STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

PETITION OF SYCAMORE GAS COMPANY FOR APPROVAL TO INCREASE ITS RATES AND CHARGES FOR GAS SERVICE AND FOR AUTHORIZATION TO TRACK ADDITIONS OF CUSTOMER SERVICE LINES	)))))	**CAUSE NO. 45072**

IURC
PUBLIC'S
EXHIBIT NO. 6
10-3-18 AT
DATE REPORTER

INDIANA OFFICE OF UTILITY CONSUMER COUNSELOR

PUBLIC'S EXHIBIT NO. 6

PUBLIC (REDACTED) TESTIMONY OF OUCC WITNESS

BRIEN R. KRIEGER

JULY 31, 2018

Respectfully submitted,

Lorraine Hitz-Bradley

Lorraine Hitz-Bradley
Attorney No. 18006-29
Deputy Consumer Counselor

PUBLIC (REDACTED) TESTIMONY OF
OUCC WITNESS BRIEN R. KRIEGER
CAUSE NO. 45072
SYCAMORE GAS COMPANY, INC.

NOTE: [redacted] HIGHLIGHT REPRESENTS CONFIDENTIAL INFORMATION

I. INTRODUCTION

Q: Please state your name and business address.

A: My name is Brien R. Krieger and my business address is 115 W. Washington Street, Suite 1500 South, Indianapolis, Indiana 46204.

Q: By whom are you employed and in what capacity?

A: I am employed by the Indiana Office of Utility Consumer Counselor ("OUCC") as a utility analyst in the Natural Gas Division. For a summary of my educational and professional experience and general preparation for this case, please see Appendix BRK-1.

Q: What is the purpose of your testimony?

A: The purpose of my testimony is to discuss my review and analysis of Sycamore Gas Company, Inc.'s ("Petitioner" or "Sycamore Gas") cost of service study ("COSS"), proposed rate design, and monthly customer charge. I recommend the Commission reject Petitioner's proposed Rate GS monthly customer charges. I also present analysis supporting a decrease to the cost allocation and wholesale rate to the Town of Aurora, the only customer in Rate WS. For its next COSS, I recommend Petitioner use its own cost data to determine the cost allocation of meters, services, and distribution mains.

Q: Please summarize your findings concerning Petitioner's COSS, rate design, and monthly customer charge.

A: Petitioner is requesting a total revenue increase of 16.5%. Petitioner's COSS method of functionalization and classification of costs using FERC accounts, and then categorizing those costs into Demand, Commodity, Services, Meters and Regulators, and Customer

Accounts, is a normal and acceptable rate calculation process that is consistent with other Indiana natural gas utilities. However, not all rate classes were included in the COSS, and Petitioner did not use its customers' data to perform "Special Studies",[1] which are embedded sub-studies of the COSS used to apportion costs that may be assignable to specific rate classes. Special Studies aid the entire COSS process, by using Petitioner's specific accounting and plant record data to prove rate class cost causation and determine rate class allocators.

Since Rate GS-Meter Group 1 represents approximately 86% of all customers, the absence of a Special Study for Meters and Regulators has little impact. However, a Special Study for Services is important in this Cause, because Petitioner has proposed a Services Tracker and is in the process of updating records and proving the integrity of customer owned services.

Additionally, a Special Study determining rate base and expenses exclusive to Rate WS - Service to Aurora for Resale was not performed. The Rate WS service to the Town of Aurora warrants a Special Study because Petitioner claims Aurora's cost share of distribution plant mains (FERC 376) has increased significantly since Petitioner's previous case, Cause No. 43090 (Order dated June 20, 2007).

My review of Petitioner's COSS indicates an over-allocation of costs to Rate WS. Petitioner's COSS would require a 184% increase to Rate WS, but without substantiation Petitioner proposes only a 10% rate increase to Rate WS. My analysis indicates the actual cost to serve rate WS warrants up to a 15% increase. Only 10% of Petitioner's distribution

[1] Attachment BRK-1, DR 6.2.

mains are used to deliver gas to Aurora, and Aurora serves its own customers through a network of distribution pipes, services, and meters.

I recommend using the adjustments I made to Petitioner's COSS to set revenue requirements. I also recommend that Petitioner use actual cost data to develop the allocation method for meters, regulators and services for all rates. Petitioner's next COSS can and should improve the services allocator in light of Petitioner's request of a services cost tracking mechanism and its continuous improvement of ownership records and integrity of its services placed into Petitioner's plant records and GIS system.

II. OUCC SITE VISIT OBSERVATIONS OF PETITIONER'S PLANT

Q: Please describe your site visit observations of the Sycamore Gas utility and how it impacts your analysis of Petitioner's COSS.

A: On May 15, 2018, OUCC witness Leon Golden and I met with two Sycamore Gas employees at Petitioner's facilities. We reviewed systems maps and toured Sycamore Gas' plant facilities. Petitioner serves the Indiana communities of Brookville, Bright, Greendale, Lawrenceburg, and Rising Sun. Additionally, Sycamore Gas provides wholesale natural gas service to the Town of Aurora. Lawrenceburg has the largest population of Petitioner's system and has approximately 5,000 residents. It is adjacent to Greendale, and is located at the southernmost end of Indiana State Road 1. Brookville is 30 miles north of Lawrenceburg, and also located on State Road 1. The towns of Bright and Rising Sun are located away from major highways with non-road right-of-way easements for Petitioner's feeder distribution pipes.

The Sycamore Gas plant has two separate systems served by two different interstate pipelines. The Brookville area has one city gate take-point on Texas Eastern interstate

pipeline. The Lawrenceburg system has four take-points from Texas Gas. These two independent systems are separated by approximately 4 miles. Sycamore's sole wholesale customer, the Town of Aurora, is situated between Lawrenceburg and Rising Sun. Sycamore Gas can serve Aurora from the east or the west from two separate high pressure distribution pipes.[2] Petitioner's largest customer MGPI remains under a Special Contract rate until 2022. The usage by the Town of Aurora and MGPI represent approximately 53% of Petitioner's annual throughput.

Since the last rate case, Sycamore Gas reclassified its transmission mains from FERC 367 to distribution mains under FERC 376, and Sycamore Gas now has five pressure classes of distribution mains equaling approximately 176 miles of distribution pipes. Petitioner's system includes approximately fifty-five district stations for reducing pressure and Petitioner is in the process of modernizing its odorant delivery systems.

Petitioner has upgraded 98% of the residential 250 cubic feet per hour ("cfh") meter class to electronic meter reading ("AMR") and 50% of the 1,000 cfh meters are already upgraded. All meters are in rate base in FERC Account 381. However, only a small portion of service lines are in rate base - mostly the main to curb valve stubs. The vast majority of service lines are owned by the customers. Sycamore Gas has proposed a tracking mechanism to recover the cost of acquisition of all service lines from distribution main to meter. Petitioner is in the process of recording and validating service lines through updates to its GIS Google Earth operation, mains, stations, and services map. This will allow Petitioner to accurately track any change to ownership of service lines, as well as pressure

[2] Attachment BRK-2, DR 6.9 through DR 6.12

checking the integrity of each service line.

III. PETITIONER'S PROPOSED SERVICES TRACKER

Q: Please describe the current customer-owned Services and the proposed Services Tracker.

A: Petitioner has replaced or repaired approximately 1,345 of 6,300 Rate GS customers' service lines, and has proposed a tracking mechanism to cover the cost of acquiring service lines from existing customers. The costs of acquisition, potential repair, updating accounting requirements, and mapping that will be exclusive to service lines are not well defined in the Petition or testimony. In particular, there is no evidence about whether or how Petitioner will compensate customers if Petitioner seeks to acquire a service line with residual value. See further discussion in the Testimony of OUCC Witness Leon Golden. As part of this process, Petitioner proposes pressure validating existing customer owned service lines, excluding those previously pressure validated, before any ownership change. Petitioner will then have accurate records of ownership with pressure validation, which will be entered into Petitioner's GIS mapping system.

In Petitioner's previous rate case, Cause No. 43090, only the stub portion of a service line, from the main to the curb valve, was recorded in FERC Account 380. Since the last rate case, Petitioner has been repairing/replacing service lines and improving the integrity of customer owned service lines. Based on my conversation with Petitioner's consultant, few, if any, entire service lines have been capitalized into FERC Account 380. The 1,345 services is referenced in OUCC Data Request 3.4[3]. Petitioner needs to further

[3] Attachment BRK-3, DR 3.4 through DR 3.6.

validate ownership and capitalization of main to curb valve and/or curb valve to meter.

IV. PETITIONER'S COST OF SERVICE STUDY

Q: When did Petitioner perform its last COSS and what were the results?

A: Petitioner's most recent COSS was performed in Cause No. 43090 (Order dated June 20, 2007) with a rate base cutoff date of April 30, 2006. Petitioner received authority to merge the Rate G-1 General Service (Lawrenceburg Division) and the Rate G-2 General Service (Brookville Division) rate schedules into a single rate schedule applicable to all General Service customers. The Commission found that Sycamore Gas should implement its approved increase with a 25% subsidy reduction across-the-board as proposed by Petitioner's COSS witness Mr. Kerry Heid (Petitioner's Exhibit KAH-4). Prior to Cause No. 43090, Rate WS – Wholesale Service to Aurora was subsidizing Rate GS; this same subsidization continued even after the Commission's Order to reduce subsidies.

In Cause No. 43090, Petitioner's mains were classified into separate FERC accounts – transmission (FERC 367) and distribution (FERC 376). Thirty-three percent (33%) of the mains were transmission mains and sixty-seven percent (67%) were distribution mains. Approximately 18% of undepreciated transmission plant and less than 1% of undepreciated distribution plant was allocated to Rate WS – Service to Aurora for Resale. In Petitioner's present COSS there is no transmission plant, as it has been reclassified to distribution, and Rate WS is allocated approximately 25% of the depreciated distribution plant.

In Cause No. 43090, the Residential Customer Service Charge increased from $9.11/month to $12.00/month under Rate GS - Group 1 meters (450 cfh and less). In this

case, Petitioner is proposing to increase the customer charge for Rate GS – Group 1 from $12.00/month to $18.50/month, a 54% increase.

Q: Please summarize Petitioner's COSS and the rate design results for this Cause.

A: Petitioner's total plant is dominated by distribution mains, station equipment, meters, and services. The two greatest costs, distribution mains (FERC 376) and measuring & regulating station equipment (FERC 378 and FERC 379) make up 66% of total plant and are allocated on Peak Day Demand and Annual Throughput (Exhibit MJM-5, Table 5A-2, page 1 of 2) to the three rate classes in the COSS. Services, meters, and house regulators dominate the remaining 28% of total plant in service, and are allocated directly to rate classes with weighting factors for these costs derived from Meter Class Group 1 number of customers (base = 1). The Meter Group 2 weighting factor is two and Meter Group 3 weighting factor is five. Petitioner did not substantiate these weighting factors with actual costs. General Plant, Intangible Plant, Land, and Structures are the remaining 6% of total plant, with the allocator from Supervised O&M used for the majority of the group.

Only Rate GS, Rate FT–Firm Transportation, and Rate WS-Service to Aurora for Resale are included in the COSS, jointly representing 35% of the annual throughput. Three rate classes were not included in the COSS, but two of the three - Rate ITS-Interruptible Transport Service and Rate ES-Employment Stabilization Service - were each assigned a 10% rate increase. The third rate class not included in the COSS, the Special Contract Service rate for customer MGPI, was assigned zero increase with its special contract term ending March, 2022. With only two customers, the Special Contract Service rate and the Rate ES-Employment Stabilization Service, represent 65% of Petitioner's annual throughput.

A. Petitioner's Allocation of Transmission and Distribution Mains

Q: Does Petitioner have transmission mains under FERC Account 367 to allocate in the COSS?

A: No. The transmission mains were reclassified as distribution mains (FERC 376) after Cause No. 43090, based on operating pressures in relationship to the allowable yield stress of the pipe as allowed by the Department of Transportation's Pipeline & Hazardous Material Safety Administration ("PHMSA"). All mains are now classified as distribution mains in FERC 376.

Q: How did Petitioner allocate distribution mains in this COSS?

A: Petitioner allocates 50% of distribution plant in FERC 376 using design day throughput and 50% with annual throughput (Allocator: 50% Demand/50% Commodity) per rate class. Peak demand or design day throughput was determined using a heating degree day method with Petitioner's rate class monthly metered data. The annual throughput portion of the 50%/50% allocator is metered annual volumes per rate class.

Based on peak demand and throughput, the COSS assigns all the rate classes (Rate GS, Rate FT, and Rate WS) within the cost of service analysis a share of all distribution mains, including the highest pressure feeder distribution pipes. The 50%/50% is a good allocation method because of Petitioner's concentrated mixed loads of residential and small commercial customers, and for Rate WS when Rate WS is allocated only its appropriate costs from FERC Account 376. The COSS assigns rate classes a proportionate share of all distribution mains, including the four lowest pressure classifications, which are predominantly within city limits and in the neighborhoods. Rate WS – Wholesale Service to Aurora should be excluded from the entirety of distribution mains and evaluated

independently because Aurora only uses a fraction of all pipe contained within FERC 376.

Q: How does Petitioner's allocation of distribution plant compare to its previous base rate case?

A: In Cause No. 43090, Rate WS was allocated zero costs of the undepreciated distribution account (FERC 376) and allocated approximately 18% of the undepreciated transmission mains account (FERC 367). For total mains, Rate WS was allocated 6% of the combined undepreciated transmission and distribution mains ($14,435,716). *See,* Cause No. 43090, Exhibit KAH-2, Schedule 2, p. 1 of 3, lines 6-8 and 14-16.

Approximately $4,500,000 of additional Distribution mains (FERC 376) have been added since Cause No. 43090, with an undepreciated "all" mains total of $18,747,065 *See*, Sycamore's Exhibit MJM-5, Table 5A-2, p. 1 of 2, line 16, Column C. Petitioner's COSS witness does not allocate undepreciated rate base directly to rate classes, but rather lumps depreciated rate base into demand and commodity portions before allocating to rate classes. Therefore, the following analyses is for depreciated rate base, and shows that the allocation to Rate WS now grossly exceeds the 6% allocation for the combined transmission and distribution FERC accounts.

Rate WS is allocated 25% ($2,811,289) of the depreciated "Total Transmission" (sic) (Exhibit MJM-5, Table 5B-3, Page 1 of 1, Line 9) or 17.4% of the total depreciated rate base. The "Total Transmission" in Petitioner's Table 5B-3, Line 9 is actually depreciated Distribution Plant plus depreciated General Plant and is 69% of total depreciated rate base, $16,115,659 (Exhibit MJM-5, Table 5B-3, Page 1 of 1, Line 13).

In response to discovery, Sycamore Gas stated the total book value of Sycamore Gas' plant exclusive to Rate WS is $20,311;[4] I calculate this to be less than 1% of depreciated Total Transmission. *See,* Exhibit MJM-5, Table 5B-3, p. 1 of 1, line 9.

Q: How is the Town of Aurora served from Petitioner's distribution plant?

A: Aurora is served from the east and the west portions of Petitioner's distribution plant through 6" distribution mains. Petitioner has 40 miles of 4" to 8" high pressure distribution mains and these largest diameter mains represent 33% of the total 176 miles of distribution mains (FERC 376) as calculated from Petitioner's Form PHMSA F 7100.1-1. There are east and west taps to serve Aurora from the 6" distribution main. Petitioner's response to discovery concerning tap locations serving Rate WS is attached in OUCC DR 6 (Q 6.9 through Q 6.14).[5]

From Petitioner's mains diagram[6] and my site visit, I estimate there are approximately 4 miles of 6" high pressure distribution mains (FERC 376) used for service to Aurora. These 4 miles of main are not exclusive to Aurora, but are high pressure mains that also serve Lawrenceburg and Rising Sun. The four miles of distribution mains represent approximately 2.5% of Petitioner's total mains (FERC 376) recorded in Form PHMSA F 7100.1-1.

[4] Attachment BRK-4, DR 10.1

[5] Attachment BRK-5, DR 6.9 through DR 6.14

[6] Attachment BRK-6, DR 11.1

Q: Please describe Petitioner's allocation of distribution plant (Rate Base) to Rate WS – Service to Aurora for Resale and your allocation of distribution plant.

A: FERC Account 376 (Exhibit MJM-5, Table 5A-2, Page 1 of 2, Line 16) represents approximately 64% of Total Distribution Plant as calculated from the Total Distribution Plant in Line 26 of the same table. Rate WS is allocated 25% ($2,811,289) of total distribution plant (Exhibit MJM-5, Table 5B-3, Page 1 of 1, Column F, Line 9) and approximately 18.0% of total rate base, Table 5B-3. Line 13. In Cause No. 43090, Rate WS's rate base allocation was 4.5%, or one-quarter of Petitioner's proposed allocation in this case.

My analysis of total rate base (Table 1) includes the starting point where Rate WS is responsible for 2.5% of the total distribution pipe length. I reduced the demand and commodity aggregate portion of rate base (Exhibit MJM-5, Table 5B-3, Page 1 of 1, Column F, Line 9) for Rate WS from 25% to 10% by replacing Petitioner's $2,811,289 of rate base costs to $1,111,692. The 10% of demand and commodity rate base represents all shared rate base with other rate classes including the four miles of distribution main, a higher cost for 6" pipe, and shared costs of measuring and regulating equipment (FERC 378 and FERC 379). The resulting adjustment results in a total rate base (demand, commodity, services, meters & regulators, and customer accounting) allocation of 7% to Aurora, which is 2.5% greater than total rate base allocated to Rate WS in Cause No. 43090.

Table 1 is Petitioner's extracted data of demand and commodity rate base allocation compared to my demand and commodity adjustments resulting in a new total rate base allocation. The right most column shows the effects to Rate WS (Wholesale) of distribution plant reallocation from 25% to 10% resulting in the OUCC bottom line total

rate base allocation of 7%.

Table 1 Rate Base Adjustments

RATE BASE ADJUSTMENTS TO PETITIONER'S EXHIBIT MJM-5, TABLE 5B-4					
	Total Company	General Service and Firm Transportation			
Description	Adjusted	Group 1	Group 2	Group 3	Wholesale
Distribution - Petitioner					
Demand	5,552,429	2,692,433	728,752	529,208	1,602,036
Commodity	5,564,492	2,531,977	826,426	996,837	1,209,253
Total	11,116,921	5,224,410	1,555,178	1,526,045	2,811,289
Percentage of Distribution - Petitioner		**47%**	**14%**	**14%**	**25%**
Adjusted Distribution - OUCC	11,116,921	6,293,491	1,873,416	1,838,322	1,111,692
Percentage of Distribution - OUCC		**57%**	**17%**	**17%**	**10%**
OUCC Distribution Demand & Commodity Adj. to Rate Base	0	1,069,081	318,239	312,277	(1,699,597)
RATE BASE TOTAL					
Petitioner's Rate Base Total	16,115,659	9,860,696	1,776,138	1,649,655	2,829,170
Percentage Allocations - Petitioner Rate Base		**61%**	**11%**	**10%**	**18%**
OUCC Distribution Demand & Commodity Adj. to Rate Base		1,069,081	318,239	312,277	(1,699,597)
Adjusted Rate Base Total	16,115,659	10,929,777	2,094,376	1,961,932	1,129,574
NEW Percentage Allocations - OUCC Adjusted Rate Base		**68%**	**13%**	**12%**	**7%**

B. Cost of Service Study Adjustments

Q: What are the largest categories of costs to be allocated in Petitioner's COSS?

A: Almost 30% of the COSS total is return on rate base (Exhibit MJM-5, Table 5A-1, Line 8). From the same table, Operation and Maintenance ("O&M") expenses are 53% of the COSS total, with the remainder consisting of income taxes and depreciation expenses. Petitioner categorizes 60% of these costs as Distribution Demand and Commodity (Exhibit MJM-5, Table 5A-1, Columns [F] and [G]) in the COSS with the remaining directly assigned with the weighted allocators: Services, Meters & Regulators, and Customer Accounting (Exhibit MJM-5, Table 5B-4). I made my adjustments to the Distribution

Demand and Commodity portion of the COSS. The transportation revenues (Exhibit MJM-5, Table 5A-1, Line 11) are credited to the COSS rate classes.

Q: Please describe the adjustments you made to Petitioner's COSS allocation for your analysis.

A: As presented in the far right column of Table 2, I reduced the COSS demand plus commodity aggregation of Distribution (MJM-5, Table 5B-2, Page 1 of 1, Line 9) from 25% to 10% ($744,257 to $296,217), just as I reduced Demand and Commodity in rate base. I proportionately redistributed the remainder ($448,040) based on original percent shares of Distribution to the lumped Rate GS and Rate Firm Transportation contained within the COSS. In totality, the cost of service to Rate WS drops from Petitioner's 15% to 6%, which is more in line with the previous allocation of 4.5% of the total cost of service.

The following Table 2 contains my results for adjusting Petitioner's COSS, with Rate GS – Group 1 Meters now accounting for 71% of the cost of its service increasing from 66%. This aligns with Rate GS-Group 1, which is approximately 97% of customers and requires the vast majority of distribution mains and expenses.

Table 2 COSS Adjustments

COSS ADJUSTMENTS TO PETITIONER'S EXHIBIT MJM-5, TABLE 5B-2					
	Total Company	General Service and Firm Transportation			
Description	Adjusted	Group 1	Group 2	Group 3	Wholesale
Distribution - Petitioner					
Demand	1,411,698	684,548	185,284	134,550	407,316
Commodity	1,550,469	705,500	230,272	277,755	336,942
Total	**2,962,167**	**1,390,048**	**415,556**	**412,305**	**744,257**
Percentage of Distribution - Petitioner		**47%**	**14%**	**14%**	**25%**
Adjusted Distribution - OUCC	**2,962,167**	**1,670,852**	**499,503**	**495,595**	**296,217**
Percentage of Distribution - OUCC		**56%**	**17%**	**17%**	**10%**
Distribution Demand & Commodity Adj. to COSS	0	280,804	83,947	83,290	(448,041)
	COSS Total				
Petitioner's COSS Total	4,999,384	3,291,320	499,093	456,191	752,780
Percentage Allocations - Petitioner COSS		**66%**	**10%**	**9%**	**15%**
Distribution Demand & Commodity Adj. to COSS		280,804	83,947	83,290	(448,041)
BRK's Adjusted COSS Total	4,999,384	3,572,124	583,040	539,481	304,739
NEW Percentage Allocations - OUCC Adjusted COSS		**71%**	**12%**	**11%**	**6%**

Q: Do you agree with Petitioner's COSS allocation of Distribution Mains (FERC 376)?

A: No.

Q: How do your adjustments to Petitioner's COSS compare to Petitioner's COSS and to present revenues?

A: Petitioner over-allocates the COSS to Rate WS by a factor of twelve. The over-allocation to Rate WS results in an under-allocation to Meter Group 2 and Group 3. See Table 3 for comparison of Petitioner's COSS rate class allocation to the OUCC's adjusted COSS allocation.

Table 3 COSS Adjustment Comparisons

COST OF SERVICE COMPARISON - REVENUE DEFICITS VS. COSS						
Description	Total Company Adjusted	General Service and Firm Transportation			Wholesale	Reference
		Group 1	Group 2	Group 3		
Sales Revenues Excluding Gas Cost - PETITIONER	**4,225,734**	**2,971,906**	**528,855**	**459,900**	**265,072**	MJM-5, Table 5B-1, Line 3
Petitioner - Proposed COSS						
Net Cost of Service w/o Rates ITS,ES, & Special Contract	4,999,384	3,291,320	499,093	456,191	752,780	MJM-5, Table 5B-1, Line 6
Revenue Deficiency from Present Rate Revenue	773,650	319,414	(29,762)	(3,710)	487,708	MJM-5, Table 5B-1, Line 7
Percent Increase if Rate Revenue is set equal to COSS	18.3%	10.7%	-5.6%	-0.8%	184.0%	
OUCC - Adjusted COSS						
Net Cost of Service w/o Rates ITS,ES, & Special Contract	4,999,384	3,572,124	583,040	539,481	304,739	OUCC Exhibit 6, Table 2
Revenue Deficiency from Present Rate Revenue	773,650	600,218	54,185	79,580	39,667	
Percent Increase if Rate Revenue is set equal to OUCC Adjusted COSS	18.3%	20.2%	10.2%	17.3%	15.0%	

C. Special Studies Associated with Cost of Service

Q: What is the purpose of Special Studies within a COSS?

A: Special Studies are performed to define the unique qualities of individual utilities. It is common practice within a COSS to determine percentages of FERC accounts that can be directly assigned to, or shared by, a rate class. COSS witnesses routinely perform studies on transmission and distribution mains, meters, and services. Actual amounts of Petitioner's plant, O&M costs, and records data is routinely used. A service or meter study lends itself to direct allocation of costs included in FERC 380 and FERC 381 that can be tracked against rate classes.

A distribution main study often assigns costs based on customer count, with the majority of costs split 50%/50%, allocated by rate class annual throughput and rate class peak demand. Distribution studies are unique to each utility because of the utility's characteristics: size and length of distribution pipes, operating pressures, the varying

topography, different operational strategies, and special rate classes or customers. A Special Study is important when there is a single customer, or few customers contained within a rate class and these rate classes are non-homogeneous with other rate classes.

Q: Did Petitioner perform Special Studies to directly assign costs to various rate classes?

A: Yes, but not all that were required to support cost assignments. Petitioner performed a Special Study to determine each rate's contribution to peak demand or Peak Day. I do not dispute Petitioner's derivation of the Peak Day allocator. The allocators for services and meters and regulators were determined by multiplying by weighting factors. However, Petitioner does not have workpapers that exist for the derivation of the weighting factors. I do not consider the weighting factors derivation as a special study, because Petitioner provides no supporting costs or specific analysis.

Petitioner states the weighting factors represent relative cost differentials between small and larger facilities, but provides no cost support for this assertion.[7] I do not contest this weighting factor approach, but recommend improvements because Sycamore Gas is replacing or repairing approximately 100 services[8] per year. A special study related to services will better align costs since the number of services increases each year.

A special study was not included in Petitioner's case-in-chief for allocation of rate

---

[7] Attachment BRK-1, DR 6.2

[8] FERC Account 380 SERVICES - as defined in PART 201—UNIFORM SYSTEM OF ACCOUNTS PRESCRIBED FOR NATURAL GAS COMPANIES:

> A. This account shall include the cost installed of service pipes and accessories leading to the customers' premises.
>
> B. A complete service begins with the connection on the main and extends to but does not include the connection with the customer's meter. A stub service extends from the main to the property line, or the curb stop.

base to Rate WS – Service to Aurora for Resale. A Special Study is needed for Rate WS because: 1) Aurora is the only customer in the rate class; 2) there is limited use of Petitioner's rate base by Aurora; 3) Aurora provides its own distribution plant to its customers; and 4) Petitioner has reclassified all transmission mains to distribution mains affecting allocation to Rate WS.

Q: Do you recommend Petitioner update the proposed COSS for cost allocation to Aurora?

A: Yes. A special study is warranted to determine cost causation for providing service to Rate WS – Service to Aurora. At a minimum, a special study should be done to segregate distribution feeder mains (60 psig to 300 psig) used to move gas to Sycamore Gas' concentrated customer base within Brookville, Greendale, Lawrenceburg, and Rising Sun from that feeder main that serves Rate WS. It is important to remember the Town of Aurora has lower pressure distribution pipelines, regulators, and services for its concentration of customers. The result of the Rate WS special study should be used in an updated COSS to better understand the cost to serve and determine if subsidies can be mitigated while avoiding rate shock to any one rate class.

Q: Do you recommend Petitioner update the proposed COSS for cost allocation of Meter and Services?

A: No. A special study of services is not warranted at this time because only the service stub is contained within rate base. Petitioner is substantially improving its service records data through the GIS System. I do recommend Petitioner "ready" its Services data for a special study for the next Cause concerning services as Petitioner records are improved. The special study can accurately assign costs as warranted.

I do have concerns about the potential for Petitioner to perform O&M on a service while the customer retains ownership and these costs being captured and booked as a revenue requirement expense. If the Commission approves Petitioner's service ownership change request in this Cause, the total change of service lines ownership will happen gradually. There will be a period of time where some customers will continue to pay for O&M even though the line is customer-owned, while other customers' service O&M is expensed in Petitioner's accounts because it is Petitioner-owned. The timing and the costs of acquisition by Petitioner should be carefully accounted for to delineate capitalization, depreciation, and O&M costs.

Petitioner differentiates between rate class meter sizes with different volumetric rates and customer charges. The three different proposed monthly customer charges for Rate GS are based on meter size variations which have increasing costs, but the actual cost of meters was not investigated. The next COSS should include a meter study using actual Petitioner data to differentiate between directly assignable costs to the different rate classes.

V. MONTHLY CUSTOMER CHARGES AND RATE DESIGN

A. Monthly Customer Charges

Q: What monthly customer charges does Petitioner propose for Rate GS Group 1?

A: Petitioner proposes to increase the customer charge from $12.00 to $18.50 for approximately 86% of its customers – Rate GS Group 1. Rate GS Group 1 is the smallest meter size and is comprised of residential customers and small commercial customers.

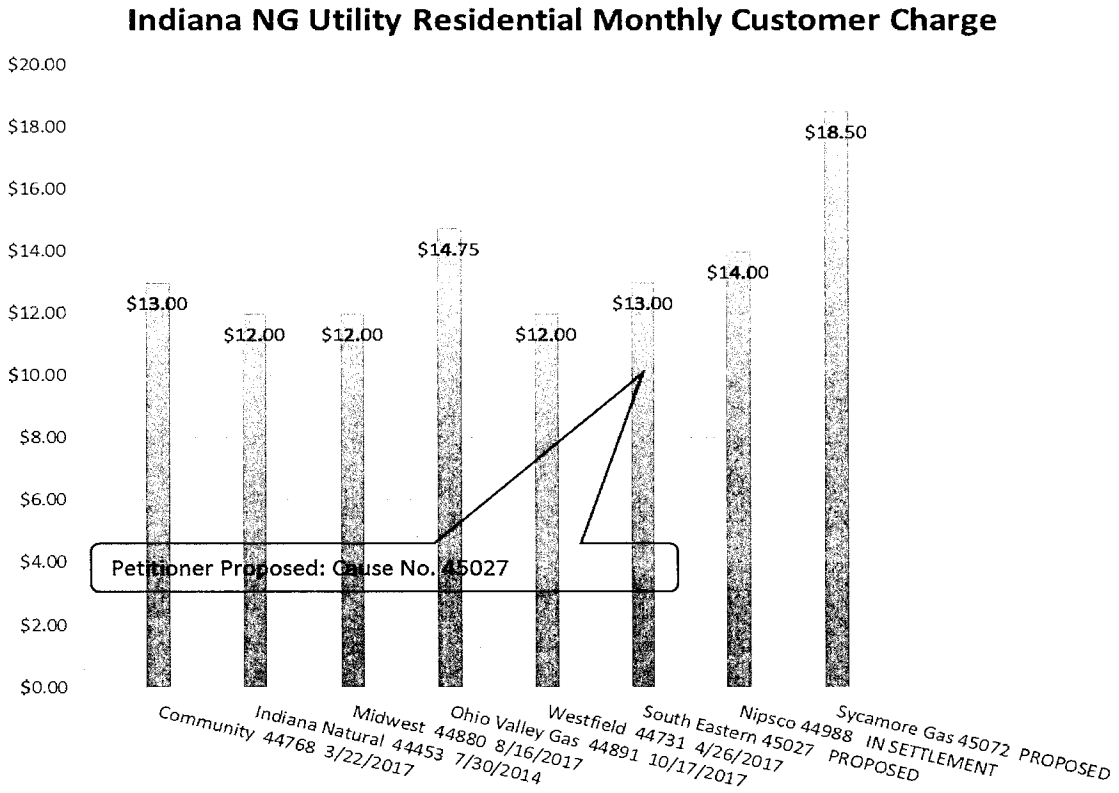
Q: Is Petitioner's proposed residential monthly customer charge, Rate GS – Group 1, similar to other Indiana natural gas utilities?

A: No. Petitioner is requesting a 54% increase to the residential class' (Rate GS – Group 1) fixed monthly customer charge. The proposed residential monthly charge of $18.50 is the highest of other Indiana natural gas utilities, as I have illustrated in Chart A.

Q: Do you agree with Petitioner's proposed increase to its fixed monthly residential customer charge, Rate GS Group 1?

A: No. This proposal is much higher than the fixed monthly customer charges the Commission has approved for other Indiana natural gas utilities in recent years, as seen below in Chart A.

Chart A – Indiana Natural Gas Utility Residential Customer Charges



Petitioner's proposed residential customer charge is 43% greater than the average of the most recent customer charges (approved, proposed, or in settlement) for any natural gas utility in Indiana as shown in Chart A. Three large natural gas utilities (Citizens Gas, Vectren North, and Vectren South) all have residential customer charges of $12/month or less. The NIPSCO residential customer charge, proposed in the pending settlement, is $14.00/month. The Petitioner's residential customer charge as proposed would be $3.75 higher than Ohio Valley Gas, which is the highest monthly customer charge of any Indiana natural gas utility.[9]

Q: How does Petitioner's proposed residential monthly customer charge compare to the requested total margin increase?

A: Petitioner's proposed residential monthly customer charge increase is 2.5 times the percentage of the requested total margin increase. Petitioner has proposed a 16.5% rate increase with a 43% increase to the monthly customer charge for Rate GS - Group 1. In recent Indiana natural gas Orders (Table 4), most residential monthly charge increases are less than half of the total margin increase. I recommend the residential monthly charge increases should not exceed 50% of the total requested margin increase.

Table 4 Indiana Utilities Residential Customer Charge Increase versus Total Margin Increase

Natural Gas Utility	Cause Number	Previous Customer Charge	New Customer Charge	Customer Charge Increase	Requested Margin Increase
Community NG	44768	$12.00	$13.00	8.3%	19.55%
Indiana NG	44453	$11.00	$12.00	9.1%	12.34%
Midwest NG	44880	$12.00	$12.00	0.0%	16.95%
Ohio Valley NG	44891	$14.50	$14.75	1.7%	17.80%

Q: Does the American Gas Association ("AGA") have statistical data about the magnitude of customer charges within the United States?

A: Yes. The AGA's May 28, 2015 Energy Analysis titled Natural Gas Utility Rate Structure:

[9] Valley Rural Utility has tentative approval of $15.33 monthly customer charge through an Alternative Regulatory Plan (ARP) in Cause No. 42115.

The Customer Charge Component – 2015 Update contains data about customer charges. The AGA's Energy Analysis indicates 75% of the companies have a residential customer charge of $15.38 or less, with the median being $11.25 per month.

Table 5

2015 Median Monthly Natural Gas Customer Charges by Census Region

Census Region	Residential	Commercial
New England	$13.50	$28.41
Middle Atlantic	$14.60	$23.60
East North Central	$11.38	$24.00
West North Central	$13.16	$24.40
South Atlantic	$10.00	$22.00
East South Central	$14.00	$16.96
West South Central	$13.24	$18.51
Mountain	$10.80	$20.00
Pacific	$4.95	$14.90

Indiana is part of the East North Central Region, along with Illinois, Michigan, Ohio, and Wisconsin. Sycamore's proposed residential customer charge exceeds East North Central region's residential customer charge in both magnitude and requested recovery percentage of claimed fixed costs.

Q: How does Petitioner's proposed residential monthly charge compare to other Indiana natural gas utilities?

A: Sycamore Gas proposes a residential monthly charge request that would be significantly higher than other Indiana natural gas utilities as shown in Chart A. Petitioner's requested increase in the monthly customer charge is not supported, is not a gradual increase, and does not align with other Indiana natural gas utility base rate case orders.

Q: What monthly residential customer charge is appropriate in this Cause?

A: I recommend Sycamore Gas' monthly residential customer charge (Rate GS Group 1) be set at $14.00/month, which is a 16.6% increase over the current charge. A $14.00 fixed

monthly residential customer charge more closely aligns with recent Commission-approved residential customer charges for Indiana natural gas utilities.

B. Rate Design and Subsidies

Q: Were subsidies addressed in Sycamore's previous rate case?

A: In Cause No. 43090, Petitioner Witness Heid compared pro forma revenues for his proposed rates against his COSS equalized revenues or equal return on rate base (KAH-4, Column (F) vs. Column (E)); the difference was subsidies. Mr. Heid proposed to reduce subsidy payments from Rate WS to Rate GS by 25%. Petitioner's Exhibit KAH-4 indicated the proposed revenue from Rate WS continued to contain $128,000 of subsidy payable to other rate classes, or 34% of Rate WS revenue. The 25 percent subsidy reduction was accepted in the Commission's Order with Rate WS paying more than its cost for service.

Q: Does Petitioner propose to mitigate subsidies through its proposed rate design?

A: Petitioner's COSS Witness Martin does not discuss prior or present subsidies.

Q: Does Petitioner propose Rate WS revenues to be proportionate to its COSS results?

A: No. COSS witness Mr. Martin indicates the Rate WS revenue requirement should increase 184% (Table MJM-5, Table 5B-1, Line 8), but Rate WS is assigned a 10% rate increase. Rate WS went from paying a substantial subsidy in Cause No. 43090 to needing a substantial subsidy now. My COSS analysis does not agree with Petitioner's COSS because Petitioner over-allocates rate base and operating expenses to Rate WS. Setting an accurate COSS for all rates is necessary to follow causation principles, to substantiate reasons to avoid rate shock, and to improve confidence to rate payers that their rates are as close as practical to their actual costs.

Q: What return did you calculate on your adjusted rate base?

A: I used Petitioner's calculation method from Petitioner's Exhibit MJM-5, Table 5B-1, page 1 of 1 to determine the rate of return for my reallocated revenues. Petitioner's overall requested return is 8.91%; my table indicates 8.95%, including rounding errors. Since Petitioner's COSS did not include Rate ITS, Rate ES, and the Special Contract Service rates, but did include all rate base, there is an unknown return associated with those excluded three rates. The three rate Meter Group numbers (Rate GS and Rate FT) and Rate WS all have positive returns. Under my adjusted COSS, Rate WS still provides a positive return of 7.75% to Petitioner as shown in Table 6.

Table 6 OUCC Rate of Return

OUCC Rate of Return Calculations					
	Total Company	General Service and Firm Transportation			
Description	Adjusted	Group 1	Group 2	Group 3	Wholesale
PER OUCC:					
REVENUE UNDER PROPOSED COSS	$4,999,384	$3,572,124	$583,040	$539,481	$304,739
REVENUE UNDER CURRENT RATES	4,225,733	$3,019,340	$492,815	$455,997	$257,581
REVENUE DEFICIENCY	781,141	600,028	52,326	81,629	47,158
TRANSPORTATION INCREASE	26,170	12,299	3,661	3,591	6,619
OUCC PROPOSED REVENUE INCREASE	754,971	587,729	48,665	78,038	40,539
INCREMENTAL TAX RATE	26.80%	26.80%	26.80%	26.80%	26.80%
INCREMENTAL TAXES	209,346	160,808	14,023	21,877	12,638
INCREMENTAL RETURN	571,795	439,220	38,303	59,752	34,520
RETURN UNDER CURRENT RATES OUCC	870,072	621,678	101,470	93,889	53,036
TOTAL RETURN UNDER OUCC COSS	**1,441,867**	**1,060,898**	**139,772**	**153,641**	**87,555**
RATE BASE OUCC COSS	**$16,115,659**	**$10,929,777**	**$2,094,376**	**$1,961,932**	**$1,129,574**
RATE OF RETURN OUCC COSS	**8.95%**	**9.71%**	**6.67%**	**7.83%**	**7.75%**

VI. RECOMMENDATIONS

Q: What are your COSS recommendations?

A: I recommend using my adjusted COSS as a basis to assign rate revenue requirements, and I recommend Petitioner perform a special study within a COSS to determine the actual costs to serve Aurora in its next base rate case. All rate classes should be evaluated in the COSS to establish cost causation with rate class revenues set from a COSS basis. Special consideration in rate design should be given to special contracts or economic development rates after the COSS. My analysis indicates Rate WS revenues can be set very close to the cost of service for Rate WS.

Q: What are your revenue recommendations per rate class?

A: I recommend not exceeding the rate class revenue for Rate WS as set forth in Table 7 (below). I set the other class revenues by first fixing Rate WS (15% increase) to my adjusted COSS and then decrease revenues between Rate GS and Rate FT as proportioned from Petitioner's original proposed revenues. I do not alter Petitioner's proposed revenues to the two economic development type rates: Rate ES and Special Contract Service and I do not change Rate ITS from Petitioner's proposal. Finally, I assign $205,027 to Rate GS and Rate FT as Petitioner has done: 85% to be collected in Rate GS and 15% from Rate FT (Exhibit MJM-S Q 11, pages 6 and 7).

The OUCC recommends a reduction in total revenue and I recommend the percentage increases as reflected in Table 7. The revenue per class based on the OUCC's total recommended rate revenue is also presented in Table 7.

Table 7: OUCC's vs. Petitioner's rate class revenue with Rate WS set to COSS

REVENUE from Rates from Revised Exhibit MJM-1 (confidential)							
PETITIONER							
	Total	GS	FT	WS	ITS	ES	Special Contract
Revenue at Present Rates	$ 4,732,604	$ 3,654,684		$ 265,072			
Petitioner Revenue at Proposed Rates	$ 5,506,250	$ 4,341,627		$ 291,579			
Petitioner Proposed % Increase	16.3%	18.8%		10.0%			
OUCC							
OUCC Rate Revenue at OUCC COSS	$ 5,506,250	$ 4,309,262		$ 304,739			
OUCC % Coss Increase	16.3%	17.9%		15.0%			
OUCC PROPOSED REVENUE	$ 5,368,268	$ 4,201,276		$ 290,936			
OUCC PERCENT INCREASE	13.4%	15.0%		9.8%			

Note: OUCC proposed total revenue from OUCC Attachment MHG-1, Schedule 5 (Operating Revenues not including Other Operating Revenue)

Q: Please summarize your recommendations concerning Petitioner's COSS and rate design.

A: I recommend:

- Only a portion of the highest pressure feeder pressure (60-300 psig) distribution pipe (FERC 376) be allocated in the COSS to Aurora.
- Actual rate base costs as provided by Petitioner, exclusive to Rate WS for the western and the eastern Aurora taps, be included in a Special Study to determine the cost of service for Aurora in Petitioner's next COSS.
- The Brookville system and the Bright and Hidden Valley distribution systems should not be included in allocation to Rate WS – Service to Aurora for Resale.
- My allocated revenues to Rate WS not be exceeded because my adjusted COSS is conservative, and it still may over allocate costs to Rate WS.
- Petitioner's next COSS include Special Studies for Services and Meters including ownership records, actual costs, and quantities of meters and

services to determine the services allocator and the meters allocator. This is especially important as Petitioner may transition to owning the services.

- A $14/month Rate GS – Meter Group 1 monthly customer charge and the rate class OUCC's Proposed Revenue of rate classes presented in Table 7.

Q: Does this conclude your testimony?

A: Yes, it does.

AFFIRMATION

I affirm, under the penalties for perjury, that the foregoing representations are true.

Brien R. Krieger

Brien R. Krieger
Utility Analyst II
Indiana Office of Utility Consumer Counselor
Cause No. 45072
Sycamore Gas Company

July 30, 2018

Date

APPENDIX BRK-1 TO THE TESTIMONY OF OUCC WITNESS BRIEN R. KRIEGER

Q: Please describe your educational background and experience.

A: I graduated from Purdue University in West Lafayette, Indiana with a Bachelor of Science Degree in Mechanical Engineering in May 1986, and a Master of Science Degree in Mechanical Engineering in August 2001 from Purdue University at the IUPUI campus.

From 1986 through mid-1997, I worked for PSI Energy and Cinergy progressing to a Senior Engineer. After the initial four years as a field engineer and industrial representative in Terre Haute, Indiana, I accepted a transfer to corporate offices in Plainfield, Indiana where my focus changed to industrial energy efficiency implementation and power quality. Early Demand Side Management ("DSM") projects included ice storage for Indiana State University, Time of Use rates for industrials, and DSM Verification and Validation reporting to the IURC. I was an Electric Power Research Institute committee member on forums concerning electric vehicle batteries/charging, municipal water/wastewater, and adjustable speed drives. I left Cinergy and worked approximately two years for the energy consultant, ESG, and then worked for the OUCC from mid-1999 to mid-2001.

I completed my Masters in Engineering in 2001, with a focus on power generation including aerospace turbines and left the OUCC to gain experience and practice in turbines. I was employed by Rolls-Royce (2001-2008) in Indianapolis working in an engineering capacity for military engines. This work included: fuel-flight regime performance, component failure mode analysis, and military program control account management.

From 2008 to 2016 my employment included substitute teaching in the Plainfield, Indiana school district, grades 3 through 12. I passed the math Praxis exam requirement for teaching secondary school. During this period, I also performed contract engineering work for Duke Energy and Air Analysis.

Over my career I have attended various continuing education workshops at the University of Wisconsin and written technical papers. While previously employed at the OUCC, I completed Week 1 of NARUC's Utility Rate School hosted by the Institute of Public Utilities at Michigan State University. In 2016, I attended two cost of service/rate making courses: Rate Making Workshop (ISBA Utility Law Section) and Financial Management: Cost of Service Rate-Making (AWWA). In 2017, I attended the AGA Rate School sponsored by the Center for Business and Regulation in the College of Business & Management at the University of Illinois Springfield and attended Camp NARUC Week 2, Intermediate Course held at Michigan State University.

My current responsibilities include reviewing and analyzing Cost of Service Studies ("COSS") relating to cases filed with the Commission by natural gas, electric and water utilities. Additionally, I have taken on engineering responsibilities within the OUCC's Natural Gas Division.

Q: Have you previously filed testimony with the Commission?

A: Yes. I have provided written testimony concerning cost of service studies. While previously employed by the OUCC, I wrote testimony concerning the Commission's investigation into merchant power plants, power quality, Midwest Independent System Operator and other procedures. Additionally, I prepared testimony and position papers

supporting the OUCC's position on various electric and water rate cases during those same years.

Q: Please describe the general review you conducted to prepare this testimony.

A: I reviewed previous Indiana base rate petitions, testimony, and Orders for natural gas utilities with a focus on the associated cost of service studies. I reviewed Petitioner's previous base rate case, Cause No. 43090, and the Commission Order. I reviewed and analyzed Petitioner's prefiled direct testimony, exhibits, workpapers, and data request responses for this Cause. I focused on the testimony, exhibits, and work papers of Petitioner's, witness Michael J. Martin. On May 15, 2018, I performed an on-site review of Petitioner's pipeline facilities and pipeline maps.

Q 6.2: *Please provide workpapers for developing the following ACOSS allocators in Exhibit MJM-5, Table 5B-4, Page 1 of 1: Services and Meters & Regulators.*

Response: **The allocators for services and meters and regulators were determined by taking the number of customers (number of annual bills divided by 12) in each Rate GS customer charge group from Revised Exhibit MJM-1 and multiplying by the weighting factors described below for Services and Meters and Regulators as shown in data Request R3.14 and R3.15.**

From R3.14
Workpapers do not exist regarding the weighting factors used in Table5B-4, line 10. The cost of the Service function is allocated to Sycamore's Rate Schedules and the customer groupings within the Rate schedules based on the number of customers. Customers that consume more gas hourly, daily and annually require larger natural gas facilities. Larger facilities are often higher in expense and company investment. The weighting factor used on line 10 represent the relative cost differential between small and larger customer facilities.

From R3.15
Workpapers do not exist regarding the weighting factors used in Table5B-4, line 15. The cost of the Meter and Regulator function is allocated to Sycamore's Rate Schedules and the customer groupings within the Rate Schedules based on the number of customers. Customers that consume more gas hourly, daily and annually require larger meters and regulators. Larger meters and regulators often are more expensive and require higher levels of company investment. The weighting factor used on line 15 represents the relative cost differential between small and larger customer meters and regulators.

The formulas for all calculations are shown in the Excel workpaper for the ACOSS provided in response to OUCC Data Request 6.1.

Q 6.9: *What is the pressure and pipe designation of the distribution pipe serving the East Aurora tap?*

Response: The pressure designation is shown on our map as "F" for feeder line. The approximate operating pressure of that line is 150 psig. It is noted as 6" SPCW 1995. 6" diameter Steel Protected Coated and Welded, installed in 1995.

Q 6.10: *What is the pressure and pipe designation of the distribution pipe serving the West Aurora tap?*

Response: The pressure designation is shown on our map as "F" for feeder line. The approximate operating pressure of that line is 275 psig. It is noted as 6" SPCW 1991. 6" diameter Steel Protected Coated and Welded, installed in 1991.

Q 6.11: *What is the address location (nearest street intersections) of the East Aurora tap?*

Response: Approximate address is 1165 W. Eads Parkway (US 50), Aurora, IN, across from Golden Dr. At this location, the 6" main feeds Station 219, which is the East Aurora Station.

Q 6.12: *What is the address location (nearest street intersections) the West Aurora tap?*

Response: Approximate address is 10750 Cole Lane, Aurora, which is at the intersection of Cole Lane with Charton Circle. At this location, the 6" main feeds Station 596, which is the West Aurora Station. The 6" main also continues on to feed the town of Rising Sun.

Q 3.4: *Has Sycamore Gas acquired any service lines (FERC account 380) previously owned by any customer? If "yes", please indicate when Petitioner acquired ownership of the service line, state how many customers it acquired service lines from, and explain how the transaction was recorded in Sycamore Gas' books and records.*

Response: Sycamore Gas has not formally acquired any customer service lines owned by any customer. When Operator Qualification (OQ) rules required customer service lines to be installed by someone qualified under Sycamore's OQ program, it no longer permitted customers to perform the installation work. Sycamore does not have a program to qualify contractors for this work, outside of its relationship with Superior Utility Operations or its affiliate, Premier Energy Services. Records indicate that Sycamore has worked on approximately 1,345 service lines since August 30, 2004. See attached list titled R3.3 Sycamore Service Lines Installed 2004-2018. It is not currently clear whether this work was on the main-curb service (Sycamore ownership), curb-meter service (customer ownership), or both. A detailed review of each Job Control Form will need to be conducted to determine whether the curb-meter portion owned by the customer was replaced or installed new by Sycamore's contractor. To the best of our knowledge, labor and material costs for this work were booked to Account 380. Most assets in Account 380 are not identified individually. Service line costs are typically lumped together when capitalized.

Q 3.5: *What percentage of all services lines are contained within FERC account 380? Please provide the response per Rate Class and meter Group.*

Response: To the best of our knowledge, all of Sycamore's service lines are contained within FERC account 380. As mentioned in the response to Q3.3, above, Sycamore is not able to provide a direct link between account 380 and Rate Class and meter Group.

Q 3.6: *Has Sycamore Gas repaired or replaced customer-owned service lines with the customer retaining ownership of the repaired or replaced service line? If "yes", were the repair or replacement expenses booked to Sycamore Gas?*

Response: Yes, Sycamore has repaired or replaced customer-owned service lines with the customer retaining ownership of the repaired or replaced service line, and yes, repair or replacement expenses were booked to Sycamore Gas in account 380.

II. Data Request.

Q 10.1: *Does Rate WS – Service to Aurora for Resale have any specific plant provided by Petitioner that is used exclusively for Rate WS? If so, please provide the name of the plant, the FERC Account number, and the approximate value for each identified plant item.*

Response 10.1: Yes. The following plant items are exclusive to Rate WS:

West Aurora Station, 12/01/1969, FERC Account 375
Original cost = $394.85
Amount depreciated = $394.85
Book value = $0

Aurora East Station, 12/01/1990, FERC Account 375
Original cost = $9,684.65
Amount depreciated = $7,733.74
Book value = $1,950.91

West Aurora Station, 12/01/1992, FERC Account 375
Original cost = $8,064.84
Amount depreciated = $5,970.31
Book value = $2,094.53

104' of Steel 4", 12/01/1990, FERC Account 376
Original cost = $260,811.08 for 5,997'
Amount depreciated = $208,412.70 for 5,997'
Book value = $52,398.38 for 5,997'
Book value for 104' = $90.69

38' of Steel 4", 12/01/1991, FERC Account 376
Original cost = $1,765.40
Amount depreciated = $1,358.33
Book value = $407.07

3' of Steel 4", 12/01/1995, FERC Account 376
Original cost = $86.07
Amount depreciated = $56.49
Book value = $29.58

250' of Steel 6", 12/01/1995, FERC Account 376
Original cost = $241,151.69 for 5,987'
Amount depreciated = $157,451.08 for 5,987'
Book value = $83,700.61 for 5,987'
Book value for 250' = $3,495.10

Aurora East Station, 12/01/1989, FERC Account 379
Original cost = $3,636.73
Amount depreciated = $3,010.15
Book value = $626.58

Aurora East Station, 12/01/1990, FERC Account 379
Original cost = $28,152.95
Amount depreciated = $22,481.15
Book value = $5,671.80

West Aurora Station #596, 12/01/1992, FERC Account 379
Original cost = $22,890.79
Amount depreciated = $16,945.80
Book value = $5,944.99

The total book value of Sycamore's plant exclusive to Rate WS is $20,311.25

Q 6.9: *What is the pressure and pipe designation of the distribution pipe serving the East Aurora tap?*

Response: The pressure designation is shown on our map as "F" for feeder line. The approximate operating pressure of that line is 150 psig. It is noted as 6" SPCW 1995. 6" diameter Steel Protected Coated and Welded, installed in 1995.

Q 6.10: *What is the pressure and pipe designation of the distribution pipe serving the West Aurora tap?*

Response: The pressure designation is shown on our map as "F" for feeder line. The approximate operating pressure of that line is 275 psig. It is noted as 6" SPCW 1991. 6" diameter Steel Protected Coated and Welded, installed in 1991.

Q 6.11: *What is the address location (nearest street intersections) of the East Aurora tap?*

Response: Approximate address is 1165 W. Eads Parkway (US 50), Aurora, IN, across from Golden Dr. At this location, the 6" main feeds Station 219, which is the East Aurora Station.

Q 6.12: *What is the address location (nearest street intersections) the West Aurora tap?*

Response: Approximate address is 10750 Cole Lane, Aurora, which is at the intersection of Cole Lane with Charton Circle. At this location, the 6" main feeds Station 596, which is the West Aurora Station. The 6" main also continues on to feed the town of Rising Sun.

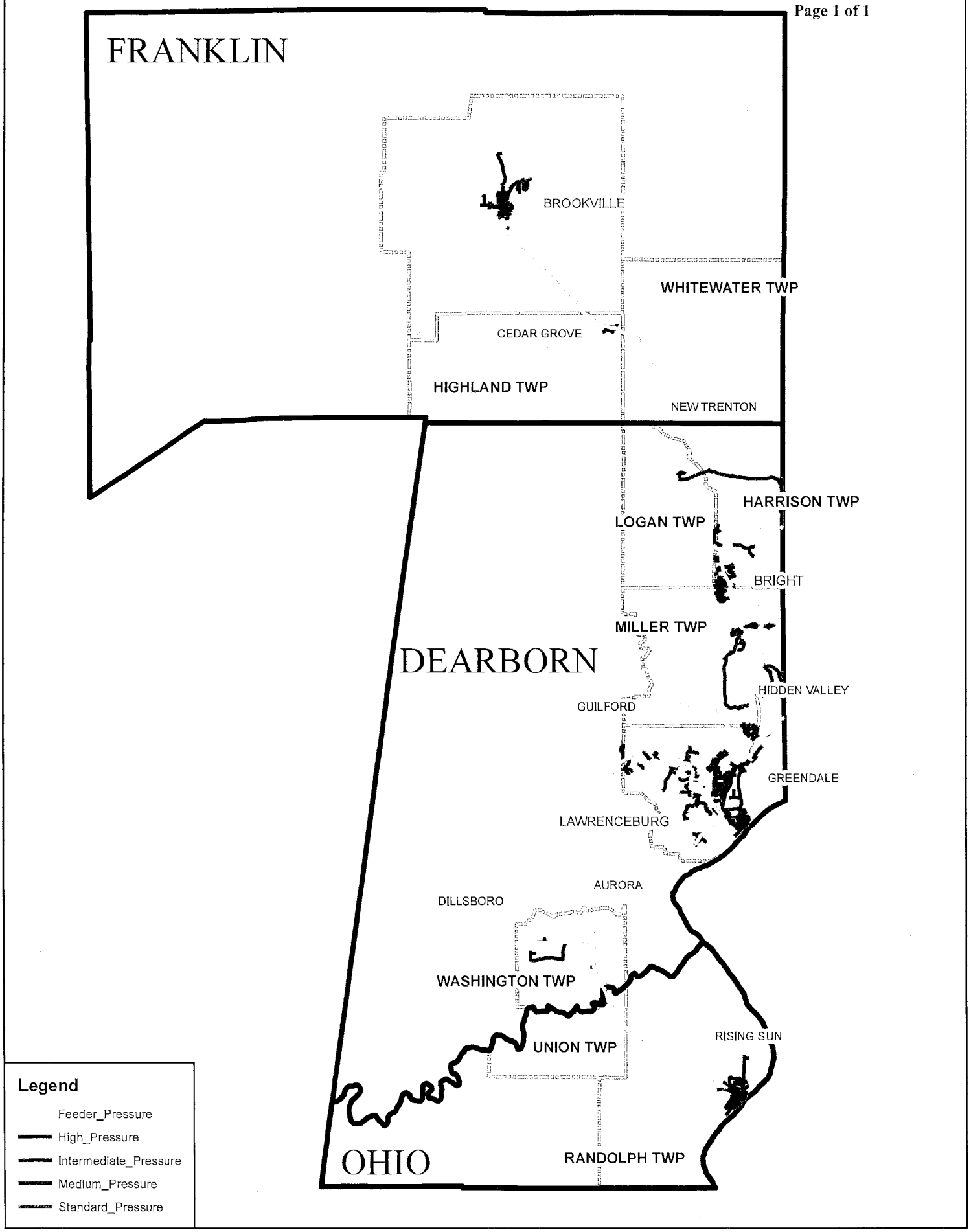
Q 6.13: *What is the approximate distance, in length of pipe, from the East Aurora tap to the nearest Sycamore Gas Company's take point from the Texas Gas interstate pipeline?*

Response: The approximate distance to the nearest take point (Lawrenceburg #1 Station) is 5.7 miles by roadway. It has not been evaluated whether this route could be traversed directly cross country.

Q 6.14: *What is the approximate distance, in length of pipe, from the West Aurora tap to the Sycamore Gas Company's take point from the Texas Gas interstate pipeline?*

Response: The approximate distance to the nearest take point (Rising Sun Tap Station) on Hoffman Road is 2.8 miles by roadway.

Possibly more relevant than either of Sycamore's referenced existing take points is that the Aurora system on SR 350 near Wilmington ends less than 3/4 of one mile from the same Texas Gas line system (where it crosses SR 350) that Sycamore Gas taps to feed its own system as well as Aurora's.


FRANKLIN
BROOKVILLE
WHITEWATER TWP
CEDAR GROVE
HIGHLAND TWP
NEW TRENTON
HARRISON TWP
LOGAN TWP
BRIGHT
MILLER TWP
DEARBORN
HIDDEN VALLEY
GUILFORD
GREENDALE
LAWRENCEBURG
AURORA
DILLSBORO
WASHINGTON TWP
UNION TWP
RISING SUN
OHIO
RANDOLPH TWP
Legend
Feeder_Pressure
High_Pressure
Intermediate_Pressure
Medium_Pressure
Standard_Pressure

CERTIFICATE OF SERVICE

This is to certify that a copy of the foregoing ***Indiana Office of Utility Consumer Counselor Public's Exhibit No. 6 Public (Redacted) Testimony of OUCC Witness Brien R. Krieger*** has been served upon the following counsel of record in the captioned proceeding by electronic service on July 31, 2018.

Clayton C. Miller
STOLL KEENON OGDEN PLLC
201 N. Illinois Street, Suite 1225
Indianapolis, IN 46204-4219
clayton.miller@skofirm.com

John Browner
SYCAMORE GAS COMPANY, INC.
370 Industrial Drive, Suite 200
Lawrenceburg, IN 47025
jbrowner@sycamoregas.com

Lorraine Hitz-Bradley
Deputy Consumer Counselor

INDIANA OFFICE OF UTILITY CONSUMER COUNSELOR
115 West Washington Street
Suite 1500 South
Indianapolis, IN 46204
infomgt@oucc.in.gov
317/232-2494 – Phone
317/232-5923 – Facsimile