June 2015 to May 2016



# Purchased Gas Cost Variance Cumulative Year-to-date June 2015 to Present

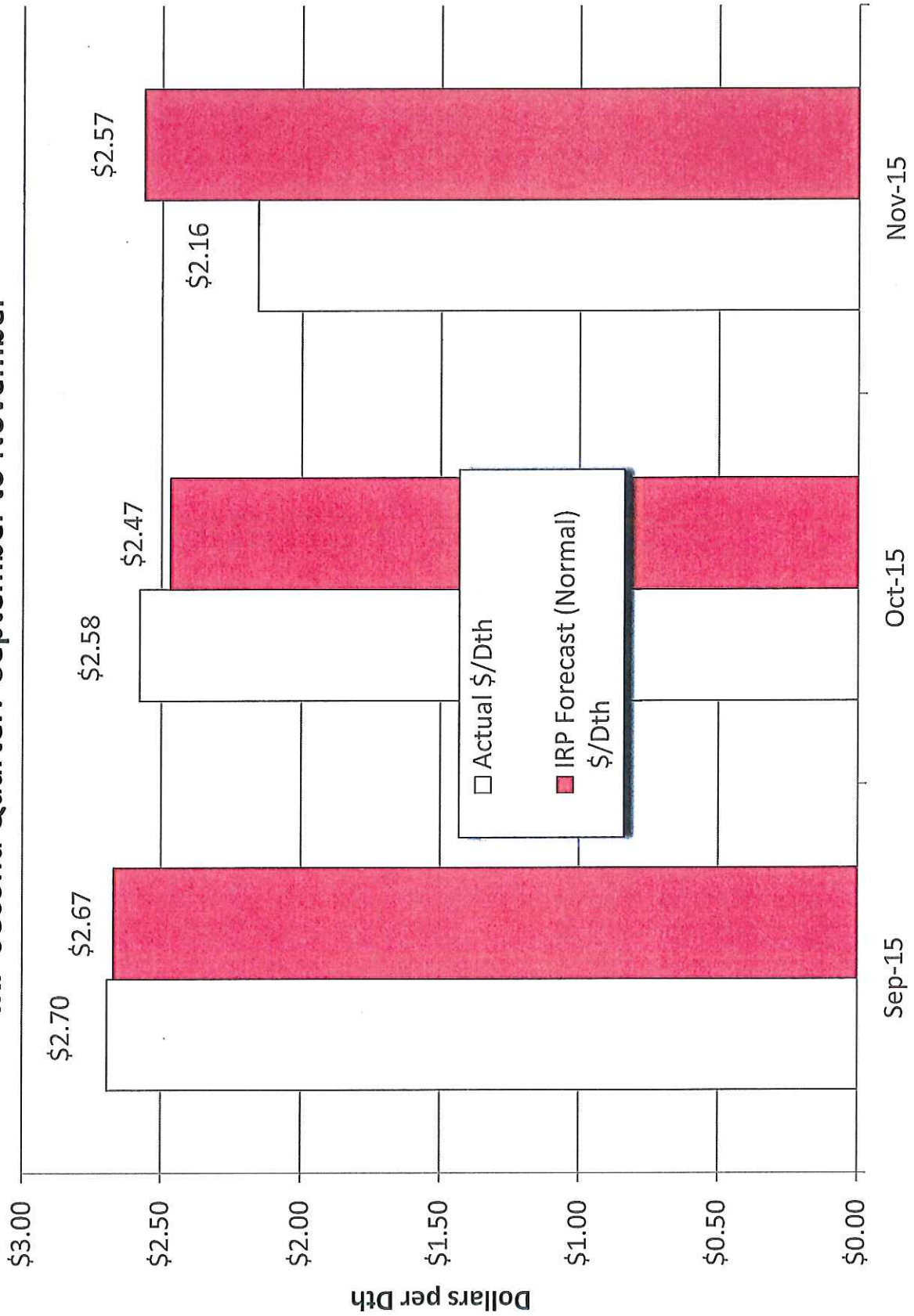




Gas Purchased  
From Third Parties

Unit Cost Variance  
Exhibits 6.1 – 6.2  
Docket No. 15-057-07

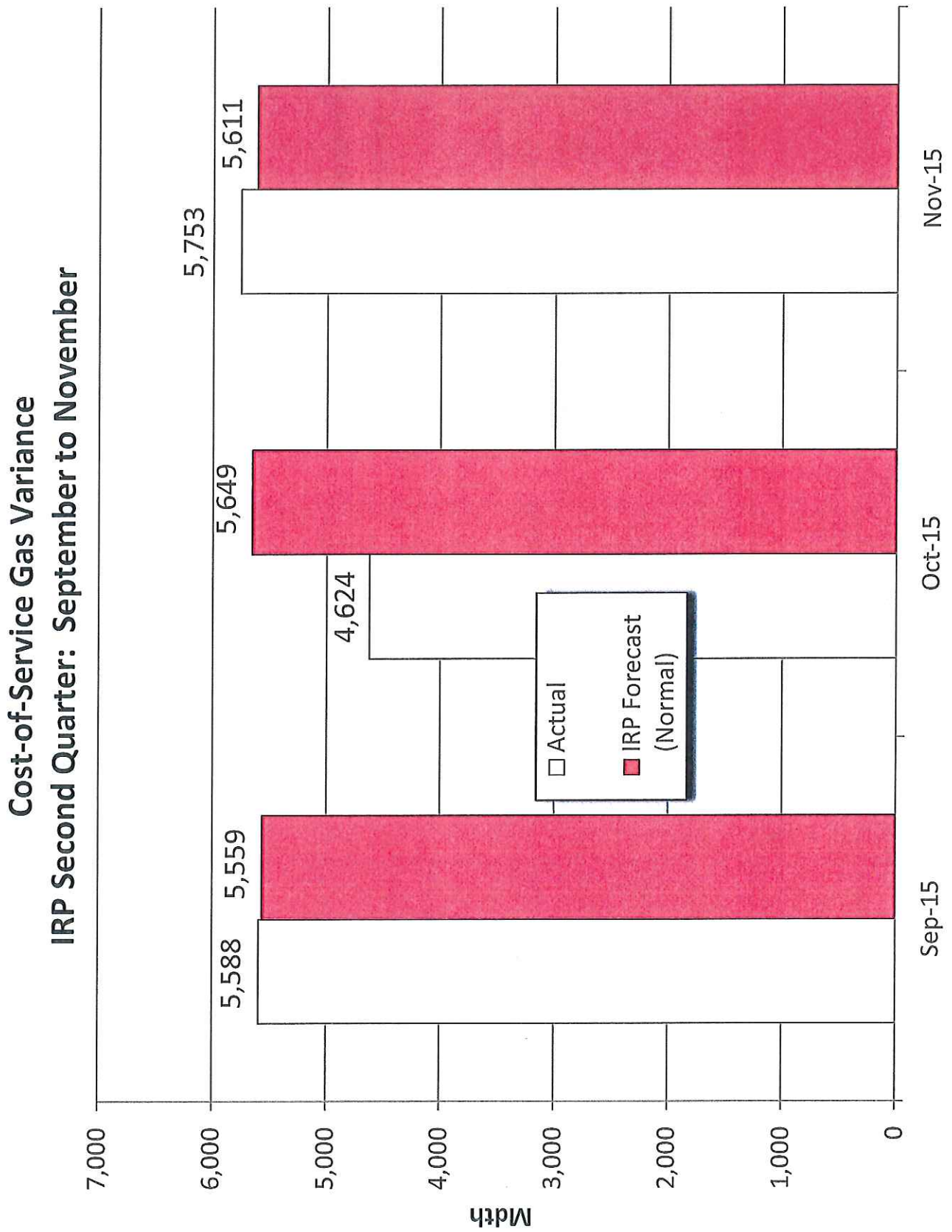
**Purchased Gas Unit Cost Variance**  
**IRP Second Quarter: September to November**



# Purchased Gas Unit Cost Variance Year to date - June 2015 to Present



Cost-of-Service Gas  
Exhibits 7.1 – 7.3  
Docket No. 15-057-07

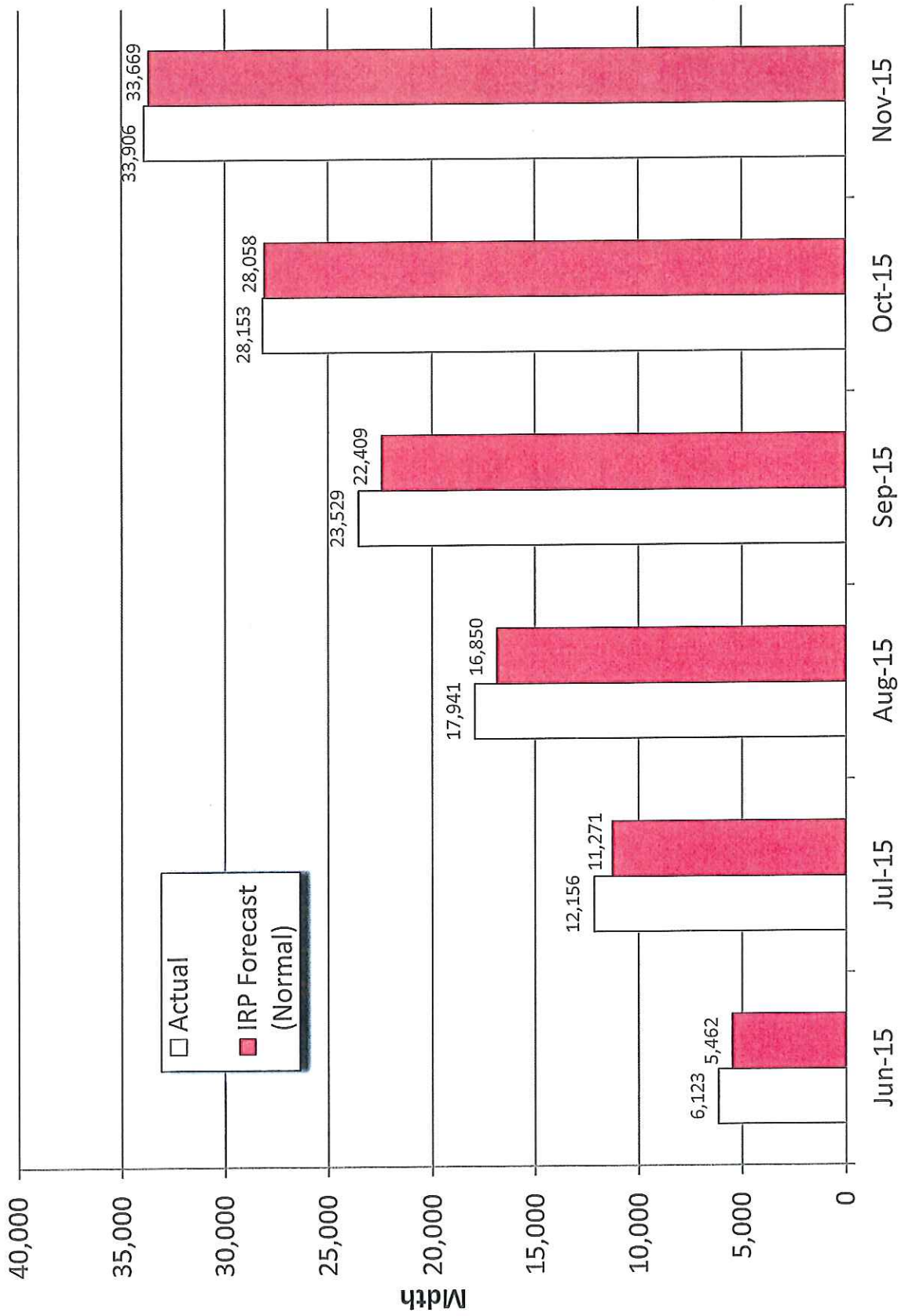




**Cost-of-Service Gas Variance**  
**Year to date - June 2015 to Present**

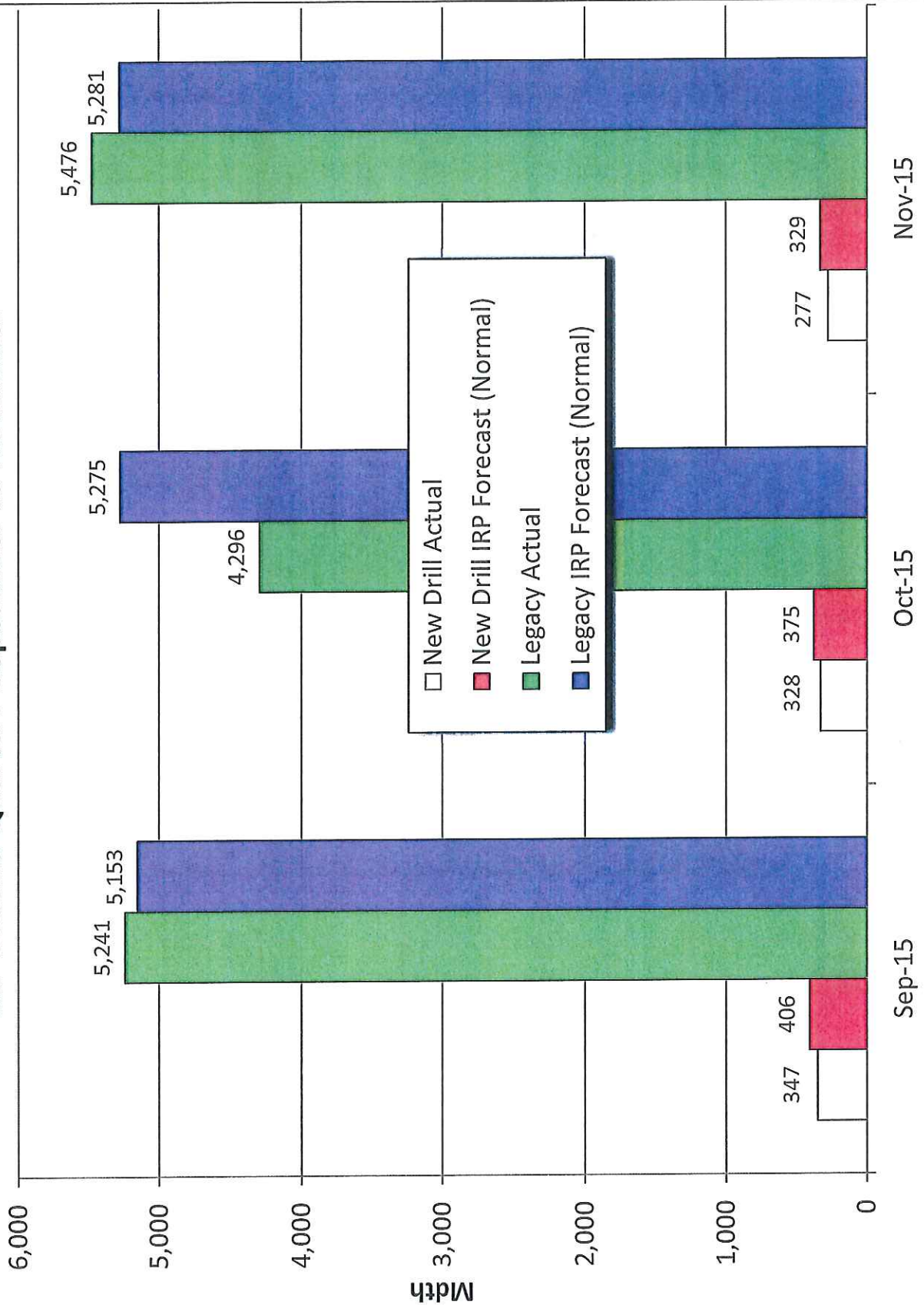


## Cost-of-Service Gas Variance Cumulative Year-to-date June 2015 to Present



Cost-of-Service Gas  
New Drill Component  
Exhibits 8.1 – 8.3  
Docket No. 15-057-07

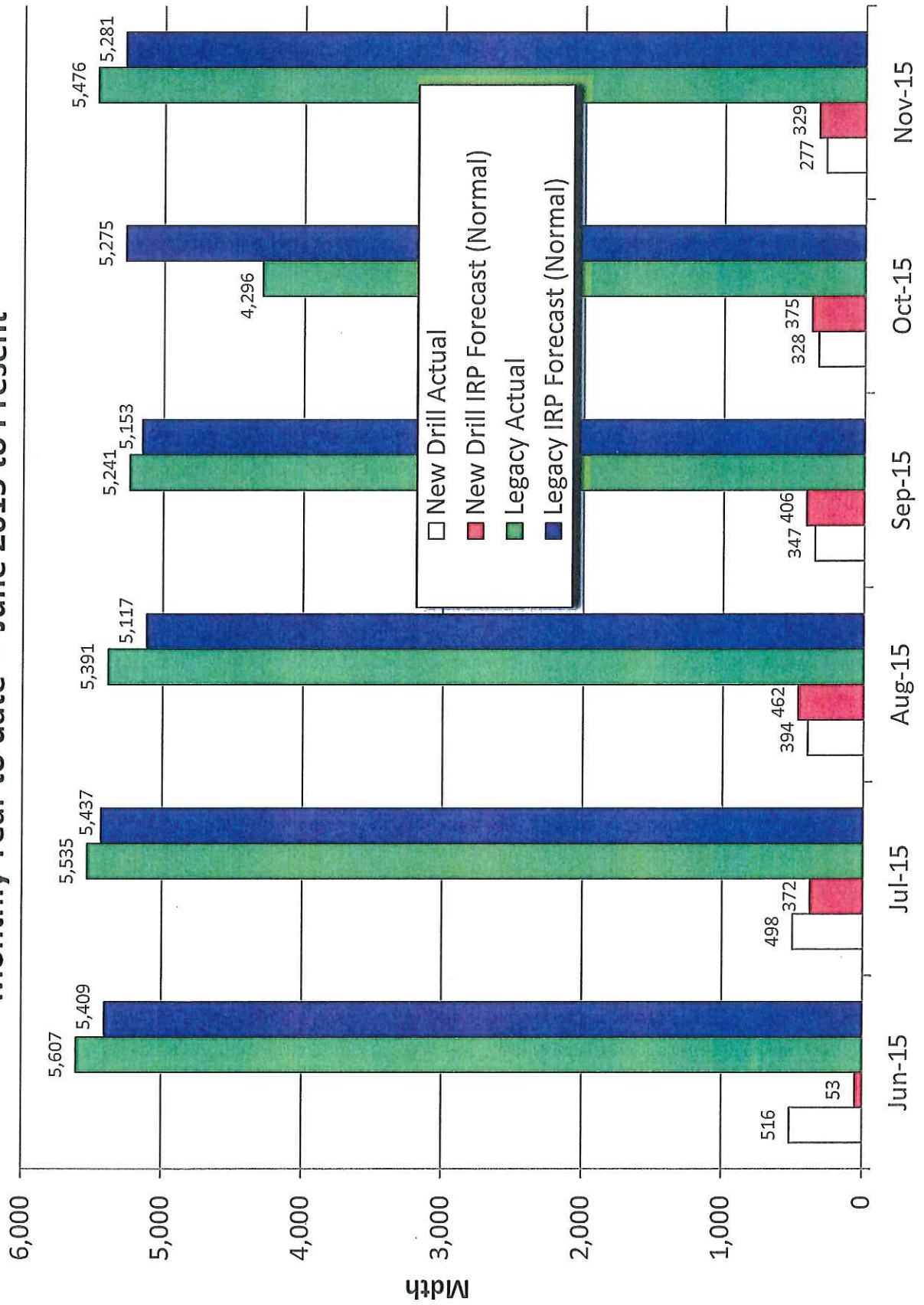
# Cost-of-Service New Drill Component IRP Second Quarter: September to November





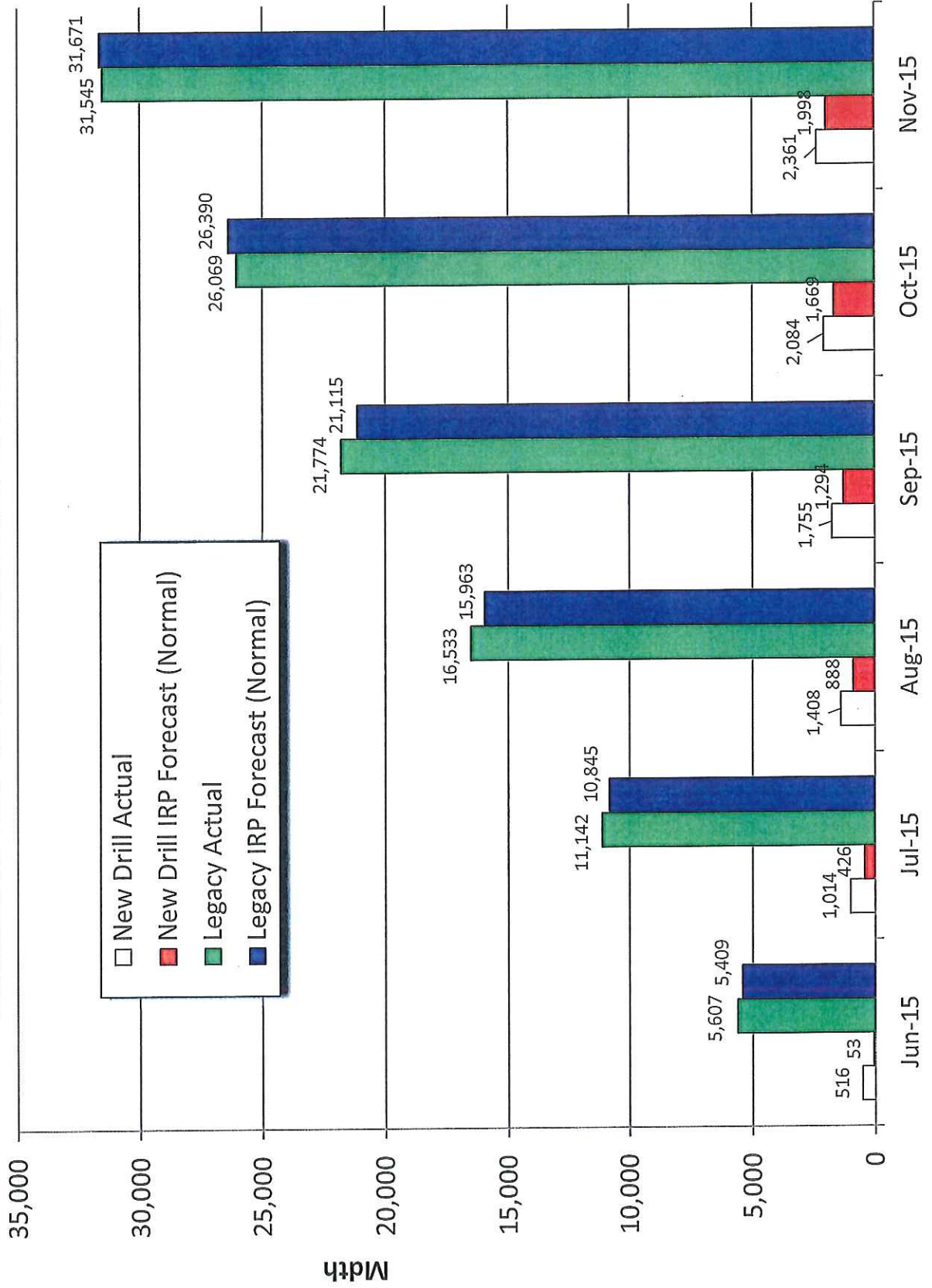
# Cost-of-Service New Drill Component

## Monthly Year to date - June 2015 to Present





# **Cost-of-Service New Drill Component** **Cumulative Year-to-date June 2015 to Present**



Data  
Exhibits 9.1 – 9.3  
Docket No. 15-057-07  
Redacted

## Total Production and New Drill by Nomination Group

**[REDACTED]**

## Total Production and New Drill by Nomination Group

[REDACTED]

## Gas Purchases

[REDACTED]



Purchase Gas and Cost-of-  
Service Gas Price  
Comparison  
Exhibits 10.1 – 10.2  
Docket No. 15-057-07  
Redacted

Purchase Gas vs Cost-of-Service Gas  
Historical

[REDACTED]

Actual Purchased Gas vs TTM Cost-of-Service Gas  
IRP Year 2015

[REDACTED]