PUBLIC UTILITIES COMMISSION OF OHIO
DIVISION OF FORECASTING AND SITING

In the Matter of the Long-Term Forecast Report of Natural Gas Demand of Suburban Natural Gas Company	))))	Case No. 17-1350-GA-FOR

2017

LONG-TERM FORECAST REPORT OF NATURAL GAS DEMAND OF SUBURBAN NATURAL GAS COMPANY

Andrew J. Sonderman, President
Suburban Natural Gas Company
2626 Lewis Center Road
Lewis Center, OH 43035-9206
(740) 548-2450

Dated: June 1, 2017

SUBURBAN NATURAL GAS COMPANY

2017

LONG-TERM FORECAST REPORT FOR GAS DEMAND, GAS SUPPLY, AND FACILITY PROJECTIONS

OF

SUBURBAN NATURAL GAS COMPANY
2626 LEWIS CENTER ROAD
LEWIS CENTER, OH 43035-9206

TO THE

PUBLIC UTILITIES COMMISSION OF OHIO
DIVISION OF FORECASTING AND SITING

PREFACE

Suburban Natural Gas Company has prepared this Long-Term Forecast Report as required by Section 4935.04 of the Ohio Revised Code. The organization of this report is based upon the Division's Rules and Regulations contained in Chapter 4901 of the Ohio Administrative Code.

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Suburban Natural Gas

Suburban currently has over four hundred and forty-eight miles of natural gas distribution facilities located in Wood, Henry, Lucas, Delaware and Marion Counties.

Our offices are located in Cygnet and Lewis Center, Ohio.

Suburban currently provides natural gas service to 16,767 residential, commercial and industrial customers in Ohio.

In Northwest Ohio, Suburban has entered into service agreements with 8 municipalities in the areas surrounding Bowling Green and smaller villages in the Wood, Henry, and Lucas counties, providing natural gas to approximately 3,788 residential customers.

In Central Ohio, Suburban serves the Polaris Centers of Commerce, west of I-71 including the JPMorgan Chase Corporate Center, The Polaris Fashion Mall and the Polaris Towne Center Strip Mall. In addition, Suburban provides residential service to over 12,052 customers in Delaware and Marion Counties.

A breakdown of our customer base by major classification is:

In Northwest Ohio:

Residential	3,788
Commercial	270
Industrial	8

In Central Ohio:

Residential	12,052
Commercial	649
Industrial	0

Based on the last five years of actual billed usage, residential customers use approximately 818 ccf per year. Commercial customers use approximately 4,994 ccf per year. While industrial customers have used about 16,974 ccf per year.

Over the last five years the weather has been slightly warmer than normal.

Projected Population Growth by County

The customer base of Suburban Natural Gas is primarily located in four counties. The counties are Delaware, Marion, Henry and Wood. Approximately 13 customers are served in Lucas County adjacent to the Maumee River.

Projected Population: County Totals
Source: Ohio Department of Development

	2020	2025	2030	2035	2040
Delaware	210,630	227,930	246,000	264,100	282,160
Henry	27,230	26,760	26,360	26,010	25,810
Marion	67,130	67,250	67,170	67,190	67,500
Wood	126,540	127,530	127,600	126,400	124,910

Delaware County has been the fastest growing county in Ohio for the past decade. This county represents the highest area of growth for Suburban Natural Gas. Since 2000, our customer base in Central Ohio has grown to 12,701 customers.

The Ohio Department of Development projects that the population of Delaware County will increase 17 percent by 2025. This growth will increase our Central Ohio customer base into the 15,000 plus range.

In Northwest Ohio, the population growth of Henry and Wood County combined is expected to remain flat over the next ten years. It is anticipated that our customer growth will be about 1-2% over the next ten years.

Gas Management

Suburban Natural Gas started working with CenterPoint Energy Services, Inc. (CES) formerly Atmos Energy Marketing (AEM) in April 2007 as our Asset manager. We collectively created a plan to manage firm requirements for our customers while maximizing the value of our assets. We work together to forecast firm demand requirements by looking at the 30 year historical weather normal ending 2010 to determine a heating degree day forecast and hence volumes that we expect our customer base to use. Since our customer base is highly heat sensitive (mostly residential), this is an effective way to forecast our firm demand requirements.

We have worked closely with CenterPoint Energy to develop a gas supply plan that takes into consideration our transportation and storage assets. Simply put, in the summer time our monthly nominations for delivery include flowing gas to the city gates using our transportation contracts with a focus on also filling our storage account. In the winter time our monthly nominations for delivery include flowing gas to the city gate using transportation contracts augmented by projected storage withdrawals. Based on monthly usage, and in executing our winter storage withdrawal plan, we will augment our first of the month nominations with intra-month purchases.

Suburban has released its TransCanada Gas Pipeline capacity to our asset manager. In return, our asset manager works to maximize the value of our interstate pipeline capacity and in return for managing those assets provides us with a discount to index and an asset management payment for capacity on our transportation contracts. Our asset manager uses our pipeline capacity to serve our customer needs off TransCanada Gas Pipeline.

SUBURBAN NATURAL GAS RISK MANAGEMENT PLAN
APRIL 17- MARCH 18

PLAN OVERVIEW

SUMMER

- BASELOAD FIRST OF THE MONTH GAS IN THE SUMMER MONTHS AND PLAN FOR STORAGE INJECTIONS—NOMINATE TO THE CITY GATE AND SWING ON STORAGE

- SUMMER BILLABLE PLAN—1/7 RATABLE INJECTIONS IN THE SUMMER MONTHS AND CARRY COST UNTIL SUBURBAN WITHDRAWS IN THE WINTER MONTHS

- BUY INCREMENTAL GAS IN THE DAILY SPOT MARKET IF NEEDED

WINTER

- BASELOAD FIRST OF THE MONTH GAS IN THE WINTER MONTHS AND PLAN FOR STORAGE WITHDRAWALS—NOMINATE TO THE CITY GATE AND SWING ON STORAGE

- FOLLOW WINTER WITHDRAWAL PLAN AND ADJUST BASED ON USAGE FOR EACH PRIOR MONTH

- BUY INCREMENTAL GAS IN THE DAILY SPOT MARKET IF NEEDED

HEDGING OVERVIEW

- DUE TO CHANGES IN THE OHIO GAS MARKET, SUBURBAN CONTINUES TO PLAN TO HEDGE ZERO GAS FOR APRIL 17 – MARCH 18

- SUBURBAN WILL CONTINUE TO CLOSELY ALIGN HEDGING PROGRAM WITH COLUMBIA OF OHIO'S AS THEY CHANGED THEIR HEDGING PHILOSOPHY DUE TO OFFERING CHOICE PROGRAM

- DUE TO CURRENT MARKET CONDITIONS, SUBURBAN'S EXPECTATIONS IS TO SEE FAVORABLE PRICING IN THE MARKET GOING FORWARD, AND

- SUBURBAN WILL CONTINUE TO PURCHASE GAS FOR STORAGE INJECTION AT A SUMMER SUPPLY PRICE

SUMMER

- HEDGE BETWEEN 0-15% AS OPPORTUNITY PRESENTS ITSELF OTHERWISE,
- BUY BALANCE AT FOM INDEX OR INTRAMONTH GAS DAILY

WINTER

- INJECT RATABLY APRIL TO OCTOBER INTO STORAGE AT SUMMER PRICING WHICH IS ROUGHLY 25% OF WINTER PROJECTED USAGE
- AUGMENT STORAGE PRICING WITH FORWARD HEDGES IF THE OPPORTUNITY PRESENTS ITSELF
  - ROUGHLY 0-15% OF WINTER PROJECTED USAGE MAX
- BUY BALANCE AT FOM INDEX OR INTRAMONTH GAS DAILY

PIPELINE TRANSPORTATION CONTRACTS

Gulf

Contract #	Rate Schedule	MDQ Daily	MDQ Seasonal Winter	MDQ Seasonal Summer	SCQ Annual	Expiration Date	Market Area
75379	FTS 1	1837				3/31/2023	
78852	FTS 1	3183				10/31/2024	

PIPELINE TRANSPORTATION AND STORAGE CONTRACTS

Columbia Gas Transmission

Contract #	Rate Schedule	MDQ Daily	MDQ Seasonal Winter	MDQ Seasonal Summer	SCQ Annual	Expiration Date	Market Area
38101	FTS	5134				10/31/2024	67-1 & 67-3
73188	FTS	500				10/31/2024	67-1
73315	FTS	110				10/31/2024	67-3
75378	FTS	1790				10/31/2023	67-3
78185	FTS	3100				3/31/2024	67-3
79265	FTS	3500				12/31/2024	67-3
80842	SST		1935	968		3/31/2025	67-1
81292	SST		1116	558		3/31/2025	67-1
81679	SST		3800	1900		4/1/2025	67-3
80843	FSS		1935		102157	3/31/2025	
81293	FSS		1116		63612	3/31/2025	
81680	FSS		3800		216600	4/1/2025	

NATURAL GAS PURCHASE CONTRACTS

Columbia Gas of Ohio-Lazelle

Contract #	Rate Schedule	MDQ Daily	MDQ Seasonal Winter	MDQ Seasonal Summer	SCQ Annual	Expiration Date	Market Area
Agreement for the purchase & sale of gas		3000			18000	As long as Suburban meets its obligation to COH	67-3

NATURAL GAS PURCHASE CONTRACTS

Columbia Gas of Ohio-Big Walnut

Contract #	Rate Schedule	MDQ Daily	MDQ Seasonal Winter	MDQ Seasonal Summer	SCQ Annual	Expiration Date	Market Area
2013 LGC (Large Gas Service)		4800				3/31/2018	67-3

BASE CONTRACT FOR SALE & PURCHASE OF NATURAL GAS

Agency	Expiration Date
CenterPoint Energy	3/31/2019

2016 PEAK DAY			
Date	System Peak Day DTH	North 67-1 Peak Day Dth	South 67-3 Peak Day Dth
1/18/2016	18230	3367	14863

Date	System Peak Day MCF	North 67-1 Peak Day Mcf	South 67-3 Peak Day Mcf
1/18/2016	16947	3130	13817

Date	System Peak Day MMCF	North 67-1 Peak Day MMCF	South 67-3 Peak Day MMCF
1/18/2016	16.9	3.1	13.8

4901:5-7-01 Definitions.

(A) Unless otherwise specified, all terms used in Chapter 4901:5-7 of the Administrative Code are the same as those found in the fourth edition "Glossary For The Gas Industry" published by the planning and analysis group of the "American Gas Association."

(B) "Energy-price relationships" means the calculated or observed effects on gas demand resulting from changes in the customer price of gas or other fuels. It consists of both energy conservation effects which reduce customer energy use directly and effects which cause customers to switch to or from utility-provided gas.

(C) "Forecast year," "year of the forecast," or "year zero" means the year in which the forecast is filed.

(D) "Energy conservation" means the effect upon gas demand resulting from customer adoption and use of measures, standards, equipment, or techniques designed, at least in part, to decrease gas consumption or to increase efficiency of gas use. Energy conservation may include the result of increases in price, but does not include price-induced fuel switching.

(E) "Self-help gas and other transported gas" means natural or synthetic gas owned by or acquired on behalf of an end-user or owned by another person which was developed independently or acquired from a third party, but which requires the use of one or more company or utility to transport the gas to the end-user.

(F) "Forecast period" means year zero through year ten.

(G) "Reporting period" means year minus five through year ten.

(H) "Service area" means the geographic area within Ohio in which the company renders service to wholesale and retail consumers of gas.

(I) "Fuel switching" means the substitution of one energy source for another in a particular end use or process, as a result of changing relative prices or technologies.

4901:5-7-03 Gas and natural gas demand forecasts for gas distribution companies serving more than fifteen thousand customers.

(A) General guidelines. The following guidelines shall be used in the preparation of the demand forecast:

(1) The demand forecast must be based upon independent analysis by the reporting utility.

(2) The demand forecast may be based on those forecasting methods which yield the most useful results to the utility.

(3) Where the required data have not been calculated directly, relevant conversion factors shall be displayed.

(4) All gas volumes shall be reported at 14.73 psia.

Suburban Natural Gas independently prepares its gas demand forecast using actual usage data that has been adjusted to normal weather conditions

Estimated data includes 2017 to the year 2027. The data contains projected normal monthly and peak day requirements for all classes of customer's in the customer's service area.

(B) Special subject areas.

(1) The following matters shall specifically be addressed:

(a) A description of the extent to which the reporting utility coordinates its load forecasts with those of other systems such as affiliated systems in a holding company group, or other neighboring systems and, if the reporting utility is a combination utility, a description of the coordination of its gas load forecast with its electric load forecast.

Suburban Natural Gas does not coordinate its load requirements with any other systems.

(b) A description of the manner in which such forecasts are coordinated, and any problems experienced in efforts to coordinate load forecasts.

See above

(c) A brief description of any computer modeling, demand forecasting, polls, surveys, or data-gathering activities used in preparation of the forecast.

Suburban Natural Gas has developed a GasWorks system model which depicts its South System and North System under "peak hour" scenarios. The models were developed using flowrate from the coldest day observed in February, 2015. Future demand forecasts were developed by locating known and potential development areas within the system's reach and assigning loading based on typical and/or historical observations

(2) No later than six months prior to the required date of submission of the forecast, the commission shall supply reporting utilities:

(a) Copies of appropriate commission or other state documents or public statements that include the state energy policy for consideration in preparation of the forecast.

(b) Such current energy policy changes or deliberations which, due to their immediate significance, the commission determines to be relevant for specific identification in the forecast (including but not limited to new legislation, regulations, or adjudicatory findings). It is the commission's intent that such additional factors be limited to issues of current policy which may influence the forecast, but which otherwise may not have been specifically identified by the reporting utility. The reporting utility shall, to the extent possible, provide either a discussion of the impacts of such factors on the forecast or demonstrate how it has taken these factors into account in its forecast. The reporting utility need not adopt such factors as a part of its forecast.

(3) Energy efficiency, demand reduction, and demand response programs and policies of the reporting utility, which support energy conservation and load modification, shall be described along with an estimate of their impacts on energy and peak demand and supply resources.

(4) Energy-price relationships:

(a) To the extent possible, identify changes during the forecast period in energy demand and identify and describe how such changes are accounted for in the forecast.

Suburban Natural Gas is forecasting additional demands in the SNG South System (Delaware and Marion Counties) of 41.5 MCFH in 2017, 46.5 MCFH in 2018, and 48.5 MCFH in 2019. Additional demands in the SNG Northern System (Wood, Henry, and Lucas Counties) are expected to be minimal.

(b) Describe the methodologies for determining such energy-price relationships, including justification for the methodologies employed.

No methodologies implemented.

(C) Forecast documentation. The purpose of the documentation section of the report is to permit a thorough review of the forecast methodology and test its validity. The components of the forecast documentation shall include:

(1) A description of the forecast methodology employed, including:

(a) Overall methodological framework chosen.

Suburban Natural Gas maintains a strong relationship with local landowners and developers within its North and South Systems in order to stay current in its forecasts of new and changing demands. As such, the SNG team is available to approximate the location and size of new subdivisions and commercial developments within its service area. This knowledge is applied to the forecast models and approximates, with a high degree of accuracy, where new services will be required in the future and how much incremental demand they will add to the overall system.

(b) Specific analytical techniques used, their purpose, and the forecast component to which they are applied.

Suburban Natural Gas utilizes its "peak hour" scenario models in conjunction with the forecasted demands to depict the systems' performances in the future. The "peak hour" scenario loading is based upon monthly meter readings collected on a record cold day in February 2015. These monthly totals, in addition to similar readings collected during the warmest month in the same twelve month period and degree day values, are used in an equation to estimate an hourly peak load for the design day.

The equation is:

$$Q_L = \left\{\left[\frac{Q_W - (Q_S \times F)}{DD_W}\right] \times DD_T + \frac{Q_S \times F}{SD_S}\right\} \times 0.05$$

Where,

Q_L = Peak winter hourly load (MSFCH)

Q_W = Peak winter monthly load (MSCF/Mo.)

Q_S = Peak summer monthly load (MSCF/Mo.)

F = Index Factor, 1.13

DD_W = Peak Degree Day for coldest winter day observed

DD_T = Total Degree Days for month of coldest winter day observed

SD_S = Total service days for month of peak summer load (days)

(c) The manner in which specific techniques are related in producing the forecast.

The forecasted demands are typically developed using the "peak hour" loads from similar customers. For example, a new subdivision may be expected to contain larger, high value homes and SNG would look to other, existing subdivisions with homes of similar size, structure, and location when estimating individual loads of the new services. Future commercial loads are developed in the same manner. Oftentimes SNG is aware of more unique future services (e.g. large hotels large office building, industrial users, etc.) and will attempt to reach out to developers or to the end-user to attempt to gather actual or estimated loads.

(d) Where statistical techniques have been used.

(i) All relevant equations.

(ii) The results of appropriate statistical tests.

(iii) A description of the technique.

(iv) The reason for choosing the technique.

(v) Identification of significant computer software used.

Suburban Natural Gas uses heating degree day information and historical usage to determine load requirements on a monthly basis.

(e) An explanation of how interruptibles, curtailables, and other non-firm requirements are forecast, how they are treated in the total forecast and an identification of demand volumes subject to interruption or curtailment and other non-firm demand.

Not applicable. No interruptible customers.

(f) An identification of customer usage factors and a description of how they are used within the forecast.

Customer usage is based on historical data and heating degree days.

(g) Where the methodology for any major customer class has changed significantly from the previous year, a discussion of the rationale for the change.

No significant change.

(2) Assumptions and special information. The reporting utility shall:

(a) For each significant assumption made in preparing the forecasts include a discussion of the basis for the assumption and the impact it has on the forecast results. Give sources of the assumption if other than the reporting utility.

The only significant assumption made in the long term forecasting performed by SNG is the location and number of new customers located within the Evans Farm subdivision. SNG has been in

discussions with the developer and engineers of the Evans Farm subdivision for some time and feel very confident that the forecasts meet or exceed the projected demand requirements

(b) Identify special information bearing on the forecast (e.g., the existence of a major planned industrial expansion program in the area of service).

The Evans Farm subdivision is the only significant single demand expected in forecasted period.

(3) Data base documentation. The responsibilities of the reporting utility with regard to its forecast data base are as follows:

(a) The reporting utility shall provide:

(i) A brief description of all data sets used in making the forecast, both internal and external, input and output, and a citation to the sources.

Actual billing data used.

Preliminary Local Climatological Data (WS Form: F6)

(ii) The reasons for the selection of the specific data base used.

Readily obtainable from the National Weather Service.

(iii) A clear identification of any adjustments made to raw data in order to adapt them for use in the forecast, including for each adjustment, to the extent practicable:

(a) The nature of the adjustment made.

(b) The basis for the adjustment made.

(c) The magnitude of the adjustment.

No adjustments made.

(b) If a hearing is to be held on the forecast in the current forecast year, the reporting utility shall provide to the commission in electronic formats or other medium as the commission directs all data series, both input and output, raw and adjusted, and model equations used in the preparation of the forecast.

(c) The reporting utility shall be prepared to provide to the commission on request:

(i) Copies of all data sets used in making the forecasts, including both raw and adjusted data, input and output data, and complete descriptions of any mathematical, technical, statistical, or other model used in preparing the data.

(ii) A narrative explaining the data sets, and any adjustments made with the data to adapt it for use in the forecast.

(D) Demand forecast forms. The demand presentation shall include the following elements presented on the indicated forms supplied by the commission.

(1) Service area natural gas demand: actual and forecast Ohio service area natural gas demand (MMCF/year) displayed by major customer class as indicated in form FG1-1.

Completed

(2) Monthly gas sendout: a month-by-month forecast of gas sendout in the service area for the current year and the following two years, as indicated on form FG1-3 (this sendout shall conform to the most likely growth scenario).

Completed

(3) Range of forecasts: a range of forecasts provided on form FG1-4 for natural gas sales volumes by residential, commercial, and industrial sector and total sales volumes. The range of forecasts shall consist of, at a minimum, three scenarios (highest, lowest, and most likely growth). The methodology for the range forecast shall be determined by the reporting utility and may be based on confidence intervals, different assumptions, or whatever techniques the reporting utility finds appropriate.

Completed

(4) Peak and forecast design day requirements: historical peak requirements and forecast design day requirements (MMCF) as indicated on form FG1-5.

Completed

(5) Self-help and other transported gas: historical and forecast self-help gas volumes as transported and anticipated to be transported by the reporting utility as indicated on form FG1-6.

Completed

(6) Gas distribution companies serving more than one hundred thousand customers should also include service area natural gas demand by industrial sectors: actual and forecast natural gas demand in Ohio only (MMCF/year) by industrial sectors displayed for each of the standard industrial classification (SIC) codes indicated on form FG1-2.

Not Applicable

Form FG1-1 HISTORICAL AND FORECAST SERVICE AREA ANNUAL GAS DEMAND (Part 1)
Units: MMCF/YEAR

		1	2	3	4	5	6	7	8
	YEAR	RESIDENTIAL SALES	COMMERCIAL SALES	INDUSTRIAL SALES	SALES TO ELECTRIC UTILITIES	SALES TO ULTIMATE CUSTOMERS	SALES FOR RESALE TO MUNICIPALS AND SMALL NATURAL GAS CO	OTHER SALES FOR RESALE	TOTAL SALES
-5	2012	1047	467	11	0	1525	0	0	1525
-4	2013	1248	530	35	0	1813	0	0	1813
-3	2014	1426	603	37	0	2066	0	0	2066
-2	2015	1285	520	35	0	1840	0	0	1840
-1	2016	1129	451	34	0	1614	0	0	1614
0	2017	1380	557	35	0	1972	0	0	1972
1	2018	1410	572	35	0	2017	0	0	2017
2	2019	1445	583	35	0	2063	0	0	2063
3	2020	1488	600	35	0	2124	0	0	2124
4	2021	1533	619	35	0	2187	0	0	2187
5	2022	1579	637	35	0	2251	0	0	2251
6	2023	1626	656	39	0	2322	0	0	2322
7	2024	1675	676	39	0	2390	0	0	2390
8	2025	1725	696	39	0	2461	0	0	2461
9	2026	1777	717	39	0	2533	0	0	2533
10	2027	1830	739	39	0	2608	0	0	2608

SUBURBAN NATURAL GAS COMPANY

Form FG1-1 HISTORICAL AND FORECAST SERVICE AREA ANNUAL GAS DEMAND (Part 2)
Units: MMCF/YEAR

		8	9	10	11	12	13	14	15	16
	YEAR	TOTAL SALES	COMPANY USE	TOTAL CONSUMPTION	NET INJECTIONS TO STORAGE	LOSSES AND UFG	TOTAL DEMAND	SUM OF INTERRUPTBLE	TOTAL INJECTIONS TO STORAGE	TOTAL INJECTIONS TO STORAGE
-5	2012	1525	1	1526	0	0	1526	0	0	0
-4	2013	1813	1	1814	0	0	1814	0	0	0
-3	2014	2066	1	2067	0	15	2082	0	0	0
-2	2015	1840	1	1841	0	24	1865	0	0	0
-1	2016	1614	1	1615	0	10	1625	0	0	0
0	2017	1972	1	1973	0	10	1983	0	0	0
1	2018	2017	1	2018	0	10	2028	0	0	0
2	2019	2063	1	2064	0	10	2074	0	0	0
3	2020	2124	1	2125	0	10	2135	0	0	0
4	2021	2187	1	2188	0	10	2198	0	0	0
5	2022	2251	1	2252	0	10	2262	0	0	0
6	2023	2322	1	2323	0	10	2333	0	0	0
7	2024	2390	1	2391	0	10	2401	0	0	0
8	2025	2461	1	2462	0	10	2472	0	0	0
9	2026	2533	1	2534	0	10	2544	0	0	0
10	2027	2608	1	2609	0	10	2619	0	0	0

SUBURBAN NATURAL GAS COMPANY

Form FG1-3 MONTHLY GAS SENDOUT
Units: MMCF/YEAR

	YEAR 0	YEAR 1	YEAR 2
JANUARY	347	354	363
FEBRUARY	292	299	305
MARCH	242	247	252
APRIL	146	150	153
MAY	83	86	88
JUNE	49	50	51
JULY	44	45	46
AUGUST	44	46	47
SEPTEMBER	62	64	66
OCTOBER	133	136	140
NOVEMBER	215	220	224
DECEMBER	315	320	328
	1972	2017	2063

SUBURBAN NATURAL GAS COMPANY

Form FG1-4 RANGE OF DEMAND FORECAST
Units: MMCF/YEAR

		RESIDENTIAL SALES			COMMERCIAL SALES			INDUSTRIAL SALES			TOTAL SALES		
	YEAR	LOWEST	MOST LIKELY	HIGHEST	LOWEST	MOST LIKELY	HIGHEST	LOWEST	MOST LIKELY	HIGHEST	LOWEST	MOST LIKELY	HIGHEST
0	2017	1242	1380	1518	501	557	613	32	35	39	1775	1972	2169
1	2018	1269	1410	1551	515	572	629	32	35	39	1815	2017	2219
2	2019	1301	1445	1590	525	583	641	32	35	39	1857	2063	2269
3	2020	1339	1488	1637	540	600	660	32	35	39	1911	2123	2335
4	2021	1380	1533	1686	557	619	681	32	35	39	1968	2187	2406
5	2022	1421	1579	1737	573	637	701	32	35	39	2026	2251	2476
6	2023	1463	1626	1789	590	656	722	35	39	43	2089	2321	2553
7	2024	1508	1675	1843	608	676	744	35	39	43	2151	2390	2629
8	2025	1553	1725	1898	626	696	766	35	39	43	2214	2460	2706
9	2026	1599	1777	1955	645	717	789	35	39	43	2280	2533	2786
10	2027	1647	1830	2013	665	739	813	35	39	43	2347	2608	2869

SUBURBAN NATURAL GAS COMPANY

Form FG1-5 HISTORICAL PEAK AND FORECAST DESIGN DAY DAY REQUIREMENTS
Units: MMCF/YEAR

	YEAR	1 RESIDENTAIL SALE	2 COMMERCIAL SALES	3 INDUSTRIAL SALES	4 SALES TO ELECTRIC UTILITIES	5 SALES TO ULTIMATE CUSTOMERS	6 RESALE TO MUNICIPALS AND SMALL NATURAL GAS CO	7 OTHER SALES FOR RESALE	8 TOTAL SALES	9 UNACCT FOR GAS	10 TOTAL
-5	2012	9.3	4.1	0.1	0.0	13.5	0.0	0.0	13.5	0.0	13.5
-4	2013	10.8	4.5	0.3	0.0	15.6	0.0	0.0	15.6	0.0	15.6
-3	2014	14.6	5.9	0.4	0.0	20.9	0.0	0.0	20.9	0.0	20.9
-2	2015	14.0	5.3	0.4	0.0	19.7	0.0	0.0	19.7	0.0	19.7
-1	2016	12.0	4.6	0.3	0.0	16.9	0.0	0.0	16.9	0.0	16.9
0	2017	16.4	6.4	0.4	0.0	23.2	0.0	0.0	23.2	0.0	23.2
1	2018	16.9	6.4	0.4	0.0	23.7	0.0	0.0	23.7	0.0	23.7
2	2019	17.4	6.5	0.4	0.0	24.3	0.0	0.0	24.3	0.0	24.3
3	2020	17.9	6.5	0.4	0.0	24.8	0.0	0.0	24.8	0.0	24.8
4	2021	18.4	6.6	0.4	0.0	25.4	0.0	0.0	25.4	0.0	25.4
5	2022	18.9	6.6	0.4	0.0	25.9	0.0	0.0	25.9	0.0	25.9
6	2023	19.4	6.6	0.4	0.0	26.4	0.0	0.0	26.4	0.0	26.4
7	2024	19.9	6.7	0.4	0.0	27.0	0.0	0.0	27.0	0.0	27.0
8	2025	20.4	6.7	0.4	0.0	27.5	0.0	0.0	27.5	0.0	27.5
9	2026	20.9	6.7	0.4	0.0	28.0	0.0	0.0	28.0	0.0	28.0
10	2027	21.4	6.8	0.4	0.0	28.6	0.0	0.0	28.6	0.0	28.6

SUBURBAN NATURAL GAS COMPANY

Form FG1-6 SUPPLY AND DISPOSITION OF SELF-HELP AND OTHER TRANSPORTED VOLUMES
Units: MMCF/YEAR

	YEAR	1 OHIO PRODUCED GAS TRANSPORTED SOLEY BY RESPONDENT FOR ON-LINE CUSTOMERS	2 OHIO PRODUCED GAS TRANSPORTED FROM OTHER COMPANY TO RESPONDENT FOR ON-SYSTEM CUSTOMERS	3 OTHER VOLUMES BY RESPONDENT FOR O-SYSTEM CUSTOMERS	4 TOTAL VOLUMES BY RESPONDENT FOR ON-SYSTEM CUSTOMERS	5 OHIO PRODUCED GAS TRANSPORTED OFF-SYSTEM BY RESPONDENT	6 OTHER VOLUMES BY RESPONDENT FOR OFF-SYSTEM CUSTOMERS	7 TOTAL VOLUMES BY RESPONDENT FOR OFF-SYSTEM CUSTOMERS	8 TOTAL VOLUMES TRANSPORTED
-5	2012	0	0	52	0	52	0	0	52
-4	2013	0	0	76	0	76	0	0	76
-3	2014	0	0	78	0	78	0	0	78
-2	2015	0	0	76	0	76	0	0	76
-1	2016	0	0	83	0	83	0	0	83
0	2017	0	0	90	0	90	0	0	90
1	2018	0	0	90	0	90	0	0	90
2	2019	0	0	90	0	90	0	0	90
3	2020	0	0	90	0	90	0	0	90
4	2021	0	0	90	0	90	0	0	90
5	2022	0	0	100	0	100	0	0	100
6	2023	0	0	100	0	100	0	0	100
7	2024	0	0	100	0	100	0	0	100
8	2025	0	0	100	0	100	0	0	100
9	2026	0	0	100	0	100	0	0	100
10	2027	0	0	100	0	100	0	0	100

4901:5-7-04 Gas and natural gas supply forecasts for gas distribution companies serving more than fifteen thousand customers.

(A) General guidelines. The supply estimates used in these forecasts must be based upon the reporting utility's independent analysis of alternative sources of gas as well as its current sources. When data is based on material received from current or prospective suppliers, the reporting utility must show that it has made an independent review of such data and arrived at its own analysis of the probable future availability and price of gas from the source in question.

The supply estimates used in this forecast are based upon Suburban Natural Gas Company's independent analysis of alternative sources of gas as well as current sources.

This information shown on the forms may not be consistent with other reports on file with the Public Utilities Commission of Ohio (PUCO). Any differences between data previously filed and that shown should be attributed to the timing of the forecast.

(B) Special subject area. The forecast shall contain a description of the reporting utility's policies and activities involving the procurement of Ohio gas, the impact of such procurement upon the reliability of the reporting utility's gas supply, and the compatibility of such policies and activities with a least-cost procurement plan.

Suburban Natural Gas utilizes CenterPoint Energy (formerly Atmos Energy) as our asset manager. CenterPoint has proven to be a cost effective reliable source.

(C) Gas and natural gas supply forecast discussion. A narrative shall be prepared which includes a general description of the methods and procedures used to develop the reporting utility's forecast of:

(1) Gas supply, by source.

Gas is procured from CenterPoint Energy.

(2) Gas supply prices, by source.

See Suburban Natural Gas Risk Management Plan.

(3) Natural gas storage facilities.

Per TransCanada contracts.

(D) Projected sources of gas. A narrative shall be prepared which includes the following:

(1) A description of the projected sources of gas for the forecast period. This description shall include the following:

(a) A list of the projected sources of gas for the forecast period.

CenterPoint Energy
Columbia Gas of Ohio – Two points of delivery for our southern system

(b) A description of the role of company-owned gas in the future supply mix.

N/A

(c) A description of the anticipated use of storage facilities in the future supply mix.

Per TransCanada contract

(d) The anticipated use of firm and interruptible transportation to obtain gas for system supply and the effect of state and federal policies toward the transportation of natural gas on the reporting utility's supply mix.

Gas Demand will be met through the use of firm transportation, storage and market purchases from CenterPoint Energy and Columbia Gas of Ohio (Tariff or Approved Special Purchases)

(2) A description of those factors which may have an impact on the reporting utility's projected natural gas supplies and its future construction of additional facilities, including but not limited to interconnections with alternate supplies.

Suburban Natural Gas continues to evaluate potential additional facilities or interconnections as may be needed to meet long term projected growth.

(E) Reliability of gas sources. A narrative shall be prepared which includes the following:

(1) The reporting utility's working definition(s) of gas supply reliability.

Supply reliability is access to pipelines, storage, producers, and marketers who can provide long term and peak day supply.

(2) A description of the methods used by the reporting utility to quantitatively or qualitatively measure gas supply reliability.

Historical experience, professional consultation with UTI and informed judgement.

(3) The reliability of gas sources over the past five years and the anticipated reliability of each of the reporting utility's gas sources over the forecast period.

Suburban Natural Gas has not experienced any difficulties in gas supply reliability over the past five years.

(F) Analysis of system peak and winter season planning. The reporting utility shall provide an analysis of its ability to meet peak requirements under design weather conditions throughout the forecast period and shall also provide a description of supply projections for meeting winter season requirements.

Suburban Natural Gas contracts from sources that are considered to be the most reliable for base load gas demand. Suburban utilizes its storage contract with TransCanada to meet seasonal requirements.

(G) Supply forecast forms. The supply presentation shall include the following elements presented on the indicated forms supplied by the commission.

(1) Gas supplies: actual and forecast gas supply volumes (MMCF/year) by source, as indicated in form FG2-1.

Completed

(2) Gas prices: actual and forecast gas supply prices (annual average dollars/MCF) by source, as indicated in form FG2-2.

Completed

(3) Peak and design day supply: historical and forecast peak day supplies (MMCF) by source, as indicated in form FG2-3.

Completed

(4) Natural gas storage facilities: a list of wholly or jointly owned or leased storage facilities, existing and planned over the forecast period, as indicated in form FG2-4.

Completed

(5) Propane facilities: a list of existing facilities and those planned over the forecast period, as indicated in form FG2-5.

Completed

(6) Other peaking facilities: a list of other sources of peaking gas supplies not included in paragraphs (G)(4) and (G)(5) of this rule, as indicated in form FG2-6.

Completed

SUBURBAN NATURAL GAS COMPANY

Form FG2-1 ANNUAL GAS SUPPLY
Units: MMCF/YEAR

	YEAR	1 LONG-TERM INTERSTATE SUPPLY	2 SPOT MARKET INTERSTATE SUPPLY	3 ALL OTHER INTERSTATE SUPPLY	4 OHIO PRODUCTION	5 PROPANE	6 SNG	7 LNG	8 OTHER	9 TOTAL REQUIREMENTS	10 NET WITHDRAWALS FROM STORAGE	11 TOTALS SUPPLIES
-5	2012	0	0	1526	0	0	0	0	0	1526	0	1526
-4	2013	0	0	1814	0	0	0	0	0	1814	0	1814
-3	2014	0	0	2067	0	0	0	0	0	2067	0	2067
-2	2015	0	0	1841	0	0	0	0	0	1841	0	1841
-1	2016	0	0	1615	0	0	0	0	0	1615	0	1615
0	2017	0	0	1973	0	0	0	0	0	1973	0	1973
1	2018	0	0	2018	0	0	0	0	0	2018	0	2018
2	2019	0	0	2064	0	0	0	0	0	2064	0	2064
3	2020	0	0	2125	0	0	0	0	0	2125	0	2125
4	2021	0	0	2188	0	0	0	0	0	2188	0	2188
5	2022	0	0	2252	0	0	0	0	0	2252	0	2252
6	2023	0	0	2323	0	0	0	0	0	2323	0	2323
7	2024	0	0	2391	0	0	0	0	0	2391	0	2391
8	2025	0	0	2462	0	0	0	0	0	2462	0	2462
9	2026	0	0	2534	0	0	0	0	0	2534	0	2534
10	2027	0	0	2609	0	0	0	0	0	2609	0	2609

SUBURBAN NATURAL GAS COMPANY

Form FG2-2 ANNUAL SUPPLY PRICES
Units: $/MCF

	YEAR	1 LONG-TERM INTERSTATE SUPPLY	2 SPOT MARKET INTERSTATE SUPPLY	3 ALL OTHER INTERSTATE SUPPLY	4 OHIO PRODUCTION	5 PROPANE	6 SNG	7 LNG	8 OTHER	9 TOTAL REQUIREMENTS	10 WITHDRAWALS FROM STORAGE	11 TOTALS SUPPLIES WACOG
-5	2012	0	0	7.20	0	0	0	0	0	0	0	7.20
-4	2013	0	0	6.87	0	0	0	0	0	0	0	6.87
-3	2014	0	0	7.47	0	0	0	0	0	0	0	7.47
-2	2015	0	0	5.87	0	0	0	0	0	0	0	5.87
-1	2016	0	0	5.19	0	0	0	0	0	0	0	5.19
0	2017	0	0	6.75	0	0	0	0	0	0	0	6.75
1	2018	0	0	7.09	0	0	0	0	0	0	0	7.09
2	2019	0	0	6.70	0	0	0	0	0	0	0	6.70
3	2020	0	0	6.58	0	0	0	0	0	0	0	6.58
4	2021	0	0	6.64	0	0	0	0	0	0	0	6.64
5	2022	0	0	6.69	0	0	0	0	0	0	0	6.69
6	2023	0	0	6.75	0	0	0	0	0	0	0	6.75
7	2024	0	0	6.84	0	0	0	0	0	0	0	6.84
8	2025	0	0	6.95	0	0	0	0	0	0	0	6.95
9	2026	0	0	7.06	0	0	0	0	0	0	0	7.06
10	2027	0	0	7.17	0	0	0	0	0	0	0	7.17

* Supply Price based on NYMEX January Futures Contracts

SUBURBAN NATURAL GAS COMPANY

Form FG2-3 HISTORICAL PEAK DAY AND FORECAST DESIGN DAY SUPPLY
Units: MMCF/DAY

	YEAR	1 LONG-TERM INTERSTATE SUPPLY	2 SPOT MARKET INTERSTATE SUPPLY	3 ALL OTHER INTERSTATE SUPPLY	4 OHIO PRODUCTION	5 PROPANE	6 SNG	7 LNG	8 OTHER	9 TOTAL REQUIREMENTS	10 NET WITHDRAWALS FROM STORAGE	11 TOTALS SUPPLIES
-5	2012	0	0	10.8	0	0	0	0	0	10.8	2.7	13.5
-4	2013	0	0	12.5	0	0	0	0	0	12.5	3.1	15.6
-3	2014	0	0	12.2	0	0	0	0	0	12.2	8.7	20.9
-2	2015	0	0	12.4	0	0	0	0	0	12.4	7.3	19.7
-1	2016	0	0	5.5	0	0	0	0	0	5.5	11.4	16.9
0	2017	0	0	13.9	0	0	0	0	0	13.9	9.3	23.2
1	2018	0	0	14.2	0	0	0	0	0	14.2	9.5	23.7
2	2019	0	0	14.6	0	0	0	0	0	14.6	9.7	24.3
3	2020	0	0	14.8	0	0	0	0	0	14.8	9.9	24.7
4	2021	0	0	15.2	0	0	0	0	0	15.2	10.2	25.4
5	2022	0	0	15.5	0	0	0	0	0	15.5	10.4	25.9
6	2023	0	0	15.8	0	0	0	0	0	15.8	10.6	26.4
7	2024	0	0	16.2	0	0	0	0	0	16.2	10.8	27.0
8	2025	0	0	16.5	0	0	0	0	0	16.5	11.0	27.5
9	2026	0	0	16.8	0	0	0	0	0	16.8	11.2	28.0
10	2027	0	0	17.1	0	0	0	0	0	17.1	11.4	28.5

SUBURBAN NATURAL GAS COMPANY

FORM FG-2-4 EXISTING AND PROPOSED STORAGE FACILITIES

Storage Gas is provided through TransCanada Contracts

RESERVOIR NAME	LOCATION	CUSHION BASE GAS	CAPACITY WORKING GAS	TOTAL	COMPLETION DATE
Leased Storage					
Contract #			SCQ Annual Dth		Expiration Date
80843			102,157		3/31/2025
81293			63,612		3/31/2025
81680			216,600		4/1/2025

SUBURBAN NATURAL GAS COMPANY

FORM FG-2-5 EXISTING AND PROPOSED PROPANE FACILITIES (GALLONS)

FACILITY NAME	LOCATION	CAPACITY	COMPLETION DATE
NONE			

SUBURBAN NATURAL GAS COMPANY

FORM FG-2-6 OTHER PEAKING FACILITIES

FACILITY NAME	LOCATION	CAPACITY	COMPLETION DATE
NONE			

Heating Degree Days

Central Ohio

Month	30 Year Normals	%	2016	2015	2014	2013	2012
Jan	1099	21%	1126	1203	1305	1015	964
Feb	901	17%	886	1273	1087	942	807
Mar	717	14%	504	834	837	846	368
Apr	372	7%	400	345	300	353	355
May	145	3%	202	82	112	97	31
Jun	19	0%	4	20	1	6	9
Jul	1	0%	0	0	0	0	0
Aug	4	0%	0	5	0	4	0
Sep	69	1%	18	22	48	49	86
Oct	325	6%	214	290	328	300	351
Nov	620	12%	534	488	809	709	680
Dec	978	19%	1001	624	893	938	784
	5250	100%	4889	5186	5720	5259	4435
	100%		93.1%	98.8%	109.0%	100.2%	84.5%

Source: National Weather Service
Preliminary Monthly Climate Data (CF6)
http://www.erh.noaa.gov/iln/lcdpage.htm

Copies of This Report are on File at the Following Libraries

Delaware County

Delaware Public Library
84 East Winter Street
Delaware, OH 43015

Marion County

Marion County Public Library
445 East Church Street
Marion, OH 43302

Henry County

Napoleon Public Library
310 West Clinton Street
Napoleon, OH 43545

Wood County

Wood County District Public Library
251 North Main Street
Bowling Green, OH 43402

Lucas County

Lucas County Public Library
325 North Michigan Street
Toledo, OH 43604

Updated 6/1/17

CONTENT STATEMENT

Pursuant to Ohio Administrative Code Section 4901:5-1-03(d), I hereby certify that I am responsible for the filing of this Long-Term Forecast Report and that the information contained herein is true and correct to the best of my knowledge and belief.

Andrew J. Sonderman, President
Suburban Natural Gas Company

CERTIFICATE OF SERVICE

I hereby certify that the requirements of Ohio Administrative Code Section 4901:5-1-03 will be met, and copies of the foregoing Long-Term Forecast Report of Natural Gas Demand of Suburban Natural Gas Company have been sent to the Office of the Ohio Consumers' Counsel, 10 West Broad Street, Suite 1800, Columbus, Ohio 43215-3485, and filed with the county libraries listed on the attached list by regular U.S. mail, postage prepaid, this 1st day of June 2017.

Andrew J. Sonderman, President
Suburban Natural Gas Company

Summary: Report electronically filed by Mrs. Cathy A Mulkey on behalf of Suburban Natural Gas Company