Control Number: 44592

Item Number: 66

Addendum StartPage: 0

OPEN MEETING COVER SHEET

MEETING DATE:	September 24, 2015
DATE DELIVERED:	September 17, 2015
AGENDA ITEM NO.:	13
CAPTION:	Project No. 44592—*Relating to a Project Regarding Sharyland Utility Complaints* Darryl Tietjen, Jason Haas, Chris Burch
ACTION REQUESTED:	Discussion and possible action with respect to the ***Staff Report on the Factors and Historical Background Underlying the Rates of Sharyland Utilities***

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Public Utility Commission of Texas

Memorandum

To: Chairman Donna L. Nelson
Commissioner Kenneth W. Anderson, Jr.
Commissioner Brandy D. Marty

From: Darryl Tietjen, Rate Regulation

Re: Open Meeting, September 24, 2015—Agenda Item #13
Project No. 39548—*Relating to a Project Regarding Sharyland Utility Complaints* (Discussion and possible action)

Date: September 17, 2015

Please find attached to this memo the ***Staff Report on the Factors and Historical Background Underlying the Rates of Sharyland Utilities***. This report was previously filed in this project on September 8, 2015 (as item number 59), in order to provide an opportunity for interested parties to view the report as soon as possible. Please note that the attached report *is identical* to the report filed on September 8th.

The report consists of five discussion sections and four appendices, each addressing different aspects of Sharyland's rate structure, operating characteristics, and history. The Executive Summary (beginning on page 3) summarizes the key points of the report, and the main text concludes with a discussion in sections IV and V of options and technical factors the Commission may wish to consider with regard to the timing of Sharyland's next rate proceeding.

Staff notes that its cover memo for the report's initial filing on September 8th solicited comments from interested parties, with a requested filing deadline of September 17th (today). At the time of today's (re)filing of the report, the Commission had received filed comments from two parties—St. Lawrence Cotton Growers' Association, and the Office of Public Utility Counsel.

Staff is available to answer any questions you may have about the report.

Public Utility Commission of Texas

Staff Report on the Factors and Historical Background Underlying the Rates of Sharyland Utilities

Project No. 44592

September 8, 2015

Acknowledgements

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Darryl Tietjen

Project Team
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Special thanks also to Sharyland Utilities, which provided assistance and information essential to the preparation of this report.

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LIST OF ACRONYMS AND DEFINITIONS

4CP – The average ERCOT coincident system peak demand for the months of June, July, August, and September.

A&G – Administrative and General Expense

CNP – CenterPoint Energy Houston Electric

CREZ – Competitive Renewable Energy Zone

EECRF – Energy Efficiency Cost Recovery Factor

EFL – Electricity Facts Label

ERCOT – Electric Reliability Council of Texas

HTS – Hunt Transmission Services

kW – Kilowatt

kWh – Kilowatt-hour

O&M – Operations and Maintenance Expense

Oncor – Oncor Electric Utility

PTB – Price to Beat

PUC – Public Utility Commission of Texas

REP – Retail Electricity Provider

SOP – Standard Offer Program

SPP – Southwest Power Pool

SPS – Southwestern Public Service Company

SU-CapRock – Sharyland Utilities' Brady, Celeste, Colorado City, and Stanton divisions

SU-McAllen – Sharyland Utilities' McAllen division

T&D – Transmission and Distribution

TCC – AEP Texas Central Company

TDU – Transmission and Distribution Utility

TNC – AEP Texas North Company

TNMP – Texas-New Mexico Power Company

TSP – Transmission Service Provider

The ERCOT Study – the study ordered by the PUC in Docket No. 37990 and performed by an independent, third-party consultant to analyze and evaluate issues related to moving the Stanton and Colorado City Division loads from the Southwest Power Pool transmission grid into the ERCOT grid.

The Retail Plan – Sharyland's study and plan ordered by the Commission in Docket No. 37990 concerning a transition of Sharyland's former Cap Rock divisions to retail competition.

EXECUTIVE SUMMARY

This report was prepared in response to the directive by the Public Utility Commission of Texas (PUC) to its staff to review and evaluate the factors and historical background underlying the electricity rates in the operating areas of Sharyland Utilities, L.P. that were previously part of Cap Rock Energy (SU-CapRock). The PUC issued the directive at its public meeting held on April 17, 2015, after consideration of a series of customer complaints received by the Commission during the early part of 2015. The PUC has filed these complaints, many of which have been redacted to preserve confidentiality, in Project No. 44592.

This report consists of five discussion sections and four appendices, each addressing different aspects of Sharyland's rate structure, operating characteristics, and history. **The main text of the report concludes with a discussion in sections IV and V of options and technical factors the Commission may wish to consider with regard to the timing of Sharyland's next rate proceeding.**

The following summary highlights key points of this report.

History of Sharyland Utilities

- Sharyland Utilities was created in 1999 to serve residents and businesses of Sharyland Plantation, a new mixed-use real estate development project of 6,000 acres located along the Rio Grande River between the South Texas cities of Mission and McAllen.
- In July 2010, Sharyland Utilities entered into a merger agreement in which it acquired the operating divisions of Cap Rock Energy. In August 2012, the Commission approved Sharyland's plan to move the SU-CapRock service territory to retail competition, and in January 2014, the Commission approved the retail delivery rates of SU-CapRock that are currently in effect.

SU-CapRock's Rates and Bills Are Comparatively High

- The rates charged by SU-CapRock are generally higher across all rate classes when compared to the rates of other utilities in the Electric Reliability Council of Texas (ERCOT) service territory, and, as a result, the total dollar amounts of customers' bills are also typically higher. A number of factors contribute to SU-CapRock's comparatively high rates and total bills, including:
    - SU-CapRock's small size, which, in comparison to larger utilities, inhibits SU-CapRock's ability to achieve economies of scale;
    - SU-CapRock's low customer density, which results in the spreading of the utility's costs over a small number of customers; and
    - SU-CapRock customers' higher electricity usage. Compared to customers of other transmission and distribution utilities (TDUs) in the state, SU-CapRock's residential customers, on average, use significantly more electricity during the winter months, including during the winter of 2014-2015 (the time frame generally consistent with the timing of when the Commission began receiving complaints).
- For residential customers, rates related to recovery of the costs of SU-CapRock's *distribution* service are more than three times as high as the distribution rates of other

TDUs in Texas; for non-residential customers, distribution rates are two to three times as high.

- Higher costs for *transmission* services have also contributed to the rate increases charged to SU-CapRock's customers. These increases, however, are not unique to customers of SU-CapRock. Because of increased transmission investment in recent years throughout Texas, transmission costs in recent years have increased for all TDUs in the state.

Other Factors Impacting SU-CapRock's Rates

- As part of SU-CapRock's transition to the competitive retail market in early 2014, other factors have also impacted the utility's rates, including:
  - Changes in the setting of rates for the utility's various rate classes, with partial movement towards more cost-based rates (a change consistent with Commission rate-setting policies) for some classes (primarily residential) that previously were heavily subsidized by other rate classes.
  - Changes to SU-CapRock's customer classifications to reflect the utility's switch from a fully "bundled" utility (i.e., a utility that owns generation services as well as transmission and distribution facilities) to a utility that provides only transmission and distribution (T&D) service in ERCOT.
    - In SU-CapRock's most recent rate proceeding, this factor likely resulted in some customers experiencing a move from one rate class that previously was *being subsidized* via its paying of *below*-cost rates to another rate class that was now *providing* a subsidy via its paying of *above*-cost rates. For some of these customers, the combined effects of the movement towards cost-based rates and the change to a different rate class may have resulted in a magnification of the effects of rate increases.
  - The expiration in December 2013 of SU-CapRock's favorable power contract with Southwestern Public Service Company (SPS).

Options Available to Customers to Reduce Electricity Bills

- Switching to more favorable price offerings from competing retail electric providers (REPs) may be cost-effective for some customers. In July 2015, 32 REPs were offering service in SU-CapRock's service area, with the lowest-cost offered rate only about $6 more per month for a 1,000-kWh residential customer than the charges from rates in effect prior to SU-CapRock's transition to the competitive electricity marketplace.
- Participation in energy efficiency programs may provide additional cost savings for some customers.

Options Available to the Commission with Regard to Sharyland's Next Rate Proceeding

- The Commission could decide to allow the timing of Sharyland's next rate proceeding to proceed on a timeline consistent with the terms of the settlement agreement approved in Sharyland's last rate case, Docket No. 41474.[1]
  - The stipulated agreement provides that Sharyland will file a system-wide rate case *on or before* July 1, 2016.

[1] Docket No. 41474, *Application of Sharyland Utilities, L.P. to Establish Retail Delivery Rates, Approve Tariff for Retail Delivery Service, and Adjust Wholesale Transmission Rate* (Order, January 23, 2014).

- The Commission could direct Sharyland to file for a rate proceeding as soon as is feasible.
    - Given the four to six months needed for Sharyland to prepare its application for a rate review, the earliest possible filing date would likely be sometime in the first quarter of 2016.

Reasons that an earlier rate filing may be desirable:

- SU-CapRock's new rates would reflect more up-to-date costs and allocation factors, including any changes resulting from relative growth in residential and non-residential loads, changes of which may reduce the residential class's *relative* share of cost responsibility under cost-based rates.
- The Commission would have the opportunity to review cost-allocation issues sooner rather than later. With regard to this point, it is important to note that a significant degree of inter-class cross-subsidization in SU-CapRock's rates may still persist, and continued movement towards the Commission's general policy goal of cost-based rates will impact different rate classes in different ways.

Reasons that an earlier rate filing may *not* be desirable:

- Given Sharyland's significant increase in capital expenditures and additions to rate base since its last rate proceeding, and the possible inclusion in rates of Sharyland's $30 million cost deferral, an overall *increase* in rates is possible or even likely. In other words, a rate proceeding that is filed earlier than previously contemplated could result in an increase in overall rates *sooner* than would otherwise occur.
- An earlier filing date would likely necessitate the use of a test year that does not include information from a full 2015 calendar year. Continued relative growth in non-residential load may make a calendar-year 2015 test-year more representative of relative class usage patterns expected to continue in the future, thus better aligning class cost responsibility with respect to the significant growth in non-residential load (such as oil and gas operations) in Sharyland's service territory.

I. COMPARISONS OF RATES AND TOTAL BILLS

I-A: SU-CapRock's Rates and Total Bills—Before and After Deregulation

A variety of factors have had an impact on the overall costs of electricity paid by SU-CapRock's customers since the company's transition to the competitive electricity market.[2] In recent months, a number of SU-CapRock's customers have expressed concerns to the Commission and filed complaints about the bill impact of this transition. Based on a sample group of these customers,[3] the comparison below shows the *total* cost (i.e., including the costs of power and retail services) of electric service per kilowatt-hour (kWh) of power for the 12-month period before and after the transition to competition.

Total electricity charges per kWh:

	Before the transition to competition	After the transition to competition	Change
Sample group	$0.1154	$0.1403	+ 21.6%

Before the transition, SU-CapRock provided the full bundle of electric services—production, transmission, distribution, customer service, and retail services. Since the transition, SU-CapRock has continued to provide transmission and distribution services (delivery services), but the competitive market now provides for the generation of power and retail services available to SU-CapRock's customers. For the same group of customers during the same time period, below is a breakdown of the total charges into the delivery component and the generation/retail components.

Total electricity charges per kWh—with breakdown of delivery charges and generation/retail charges:

	Before the transition to competition	After the transition to competition	Change
Delivery charges	$0.0577	$0.0685	+ 18.7%
Generation and retail charges	$0.0578	$0.0718	+ 24.2%

Several factors have contributed to SU-CapRock's high rates, including:

- the comparatively high per-customer costs of SU-CapRock's distribution system;
- the increasing costs of transmission services throughout Texas; and
- the expiration of SU-CapRock's favorable power contract with SPS.

An additional aspect of note with regard to SU-CapRock's rates relates to the challenge of addressing the significant subsidies inherent in the company's rates prior to its transition to

[2] Appendix A contains a discussion of Sharyland's history and a general overview of its recent regulatory proceedings.

[3] The sample group consists of customers—most but not all of whom are in the residential class—that have voiced concerns and provided billing information (which has been treated as confidential).

competition. Before the establishment of new rates in SU-CapRock's most recent rate proceeding (Docket No. 41474), the company's rates reflected a very high degree of inter-class cross-subsidization, in which the non-residential classes were heavily subsidizing the Residential class (then called *General Service*). The amount of the subsidy was to a degree such that the rates charged to the Residential class were recovering only about two-thirds of the costs that the class was causing. Although the company's current rates reflect some movement towards cost-based levels, some degree of inter-class cross-subsidization may still remain.[4]

All these factors are discussed in greater detail below.

I-B: Comparison of TDUs' Residential *Transmission* and *Distribution* (T&D) Charges

As a TDU, Sharyland's residential rates for transmission, distribution, and associated customer services for customers in its former Cap Rock divisions—the Brady, Celeste, Stanton, & Colorado City divisions—are approximately double the rates of other investor-owned TDUs in ERCOT. This can be seen in the following table, which shows what each TDU's bill would be under current rates for a residential customer that uses 1,000 kWh of electricity in one month.

T&D utility	**Residential *Delivery* Charges at 1,000 kWh**
Oncor Electric Delivery Company, LLC (Oncor)	$38.59
CenterPoint Energy Houston Electric, LLC (CNP)	$45.78
Texas New Mexico Power Company (TNMP)	$41.01
AEP Texas Central Company (TCC)	$49.07
AEP Texas North Company (TNC)	$43.56
Average excluding Sharyland	**$43.60**
Sharyland—former Cap Rock divisions (SU-CapRock)	**$90.39**
Sharyland—McAllen division (SU-McAllen)	$44.20

SU-CapRock's ***Distribution*** System Charges

The principal driver of the difference in SU-CapRock's total delivery rates versus those of other ERCOT TDUs is *the high level of rates related to recovery of SU-CapRock's distribution system.* Considering the rates only for distribution system services, SU-CapRock is clearly an outlier, with distribution system rates for residential customers that are more than three times higher than those of other TDUs in ERCOT. This is illustrated in the following chart:

[4] The settlement agreement in Docket No. 41474 addresses the issue of continuing efforts to move towards cost-based rates by providing that "In the 2016 Rate Case, Sharyland agrees to propose and support rates for each customer class that recover each customer class' allocated cost of service." The agreement also states that "The Stipulating Parties agree that they will not oppose setting rates that recover each customer class' allocated cost of service, though all Stipulating Parties retain all rights to contest any portion of the cost of service study filed by Sharyland in the 2016 Rate Case." Docket No. 41474, Order (page 7) (Jan. 23, 2014).

T&D utility	***Distribution* System Rates per kWh (Residential)**
Oncor Electric Delivery Company, LLC (Oncor)	$0.018583
CenterPoint Energy Houston Electric, LLC (CNP)	$0.016489
Texas New Mexico Power Company (TNMP)	$0.017347
AEP Texas Central Company (TCC)	$0.013915
AEP Texas North Company (TNC)	$0.019007
Average excluding Sharyland	**$0.017068**
Sharyland—former Cap Rock divisions (SU-CapRock)[5]	**$0.062669**
SU-CapRock as % of Peer Group avg.	367.2%

It should be noted that SU-CapRock's high distribution system charges are not limited to residential customers. As shown below, SU-CapRock's distribution system charges are also two to three times higher for *non-residential* customers:

Delivery rate class	**SU-CapRock distribution system charge**	**Peer Group avg. distribution charge (Oncor, CNP, AEP-TCC, AEP-TNC, TNMP)**	**SU-CapRock as % of Peer Group avg.**	**Billing Basis**
Secondary less than 10 kW	$0.051640	$0.022617	228.3%	kWh
Secondary greater than 10 kW	$12.29	$3.85	319.2%	kW (or kVa)
Primary	$8.70	$2.98	291.9%	kW (or kVa)

Section II of this report discusses some of the reasons underlying the high levels of SU-CapRock's distribution rates.

Transmission Charges in ERCOT and the Southwest Power Pool (SPP)

Although recovery of distribution costs is the most significant factor in the level of SU-CapRock's rates, higher transmission costs have also played a role in the utility's rate increases over time. The table below compares the residential transmission rates of SU-CapRock and other ERCOT TDUs:[6]

[5] Sharyland's McAllen division does not have a separate residential energy rate for distribution system services.

[6] Rates shown were those in effect August 31, 2015. Also, in Sharyland's previous Transmission Cost Recovery Factor (TCRF) proceeding (Docket No. 43865), parties stipulated to new TCRF rates that incorporated only one-half of the under-recovery that Sharyland was entitled to include in its petition, with the remaining half to be included in the subsequent TCRF update that would be filed on or about June 1, 2015. Accordingly, Sharyland's transmission rate shown in the table is lower than it would otherwise be. See *Petition of Sharyland Utilities, L.P. for Approval of Transmission Cost Recovery Factor Update*, Docket No. 43865, Order, Finding of Fact 20 (March 10, 2015).

T&D utility	**Transmission System Rates per kWh (Residential)**
Oncor Electric Delivery Company, LLC (Oncor)	$0.012189
CenterPoint Energy Houston Electric, LLC (CNP)	$0.013822
Texas New Mexico Power Company (TNMP)	$0.011281
AEP Texas Central Company (TCC)	$0.010798
AEP Texas North Company (TNC)	$0.013405
Average excluding Sharyland	**$0.012299**
Sharyland—former Cap Rock divisions (SU-CapRock)	**$0.016428**
SU-CapRock as % of Peer Group avg.	133.6%

Non-residential transmission rates are shown in the following table:

Delivery rate class	**Sharyland-Cap Rock transmission system charge**	**Peer Group avg. distribution charge (Oncor, CNP, AEP-TCC, AEP-TNC, TNMP)**	**SU-CapRock as % of Peer Group avg.**	**Billing Basis**
Secondary less than 10 kW	$0.009729	$0.0088728	109.65%	kWh
Secondary greater than 10 kW IDR	$4.216819	$3.984948	105.82%	4CP kW
Secondary greater than 10 kW Non-IDR	$2.580105	$2.8675458	89.98%	NCP kW
Primary IDR	$4.036839	$4.152499	97.21%	4CP kW
Primary Non-IDR	$1.781502	$2.9155074	61.10%	NCP kW

It should be noted that the costs of transmission services have been increasing for all ratepayers in Texas, at least in part because of the impact in Texas of the development of wind resources. However, transmission charges have also been increasing rapidly in the Southwestern Power Pool (SPP). Prior to the transition to competition, SU-CapRock's customers received transmission services from both SPP and from ERCOT; since the transition, all Sharyland customers receive transmission services only from ERCOT.

In recent years, ERCOT has been in a phase of rapid expansion as the costs of the Competitive Energy Renewable Zone (CREZ) transmission lines and other improvements have been incorporated into the transmission rates of transmission service providers (TSPs). This can be seen in the following table, which compares the sum of the transmission revenue requirements of all TSPs in ERCOT during the past five years.[7]

[7] Data shown are from the Commission's Final ERCOT Transmission "Matrix" for each year.

ERCOT Transmission Revenue Requirements, 2011-2015

Rate Year	Sum of Transmission Revenue Requirements	Growth from prior year
2015	$3,020,770,273[8]	13.6%
2014	$2,659,921,872[9]	32.9%
2013	$2,001,794,430[10]	13.0%
2012	$1,772,182,077[11]	6.1%
2011	$1,669,537,553[12]	-

SPP is likewise in a phase of significant expansion of its transmission system, as can be seen in the following table showing the sum of SPP transmission owners' revenue requirements under the SPP Open Access Transmission Tariff during a similar time period.

SPP Transmission Revenue Requirements, 2011-2015

Rate Year	Sum of Transmission Revenue Requirements	Growth from prior year
2015	$1,561,502,295[13]	8.2%
2014	$1,442,575,879[14]	8.7%
2013	$1,327,207,359[15]	1.5%
2012	$1,307,584,037[16]	17.1%
2011	$1,116,826,300[17]	-

As indicated above, all customers in both ERCOT and SPP, including residential customers, have been experiencing increases in transmission charges as transmission system investments are phased into rates. This explains, at least in part, some of the increases in T&D charges that SU-CapRock's residential customers have been experiencing. It is important to note that *SU-CapRock's customers would have experienced transmission-related rate increases regardless of whether SU-CapRock had stayed in the SPP grid or moved its load into ERCOT.*

It is also important to remember that all wholesale transmission customers in ERCOT (including Sharyland) ultimately pay the same wholesale transmission rates. The Commission has authority over all wholesale transmission rates in ERCOT, and regulates the transmission charges in the retail rates of ERCOT's investor-owned T&D utilities such as Sharyland.

I-C: Considerations Related to SU-CapRock's Most Recent Base-Rate Case

In its orders and policy decisions, the PUC has consistently expressed a preference for cost-based rates for electric service, especially for the ERCOT T&D companies. In other words, historically one of the Commission's basic objectives in its rate-setting policies has been to achieve a result

[8] Docket No. 43881.
[9] Docket No. 42062.
[10] Docket No. 40946.
[11] Docket No. 39916.
[12] Docket No. 38900.
[13] SPP Revenue Requirements and Rates (RRR) file 5/1/2015.
[14] SPP RRR file 4/1/2014.
[15] SPP RRR file 7/1/2013.
[16] SPP RRR file 4/16/2012.
[17] SPP RRR file 9/1/2011.

in which the costs borne by customers in a rate class match, as closely as is practicable, the costs incurred by the utility to provide electric services to the customers in that class. This basic policy goal notwithstanding, utilities' rates often reflect some degree of cross-subsidization whereby some of the costs to serve customers in one rate class are borne by customers in other classes.[18]

Based on the information filed by SU-CapRock in Docket No. 41474, the company's then-current rates reflected a very high degree of inter-class cross-subsidization, as can be seen in the following table:

Rate Class	Test Year Revenues	Cost of Service (based on Staff's model)	Percentage above or (below) cost of service
Residential	$18.8 million	$26.6 million	(29%)
Secondary ≤ 10 kW	$9.5 million	$9.4 million	1%
Secondary > 10 kW	$28.9 million	$23.4 million	23%
Primary	$20.0 million	$8.1 million	150%
Lighting	$0.1 million	$0.22 million	(55%)

As indicated in the above data, prior to Docket No. 41474, SU-CapRock's Residential class (then part of the bundled *General Service* rate class) was being heavily subsidized by the non-residential classes, with rates charged to the Residential class that recovered only about two-thirds of the costs that the class was causing. Such a situation is contrary to the fundamental objective of charging rates for a given class based on the cost of providing service to that class. This is a standard ratemaking principle that has long stood the test of time because cost-based rates yield important benefits, including equity among customers, economic efficiency in the provision and consumption of electric services, and revenue stability for the utility. Moreover, rates that are *not* cost-based can cause market distortions that limit the benefits of a utility's transition to competition.

The basic regulatory practice of the Commission Staff, in its role representing the public interest in contested rate proceedings, is to follow cost-causation principles as closely as reasonably possible, subject to appropriate consideration of possible rate-shock effects and the need for gradualism. In Docket No. 41474, to address SU-CapRock's significant inter-class subsidization, Staff recommended the elimination of approximately one-third of the subsidy that was being provided to residential customers; Staff additionally recommended, however, that an elimination of more than one-third of the subsidy would be excessive and result in rate shock.

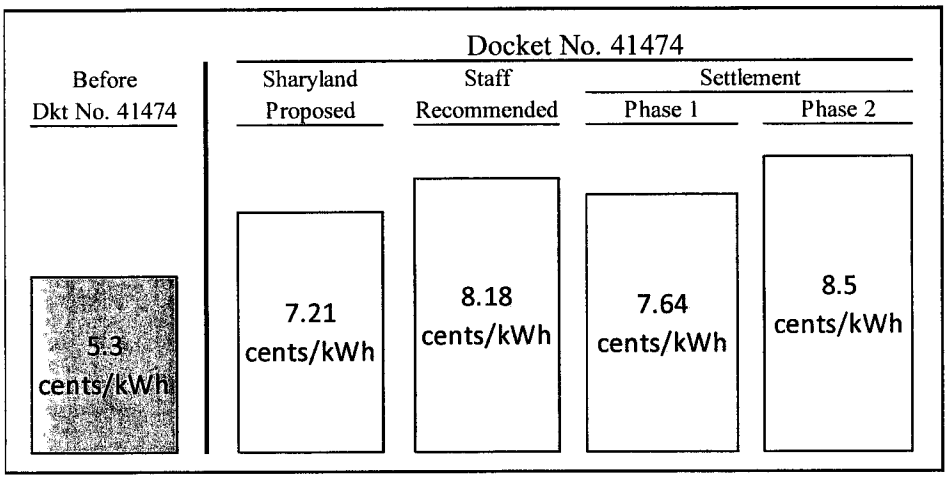
Ultimately, Docket No. 41474 was resolved through a negotiated settlement agreement that reflected compromise among the parties agreeing to the settlement. One point of note with regard to the settlement agreement is that, in comparison to Staff's recommendation for a more gradual move to cost-based rates through the elimination of one-third of the residential subsidy, the terms of the settlement agreement provided for a more rapid move to cost-based rates by eliminating (in a two-step process) approximately *two*-thirds of the residential subsidy. Parties to

[18] Among other reasons, this phenomenon can occur simply because of the passage of time, as different classes of customers experience different rates of growth and impose demands on a utility's system different from those used to set rates in the company's last rate proceeding.

the settlement did, however, agree to fully reflect some of Staff's other important recommendations in the settlement agreement, such as customer classification and rate design.

To provide a visual representation of the progression of rates experienced by SU-CapRock's residential customers that have filed complaints, the following chart illustrates rate levels 1) prior to Docket No. 41474, 2) as proposed by Sharyland and Staff during the course of the proceeding, and 3) as ultimately agreed upon by the settling parties and approved by the Commission at the end of the proceeding:

Residential Delivery Rates–Before and After Docket No. 41474*



* Rates shown are based on actual usage of customers that filed complaints.

I-D: Customer Reclassifications and Rate-Shock Consequences

Another outcome of Docket No. 41474 involved the reclassification of customers from the customer groupings under SU-CapRock's bundled tariff to the standard customer groupings under the Commission's generic tariff for T&D utilities. In Docket No. 22344,[19] the Commission found that if the customer classifications of all T&D utilities in ERCOT were standardized, it would facilitate competition by lowering barriers to entry for retail electricity providers (REPs). The following table shows SU-CapRock's customer classifications before and after the transition to competition:[20]

[19] Docket No. 22344, *Generic Issues Associated with Applications for Approval of Unbundled Cost of Service Rate Pursuant to PURA Section 39.201 and Public Utility Commission Subst. R. 25.344.*

[20] Please see Appendix B for a more detailed discussion of SU-CapRock's rates classes before and after the company's move to a competitive marketplace.

SU-CapRock's Customer Classifications as a Bundled Utility	SU-CapRock's Customer Classifications as an Unbundled T&D Utility
General Service	Residential
Irrigation	Secondary Less Than or Equal to 10kW
Commercial	Secondary Greater Than 10kW
Large Power Secondary	Primary
Large Power Primary	Transmission
Cotton Gins	Lighting
Lighting Service	

One significant consequence when re-classification of customers occurs is that some of the re-classified customers may experience substantial changes in electricity charges even if their usage remains constant. For example, some rates that were previously considered Residential (formerly in the *General Service* class) under SU-CapRock's bundled tariff are now considered non-residential (*Secondary* Service) under the Commission's generic classifications, such as rate codes 111 (hand house), 112 (barn, shop), 113 (water well), 114 (electric fence). The table below shows the estimated T&D charges for a representative hand house, barn, shop, water well, or electric fence load at 4,000 kWh for one month under SU-CapRock's bundled rates in comparison to the unbundled charges for the same services under the Commission's standard *Secondary Less Than 10 kW* class.

T&D charges for 4,000 kWh monthly usage (estimated)

	Under SU's bundled rates: *General Service*	Under SU's unbundled rates: *Secondary Less Than 10 kW*	Change
Customer & Metering charges, T&D-related[21]	$5.00	$22.70	
Transmission & Distribution System Charges	$179.83	$247.20	
PCRF, transmission-related[22]	$30.00	n/a	
Total estimated bill	**$214.83**	**$269.90**	**+25.6%**

The data above illustrate how migrating between classes can create customer impacts when there are significant subsidies in the rate structure, particularly when a customer moves from a class that was *being* significantly subsidized (in SU-CapRock's case, the General Service class) by other classes prior to Docket No. 41474, to a class that was *providing* a subsidy (Secondary Less Than 10 kW) to other classes subsequent to Docket No. 41474. This underscores the importance of the Commission's general policy goal of eliminating (gradually, when appropriate) inter-class cross-subsidies.

As another example of how a customer could experience a change in bills as a result of the change in customer classifications, consider the following scenarios:

Assume that, prior to SU-CapRock's transition to competition, a customer was in the *Irrigation* rate class, with an actual demand of 20 kW during the month. However, the customer is charged for electricity only on the basis of her *energy* (kWh) use, with the per-kWh rate based on the

[21] Imputed based on functional share of measurable charges.
[22] Based on functional split provided by Sharyland.

class average demand. Under these circumstances, if the customer used, say, 2,000 kWh per month at a rate of $0.05 per kWh, her monthly bill would be $100 (i.e., 2,000 multiplied by $0.05). Again, the customer's bill is based only on the amount of *energy* the customer uses; the customer's actual demand of 20 kW does not factor into the determination of the customer's bill.

Now suppose that as part of the rate-class changes resulting from SU-CapRock's transition to competition, the customer has been moved into the Secondary > 10 kW rate class. For this rate class, the utility measures the monthly kW demand of each customer in the class, and the utility now bills the customer primarily on this *demand* basis, rather than on the energy-only basis as in the above scenario. In this instance, assuming that the utility charges $16 per kW of demand, the customer's bill would be $320 (i.e., 20 kW multiplied by $16 per kW). If the customer's energy usage was the same as in the above example (2,000 kWh), the customer's bill, when expressed on a *per-kWh* basis, would indicate a rate of $0.16 per kWh, or $0.11 higher than the per-kWh rate prior to competition.

In each of these two scenarios, the customer's actual demand was 20 kW. After the transition to competition, however, because every month the utility measures the peak demand of each customer in this rate class, the charges and resulting rates on a customer's bill can change dramatically, depending on how efficiently the customer uses system capacity. In the second scenario described above, if the customer had used, say, 16,000 kWh of energy instead of 2,000, the resulting rate under the new demand charge—when expressed in terms of kWh—would have been $0.02 (i.e., $320 divided by 16,000 kWh), or less than half the rate paid prior to competition.

Summarizing the key points of this example, for a customer that is now billed—after the transition to competition—primarily on a *demand* basis, the amount of monthly charges can vary significantly, depending on the customer's electricity needs in a given month and the relationship between the customer's demand and energy requirements. In some months, with the same energy requirements, the use of demand charges may result in a customer paying a higher total bill, while in other months, the customer may pay a lower bill. These types of billing effects may have contributed to the confusion and bewilderment that some SU-CapRock customers have experienced with respect to their electricity charges.

I-E: Expiration of Purchased Power Contract

Another factor contributing to the increase in the total charges paid by customer of SU-CapRock is related to the expiration in December 2013 of the favorable long-term power contract with SPS and the resulting increase in costs for power and associated retail services after the transition to competition.

As more fully discussed in Appendix A, the Commission's order in Docket No. 37990[23] required Sharyland to initiate a study (the ERCOT Study) to be performed by an independent, third-party

[23] *Joint Report and Application of Sharyland Utilities, L.P., Sharyland Distribution & Transmission Services, LLC, Hunt Transmission Services, LLC, Cap Rock Energy Corporation, and NewCorp Resources Electric Cooperative, Inc. for Regulatory Approvals Pursuant to PURA §§ 14.101, 37.154, 39.262, and 39.915*, Docket No. 37990, Order (Jul. 8, 2010).

consultant to analyze and evaluate issues related to moving the Stanton and Colorado City Division loads from the SPP transmission grid into the ERCOT grid. The ERCOT Study estimated that if the Stanton and Colorado City divisions had remained in SPP and were served under a new wholesale contract with SPS after the expiration of the then-current contract on December 31, 2013, wholesale power costs for the Stanton and Colorado City divisions would have been almost double the level of the wholesale power costs available to those divisions after moving to ERCOT. The ERCOT Study also estimated that if the residential customers of SU-CapRock's Stanton and Colorado City divisions had the opportunity to utilize ERCOT REPs from November 2009 through October 2010, they would have saved, based on an average consumption of 1,000 kWh, between $170 and $434 (13% - 23%) annually.

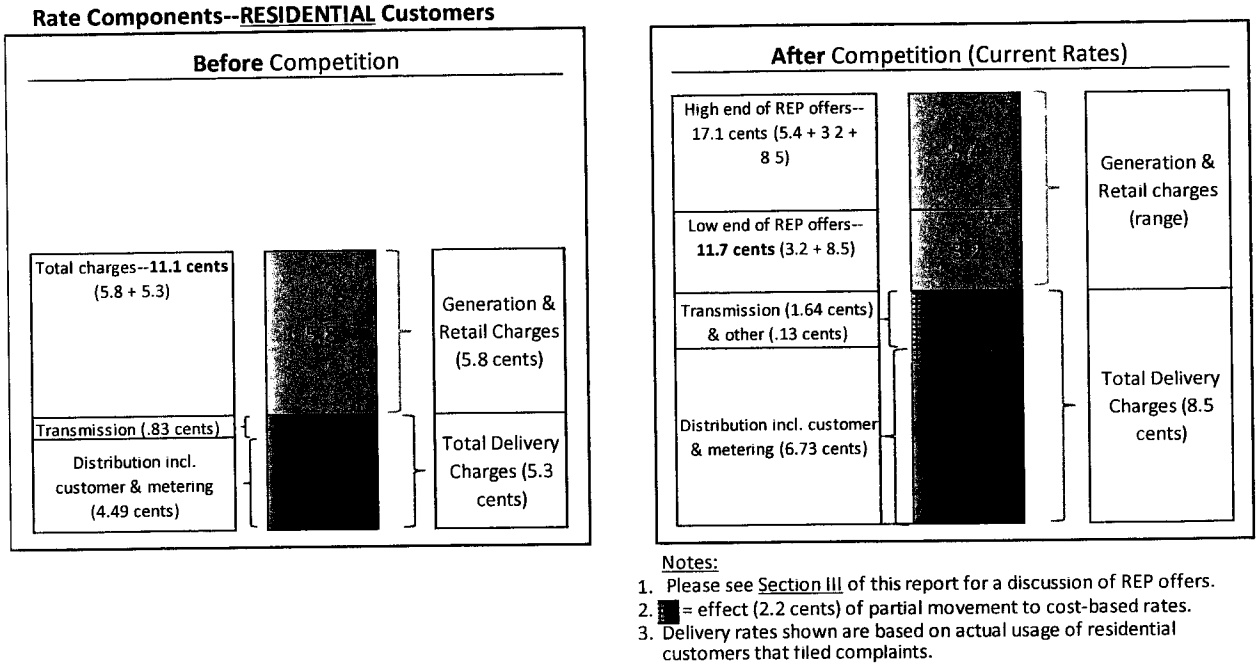
Accordingly, although the unbundled power charges may have increased for some customers as a result of the transition to ERCOT, it is important to note that they would have also increased had SU-CapRock remained in SPP and been forced to enter into a new contract in the SPP power market.

I-F: Component Parts of Total Residential Rate—Before and After Competition

The bar charts below reflect the effects on SU-CapRock's rate levels of the various factors discussed previously in this section and illustrate—based on actual usage of SU-CapRock's residential customers that filed complaints—the component parts of the total rates before and after the transition to competition. As the charts show, SU-CapRock's residential delivery rate (shown in red) increased from 5.3 cents per kWh before competition (shown in the left bar) to the rate of 8.5 cents (shown in the right bar). Applying this difference to a residential customer using 1,000 kWh per month would result in an increase in the delivery-charge portion of the bill of approximately $32 per month (i.e., [.085 - .053] * 1,000).

As noted in the footnote at the bottom of the right chart (and represented in the red cross-hatched area of the 8.5 cents delivery-charge portion of the right bar), about 2.2 cents of the current delivery charge of 8.5 cents resulted from the terms of the settlement in Docket No. 41474 that began to move the subsidized Residential rate class closer to paying cost-based rates. In other words, this means that of the $32 more per month that a residential customer using 1,000 kWh would be paying after approval of the rates in Docket No. 41474, about $22 is related to moving the Residential rate class *partially* (but still not completely) towards the goal of cost-based rates.

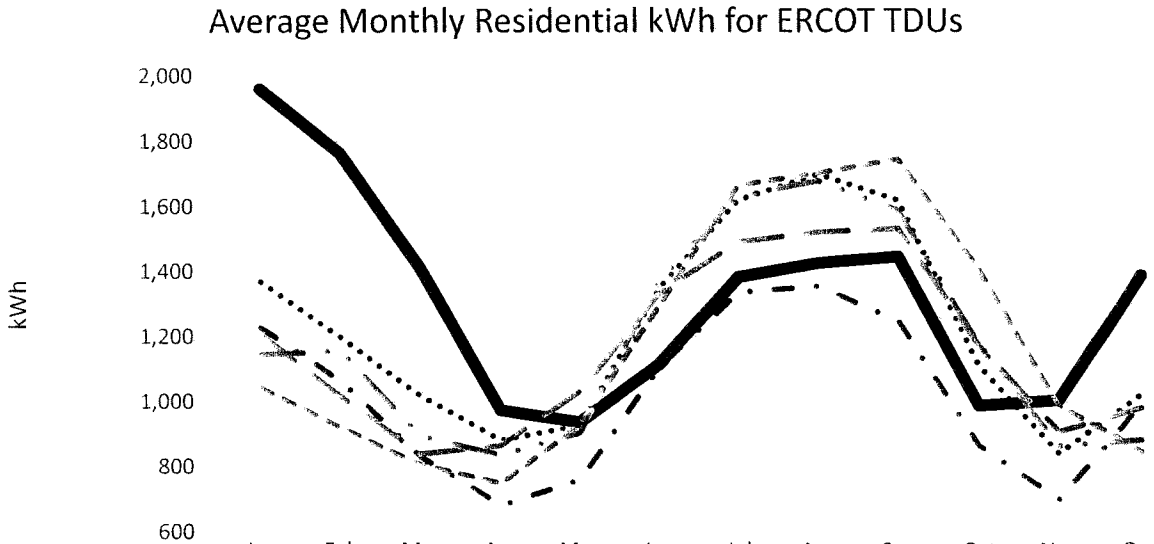
Another point of particular note in the charts is that the *total* pre-competition rate of 11.1 cents per kWh (the sum of the 5.3 and 5.8 figures in the left bar) is not significantly different from the lowest REP offer recently available of 11.7 cents (the sum of the 8.5 and 3.2 figures in the right bar). Stated another way, for a residential customer with monthly usage of 1,000 kWh, the difference in costs would be $6 per month. This suggests that *although the delivery-charge portion of a residential customer's bill has increased, the competitive market includes retail rate offers that can offset much of the effects of that increase.* **Section III** of this report provides additional details on REP offers available in SU-CapRock's service area.



Notes:
1. Please see Section III of this report for a discussion of REP offers.
2. ▓ = effect (2.2 cents) of partial movement to cost-based rates.
3. Delivery rates shown are based on actual usage of residential customers that filed complaints.

I-G. Comparative Usage Patterns

Although a customer's electricity usage is not a direct driver of the *level of rates* required for cost recovery, it does play a significant role in the amount of the customer's *total bill.* As noted previously in this report, the Commission began receiving complaints from SU-CapRock's customers during the early part of 2015 (i.e., last winter). Based on information provided by the TDUs in their 2014 PUC earnings reports, residential customers of SU-CapRock used considerably higher amounts of electricity during the winter months than did residential customers of other TDUs in the state. The following graph shows this clearly, with the dark bold line that represents the usage levels of SU-CapRock's residential customers well above the comparable lines of other TDUs during the early and late months of 2014 (and lower than average during the summer):



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
SU-CapRock	1,960	1,764	1,412	973	937	1,117	1,383	1,426	1,446	988	1,005	1,385
Oncor	1,369	1,199	1,019	883	929	1,350	1,621	1,701	1,620	1,114	841	1,021
CNP	1,042	920	806	749	930	1,297	1,666	1,704	1,745	1,408	988	845
TNC	1,229	1,065	832	682	761	1,108	1,337	1,356	1,249	866	700	993
TCC	1,208	1,016	840	866	1,033	1,334	1,493	1,523	1,533	1,175	908	979
TNMP	1,145	1,157	894	836	905	1,373	1,633	1,681	1,589	1,178	865	881

Although the reasons for the higher usage levels of SU-CapRock's residential customers during the winter months are not entirely clear, the colder temperatures in that part of the state likely explain much of the difference. It is also likely that, given the rural nature of much of that service area, all-electric homes are more common. Furthermore, the significantly below-cost rates that SU-CapRock was historically charging residential customers may have had the effect of discouraging the adoption of cost-effective energy efficiency improvements that otherwise would have been implemented under the higher cost-based rates.

I-H. Issues Related to SU-CapRock's Transition to Competition

Finally, with respect to the *total* rates paid by SU-CapRock's customers, it is worth noting that the circumstances of SU-CapRock's transition to the competitive marketplace were somewhat different from that of other TDUs in Texas. The 1999 legislation that deregulated the electricity market in most areas of the state specifically provided for a more systematic transition to competitive rates; this was accomplished through the use of a statutorily prescribed "price to beat" (PTB) rate structure in which the rates charged by REPs previously affiliated with the TDUs were reduced by 6% and held there for 36 months or until 40% of the service territory was served by competitive (nonaffiliated) REPs.[24] Attempts were also made to set rates at cost for legacy rate classes in rate proceedings prior to transitioning, to minimize the potential impact of moving to cost-based TDU rates.

[24] See Public Utility Regulatory Act (PURA), Section 39.202, *Price to Beat.*

In the SU-CapRock service area, however, no plan similar to the PTB system was implemented, and it was not possible to set rates for the old rate classes to cost prior to transitioning. This was due, in part, to the fact that reliable cost and rate information related to the former Cap Rock Energy operations was not available. Additionally, in the early years of the state's competitive marketplace, one of the reasons for the statutorily required PTB rate was to allow for a period of time in which the Texas competitive retail market would have an opportunity to develop—these circumstances, however, are no longer applicable. As a result, the SU-CapRock service area transitioned to the competitive marketplace with an immediate "flash cut" to competitive rates instead of the more systematic, gradual transition that was a deliberate part of the early-stage design of the nascent Texas competitive electricity market. The effects of this immediate "flash cut" to market-determined total rates may have contributed to customers' perceptions of the impact and magnitude of SU-CapRock's rate changes.

II: OTHER FACTORS UNDERLYING SU-CAPROCK'S DELIVERY RATES

II-A: Sharyland Utilities—Distinguishing Characteristics

Sharyland Utilities is a small utility in comparison to the other IOU distribution utilities in ERCOT (Oncor, CenterPoint, AEP Central, AEP North, and TNMP). Logically, large utilities can provide the same service at a lower per-unit cost simply through economies of scale, by virtue of the ability to spread fixed costs across a larger customer base. As of December 31, 2014, the number of retail customers served by each utility was as follows:

Company	Retail Customers
Oncor	3,333,381
CenterPoint Electric	2,207,204
AEP Texas Central	816,934
Texas-New Mexico Power	239,827
AEP Texas North	189,096
Sharyland Utilities (excluding McAllen)	51,399
Sharyland Utilities—McAllen Division	3,135

Customer density is an important measure of the number of customers on a utility's system over which the utility's cost of doing business can be spread. One frequently cited measure of customer density is the total number of retail customers compared to the miles of distribution lines on the utility's system. The portion of Sharyland Utilities that consists of what used to be Cap Rock Energy (i.e., Sharyland Utilities excluding the McAllen Division) has a customer density that is significantly lower in comparison to corresponding figures from the other companies (see Figure 1 below).[25]

Consequently, one would expect SU-CapRock's distribution operation and maintenance (O&M) expenses to be somewhat lower per mile of distribution line, reflecting the smaller number of customers per mile of line (and the correspondingly lesser amount of equipment required—such as transformers, lightning arresters, meters, etc.—to serve the smaller customer base), and that is in fact the case (Figure 2).[26]

[25] Figures 1 through 8 in this section are based on information reported in Sharyland's 2013 PUC Earnings Report.
[26] The data reflect information for Sharyland excluding the McAllen Division.

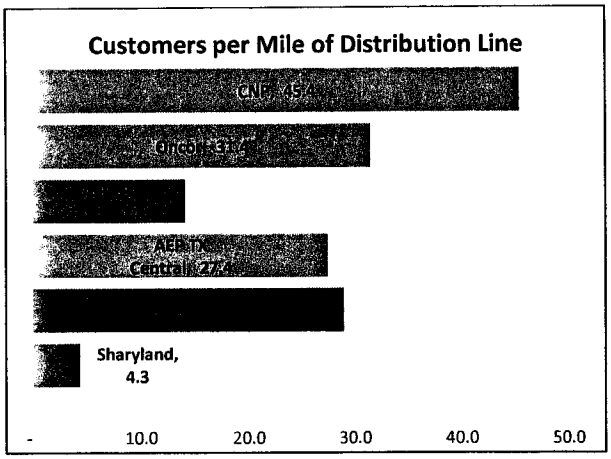


Figure 1

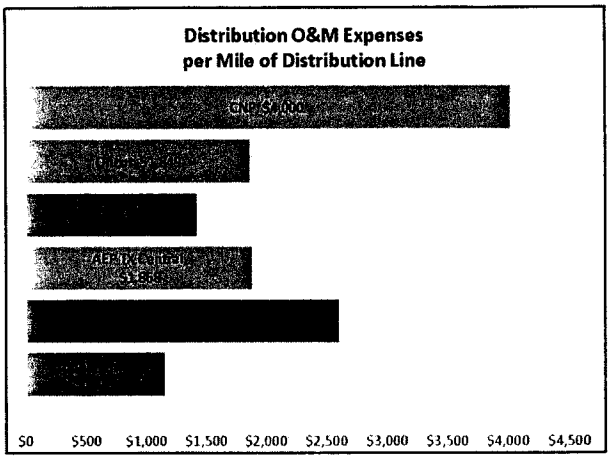


Figure 2

However, with a smaller customer base over which to spread costs, O&M expenses *per customer* would be expected to be greater than the average, which again, the data clearly confirm for SU-CapRock (Figure 3). Also, with fewer customers, one might expect SU-CapRock to have significantly more infrastructure (gross plant in service) to serve each customer on average than other utilities. That is also observed to be the case (Figure 4).

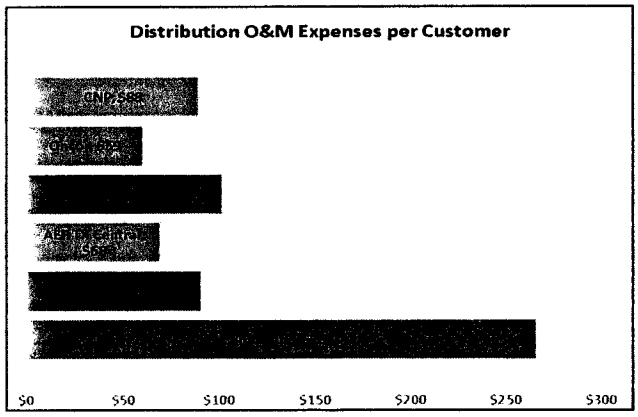


Figure 3

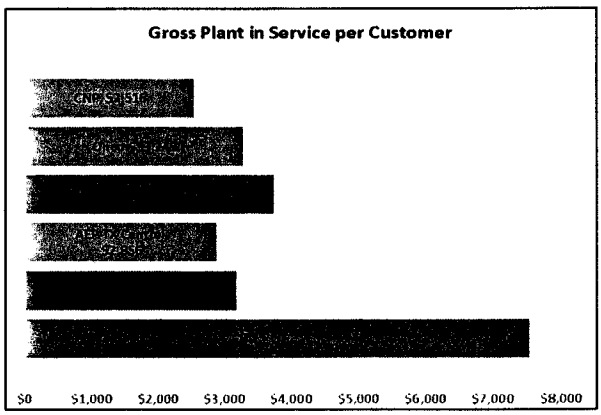


Figure 4

Conversely, with lower customer density, SU-CapRock would be expected to have a smaller investment, and less gross plant in service, per mile of distribution line, which the data also confirm (Figures 5 and 6). For example, a company having four customers per mile would likely require four transformers, meters, etc. per mile of line, whereas a company having 20 customers per mile might need as many as 20 transformers, meters, etc. per mile of line.

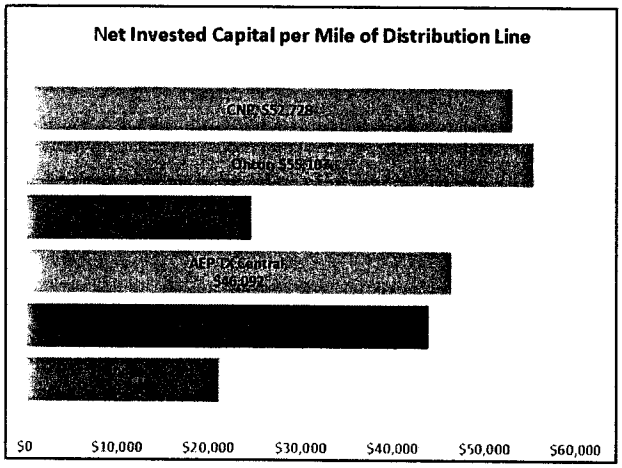


Figure 5

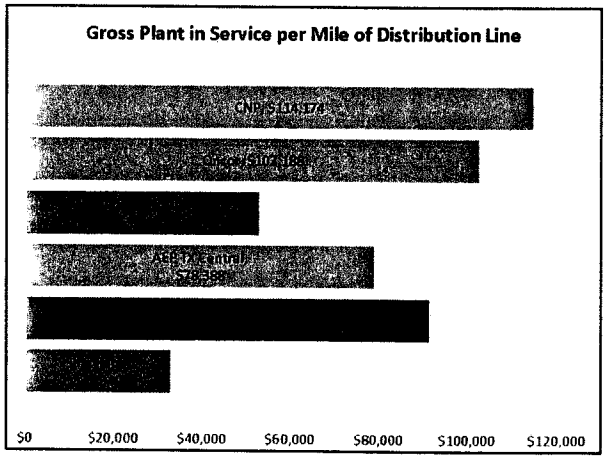


Figure 6

Finally, the amount of SU-CapRock's Administrative and General (A&G) expense reflects the company's low customer density (Figure 7) but is comparable to other utilities as a percent of plant in service (Figure 8).

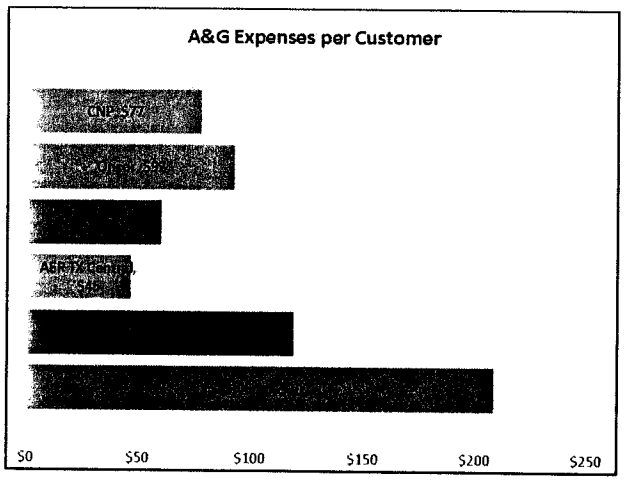


Figure 7

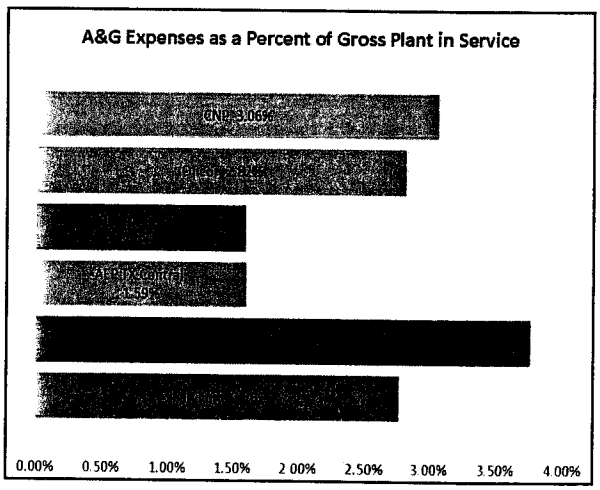


Figure 8

Sharyland's Distinguishing Characteristics—**Key Points**

The data reflected in Figures 1 through 8 reveal in various metrics the effects of SU-CapRock's low customer density and comparatively smaller size. In particular, Figures 3, 4, and 7—all of which express costs on a *per-customer basis*—show that SU-CapRock's costs per customer significantly exceed those of other TDUs. Reflecting this fact, SU-CapRock's rates—all else equal—will necessarily be higher, resulting in higher customer bills.

Stated more simply, for any given amount of costs, the smaller the number of customers, the more each customer must each pay. The comparatively high rates of SU-CapRock reflect this basic mathematical result.

II-B: Other Issues—*Energy Efficiency*

In 2011, Sharyland began offering a limited number of energy efficiency programs, and 2013 marked the first full year of program implementation. These programs were developed pursuant to the Commission's energy efficiency rule (§ 25.181), which outlines the types of programs that may be included in a utility's portfolio, the goals for demand and energy reduction, cost recovery, and evaluation of the programs. In 2012, Sharyland started with a lower demand goal of 0.20 MW to give the company a chance to ramp up its programs and to ensure that the costs remained under the costs caps outlined in § 25.181. For the 2015 program year, the Commission set a demand goal of 1 MW.

Sharyland's 2015 budget for its residential and commercial programs is $811,501, which includes $729,627 in incentives and $81,874 in administrative costs. Sharyland projects that it will spend the total funds allocated to the programs. Below is a breakdown of funds remaining in each of the programs (as of May 5, 2015):

Residential Standard Offer Programs (SOP)
Budget: $238,637
Funds allocated/spent: $132,722
Funds available: $105,915

Hard-to-Reach SOP
Budget: $62,885
Funds allocated/spent: $36,409
Funds available: $26,476

Targeted Low-Income Weatherization
Budget: $77,000
Funds allocated/spent: $0
Funds available: $77,000

Customized Commercial MTP
Budget: $176,105
Funds allocated/spent: $74,112 (includes $62,628 of funds projected to be spent on submitted projects)
Funds available: $101,993

Commercial SOP
Budget: $80,000
Fund allocated/spent: $0
Funds available: $80,000

Load Management SOP
Budget: $80,000
Funds allocated/spent: $0
Funds available: $80,000

SCORE Pilot
Budget: $15,000
Funds allocated/spent: $0
Funds available: $15,000

Energy Efficiency—Commission Options
If the Commission would like to see more energy efficiency funding made available to Sharyland's residential customers, its residential budget could be increased by $181,996 without going over the cost cap. It is unlikely that adding funding for the commercial programs would result in funds being spent within the program year. *One point of note with respect to this report* is that, so far, only one residential customer that has submitted a complaint has participated in Sharyland's Residential SOP.

The Commission previously requested additional spending for load management programs in 2012 in response to the tight reserve margins for the summer peak period. A good-cause exception order was issued for Oncor Electric Delivery Company, LLC (Oncor) to procure an additional 50 MW of commercial load.[27] The other four utilities in ERCOT (AEP Texas Central Company, AEP Texas North Company, CenterPoint Energy, and Texas-New Mexico Power) reached an agreement with the interveners in their prior energy efficiency cost recovery factor (EECRF) cases and filed a letter signed by all of the parties to signify the agreement.[28] The Commission could follow either process to ensure Sharyland's residential customers have access to the additional energy efficiency funds ($181,996) to help reduce demand and energy consumption, which in turn would reduce customer's bills.

II-C: Estimated Meter Readings

Sharyland has not deployed smart meters at the time of this report; therefore, the company still obtains manual meter readings for each billing cycle.

Sharyland's records indicate that 1,533 ESI IDs received estimated bills during the bad-weather events on February 23, 2015 and February 27, 2015. Sharyland informed Staff that some of these customers had the potential of receiving a higher bill due to an underestimation of usage, in addition to the Phase II increases that went into effect on March 1, 2015. Sharyland reviewed all the subsequent meter readings on those accounts to determine whether, in its best judgment, the

[27] *Petition of Oncor Electric Delivery Company LLC for a Good Cause Exception Order*, Docket No. 40123 (March 28, 2012).
[28] *Application of AEP Texas Central Company to Adjust Energy Efficiency Cost Recovery Factor and Related Relief*, Docket No. 39360 (February 6, 2012); *Application of AEP Texas North Company to Adjust Energy Efficiency Cost Recovery Factor and Related Relief*, Docket No. 39361 (February 6, 2012); *Application of CenterPoint Energy Houston Electric, LLC for Approval of an Adjustment to its Energy Efficiency Cost Recovery Factor*, Docket No. 39363 (January 25, 2012); and *Application of Texas-New Mexico Power Company for Approval of an Energy Efficiency Cost Recovery Factor*, Docket No. 39362 (April 16, 2012).

meter estimation was under the actual usage value. Sharyland informed Staff that for any account in which the estimation may have been under the actual usage, Sharyland re-estimated the prior month by splitting the metered usage equally between the two months. In these situations, Sharyland would then cancel and rebill the prior month so that the customers would receive bills with an equal amount of usage under the lower rate. Sharyland also advised that there were instances in which over-estimated usage occurred and the subsequent actual meter reading was less than the prior month. In those instances, the usage would have also been cancelled and rebilled due to the fact that negative usage falls within the tariff prohibition of billing extreme values.

Because of the relatively minimal number of ESI IDs estimated and the relatively short period of time during which such estimations occurred, *Staff does not believe that Sharyland's handling of the estimated meter readings was a meaningful contributing factor in the level of rates charged to Sharyland customers.*

III: RETAIL MARKET ISSUES AND CONSIDERATIONS

III-A: Public Information Meetings

As discussed in greater detail in Appendix A, the Commission on August 22, 2012 issued its Final Order in Docket No. 39592, approving Sharyland's plan to transition the Stanton, Colorado City, Brady, and Celeste divisions to retail competition. As required by the order in that proceeding, Sharyland held public meetings to provide customers with additional information concerning the transition to competition, with the public meetings including a presentation on how to use the *Power to Choose* website. Customers were notified via direct mail and newspaper publications about the following public meetings:

1. Stanton – February 24, 2014
2. Colorado City – February 25, 2014
3. Brady – February 27, 2014
4. Midland – March 3, 2014
5. Celeste (Greenville) – March 6, 2014

III-B: Competitive Offers

When SU-CapRock opened to competition in May 2014, a total of 27 REPs were serving customers in the service area. By comparison, in July 2015, there were 32 REPs serving customers in the service area. Of those 32 REPs, 18 were offering services on the *Power to Choose* website.

- ***Residential rate comparisons*** based on offers from the *Power to Choose* website are shown below. Rates shown are cents per kWh and assume the customer uses 1,000 kWh in a month.

	MAY 2014 (¢ per kWh @ 1,000 kWh per month)			JULY 2015 (¢ per kWh @ 1,000 kWh per month)		
PRODUCT TYPE (powertochoose.com)	**PRICE RANGE**	**MEDIAN**	**AVERAGE**	**PRICE RANGE**	**MEDIAN**	**AVERAGE**
Fixed Rate	11.7 to 15.8	13.8	13.8	11.7 to 17.1	14.3	14.3
Variable Rate	11.7 to 15.9	13.6	13.6	13.3 to 17.2	14.5	14.9
Indexed	14.2 to 16.7	15.5	15.5	15.1 to 15.7	15.4	15.4

Among the 18 REPs listed in July 2015 on the *Power to Choose* website as serving customers in the SU-CapRock service area, a total of 129 residential non-prepaid products (112 fixed, 15 variable, and 2 indexed) were offered. A few additional REPs also offered services that were not posted on the *Power to Choose* website.

Contract periods for the Fixed Rate products ranged from 3 to 36 months, with most of the offers being for a 12-month period. Early cancellation fees ranged from $50 to $350. One REP had a cancellation fee of $20 per month for each month remaining in the contract.

Small non-residential rate comparisons. REPs do not post Electricity Facts Labels (EFLs) on the *Power to Choose* website for these customer groups. However, Staff requested and received pricing offers from the three largest REPs for this type of customer. Rates shown are cents per kWh assuming the customer uses 2,500 kWh in a month. The provided information concerning contract periods varied for each of the three REPs; generally, however, contract periods ranged from 3 to 36 months, with the most common contract period being either 12 or 24 months.

	MAY 2014 (¢ per kWh @ 2,500 kWh per month)			JULY 2015 (¢ per kWh @ 2,500 kWh per month)		
PRODUCT TYPE (3 Largest REPs Only)	**PRICE RANGE**	**MEDIAN**	**AVERAGE**	**PRICE RANGE**	**MEDIAN**	**AVERAGE**
Fixed Rate	12.2 to 16.1	15.1	14.5	11.9 to 19.6	16.2	16.0
Variable Rate	14.6 only	14.6	14.6	13.4 to 15.8	14.8	15.0
Indexed	15.6 to 17.6	16.6	16.6	16.5 to 18.5	17.5	17.5

III-C: Options for Customers to Lower Electricity Bills

A number of steps exist that may be useful to customers actively seeking to lower their electricity charges. First, customers without an existing contract may compare prices between the various REPs to select their preferred rate. Second, customers with an existing contract may contact their REP regarding possible payment plans to defer or levelize certain payments. If a REP determines a customer qualifies for a payment plan, the customer will likely be prohibited from switching to another REP until the payment plan is completed. Third, a customer may talk to his or her REP about usage patterns and the possibility of being placed in a plan that better fits the customer's needs. Finally, while a customer with an existing contract has the right to switch REPs at any time, the customer's contract with their REP may require the customer to pay a fee for early cancellation.

Staff performed a comparison on three customer bills that were submitted in this project to show the potential savings a customer could realize by utilizing the *Power to Choose* website to look for a lower priced rate. **Appendix C** to this report shows the bill comparisons performed by Staff and the resulting potential savings.

Certain low-income customers may be eligible to obtain assistance through the LITE-UP TEXAS program, which provides discounts to eligible customers during the summer months. For more information on the LITE-UP TEXAS program, a customer may contact the REP or visit the Commission's website at the following link: https://www.puc.texas.gov/consumer/lowincome/Assistance.aspx.

IV: TECHNICAL AND LEGAL CONSIDERATIONS REGARDING THE FILING DATE OF SHARYLAND'S NEXT COMPREHENSIVE RATE PROCEEDING

IV-A: Legal Considerations

In Docket No. 41474, the parties reached an agreement that included the requirements that Sharyland would "file a system-wide base rate case for all five (5) of Sharyland's divisions on or before July 1, 2016 utilizing the 12 months ending December 31, 2015 as the test year." The Commission approved the stipulation and final order at the January 23, 2014 Open Meeting.

The stipulation contains no explanation of the intent for the timing of the rate case submission deadline or the specific use of the 2015 calendar year as the test year. Presumably, the intent of the parties was that Sharyland would file a rate case for full system-wide rates within a specific period of time, and that the rate case would use a recent period as the test year so that the financial information would not be stale. In addition, the timing gives Sharyland a reasonable amount of time after the test year to prepare the rate case filing.

With regard to the timing of the rate case filing, the language of the stipulation and order only requires that Sharyland file the rate case "on or before July 1, 2016." Therefore, Sharyland is not prohibited from filing the case earlier than July 1, 2016.

Staff notes, however, that the Commission also has the authority under PURA § 36.151, "on its own motion or on complaint by an affected person" to establish just and reasonable rates of an electric utility. The Commission has used this authority in the past to require that utilities file a rate case.[29] Nothing in the stipulation or Final Order in Docket No. 41474 restricts the right of the Commission to employ this section of PURA to require Sharyland to file for a rate proceeding prior to the specified date to ensure that rates are just and reasonable. Therefore, the Commission has the authority to require that Sharyland file a rate case prior to the date set out in the stipulation, using a test year that does not include all of calendar 2015. This decision is not in conflict with nor does it violate or change the terms of the stipulation. Rather, the Commission is using its express statutory authority to accomplish the goal of establishing just and reasonable rates. Absent a directive by the Commission under PURA § 36.151, Sharyland is still bound by the terms of the stipulation to file its rate case on or before July 1, 2016, utilizing calendar-year 2015 as the test year.

IV-B: Technical and Other Considerations

4CP Data

Should the Commission decide to direct Sharyland to file an application to change rates as soon as is practicable, perhaps the key technical issue for the Commission to consider with respect to the timing of the filing is whether Sharyland would have the opportunity to include in its application the load effects of the four "coincident peak" (4CP) months (June, July, August, and September) of 2015. Test-year 4CP load data are an important input in determining the allocation of certain costs to the rate classes, both in the rate case as well as in future

[29] See *Petition by Commission Staff for a Review of the Rates of CenterPoint Energy Houston Electric, LLC Pursuant to PURA § 36.151*, Docket No. 32095 (Sept. 5, 2006); and *Commission Staff's Petition for Review of the Rates of TXU Electric Delivery Company, Docket No. 34040*, Order Requiring a Rate Filing Package (April 30, 2007).

Transmission Cost Recovery Factor (TCRF) proceedings for Sharyland, which typically use the allocation factors from the last base rate proceeding. In addition to capturing the four months of 2015 with the highest system load requirements, the use of 2015 4CP data would provide the most updated information with respect to changes in the relative loads of the rate classes—and in particular, any effects resulting from recent increased non-residential load such as oil and gas activity in the SU-CapRock area. Using the most up-to-date data would provide the basis for allocations of costs between residential and non-residential rate classes that better reflect recent changes in the usage of the system and, assuming that growth in the oil and gas activity has exceeded that of residential customers, would likely show a reduction in the degree of any inter-class cross-subsidization that has occurred naturally as a consequence of that growth. Because of the importance of using the most recent 4CP period in Sharyland's cost information, setting a filing date that would allow for the inclusion of all the 2015 4CP data would be highly desirable.

Similarly, the use of a test year ending December 31, 2015 would be expected to produce more representative information with regard to changing load patterns and the related effects on the allocation of distribution costs to the rate classes. This would ensure that any recent growth in non-residential load would be reflected in setting the distribution rates.

In general, the use of 4CP and other load information from a full 2015 test-year would ensure that the significant recent changes in Sharyland's non-residential load would be better reflected in the ratemaking process. If, however, the Commission decides to direct Sharyland to file a rate case significantly sooner than the July 1, 2016 date generally contemplated in the Docket No. 41474 settlement agreement, Sharyland would almost certainly be forced to use a test year ending earlier than year-end 2015. In such an event, one method by which Sharyland could attempt to approximate the use of a 2015 test year would be extrapolate certain filing data (such as load data) through the end of 2015; this, however, would very likely increase the potential for rate-case controversy and contentiousness (and, as well, commensurately higher levels of rate-case expenses resulting from increased discovery, pleadings, appeals, etc.).

Capital Expenditures and Increases in Invested Capital

Over the last few years, Sharyland has experienced significant growth in capital expenditures and additions to plant in service, with the most significant increases related primarily to its CREZ transmission investment (the left portion of the table below clearly reveals this sharp increase from 2012 to 2013). Additionally, in the SU-CapRock area (shown in the right side of the table), Sharyland has experienced increased investment in *both* transmission and distribution facilities, largely because of growth in the oil and gas sector. Using data reported by Sharyland in its PUC earnings reports, the table below shows for both the McAllen division and the Cap Rock divisions the yearly increases in plant in service and total invested capital from 2010 through 2014:

	SU-McAllen				SU-CapRock		
		Other	Total Invested Capital--Adjusted			Other	Total Inv
	Plant in Service	Invested Capital	Tran	Retail T&D	Plant in Service	Invested Capital	Capital--Adjusted
12/31/2010	83,654,792	39,460,868	59,509,470	58,286,341	230,246,972	-	128,014,963
12/31/2011	83,388,337	39,460,868	49,356,289	55,337,135	242,812,460	1,254,986	137,622,237
12/31/2012	85,836,499	39,460,868	44,947,714	53,795,015	268,974,999	1,254,986	149,378,378
12/31/2013	763,759,622	17,432,836	759,053,641	22,010,231	453,276,729	25,263,645	330,530,194
12/31/2014	841,864,912	19,237,077	749,454,017	29,926,787	551,797,808	25,002,273	430,470,907

With regard to Sharyland's increased investment in transmission facilities, essentially all the transmission investment (including the CREZ-related investment) is already being recovered in Sharyland's rates; this is because of Sharyland's regular use over the years of interim transmission cost-of-service filings to timely update its transmission cost of service. However, as the above information illustrates, from the end of 2012 to the end of 2014, SU-CapRock's total invested capital (i.e., rate base) nearly *tripled*, increasing from $149 million to over $430 million (these figures are highlighted above), or an increase of approximately $281 million. A very important point to note is that of this total $281 million increase, the distribution-related portion (estimated to be approximately $130 million) is *not* reflected in current rates; this is because SU-CapRock used a 2012 calendar year as the test year in its last rate case (Docket No. 41474), and the invested-capital amounts used to set rates in that proceeding therefore did not include the distribution-related increase in capital additions made since then. Accordingly, while to some extent the rate impact from that additional amount of distribution investment will likely be mitigated by load growth and a corresponding increase in billing determinants, the approximate $130 million increase in distribution-related invested capital since 2012 could have a material (upward) effect on the new rates that will be established in the next rate proceeding.

Deferred Costs

Another point of consideration is that the rates of the SU-McAllen division, since Sharyland's inception, have been set *below cost*, and as a result, for several years the utility accrued on its books a cost deferral that has never been reflected in rates.[30] According to Sharyland, the accrued amounts of these costs, which were primarily related to Sharyland's start-up expenses, eventually exceeded $39 million.[31]

However, as part of the Docket No. 41474 stipulation, Sharyland agreed to limit the amount it would seek to recover in a future case to $30 million. Finding of Fact 35 in the Commission's order in Docket No. 41474 reflects this agreement, providing that:

> Sharyland may seek recovery in a future rate case of no more than $30 million associated with the deferral that Sharyland has recorded pursuant to the deferral mechanism established in Docket Nos. 21591 and 27556. All parties to this proceeding retain all rights to oppose recovery of any portion of the deferral, included, but not limited to, the reasonableness and prudence of any costs included in the deferral amount, the rate of return used in the deferral formula, and the recovery period.

Because Sharyland's next rate case will reflect the costs of its entire system, the specific effects on rates of the potential recovery of all or part of the $30 million deferral are difficult to quantify, especially given that new rates will presumably be established on a system-wide basis. However, all else equal, the obvious and most likely consequence of inclusion in the utility's requested revenue requirement of some or all of the deferred amount would be an increase in Sharyland's rates.

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[30] For more details on Sharyland's deferred start-up costs, see the Commission Order (July 25, 2000) in Docket No. 21591, *Application of Sharyland Utilities, L.P. for Authority to Establish Initial Rates and Tariff.*

[31] See Sharyland's 2012 PUC Earnings Report, Supplemental Schedule III-1 (Project No. 41327).

Sharyland's PUC Earnings Report Data for 2014

Finally, as reported in Sharyland's most recent PUC earnings report (for the year ended December 31, 2014), SU-CapRock reported an overall return on equity (ROE) of 8.05%.[32] This figure is well under the ROE levels authorized in recent years by the Commission for other TDUs, which have generally been in the fairly narrow range of 9.6% to 9.8%. More specifically, the 8.05% figure is also under the 9.70% ROE that was stipulated and approved in SU-CapRock's last rate proceeding (Docket No. 41474).

However, when the 8.05% figure for 2014 is broken down into the component parts of the return on wholesale transmission operations and the return on retail T&D operations, the picture becomes less clear. While SU-CapRock reported an ROE of -2.52% on its wholesale transmission operations, it reported an ROE of 13.85% for its retail T&D operations. Although Staff has not yet undertaken a detailed analyses of the 2014 earnings reports, this significant asymmetry in SU-CapRock's earned returns on the two functions of service—and the apparent *excess* ROE earned on the retail T&D operations—suggests that a comprehensive rate review is needed to both 1) bring wholesale transmission and retail T&D rate-of-return levels back into balance, and 2) ensure that Sharyland's rate-of-return levels are reasonable.

[32] See Sharyland's 2014 PUC Earnings Report, Schedule III of "Midland" version (Project No. 44550).

V: COMMISSION OPTIONS

With regard to the timing of a comprehensive review of Sharyland's rates, the Commission has two basic options: 1) allow the terms of the Docket No. 41474 stipulation to govern the timing of Sharyland's next filing, or 2) require Sharyland to file for a new rate proceeding as soon as possible.

The first option would allow Sharyland to file as planned consistent with the order in Docket No. 41474 that approved the stipulated agreement, which provides that the next rate case would be filed no later than July 1, 2016. This would allow Sharyland to collect data from the full 2015 test year—an outcome also consistent with the terms of the agreement—and would ensure the use of the most up-to-date cost information, including the important 2015 4CP data.

The second option is for the Commission to use its authority under PURA § 36.151, "on its own motion or on complaint by an affected person" to establish just and reasonable rates of an electric utility by requiring Sharyland to file a rate case as soon as possible. Presumably, given the complaints received by the Commission in recent months and the resulting attention on Sharyland's rates, Sharyland has been preparing for the possibility of filing earlier than previously contemplated, and the rate case could be filed sometime before July 1, 2016. Although a typical time frame for a utility to prepare a filing for a comprehensive rate proceeding is four to six months, Staff believes that this could be shortened if in fact Sharyland has already started the process of gathering and preparing information for its next filing.

As discussed in greater detail in the previous section, **among the reasons that an earlier filing might be desirable are:**

- SU-CapRock's new rates would reflect more up-to-date costs and allocation factors, including any changes resulting from relative growth in residential and non-residential loads.
- The Commission would have the opportunity to review cost-allocation issues sooner rather than later. With regard to this point, it is important to note that a significant degree of inter-class cross-subsidization in SU-CapRock's rates may still persist, and continued movement towards the Commission's general policy goal of cost-based rates will impact different rate classes in different ways.

Among the reasons that an earlier rate filing may *not* be desirable:

- Given Sharyland's significant increase in capital expenditures and additions to rate base since its last rate proceeding, and the possible inclusion of rates of Sharyland's $30 million cost deferral, an overall rate *increase* is possible or even likely. In other words, a rate proceeding that is filed earlier than previously contemplated could result in an increase in overall rates *sooner* than would otherwise occur.
- An earlier filing date would likely necessitate the use of a test year that does not include information from a full 2015 calendar year. Test-year data would not be as timely and would not as fully reflect changes to the utility's load characteristics, including the effects of differences in the relative load growth of non-residential customers (such as customers in oil and gas operations) and residential customers.

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APPENDIX A: Brief History of Sharyland Utilities and its Recent PUC Proceedings

General History

In 1999, Sharyland Utilities was created as a "greenfield" electric utility to serve residents and businesses of Sharyland Plantation, a new mixed-use real estate development project of 6,000 acres located along the Rio Grande River between the South Texas cities of Mission and McAllen. Sharyland was created as a Texas limited partnership with Sharyland Utilities, GP, Inc. as general partner and Bolton Power Corporation, Hunt Valley Industrial, L.P., and Hunt Power Corporation as limited partners.

In July 2010, Sharyland Utilities expanded its footprint as part of a merger agreement between Continental Energy Systems LLC and Hunt Transmission Services LLC (HTS). Under the terms of the agreement, which was approved by the Commission in Docket No. 37990,[33] HTS and its affiliates acquired Cap Rock Energy and its subsidiary NewCorp Resources Electric Cooperative, including all those entities' electric transmission and distribution (T&D) assets located in West Texas, Central Texas, and an area northeast of Dallas. Cap Rock Energy was the successor in interest to Cap Rock Electric Cooperative, Inc., which had provided electric service in West Texas since 1939. Cap Rock Energy consisted of three distinct service territories:

- The Stanton and Lone Wolf Divisions (now known as the Stanton and Colorado City Divisions). This service territory is located in the Midland-Odessa and Colorado City areas of West Texas. These divisions were linked to the Southwest Power Pool in 1995. Cap Rock Energy purchased all of its capacity and energy requirements for the Stanton and Lone Wolf Divisions from Southwestern Public Service Company (SPS).
- The Hunt/Collin Division (now known as the Celeste Division). This service area was acquired in 1992 through the acquisition of Hunt-Collin Electric Cooperative and is located near the town of Celeste in portions of Hunt and Collin counties northeast of Dallas. The Celeste Division is within the Electric Reliability Council of Texas (ERCOT) service territory.
- The McCulloch Division (now known as the Brady Division). This service area was acquired in 1999 through the acquisition of McCulloch Electric Cooperative and is located near the town of Brady in the Texas Hill Country. Like the Celeste Division, the Brady Division is within the ERCOT service territory.

Sharyland Utilities currently serves approximately 50,000 customers in 29 counties throughout Texas. At the present time, the divisions of Sharyland comprising the old Cap Rock Energy service areas (SU-CapRock) have rates that are separate and different from the rates of the Sharyland service territory in South Texas (SU-McAllen).

Recent Procedural History

Docket No. 37990

As noted above, the Public Utility Commission of Texas (PUC, or the Commission) approved Sharyland's merger agreement with Cap Rock Energy in Docket No. 37990. Among the terms

[33] *Joint Report and Application of Sharyland Utilities, L.P., Sharyland Distribution & Transmission Services, LLC, Hunt Transmission Services, LLC, Cap Rock Energy Corporation, and NewCorp Resources Electric Cooperative, Inc. for Regulatory Approvals Pursuant to PURA §§ 14.101, 37.154, 39.262, and 39.915*, Docket No. 37990, Order (Jul. 8, 2010).

of the Commission's final order in that proceeding was a requirement that Sharyland initiate a study (the ERCOT Study) to be performed by an independent, third-party consultant to analyze and evaluate issues related to moving the Stanton and Colorado City Division loads from the Southwest Power Pool (SPP) transmission grid into the ERCOT grid. The ERCOT Study findings estimated that if the Stanton and Colorado City divisions remained in SPP and were served under a new wholesale contract with SPS after the expiration on December 31, 2013 of the then-current contract, wholesale power costs for the Stanton and Colorado City divisions would be almost double the amount of power costs available to those divisions in ERCOT. The ERCOT Study estimated that if the residential customers of Sharyland's Stanton and Colorado City divisions had the opportunity to utilize ERCOT retail electric providers (REPs) from November 2009 through October 2010, they would have saved, based on an average consumption of 1,000 kilowatt-hours (kWh), between $170 and $434 (13% to 23%) annually. The ERCOT Study also estimated that moving the assets and load associated with Sharyland's Stanton and Colorado City divisions from SPP to ERCOT would defer or avoid the need for $42.5 million of transmission upgrades in SPP.

On July 8, 2010, the Commission approved Sharyland's request to transfer the Stanton and Colorado City divisions from SPP to ERCOT. The loads from those service territories were transferred to ERCOT in segments during December 2013, with the final transfer occurring on December 21, 2013.

In addition to approving the merger, the Commission's order in Docket No. 37990 required Sharyland to submit a study and plan (the Retail Plan) concerning a transition of Sharyland's former Cap Rock divisions to retail competition.

Docket No. 39592

In July 2011, Sharyland filed an application in Docket No. 39592 for Commission approval of Sharyland's Retail Plan.[34] On August 22, 2012, the Commission issued its order in the proceeding and approved Sharyland's application and proposed Retail Plan. The Commission's order also required Sharyland to file an application no later than May 31, 2013, to establish unbundled retail delivery rates for the Brady, Celeste, Colorado City, and Stanton divisions, with rates to be effective on May 1, 2014 (or 90 days after Sharyland filed its tariff to implement the final Commission order in that proceeding, whichever was later).

Docket No. 41474

On May 31, 2013, Sharyland filed with the Commission its application in Docket No. 41474 to establish unbundled retail delivery rates for the Brady, Celeste, Colorado City, and Stanton divisions, to approve the tariff for retail delivery service, and to adjust its wholesale transmission rate. The Commission's order in that proceeding, issued in January 2014, established the rates currently in place for those divisions.

[34] *Application of Sharyland Utilities, L.P., to Approve Retail Plan Pursuant to the Commission's Order in Docket No. 37990 and for Other Relief*, Docket No. 39592, Order (Aug. 22, 2012).

APPENDIX B: Sharyland's Rate Classes—Before and After Deregulation

Pursuant to the terms of its merger agreement and prior Commission orders, SU-CapRock successfully completed in May 2014 its transition into the competitive electric market in ERCOT. As an ERCOT T&D utility regulated by the PUC, SU-CapRock began to provide to its customers only transmission and distribution services, in contrast to the fully integrated electric services that SU-CapRock previously provided and that included power generation and retail services.

Sharyland's Rate Classes—*Before* Deregulation

Prior to SU-CapRock's transition to competition in May 2014, the company billed its customers in a Bundled Rate or Bundled Customer Class format, as shown below.

Bundled Classes:

- General Service
  - Residential Home
  - Residential Hand House
  - Residential Barn – Shop – Etc.
  - Residential Water Well
  - Residential Electric Fence
  - Residential Total Electric
- Irrigation
- Commercial
  - Small Commercial
- Large Power Primary
  - Large Power Industrial Primary
  - Industrial Primary
- Large Power Secondary
  - Industrial Secondary
- Cotton Gins
  - Non-Ginning Months
  - Large Power Ginning
- Lighting Service
  - Lighting Unmetered
  - Lighting Metered

The foregoing classes and rate schedules were defined as follows:[35]

- General Service: Applicable to all customers taking the type of service described in this rate schedule for uses associated with the operation of a single family-residential and non-residential domestic use.
- Irrigation: Applicable to electric service for seasonal (agricultural) purposes at secondary voltage when such electric service is to one point of delivery and measured through one meter.

[35] These bundled classes were defined in tariff number 31422 as filed July 19, 2006, in PUC Docket No. 28813.

- Commercial: Applicable to electric service for non-residential purposes at secondary voltage, with demand less than or equal to 50 kW, when such electric service is to one point of delivery and measured through one meter and is not for shared or resale purposes. If customer exceeds 50kW three or more times during a 12-month period, the customer will be transferred to the Large Power Secondary Rate Schedule in this tariff.
- Large Power Primary: Applicable to electric service for non-residential purposes at primary voltage when such electric service is to one point of delivery and measured through one meter.
- Large Power Secondary: Applicable to electric service for non-residential purposes at secondary voltage, with demand greater than 50 kW, when such electric service is to one point of delivery and measured through one meter.
- Cotton Gins: Applicable to electric service for cotton gins at secondary or primary voltage when such electric service is to one point of delivery and measured through one meter.
- Lighting Service: Applicable to electric service for street and security lighting purposes. This rate schedule is not applicable to temporary, shared, standby, supplementary, maintenance or resale service.

Sharyland's Rate Classes—*After* Deregulation

After SU-CapRock switched to competition on May 1, 2014, classifications were changed from a bundled format to an unbundled service or unbundled customer class, as shown below.

Unbundled Customer Class:

- Residential
- Secondary ≤ 10 kW
- Secondary > 10 kW
- Primary
- Lighting Service

These classes and rate schedules are defined as follows:[36]

- Residential: For purposes of a permanent nature to individual private dwellings, appurtenant structures, and individually metered apartments.
- Secondary ≤ 10 kW: Existing customers where peak demand does not exceed 10 kW. If usage reaches or exceeds 3,500 kWh in a month, Sharyland will install a demand meter and the next recorded demand > 10kW will result in a reassignment to a Secondary > 10kW rate schedule.
- Secondary > 10 kW: Existing customers where peak demand exceeds 10 kW.
- Primary: Existing customers under what was previously Large Power Primary, for loads whose maximum NCP in the 11 months preceding the current billing month is ≤ 20 kW.

[36] These definitions were included in a Sharyland REP Workshop "Doing Business with Sharyland," dated February 19, 2014.

The billing kW applicable to the Distribution System Charge is the NCP kW for the current billing month.

- Lighting Service: Existing customers served under what was "Unmetered Lighting." Includes unmetered lighting of public streets, highways, bridges, parks and similar public spaces. Also includes all non-roadway lighting.

APPENDIX C: Potential Savings (for Residential Customers) From Switching REPs

	Customer Bill Date	Customer Billed Usage (kWh)	Billed Amount	Repriced Bills Using Lowest REP Offer*	Projected Savings
Customer 1	03/2015	5,760	$1,006.98 (17.5 cents per kWh)	$746.47 (13.0 cents per kWh)	$260.51
Customer 2	03/2015	4,332	$672.46 (15.5 cents per kWh)	$557.69 (12.9 cents per kWh)	$114.77
Customer 3	04/2015	2,495	$391.06 (15.7 cents per kWh)	$314.85 (12.6 cents per kWh)	$72.27

*Repriced bills are based on the lowest-priced offer on the *Power to Choose* website on July 9, 2015. See Section III of this report for related information.

APPENDIX D: Graphical Rate Comparisons

Based on information compiled by Sharyland Utilities and provided to Staff, the data below reflect customer information relating to T&D bills and kWh or kW usage. In general, the graphs first show the average T&D bill and related kWh or kW *usage* for various customer classes of SU-CapRock, with follow-up graphs showing the average *effective rates* for the given classes.

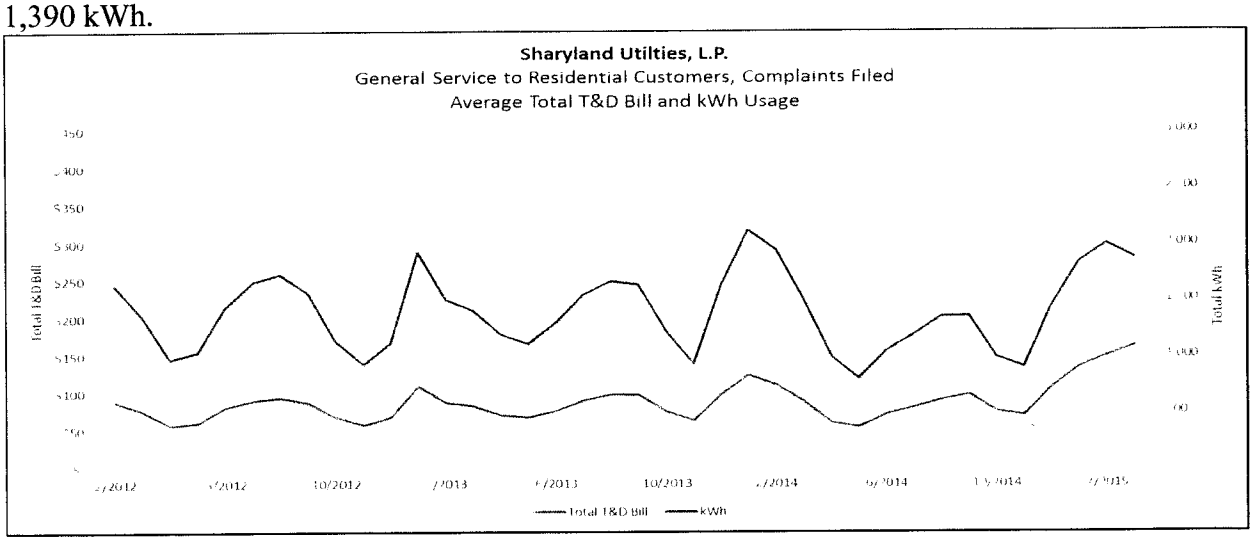
Information used in the graphs is broken down by customer class as previously described in Appendix B. The sample information covers a 38-month time period and includes data from February 2012 thru March 2015. In some of the graphs, the data include customers that filed complaints with the PUC; this information serves as the baseline for comparison against a random sample in the same class. Some graphs also include additional explanatory information.

Residential Customers

Graph 1-A: Average T&D Bill and Usage—*Residential* Customers That Have Filed Complaints

This graph reflects the baseline data of former *General Service* customers now known as *Residential* customers that have filed complaints with the PUC ("Complaints Filed" group). The data from approximately 24 to 38 customers were used to calculate an average bill and average kWh usage each month.

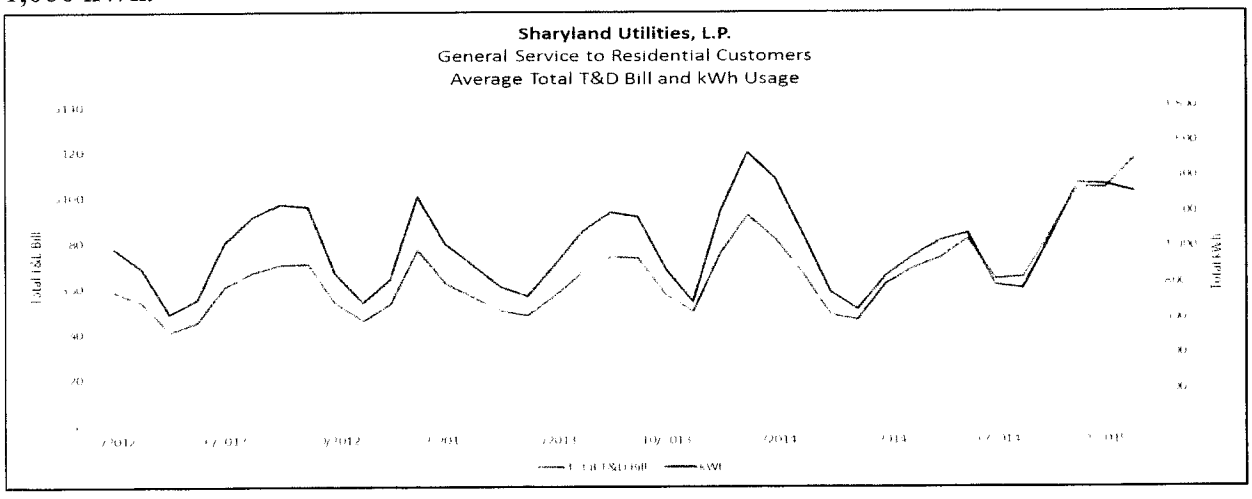
For this group of customers, the average bill for this period was $87.59. The average usage was 1,390 kWh.



Graph 1-B: Average T&D Bill and Usage—*Residential* Customers Randomly Selected

This chart reflects the baseline data of former *General Service* customers now known as *Residential* customers that, for purposes of this report, were randomly selected ("Random Sample" group). The data from approximately 66 to 84 customers were used to calculate an average bill and average kWh usage each month.

For this group of customers, the average bill for this period was $66.29. The average usage was 1,000 kWh.

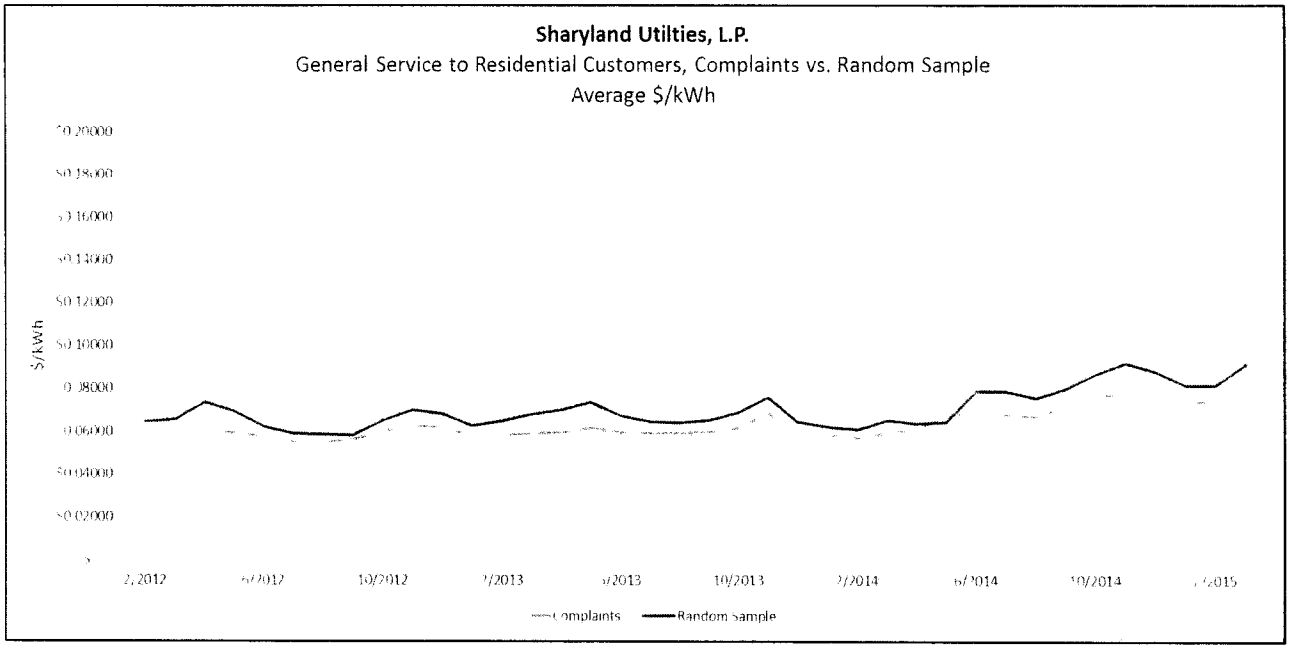


Graph 1-C:
Comparison of Average Residential Rates—Complaints Group vs. Random Sample Group

Based on the information in Graphs 1-A and 1-B, this chart provides a comparison of the average price per kWh for the *Residential* customers' Complaints Group and the Random Sample group.

The average price paid was .06327/kWh for the Complaints Group versus .06653/kWh for the Random Sample group.

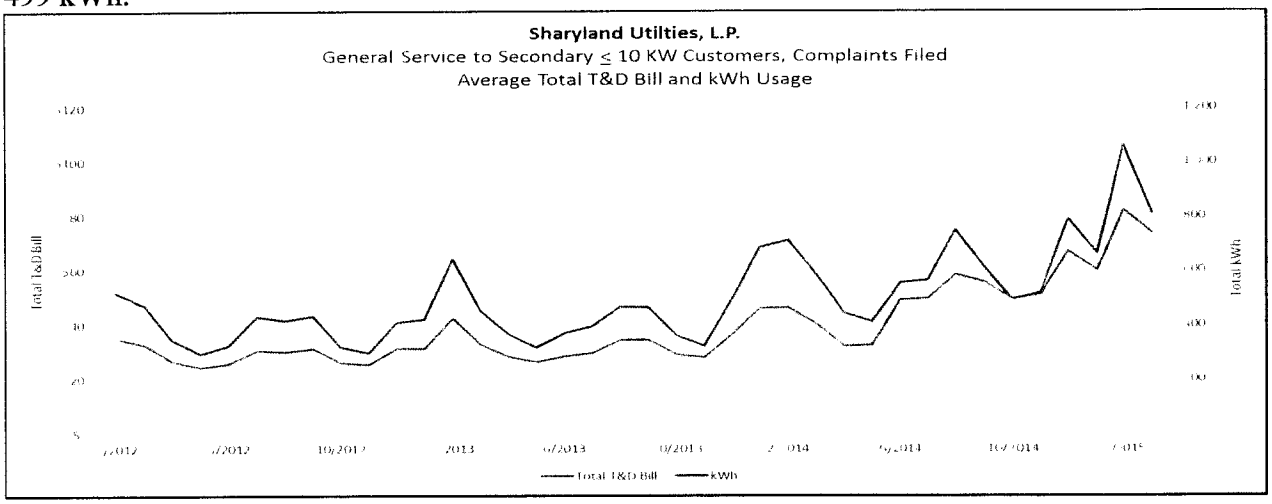
The difference shown here can be attributed largely to the higher kilowatt-hour usage by the Complaints Group (1,390 kWh) in comparison to the Random Sample Group (1,000 kWh), as average prices tend to decrease as usage increases.



Non-Residential Customers

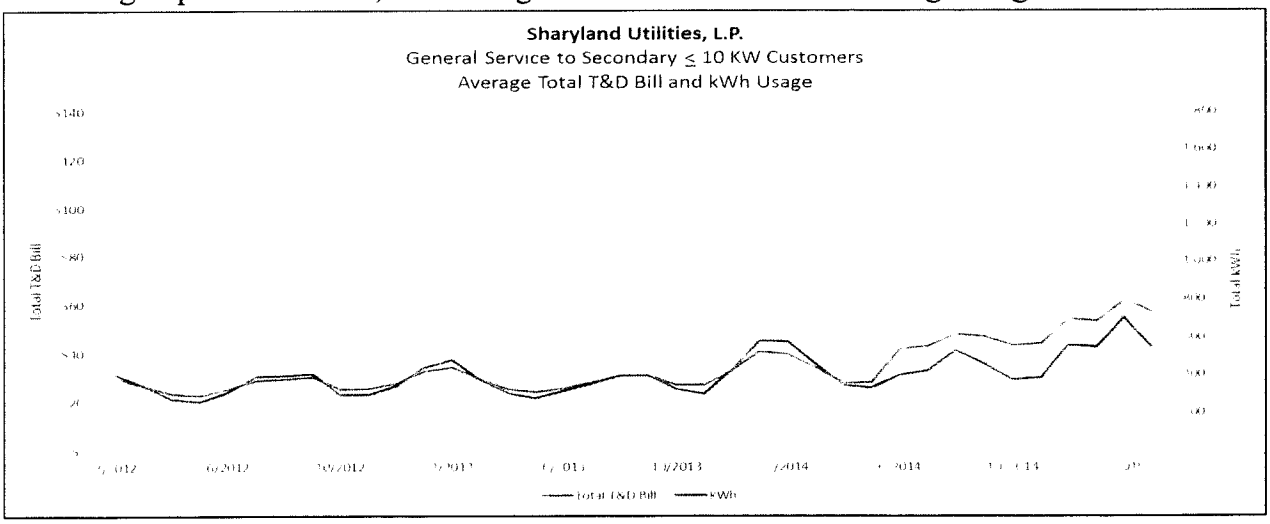
Graph 2-A: Average T&D Bill and Usage—*Secondary ≤ 10 kW Customers* That Have Filed Complaints

This chart reflects the baseline data of the former *General Service* customers now known as *Secondary ≤ 10 kW* customers that have filed a complaint with the PUC ("Complaints Filed" group). The data from approximately 24 to 38 customers were used to calculate an average bill and average kWh usage each month.
For this group of customers, the average bill for this period was $39.46. The average usage was 499 kWh.



Graph 2-B: Average T&D Bill and Usage—*Secondary ≤ 10 kW* Customers Randomly Selected

This chart reflects the baseline data of former *General Service* customers now known as *Secondary ≤ 10 kW* customers that, for purposes of this report, were randomly selected ("Random Sample" group). The data from approximately 68 to 79 customers were used to calculate an average bill and average kW usage each month.
For this group of customers, the average bill was $34.38. The average usage was 404 kWh.

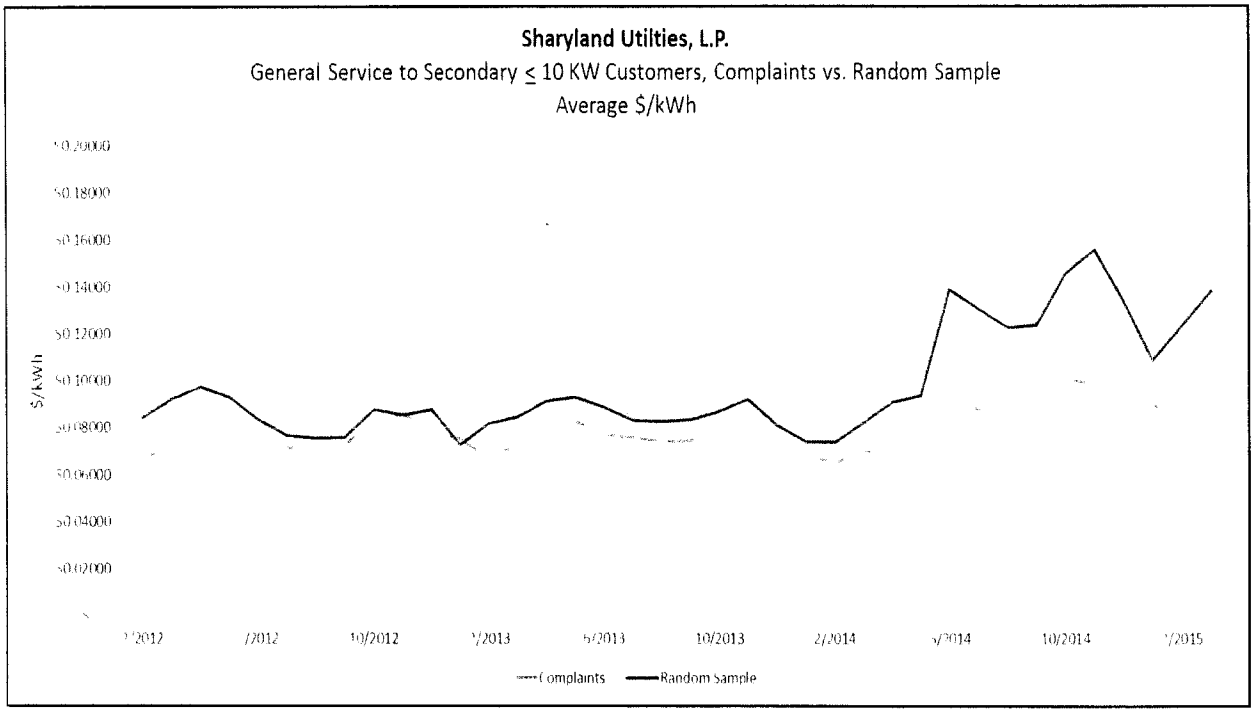


Graph 2-C:
Comparison of Average Rates for *Secondary ≤ 10 kWh*—Complaints Group vs. Random Sample Group

Based on the information in Graphs 2-A and 2-B, this chart provides a comparison of the average price per kWh for the *Secondary ≤ 10 kWh* Complaints Group and the Random Sample group.

The average price paid was .07905/kWh for the Complaints Group versus .09478/kWh for the Random Sample group.

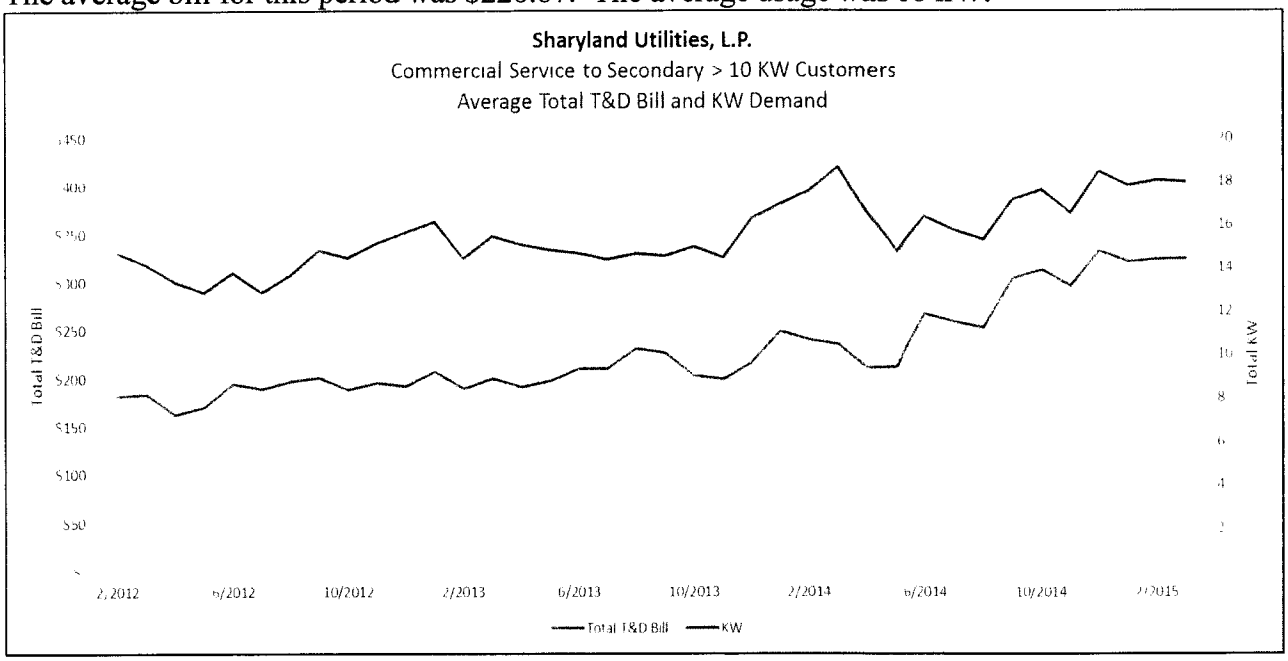
The difference shown here can be largely attributed to the higher kilowatt-hour usage by the Complaints Group (490 kWh) in comparison to the Random Sample Group (404 kWh), as average prices tend to decrease as usage increases.



Graph 3-A: *Secondary > 10 kW* Customers—Average T&D Bill and kW Usage

The data from approximately 41 to 46 customers were used to calculate an average bill and average kW usage each month.

The average bill for this period was $228.87. The average usage was 16 kW.



Graph 3-B: *Secondary > 10 kW Customers*—Average T&D Rate

The average amount billed per kW was $14.61 during the sample period.