

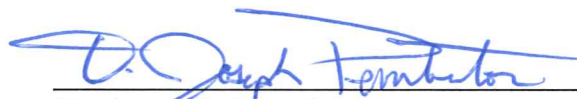
PUBLIC UTILITIES COMMISSION OF OHIO
DIVISION OF FORECASTING AND SITING

In the Matter of the Long-Term)
Forecast Report of Natural Gas)
Demand of Suburban Natural)
Gas Company)

Case No. 20-1283-GA-FOR

2020

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



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Dated: July 15, 2020

SUBURBAN NATURAL GAS COMPANY

2020

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 five hundred and 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. We have constructed a new construction services operations center on Troutman Road in Delaware County.

Suburban currently provides natural gas services to 18,020 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 3,865 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 13,155 in Delaware and Marion Counties.

A breakdown of our customer base by major classification is:

In Northwest Ohio:

Residential	3,865
Commercial	293
Industrial	8

In Central Ohio:

Residential	13,155
Commercial	699
Industrial	0

Based on the last five years of actual billed usage, residential customers use approximately 798 Ccf per year. Commercial customers use approximately 5,575 Ccf per year, while industrial customers have used about 52,749 Ccf per year. (This includes 27 transportation customers--26 commercial and 1 industrial)

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.

Delaware County continues to be one of the fastest growing counties in the United States. This county represents the highest area of growth for Suburban Natural Gas.

Since the year 1989, our customer base in Central Ohio has grown to 13,854 customers.

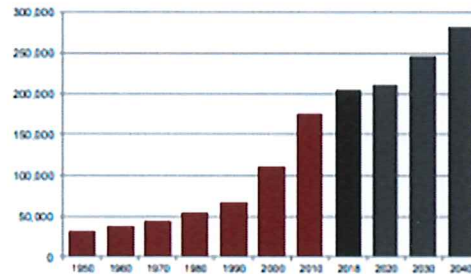
Projected Population: County Totals

Source: Ohio Department of Development

	<u>2020</u>	<u>2025</u>	<u>2030</u>	<u>2035</u>	<u>2040</u>
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

Total Population Delaware County

<u>Census</u>			<u>Estimated</u>
1800		1910	27,182
1810	2,000	1920	26,013
1820	7,639	1930	26,016
1830	11,504	1940	26,780
1840	22,060	1950	30,278
1850	21,817	1960	36,107
1860	23,902	1970	42,908
1870	25,175	1980	53,840
1880	27,381	1990	66,929
1890	27,189	2000	109,989
1900	26,401	2010	174,214
			<u>Projected</u>
		2020	210,630
		2030	246,000
		2040	282,160



The Ohio Department of Development projects that the population of Delaware County will increase 14.4 percent by 2030. This growth will increase our Central Ohio customer base.

In Northwest Ohio, the population growth of Henry and Wood County combined is expected to remain flat over the next ten years.

Gas Management

Suburban Natural Gas started working with Symmetry Energy Solutions (formerly CenterPoint Energy Services, Inc. (CES), Atmos Energy Marketing) 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 Symmetry Energy to develop a gas supply plan that takes into consideration our transportation and storage assets. Together we forecast firm demand requirements by looking at historical weather data to determine a forecast of heating degree days and based on that forecast the volumes we expect our customers will need. 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 TC Energy Pipeline/Columbia Gas Transmission 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 TC Energy/Columbia Gas Transmission.

SUBURBAN NATURAL GAS RISK MANAGEMENT PLAN

April 2019-March 2021

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 19 – MARCH 21
- 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 RATABLE 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						
TC Energy/Columbia Gulf Transmission						

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

PIPELINE TRANSPORTATION AND STORAGE CONTRACTS						
TC Energy/Columbia Gas Transmission						

Contract #	Rate Schedule	MDQ Daily	MDQ Seasonal		SCQ Annual	Expiration Date	Market Area
			Winter	Summer			
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		SCQ Annual	Expiration Date	Market Area
			Winter	Summer			
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		SCQ Annual	Expiration Date	Market Area
			Winter	Summer			
2018 LGC (Large Gas Service)		4800				Five years with evergreen	67-3

BASE CONTRACT FOR SALE & PURCHASE OF NATURAL GAS	
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Agency Symmetry Energy Solutions	Expiration Date 3/31/2021
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2019 PEAK DAY

Date	System Peak Day DTH	North 67-1 Peak Day Dth	South 67-3 Peak Day Dth
1/30/2019	24629	4151	20478

Date	System Peak Day MCF	North 67-1 Peak Day Mcf	South 67-3 Peak Day Mcf
1/30/2019	23014	3781	19233

Date	System Peak Day MMCF	North 67-1 Peak Day MMCF	South 67-3 Peak Day MMCF
1/30/2019	23.0	3.7	19.2

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.

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

Estimated data includes 2020 to the year 2030. 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.

Answer: 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.

Answer: See Above

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

Answer: 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.

Answer: Suburban Natural Gas is forecasting additional demands in the SNG South System (Delaware and Marion Counties) with loads of 47.5 MCFH in 2020, 48.6 MCFH in 2021, and 49.9 MCFH in 2022. Additional demands in the SNG Northern System (Wood, Henry, Lucas Counties) are expected to be minimal. Suburban assumed roughly 2% growth in demand annually during the forecast period.

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

Answer: 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.

Answer: 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.

Answer: 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.

Answer: 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 (large hotels, large office buildings, 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.

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

(e) An explanation of how interruptible, curtailable, 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.

Answer: Not applicable. No interruptible customers.

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

Answer: 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.

Answer: 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.

Answer: 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 discussion 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).

Answer: The Evans Farm subdivision is 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.

Answer: Actual billing data used

Preliminary Local Climatological Data (WS Form: F6)

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

Answer: 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.

Answer: 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.

Answer: Completed

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

Answer: 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.

Answer: Completed

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

Answer: 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.

Answer: 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.

Answer: Not Applicable

Form FG1-1

SUBURBAN NATURAL GAS COMPANY

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	RESALE TO MUNICIPALS AND SMALL NATURAL	OTHER SALES FOR RESALE	TOTAL SALES
-5	2015	1285	520	35	0	1840	0	0	1840
-4	2016	1129	451	34	0	1614	0	0	1614
-3	2017	1173	483	49	0	1705	0	0	1705
-2	2018	1482	595	48	0	2125	0	0	2125
-1	2019	1401	569	39	0	2009	0	0	2009
0	2020	1446	578	42	0	2066	0	0	2066
1	2021	1489	581	43	0	2113	0	0	2113
2	2022	1534	596	43	0	2173	0	0	2173
3	2023	1579	601	44	0	2224	0	0	2224
4	2024	1625	609	44	0	2278	0	0	2278
5	2025	1674	618	45	0	2337	0	0	2337
6	2026	1724	625	45	0	2394	0	0	2394
7	2027	1745	631	46	0	2422	0	0	2422
8	2028	1778	638	46	0	2462	0	0	2462
9	2029	1800	645	47	0	2492	0	0	2492
10	2030	1825	655	47	0	2527	0	0	2527

Form FG1-1

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
	YEAR	TOTAL SALES	COMPANY USE	TOTAL CONSUMPTION	NET INJECTIONS TO STORAGE	LOSSES AND UFG	TOTAL DEMAND	SUM OF INTERRUPT BLE	TOTAL INJECTIONS TO STORAGE
-5	2015	1840	1	1841	0	24	1865	0	0
-4	2016	1614	1	1615	0	10	1625	0	0
-3	2017	1705	1	1706	0	32	1738	0	0
-2	2018	2125	1	2126	0	7	2133	0	0
-1	2019	2009	1	2010	0	17	2027	0	0
0	2020	2066	1	2067	0	10	2077	0	0
1	2021	2113	1	2114	0	10	2124	0	0
2	2022	2173	1	2174	0	10	2184	0	0
3	2023	2224	1	2225	0	10	2235	0	0
4	2024	2278	1	2279	0	10	2289	0	0
5	2025	2337	1	2338	0	10	2348	0	0
6	2026	2394	1	2395	0	10	2405	0	0
7	2027	2422	1	2423	0	10	2433	0	0
8	2028	2462	1	2463	0	10	2473	0	0
9	2029	2492	1	2493	0	10	2503	0	0
10	2030	2527	1	2528	0	10	2538	0	0

Form FG1-3

SUBURBAN NATURAL GAS COMPANY

Form FG1-3 MONTHLY GAS SENDOUT

Units: MMCF/YEAR

	YEAR 0	YEAR 1	YEAR 2
JANUARY	357	361	366
FEBRUARY	352	312	301
MARCH	258	258	261
APRIL	173	168	176
MAY	112	95	96
JUNE	37	38	51
JULY	35	39	44
AUGUST	36	48	49
SEPTEMBER	58	63	64
OCTOBER	113	145	155
NOVEMBER	217	235	245
DECEMBER	318	351	365
	2066	2113	2173

Form FG1-4

SUBURBAN NATURAL GAS COMPANY

Form FG1-4 RANGE OF DEMAND FORECAST

Units: MMCF/YEAR

	YEAR	RESIDENTIAL SALES			COMMERCIAL SALES			INDUSTRIAL SALES			TOTAL SALES		
		LOWEST	MOST LIKELY	HIGHEST	LOWEST	MOST LIKELY	HIGHEST	LOWEST	MOST LIKELY	HIGHEST	LOWEST	MOST LIKELY	HIGHEST
0	2020	1301	1446	1591	520	578	636	38	42	46	1859	2066	2273
1	2021	1340	1489	1638	523	581	639	39	43	47	1902	2113	2324
2	2022	1381	1534	1687	536	596	656	39	43	47	1956	2173	2390
3	2023	1421	1579	1737	541	601	661	40	44	48	2002	2224	2446
4	2024	1463	1625	1788	548	609	670	40	44	48	2050	2278	2506
5	2025	1507	1674	1841	556	618	680	41	45	50	2103	2337	2571
6	2026	1552	1724	1896	563	625	688	41	45	50	2155	2394	2633
7	2027	1571	1745	1920	568	631	694	41	46	51	2180	2422	2664
8	2028	1600	1778	1956	574	638	702	41	46	51	2216	2462	2708
9	2029	1620	1800	1980	581	645	710	42	47	52	2243	2492	2741
10	2030	1643	1825	2008	590	655	721	42	47	52	2274	2527	2780

Form FG1-5

SUBURBAN NATURAL GAS COMPANY

Form FG1-5 HISTORICAL PEAK AND FORECAST DESIGN DAY REQUIREMENTS

Units: MMCF/YEAR

		1	2	3	4	5	6	7	8	9	10
	YEAR	RESIDENTIAL SALE	COMMERCIAL SALES	INDUSTRIAL SALES	SALES TO ELECTRIC UTILITIES	PEAK SALES TO ULTIMATE CUSTOMERS	RESALE TO MUNICIPALS AND SMALL NATURAL GAS CO	OTHER SALES FOR RESALE	TOTAL SALES	UNACCT FOR GAS	TOTAL
-5	2015	14.0	5.3	0.4	0	19.7	0	0	19.7	0	19.7
-4	2016	12.0	4.6	0.3	0	16.9	0	0	16.9	0	16.9
-3	2017	12.5	4.7	0.3	0	17.5	0	0	17.5	0	17.5
-2	2018	13.8	5.2	0.3	0	19.3	0	0	19.3	0	19.3
-1	2019	16.8	5.6	0.6	0	23.0	0	0	23.0	0	23.0
0	2020	16.9	5.0	0.6	0	22.5	0	0	22.5	0	22.5
1	2021	16.9	5.1	0.7	0	22.7	0	0	22.7	0	22.7
2	2022	17.0	5.5	0.7	0	23.2	0	0	23.2	0	23.2
3	2023	17.5	5.9	0.8	0	24.2	0	0	24.2	0	24.2
4	2024	17.7	6.0	0.8	0	24.5	0	0	24.5	0	24.5
5	2025	18.0	6.3	0.8	0	25.1	0	0	25.1	0	25.1
6	2026	18.5	6.4	0.8	0	25.7	0	0	25.7	0	25.7
7	2027	18.9	6.4	0.9	0	26.2	0	0	26.2	0	26.2
8	2028	19.1	6.3	0.9	0	26.3	0	0	26.3	0	26.3
9	2029	19.8	6.4	0.9	0	27.1	0	0	27.1	0	27.1
10	2030	20.0	6.4	0.9	0	27.3	0	0	27.3	0	27.3

Form FG1-6

SUBURBAN NATURAL GAS COMPANY

Form FG1-6 SUPPLY AND DISPOSITION OF SELF HELP AND OTHER TRANSPORTED VOLUMES

Units: MMCF/YEAR

		1 OHIO PRODUCED GAS TRANSPORTE D SOLELY BY RESPONDENT FOR ON LINE CUSTOMERS	2 OHIO PRODUCED GAS TRANSPORTE D FROM OTHER COMPANY TO RESPONDENT	3 OTHER VOLUMES BY REONDENT FOR O SYSTEM CUSTOMERS	4 TOTAL VOLUMES BY RESPONDENT FOR ON SYSTEM CUSTOMERS	5 OHIO PRODUCED GAS TRANSPORTE D OFF SYSTEM BY RESPONDENT	6 OTHER VOLUMES BY RESPONDENT FOR OFF SYSTEM CUSTOMERS	7 TOTAL VOLUMES BY RESPONDENT FOR OFF SYSEM CUSTOMERS	8 TOTAL VOLUMES TRANSPORTED
	YEAR								
-5	2015	0	0	76	0	76	0	0	76
-4	2016	0	0	83	0	83	0	0	83
-3	2017	0	0	109	0	109	0	0	109
-2	2018	0	0	133	0	133	0	0	133
-1	2019	0	0	162	0	162	0	0	162
0	2020	0	0	178	0	178	0	0	178
1	2021	0	0	182	0	182	0	0	182
2	2022	0	0	200	0	200	0	0	200
3	2023	0	0	200	0	200	0	0	200
4	2024	0	0	200	0	200	0	0	200
5	2025	0	0	200	0	200	0	0	200
6	2026	0	0	200	0	200	0	0	200
7	2027	0	0	200	0	200	0	0	200
8	2028	0	0	200	0	200	0	0	200
9	2029	0	0	200	0	200	0	0	200
10	2030	0	0	200	0	200	0	0	200

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.

Answer: 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 PUCO. Any differences between data previously filled 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.

Answer: Suburban Natural Gas utilizes Symmetry Energy, formerly CenterPoint Energy, as our asset manager. Symmetry Energy 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.

Answer: Gas is procured from Symmetry Energy, our asset manager.

(2) Gas supply prices, by source.

Answer: See Suburban Natural Gas Risk Management Plan.

(3) Natural gas storage facilities.

Answer: Per TC Energy/Columbia Gas Transmission 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.

Answer: Symmetry Energy and Columbia Gas of Ohio with two points of delivery for our southern system.

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

Answer: N/A

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

Answer: Per TC Energy/Columbia Gas Transmission Contracts

(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.

Answer: Gas Demand will be met through the use of firm transportation, storage and market purchases from Symmetry 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.

Answer: Suburban Natural Gas continues to evaluate potential additional facilities or interconnections as may be needed to meet long term projected growth. As of February 22, 2019 we completed, tested, and placed into service an additional 4.9 miles of 12 inch high pressure pipeline from the current terminus of the pre-existing 12 inch high pressure DEL-MAR Pipeline. This extension is essential due to the robust growth we have already experienced in Delaware County since the completion of the original 20 miles of 12 inch pipeline in 2005, and the continuing robust growth we are experiencing in Delaware County.

(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.

Answer: 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.

Answer: Historical experiences, 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.

Answer: 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.

Answer: Suburban Natural Gas contracts from sources that are considered to be the most reliable for base load gas demand. Suburban utilizes its storage contracts with TC Energy/Columbia Gas Transmission 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.

Answer: Completed

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

Answer: Completed

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

Answer: 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.

Answer: Completed

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

Answer: 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.

Answer: Completed

Form FG2-1

SUBURBAN NATURAL GAS COMPANY

Form FG2-1 ANNUAL GAS SUPPLY

Units: MMCF/YEAR

		1 LONG TERM INTERSTATE SUPPLY	2 SPOT MARKET INTERSTATE SUPPLY	3 ALL OTHER INTERSTATE SUPPLY	4 OHIO PRODUCTIO N	5 PROPAPNE	6 SNG	7 LNG	8 OTHER	9 TOTAL REQUIREME NTS	10 NET WITHDRAW ALS FROM STORAGE	11 TOTAL SUPPLIES
-5	2015	0	0	1841	0	0	0	0	0	1841	0	1841
-4	2016	0	0	1615	0	0	0	0	0	1615	0	1615
-3	2017	0	0	1706	0	0	0	0	0	1706	0	1706
-2	2018	0	0	2126	0	0	0	0	0	2126	0	2126
-1	2019	0	0	2010	0	0	0	0	0	2010	0	2010
0	2020	0	0	2067	0	0	0	0	0	2067	0	2067
1	2021	0	0	2114	0	0	0	0	0	2114	0	2114
2	2022	0	0	2174	0	0	0	0	0	2174	0	2174
3	2023	0	0	2225	0	0	0	0	0	2225	0	2225
4	2024	0	0	2279	0	0	0	0	0	2279	0	2279
5	2025	0	0	2338	0	0	0	0	0	2338	0	2338
6	2026	0	0	2395	0	0	0	0	0	2395	0	2395
7	2027	0	0	2423	0	0	0	0	0	2423	0	2423
8	2028	0	0	2463	0	0	0	0	0	2463	0	2463
9	2029	0	0	2493	0	0	0	0	0	2493	0	2493
10	2030	0	0	2528	0	0	0	0	0	2528	0	2528

Form FG2-2

SUBURBAN NATURAL GAS COMPANY

Form FG2-2 ANNUAL SUPPLY PRICES

Units: MMCF/YEAR

		1 LONG TERM INTERSTATE SUPPLY	2 SPOT MARKET INTERSTATE SUPPLY	3 ALL OTHER INTERSTATE SUPPLY	4 OHIO PRODUCTIO N	5 PROPAPNE	6 SNG	7 LNG	8 OTHER	9 TOTAL REQUIREME NTS	10 NET WITHDRAW ALS FROM STORAGE	11 TOTAL SUPPLIES WACOG
-5	2015	0	0	5.87	0	0	0	0	0	0	0	5.87
-4	2016	0	0	5.19	0	0	0	0	0	0	0	5.19
-3	2017	0	0	6.08	0	0	0	0	0	0	0	6.08
-2	2018	0	0	6.08	0	0	0	0	0	0	0	6.08
-1	2019	0	0	5.80	0	0	0	0	0	0	0	5.80
0	2020	0	0	4.51	0	0	0	0	0	0	0	4.51
1	2021	0	0	4.15	0	0	0	0	0	0	0	4.15
2	2022	0	0	4.05	0	0	0	0	0	0	0	4.05
3	2023	0	0	4.10	0	0	0	0	0	0	0	4.10
4	2024	0	0	4.30	0	0	0	0	0	0	0	4.30
5	2025	0	0	4.50	0	0	0	0	0	0	0	4.50
6	2026	0	0	4.60	0	0	0	0	0	0	0	4.60
7	2027	0	0	4.70	0	0	0	0	0	0	0	4.70
8	2028	0	0	4.80	0	0	0	0	0	0	0	4.80
9	2029	0	0	4.90	0	0	0	0	0	0	0	4.90
10	2030	0	0	4.70	0	0	0	0	0	0	0	4.70

Supply Price based on NYMEX January Futures Contracts

Form FG2-3

SUBURBAN NATURAL GAS COMPANY

Form FG2-3 HISTORICAL PEAK DAY AND FORECAST DESIGN DAY SUPPLY

Units: MMCF/YEAR

		1 LONG TERM INTERSTATE SUPPLY	2 SPOT MARKET INTERSTATE SUPPLY	3 ALL OTHER INTERSTATE SUPPLY	4 OHIO PRODUCTIO N	5 PROPAPNE	6 SNG	7 LNG	8 OTHER	9 TOTAL REQUIREME NTS	10 NET WITHDRAW ALS FROM STORAGE	11 TOTAL SUPPLIES
-5	2015	0	0	12.4	0	0	0	0	0	12.4	7.3	19.7
-4	2016	0	0	5.5	0	0	0	0	0	5.5	11.4	16.9
-3	2017	0	0	11.1	0	0	0	0	0	11.1	6.4	17.5
-2	2018	0	0	12.1	0	0	0	0	0	12.1	7.2	19.3
-1	2019	0	0	15.3	0	0	0	0	0	15.3	7.7	23.0
0	2020	0	0	14.6	0	0	0	0	0	14.6	7.9	22.5
1	2021	0	0	14.4	0	0	0	0	0	14.4	8.3	22.7
2	2022	0	0	14.7	0	0	0	0	0	14.7	8.5	23.2
3	2023	0	0	15.4	0	0	0	0	0	15.4	8.8	24.2
4	2024	0	0	15.5	0	0	0	0	0	15.5	9.0	24.5
5	2025	0	0	15.9	0	0	0	0	0	15.9	9.2	25.1
6	2026	0	0	16.3	0	0	0	0	0	16.3	9.7	26.0
7	2027	0	0	16.5	0	0	0	0	0	16.5	9.7	26.2
8	2028	0	0	16.4	0	0	0	0	0	16.4	9.9	26.3
9	2029	0	0	17.3	0	0	0	0	0	17.3	9.8	27.1
10	2030	0	0	17.4	0	0	0	0	0	17.4	9.9	27.3

SUBURBAN NATURAL GAS COMPANY

FORM FG-2-4 EXISTING AND PROPOSED STORAGE FACILITIES

Storage Gas is provided through TC Energy (TCO) Contracts

RESERVOIR NAME	LOCATION	CUSHION BASE GAS	CAPACITY WORKING GAS	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			

FORM FG-2-6 OTHER PEAKING FACILITIES

FACILITY NAME	LOCATION	CAPACITY	COMPLETION DATE
NONE			

Heating Degree Days

Heating degree day is a measurement designed to quantify the demand for energy needed to heat a building. HDD is derived from measurements of outside air temperature. The heating requirements for a given building at a specific location are considered to be directly proportional to the number of HDD at that location.

Example: The high temperature for a particular day was 32°F and the low temperature was 22°F.
(65 F is a base temperature)

The temperature mean for that day was:

$(32^{\circ}\text{F} + 22^{\circ}\text{F}) / 2 = 27^{\circ}\text{F}$ $65^{\circ}\text{F} - 27^{\circ}\text{F} = 38$ Heating Degree Day

Central Ohio

Source: National Weather Service

Preliminary Monthly Climate Data (CF6)

30 Year Normals

Month	HDD	%	Month	2019	2018	2017	2016	2015
Jan	1099	21%	Jan	1100	1160	869	1126	1203
Feb	901	17%	Feb	842	728	635	886	1273
Mar	717	14%	Mar	823	820	678	504	834
Apr	372	7%	Apr	298	518	186	400	345
May	145	3%	May	103	11	136	202	82
Jun	19	0%	Jun	15	8	9	4	20
Jul	1	0%	Jul	0	0	0	0	0
Aug	4	0%	Aug	0	0	0	0	5
Sep	69	1%	Sep	0	21	50	18	22
Oct	325	6%	Oct	234	345	226	214	290
Nov	620	12%	Nov	783	769	640	534	488
Dec	978	19%	Dec	850	848	1040	1001	624
Totals:	5250	100%	Totals	5048	5228	4469	4889	5186
	100%			96.2%	99.6%	85.1%	93.1%	98.8%

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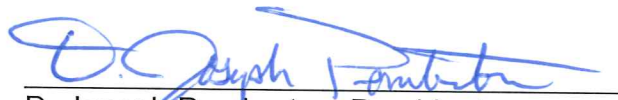
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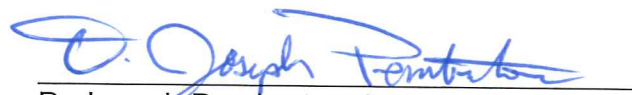
CONTENT STATEMENT

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.


D. Joseph Pemberton, 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 15th day of July 2020.


D. Joseph Pemberton, President
Suburban Natural Gas Company

This foregoing document was electronically filed with the Public Utilities

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7/15/2020 10:34:07 AM

in

Case No(s). 20-1283-GA-FOR

Summary: Report In the matter of the 2020 Long-Term Forecast Report of Natural Gas Demand of Suburban Natural Gas Company electronically filed by Ms. Daniela Bivens on behalf of Suburban Natural Gas Company