June 28th, 2017
Dominion Energy
Technical Conference

Dominion Energy®

OCS Questions

1. Regarding the table on page 5 of Kelly Mendenhall's testimony, please more thoroughly demonstrate how the peak day allocations were derived.

Customer Group	Usage	Percentage
Sales (GS, FS)	1,316,588	86.1%
Transportation (TS,FT-1,MT)	213,201	13.9%
Total	1,529,789	100%

Design Peak Day Demand Means:

- ***Total firm gas consumption*** throughout the day when the mean temperature is -5° fahrenheit

- Firm sales is estimated through ***statistical analysis*** of daily sendout variables that affect consumption

- Firm transportation is the ***summary*** of daily firm contract amounts

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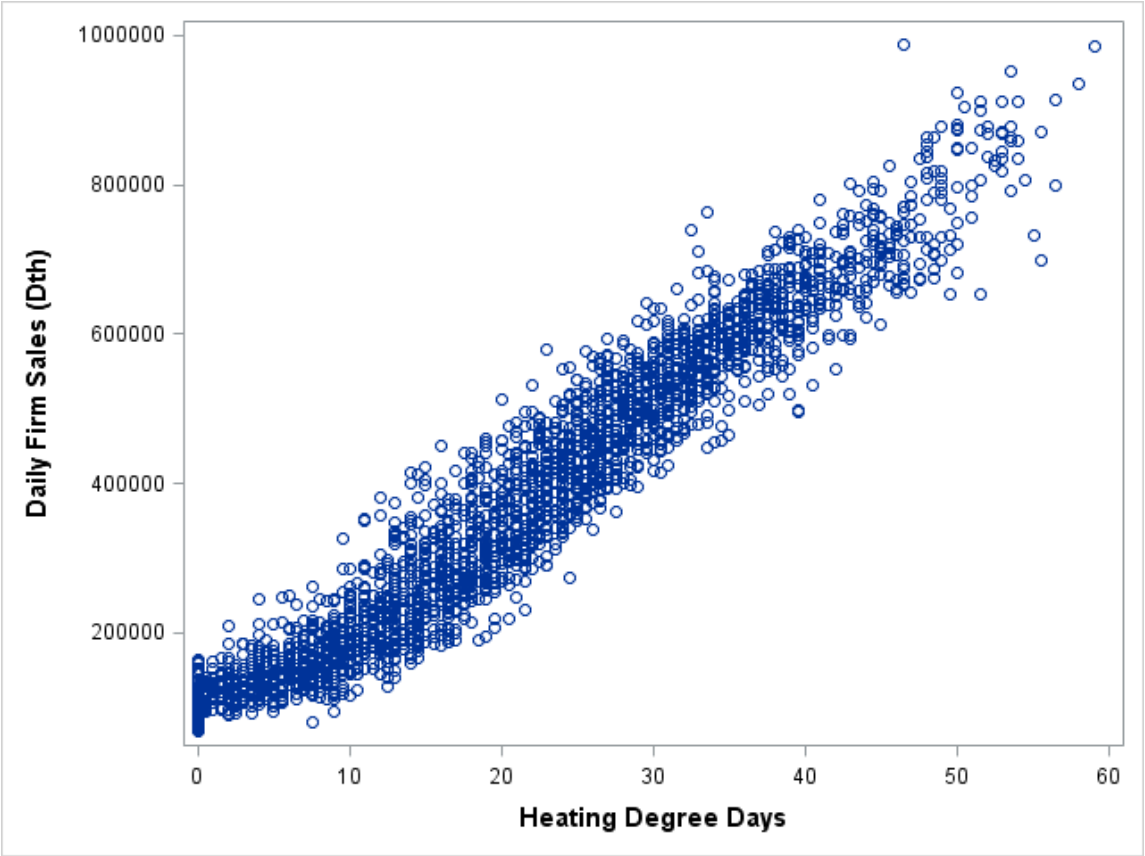
Peak Firm Sales Estimation

Daily Firm Sales Estimation

Variables that affect firm sales are:

- Heating degree days
- Prior day firm sales
- Average wind speed
- Maximum sustained wind speed
- Day of the week (sales lower on Fridays and weekends)
- Holidays (sales lower on winter holidays)



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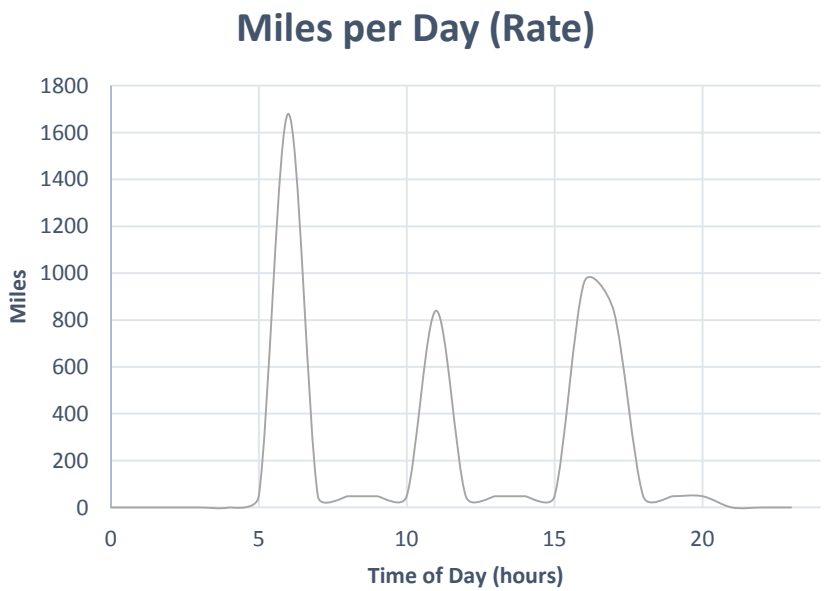
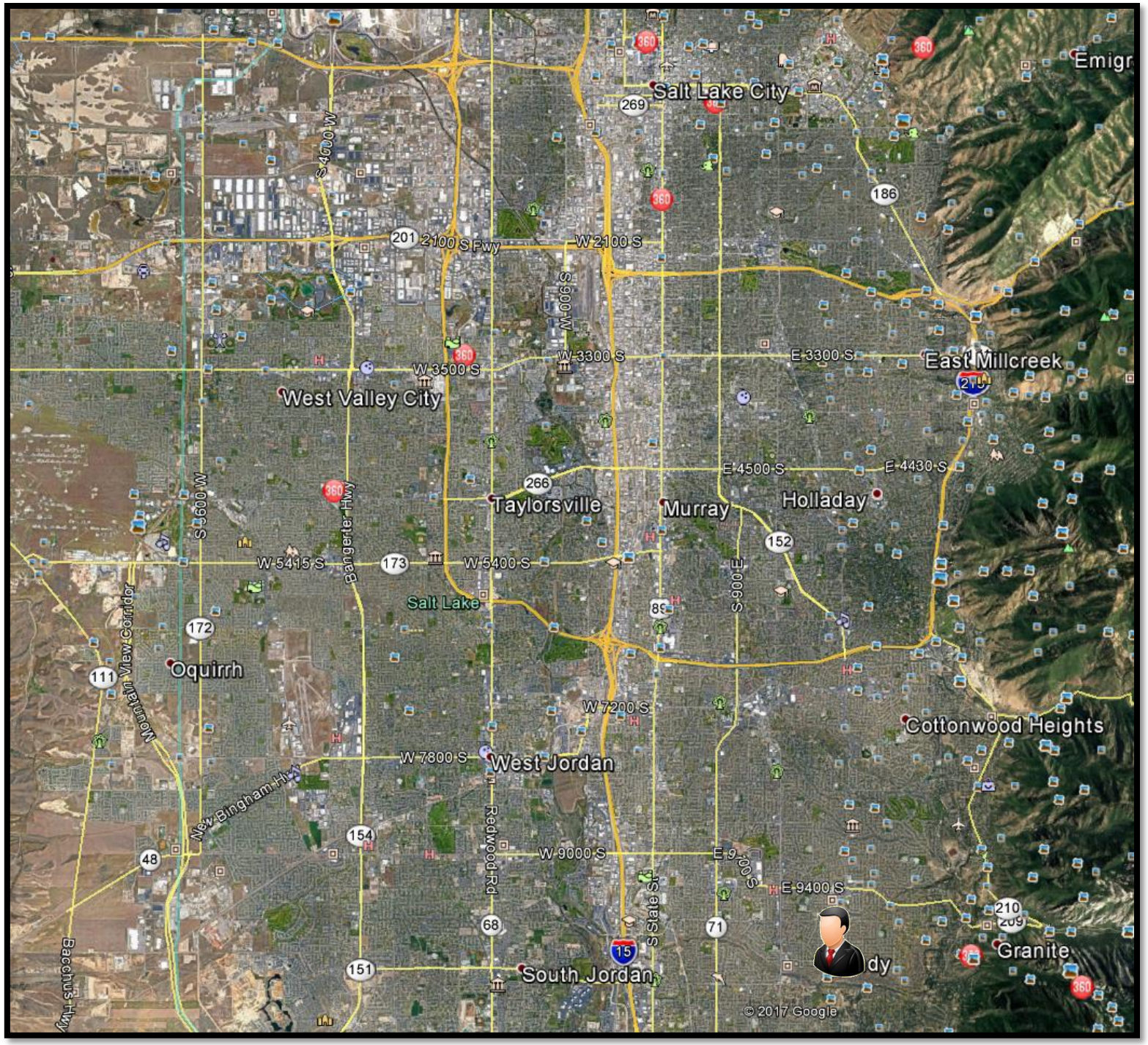
OCS Questions

2. Please explain how the total usage from the table on page 5 of Kelly Mendenhall's testimony relates to the estimated peak day hourly volumes demonstrated in Exhibit 1.3

Customer Group	Usage	Percentage
Sales (GS, FS)	1,316,588	86.1%
Transportation (TS,FT-1,MT)	213,201	13.9%
Total	1,529,789	100%


Miles
45
40
35
30
25
20
15
10
5
0
Miles
0
5
10
15
20
Time of Day (hours)
Distance
Cumulative Distance
Miles Per Day


Miles per Day (Rate)
1800
1600
1400
1200
1000
800
600
400
200
0
Miles
0
5
10
15
20
Time of Day (hours)


Salt Lake City
West Valley City
Taylorsville
Murray
Holladay
East Millcreek
Cottonwood Heights
West Jordan
South Jordan
Granite
Oquirrh
Salt Lake
W 2100 S
W 3500 S
W 3300 S
E 3300 S
E 4500 S
E 4430 S
W 5415 S
W 5400 S
W 7200 S
W 7800 S
W 9000 S
E 9400 S
S 4000 W
S 3600 W
S 1600 W
S 900 E
Bangerter Hwy
Mountain View Corridor
New Bingham Hwy
Redwood Rd
S State St
Bacchus Hwy
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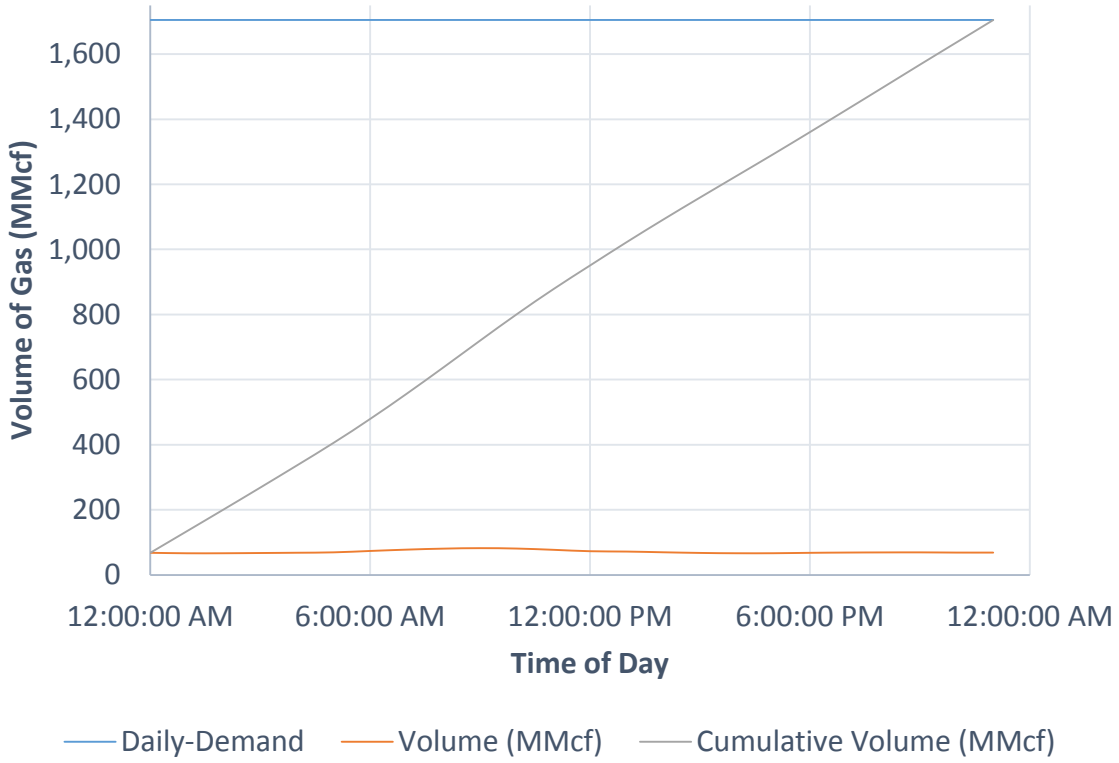
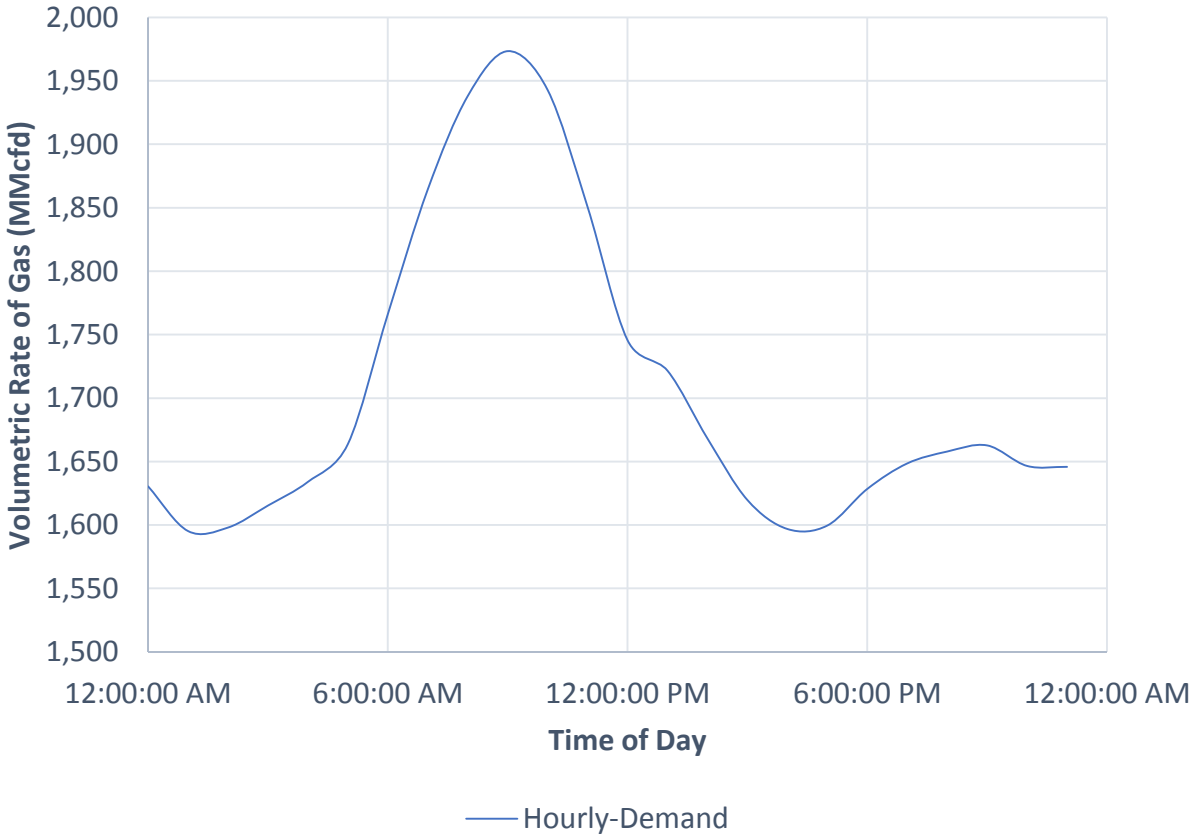
Connecting it Together

- Miles per Day = Daily Volume
  - The colder it gets, the further we go
- Traveling Speed = Hourly Rate
- Speed Limit = System Capacity

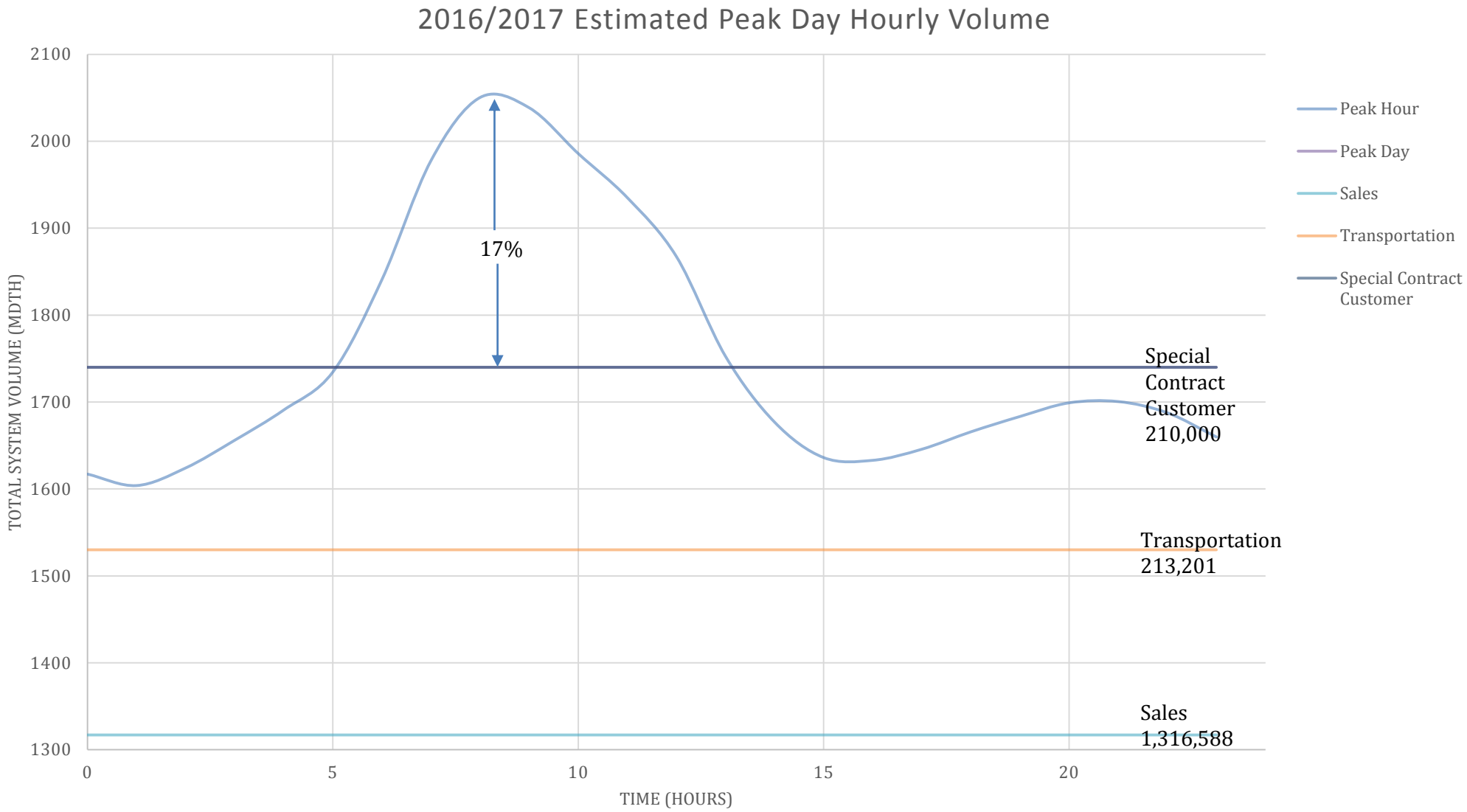

1,600
1,400
1,200
1,000
800
600
400
200
0
Volume of Gas (MMcf)
12:00:00 AM
6:00:00 AM
12:00:00 PM
6:00:00 PM
12:00:00 AM
Time of Day
Daily-Demand
Volume (MMcf)
Cumulative Volume (MMcf)


2,000
1,950
1,900
1,850
1,800
1,750
1,700
1,650
1,600
1,550
1,500
Volumetric Rate of Gas (MMcfd)
12:00:00 AM
6:00:00 AM
12:00:00 PM
6:00:00 PM
12:00:00 AM
Time of Day
Hourly-Demand

OCS Questions

2. Please explain how the total usage from the table on page 5 of Kelly Mendenhall's testimony relates to the estimated peak day hourly volumes demonstrated in Exhibit 1.3

Customer Group	Usage	Percentage
Sales (GS, FS)	1,316,588	86.1%
Transportation (TS,FT-1,MT)	213,201	13.9%
Total	1,529,789	100%


2016/2017 Estimated Peak Day Hourly Volume
TOTAL SYSTEM VOLUME (MDTH)
2100
2000
1900
1800
1700
1600
1500
1400
1300
0
5
10
15
20
TIME (HOURS)
17%
Special Contract Customer 210,000
Transportation 213,201
Sales 1,316,588
Peak Hour
Peak Day
Sales
Transportation
Special Contract Customer

OCS Questions

3. Please explain the significance of Wasatch and Non-Wasatch volumes and how they are applied in the allocations and rate calculation.

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1. Beginning on line 105, Dominion Energy Utah (DEU) discusses how peak day usage is calculated. On lines 105 through 107 it reads, “Both the transportation and sales customers’ peak hour demands are added together to calculate the total peak day demand.” If Peak Day is calculated by summing the peak hour demands, please explain the distinction between "peak hour" demand and "peak day" demand.

While the transportation customers use almost one quarter of the gas consumed in Utah during the winter heating season, I am proposing to allocate them a smaller portion of the peak hour service costs by allocating these costs based on their peak day usage.

Q. How is the peak day usage calculated?

A. The peak day calculation includes both transportation and sales volumes. Each transportation customer contracts for a certain amount of firm transportation service per day. This contractual amount is aggregated for all transportation customers to determine the total firm demand for the transportation class. For sales customers a statistical algorithm is used to determine their overall usage on a peak day. As explained in the Company's IRP section 3, the statistical algorithm includes inputs such as historical usage, temperature and wind speed to determine what the sales customer usage would be during a peak event. Both the transportation and sales customer's peak ~~hour~~ day demands are added together to calculate the total peak day demand.

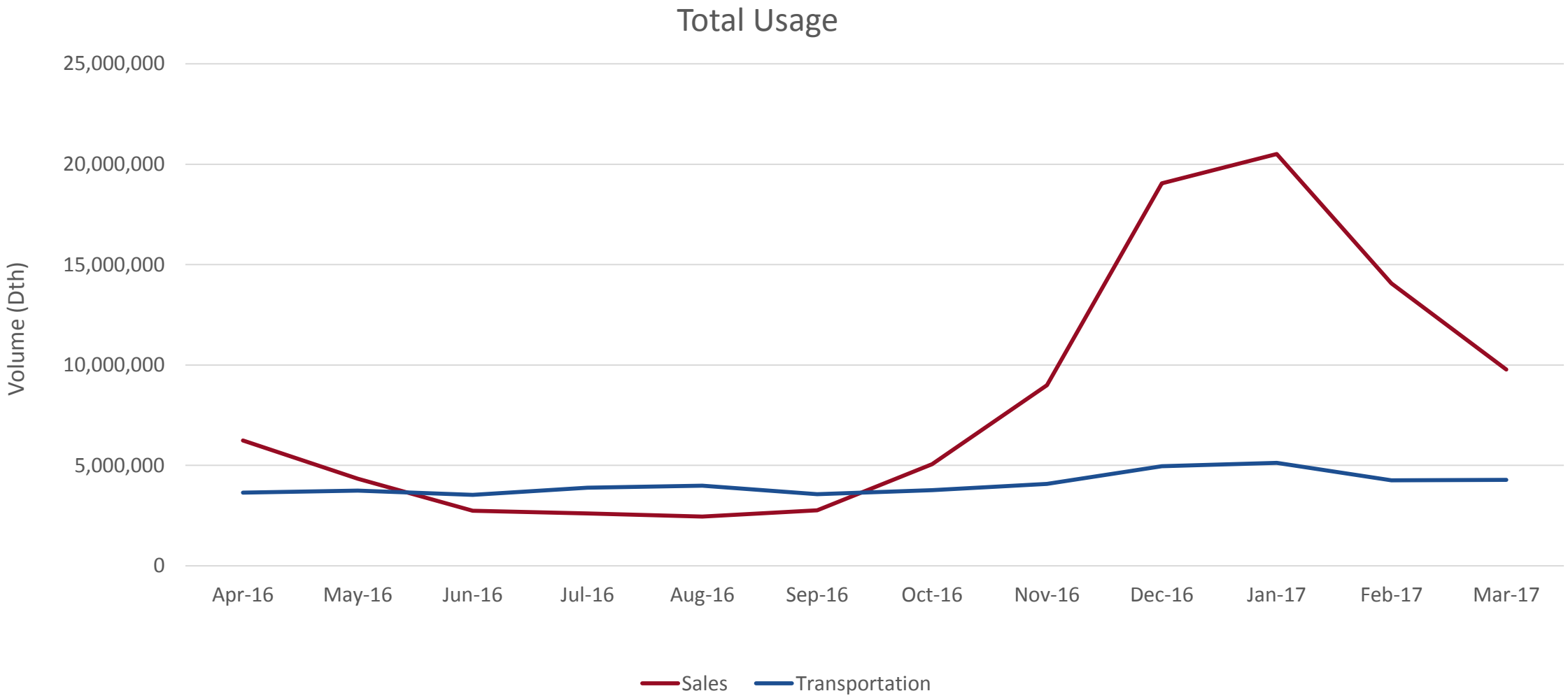
2. Line 89 refers to non-weather sensitive usage. Please explain how DEU calculates non-weather sensitive usage for transportation customers

- Lowest daily usage in July or August 2016
  - TS customers (excluding Lakeside) 49,053 DTH

- Average daily usage in July and August
  - TS customers (excluding Lakeside) 182,369 DTH

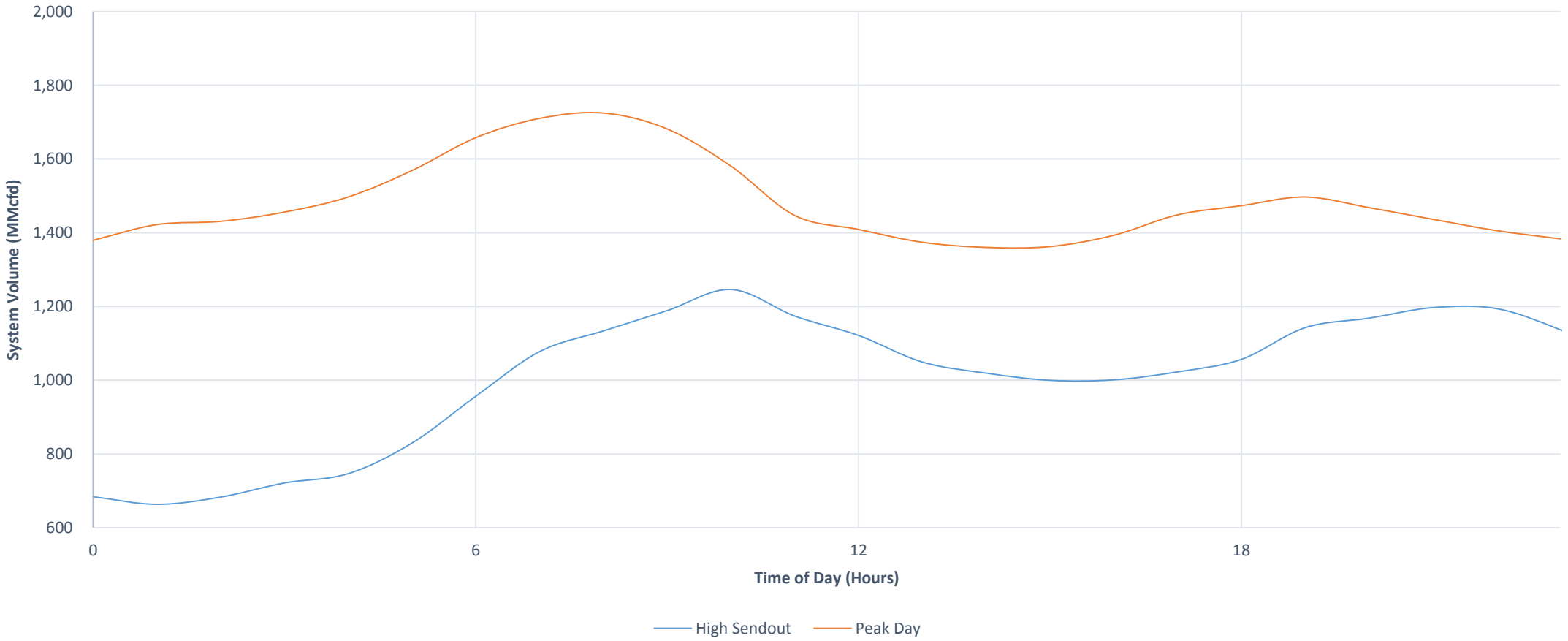
- Median daily usage in July and August
  - TS customers (excluding Lakeside) 92,329 DTH

- Highest usage from Jan 2016 – Jan 2017
  - TS customers (excluding Lakeside) 441,829 DTH


Total Usage
25,000,000
20,000,000
15,000,000
10,000,000
5,000,000
0
Volume (Dth)
Apr-16
May-16
Jun-16
Jul-16
Aug-16
Sep-16
Oct-16
Nov-16
Dec-16
Jan-17
Feb-17
Mar-17
Sales
Transportation

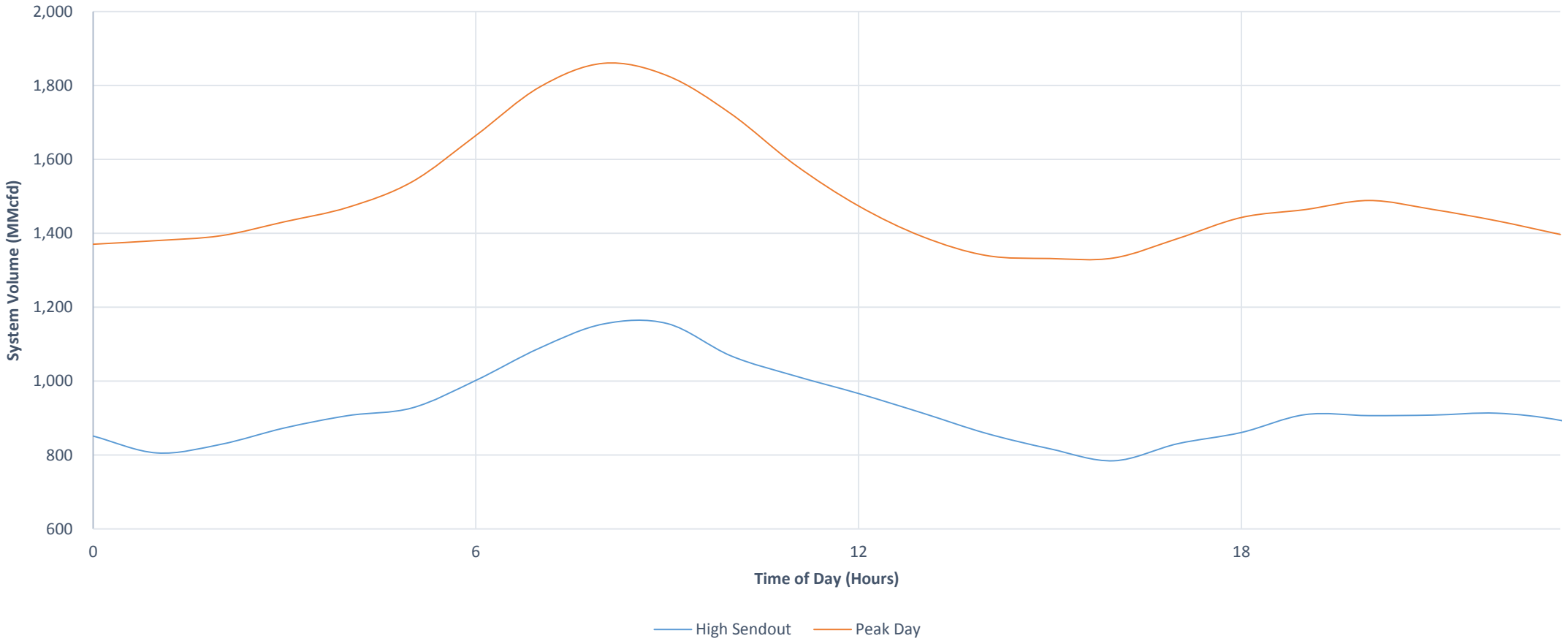
3. Exhibit 1.2, Projected Peak Day Hourly Volumes, provides historical estimates of projected peak day hourly volumes from the 2010/11 through 2016/17 heating seasons:
    a. Please discuss how forecasts for these years have compared with the actual peak day volumes.
    b. There appears to be a significant jump in forecast peak day hourly volumes between the first five years of the graph and the last two years. Please explain the reason underlying these increases.

2010-11 Peak Day Vs. High Sendout



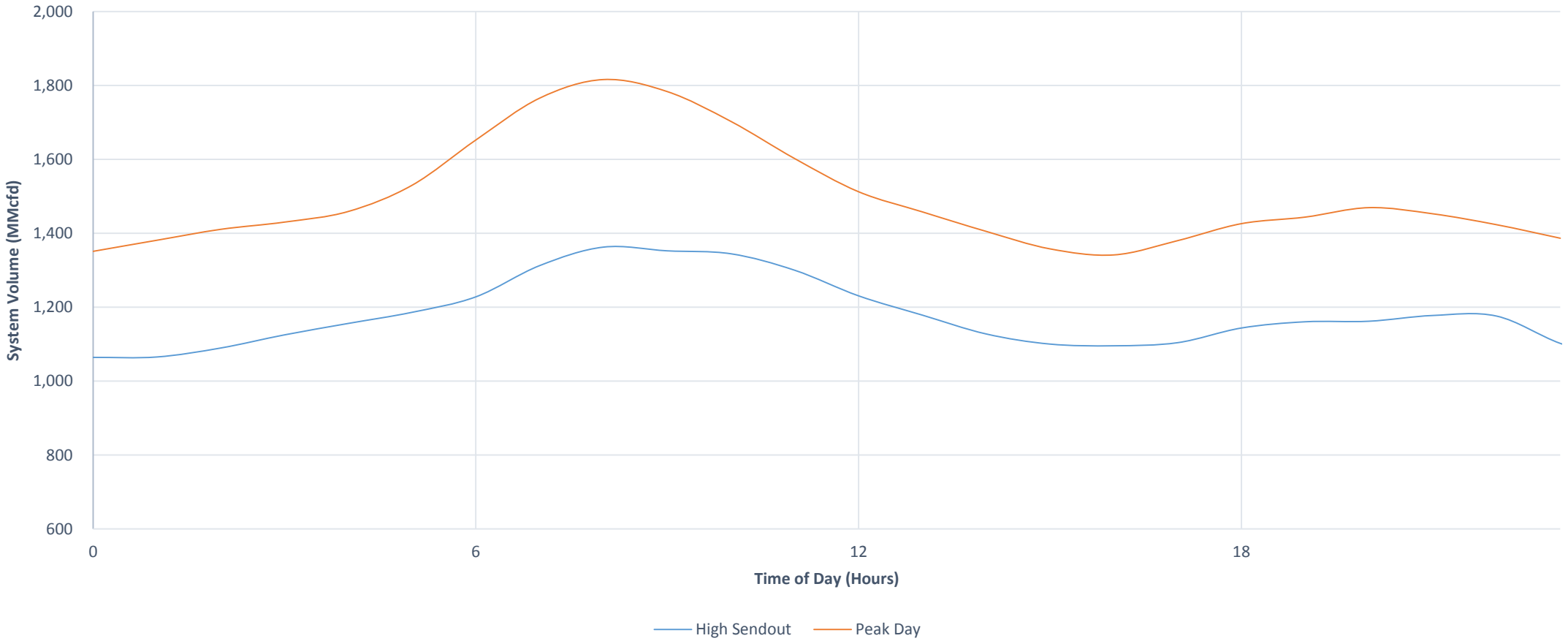
2/1/2011
19°F Mean

2011-12 Peak Day Vs. High Sendout



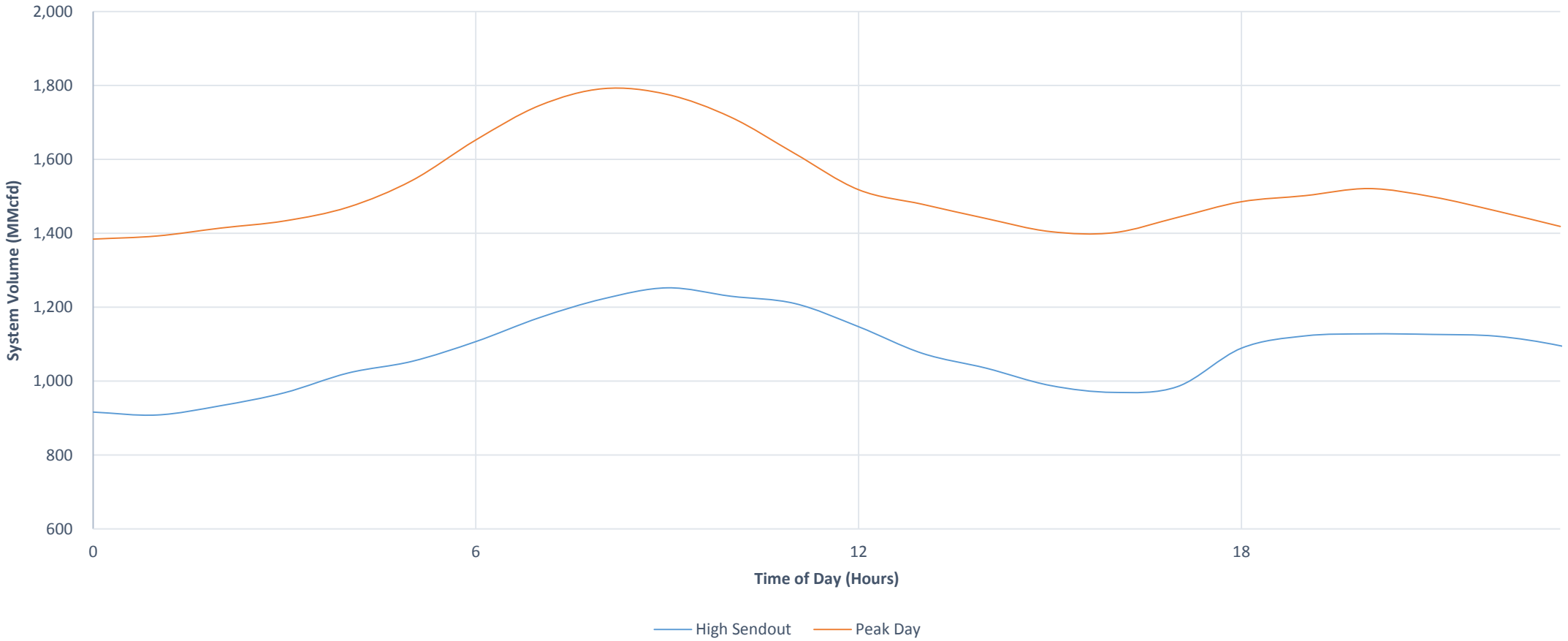
12/6/2011
24°F Mean

2012-13 Peak Day Vs. High Sendout



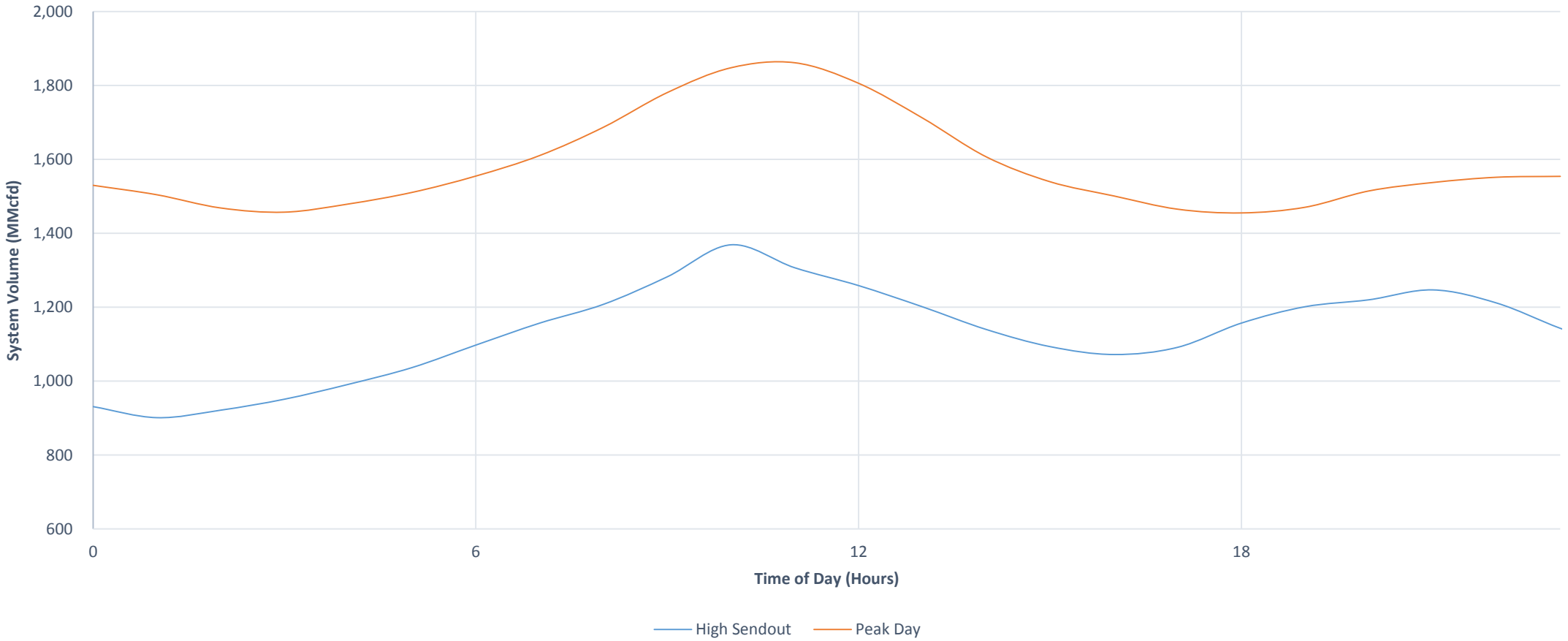
1/14/2013
6°F Mean

2013-14 Peak Day Vs. High Sendout



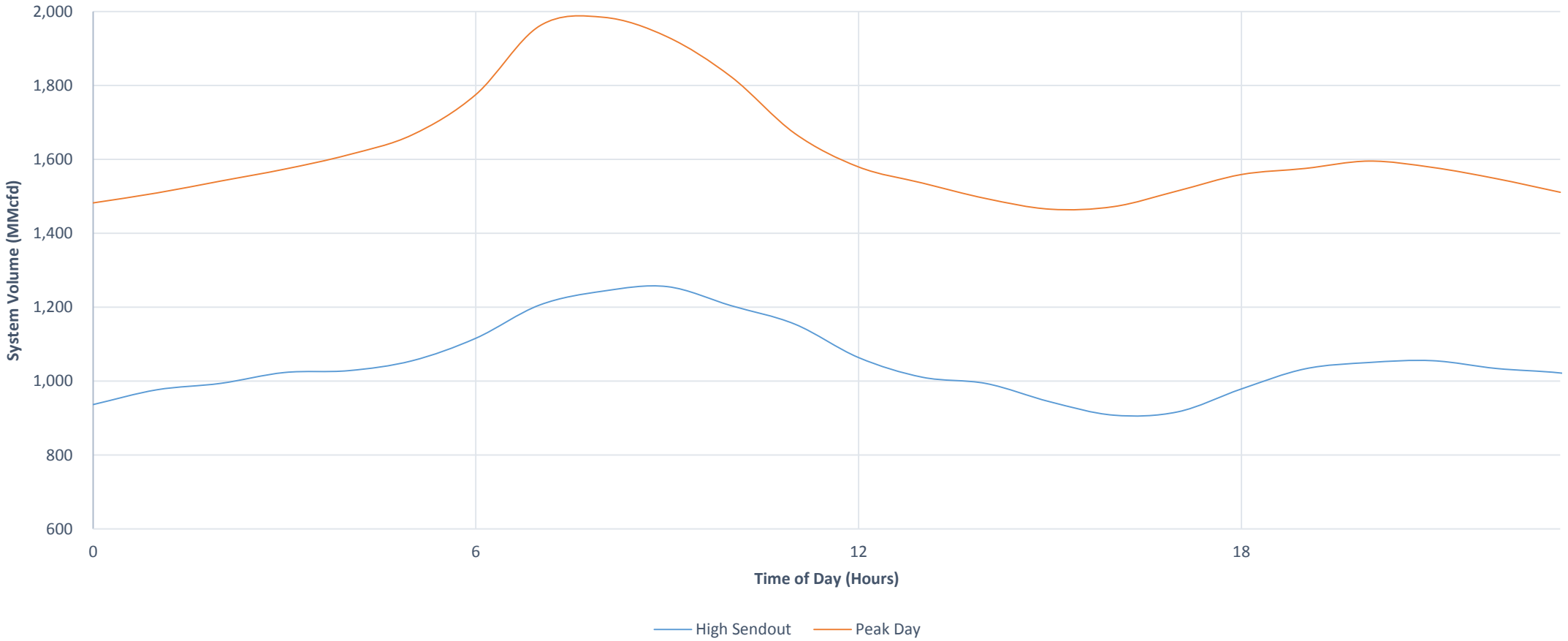
12/13/2013
20°F Mean

2014-15 Peak Day Vs. High Sendout



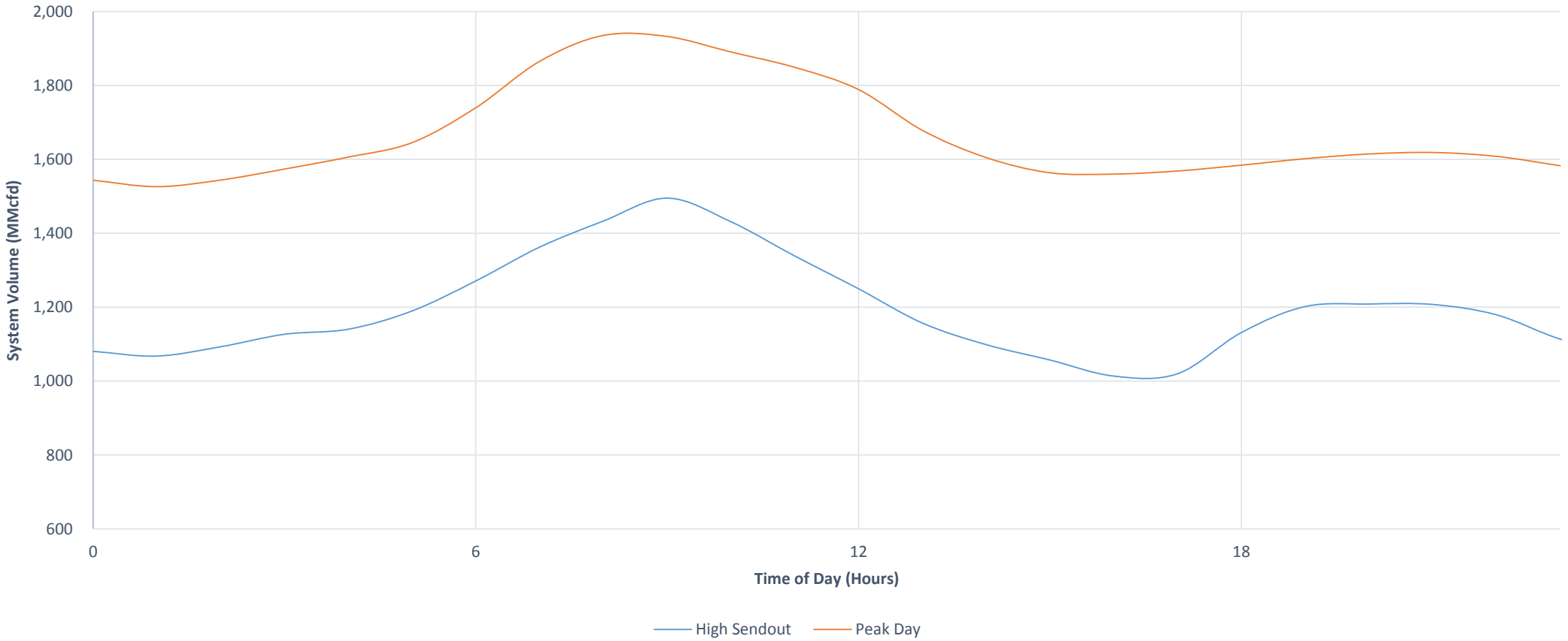
12/30/2014
11°F Mean

2015-16 Peak Day Vs. High Sendout



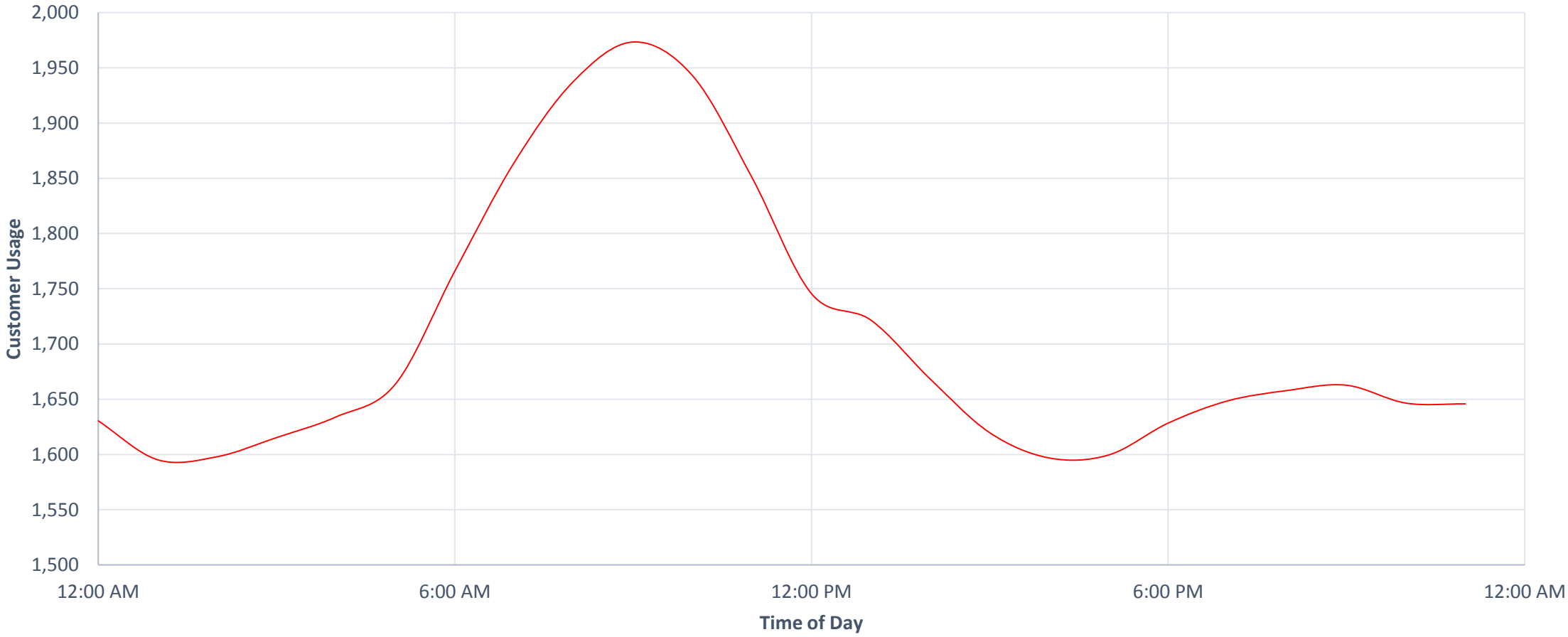
1/1/2016
12°F Mean

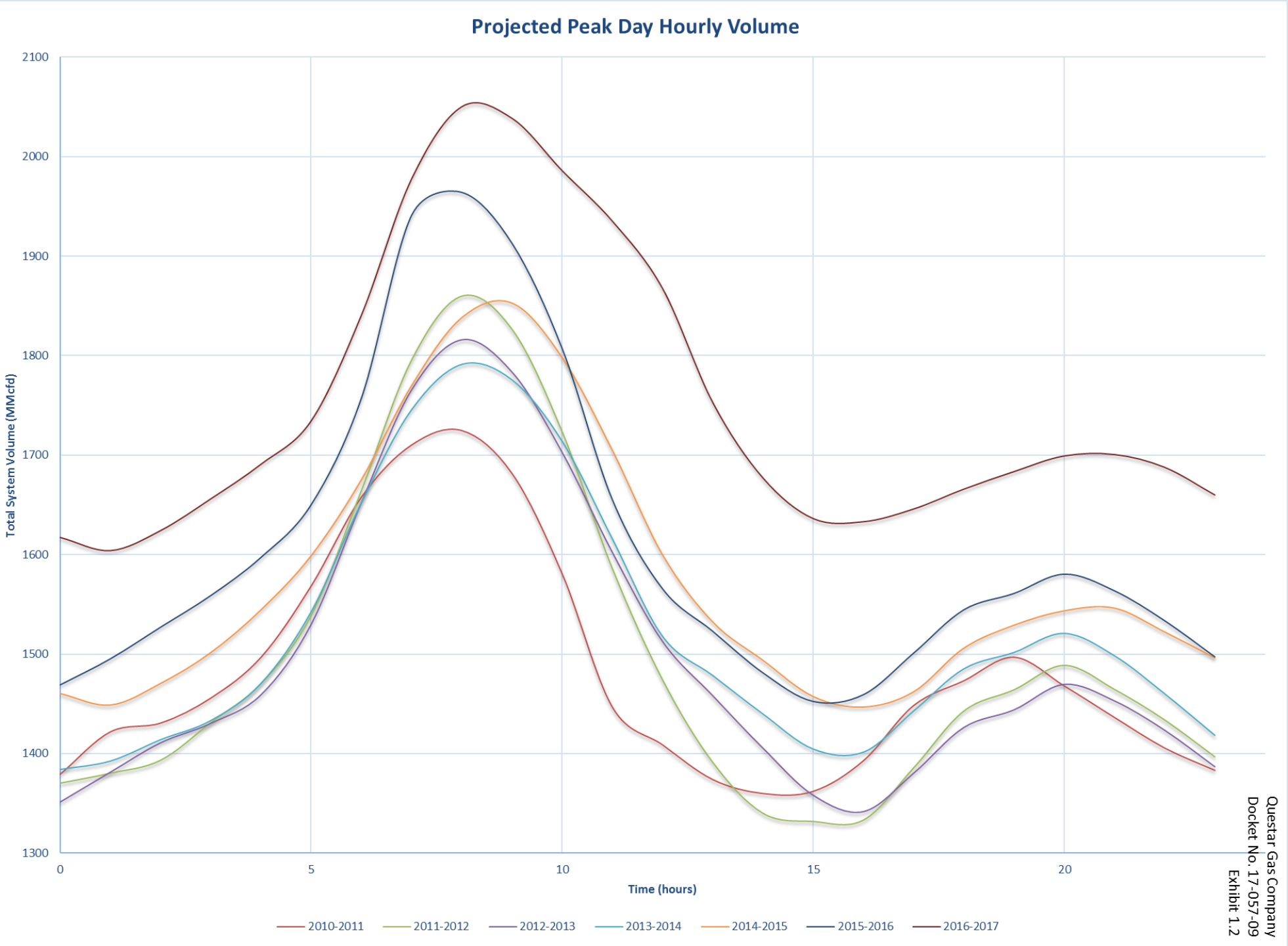
2016-17 Peak Day Vs. High Sendout



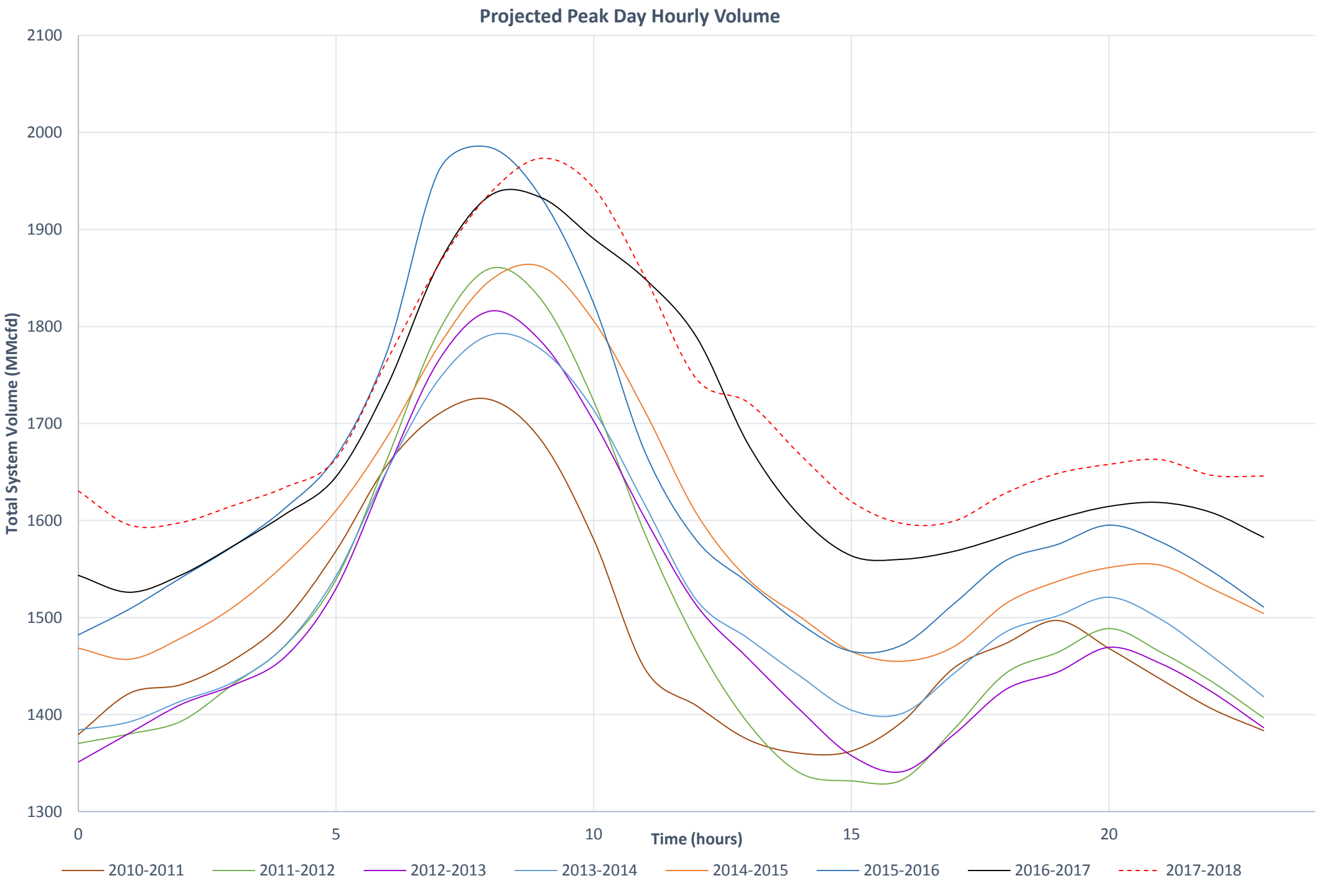
1/6/2017
6°F Mean

2017-2018 Peak Day





Questar Gas Company
Docket No. 17-057-09
Exhibit 1.2


Projected Peak Day Hourly Volume
Total System Volume (MMcfd)
2100
2000
1900
1800
1700
1600
1500
1400
1300
0
5
10
15
20
Time (hours)
2010-2011
2011-2012
2012-2013
2013-2014
2014-2015
2015-2016
2016-2017
2017-2018

4. Exhibit 1.5, Daily and Hourly Usage Ex. Lakeside Spreadsheet: 'Data by Hour' tab displays hourly data for several classifications of customers, i.e., TS Large Non-Wasatch, TS Small Non-Wasatch, TS small Wasatch, TS Large Wasatch, Systemwide Total, etc.:

   a. Please define what each category of the spreadsheet represents.

   b. Pertaining to the column "Systemwide less TS," when subtracting "TS Total" values from "Systemwide Total" values, the results appear to be different than the values provided in the "Systemewide less TS" column. Please explain the apparent discrepancy. ***It was labeled incorrectly. Label should have read "System wide less Lakeside volumes".***

5. Proposed revisions to the MT rate schedule: The new “Annual Peak Hour Demand Charge” is presented as $0.56 but is not provided on a monthly basis. Also, the charge is included under the administrative charge section. Should it more appropriately be included under a new Firm Demand Charge per Dth (see §5.01) section?

5.06 MT RATE SCHEDULE

MT RATE

	Rates Per Dth Used Each Month Dth = decatherm = 10 therms = 1,000,000 Btu
MT Volumetric	$0.65141/Dth
Energy Assistance	0.00273/Dth
Infrastructure Rate Adjustment	0.06174/Dth
Distribution Non-Gas Rate	**$0.71588/Dth**
Daily Transportation Imbalance Charge (outside +/- 5% tolerance)	$0.08125/Dth

MT FIXED CHARGES

Monthly Basic Service Fee (BSF): For a definition of BSF categories see § 8.03.		BSF Category 1	$6.75
		BSF Category 2	$18.25
		BSF Category 3	$63.50
		BSF Category 4	$420.25
Administrative Charge (see § 5.01).	Annual		$4,500.00
	Monthly Equivalent		$375.00
Firm Demand Charge per Dth (see §5.01)			
	Annual Peak Hour Demand Charge		$0.56
	Monthly Equivalent		$0.047

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6. Proposed revisions to FT-1 and TS rate schedules. For clarity, would it be appropriate to include in the line title “Firm Demand Charge per Dth (see §5.02)” a reference to §5.01 as that is where the new peak hour charge is discussed in the Tariff?

5.07 TS RATE SCHEDULE

TS VOLUMETRIC RATES

Rates Per Dth Redelivered Each Month
Dth = decatherm = 10 therms = 1,000,000 Btu

	First 200 Dth	Next 1,800 Dth	Next 98,000 Dth	All Over 100,000 Dth
Base DNG	$0.73301	$0.47917	$0.19596	$0.07253
Energy Assistance	0.00073	0.00073	0.00073	0.00073
Infrastructure Rate Adjustment	0.04550	0.02974	0.01216	0.00450
Distribution Non-Gas Rate	**$0.77924**	**$0.50964**	**$0.20885**	**$0.07776**

Penalty for failure to interrupt or limit usage when requested by the Company — See § 3.02

Daily Transportation Imbalance Charge per Dth (outside +/- 5% tolerance) — $0.08125

TS FIXED CHARGES

Monthly Basic Service Fee (BSF):		BSF Category 1	$6.75
For a definition of BSF categories see § 8.03.		BSF Category 2	$18.25
		BSF Category 3	$63.50
		BSF Category 4	$420.25
Administrative Charge (see § 5.01).	Annual		$4,500.00
	Monthly Equivalent		$375.00
Firm Demand Charge per Dth (see §5.01 and §5.02).	Base Annual		$25.81
	Infrastructure Adder		$1.60184
	Peak Hour Charge		$0.56
	Total Annual		$27.97
	Monthly Equivalent		$2. 33

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UAE

Explain how the company chose a 100,000 Dth volume for peaking service, and why it is or is not adequate or more than adequate.

Explain why Dominion proposes to collect the cost of the peaking service as a demand charge.