



Control Number: 29165



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PUBLIC UTILITY COMMISSION  
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June 4, 2004

Ms. Courtney Todd  
Filing Clerk, Central Records  
Public Utility Commission of Texas  
1701 N. Congress Avenue  
Austin, Texas 78701

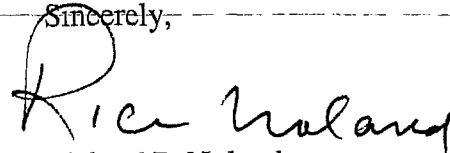
Re: *Project No. 29165; 2003 Electric System Service Quality Reports –  
Substantive Rule §25.81*

Dear Ms. Todd:

Pursuant to Staff's April 16, 2004 Service Quality Information Request,  
Sharyland Utilities, L.P. (SU) hereby submits its responses as attached.

Thank you for your attention to this matter.

Sincerely,



Richard P. Noland  
Attorneys for  
Sharyland Utilities, L.P.

cc: T. Brian Almon, P.E.  
Director of Engineering

Enclosure

**SHARYLAND UTILITIES, L.P.'S  
RESPONSE TO STAFF'S  
SERVICE QUALITY INFORMATION REQUEST**

1. Provide complete records of all sustained interruptions, by interruption class, for the months of April and October 2003. [Subst. R. §25.52(d)]

*Response:*

Sharyland Utilities had no recorded outages for the month of April 2003. Sharyland Utilities had one (1) scheduled interruption affecting one (1) customer for 168 minutes in the month of October 2003.

2. Provide the number of significant interruptions sustained during 2003 and the number lasting more than 24 hours. [Subst. R. §25.52(c)(5) and §25.52(e)(2)]

*Response:*

Sharyland Utilities had no recorded outage for 2003 that affected 20% of the system's customers lasting one hour or more.

3. Provide the number of forced information attributable to each cause shown on the 2003 Service Quality Report.

*Response:*

The table below shows the number of forced outages attributable to cause for the time period reported in the 2003 Service Quality Report.

Weather (Including Lightning)	5 outages
Vegetation	0 outages
Animals and Birds	0 outages
People (Including cars and farm equip)	3 outages
Utility-owned Equipment	3 outages
Other	0 outages
Unknown	0 outages

4. Describe the methodology used to calculate the annual average SAIFI value for each interruption class shown on the 2003 Service Quality Report. Include a description of the data used in the calculations.

*Response:*

SAIFI - System Average Interruption Frequency Index - The average number of times that a customer's service is interrupted. SAIFI is calculated by summing the number of customers interrupted for each event and dividing by the total number

of customer on the system being indexed. A lower SAIFI value represents a higher level of service reliability.

Sharyland Utilities documents each outage as it occurs and the data is tabulated on a monthly basis as shown on the attached 2003 SU Outages Indices. The table includes the total number of customers recorded for the month and calculates the subsequent customer minutes for that month. The individual outage reports record the number of customers affected, the length of the outage, and the number of customer minutes associated with the outage. The total number of customers affected for all of the outages recorded in the month and the total customer minutes of interruption for the month are listed as well as the number of interruptions for the month. At the end of the year, an average number of customers for the year is calculated from the twelve monthly totals. Also, a total value is calculated for the number of customers affected with an outage during the year. The SAIFI value for the year is calculated by dividing the total number of customers affected by an outage for the year by the average number of customers on the system for the year.

For the 2003 Service Quality Report for Sharyland Utilities, the SAIFI Index is calculated by dividing 323 customers affected by an outage for the year by an average of 889 customers on the system for 2003. The SAIFI for 2003 is 0.36.

5. Describe the methodology used to calculate the annual average SAIDI value for each interruption class shown on the 2003 Service Quality Report. Include a description of the data used for the calculations.

*Response:*

SAIDI - System Average Interruption Duration Index - The average amount of time a customer's service is interrupted during a reporting period. SAIDI is calculated by summing the restoration time for each interruption event times the number of customers interrupted for each event, and dividing by the total number of customers. SAIDI is expressed in minutes or hours. A lower SAIDI value represents a higher level of service reliability.

Sharyland Utilities documents each outage as it occurs and the data is tabulated on a monthly basis as shown on the attached 2003 SU Outages Indices. The table includes the total number of customers recorded for the month and calculates the subsequent customer minutes for that month. The individual outage reports record the number of customers affected, the length of the outage, and the number of customer minutes associated with the outage. The total number of customers affected for all of the outages recorded in the month and the total customer minutes of interruption for the month are listed as well as the number of interruptions for the month. At the end of the year, an average number of customers for the year is calculated from the twelve monthly totals. Also, a total value is calculated for the number of customers affected with an outage during the

year. The SAIDI value for the year is calculated by dividing the total customer minutes of interruption for the year by the average number of customers on the system for the year.

For the 2003 Service Quality Report for Sharyland Utilities, the SAIDI Index is calculated by dividing 29,168 customer-minutes of interruption for the year by an average of 889 customers on the system for 2003. The SAIDI for 2003 is 32.82.

6. Describe the methodology used to calculate the system-wide SAIFI standard for 2003, and include a description of the data used for the calculation. Provide the standard for 2003 and provide the calculation showing how this standard was determined. [Subst. R. §25.52(f)(1)]

*Response:*

Sharyland Utilities began operation in 1999 and connected its first customer in 2000. We filed our first Service Quality report for the 2000 timeframe with data only for a partial year of operation. The data was based on one (1) outage for the year for the small number of customers affected. Subsequently, SU has filed reports for 2001, 2002, and 2003. SU did not exist and therefore did not have data to report for the years 1998, 1999, and only had data for the partial year of 2000. Therefore, the average system-wide SAIFI for 2003 was based on the average of the last three years of reporting. The reported numbers are listed as:

<u>YEAR</u>	<u>SAIFI</u>
2001	.63
2002	.38
2003	.36

The calculated system-wide SAIFI for 2003 is .45

7. Describe the methodology used to calculate the system-wide SAIDI standard for 2003, and include a description of the data used for the calculation. Provide the standard for 2003 and provide the calculation showing how this standard was determined. [Subst. R. §25.52(f)(1)]

*Response:*

Sharyland Utilities began operation in 1999 and connected its first customer in 2000. We filed our first Service Quality report for the 2000 timeframe with data only for a partial year of operation. The data was based on one (1) outage for the year for the small number of customers affected. Subsequently, SU has filed reports for 2001, 2002, and 2003. SU did not exist and therefore did not have data to report for the years 1998, 1999, and only had data for the partial year of 2000. Therefore, the average system-wide SAIDI for 2003 was based on the average of the last three years of reporting.

<u>YEAR</u>	<u>SAIDI</u>
2001	61.04
2002	14.60
2004	32.82

The calculated system-wide SAIDI for 2003 is 36.15.

8. Identify and list the feeders on the 2003 Service Quality Report that did not meet either the SAIDI or SAIFI requirements of Subst. R. §25.52(f)(2)(A). Explain why each feeder did not meet the requirements and what action(s) have been or will be taken to achieve compliance for the feeder (i.e., to prevent the feeder repeating for a third year).

*Response:*

Sharyland Utilities had no distribution feeders that did not meet either the average SAIDI or SAIFI for this year.

Sharyland Utilities did have one listed feeder that has under-performed among the highest (worst) 10% of the feeders for two consecutive years. Sharyland Utilities started the distribution operation and service to its retail customers with one overhead 12.47 kV distribution feeder serving all customers from a meter point taken from American Electric Power Company (AEP). As the system grew, we installed our first electrical substation and all loads were served by two feeders, one overhead and the other underground. We have since that time added an additional underground feeder to distribute the load and thus divide the exposure of the retail customers to an outage. The overhead feeder number 111 has continually been our worst performing feeder; however, it did not exceed the average SAIDI or SAIFI for the system in 2003. This feeder has been unloaded in respect to the number of customers it serves and is slated to be replaced by a completely underground distribution circuit by the end of the third quarter of 2004. This in effect will limit its exposure to the weather, which is the largest cause of outages on the SU System.

9. Identify and list the feeders on the 2003 Service Quality Report that did not meet either the SAIDI or SAIFI requirements of Subst. R. §25.52(f)(2)(B). Explain why each feeder did not meet the requirements and what action(s) have been or will be taken to achieve compliance for the feeder. Describe the methodology used to calculate the SAIDI and SAIFI system averages of all feeders for purposes of identifying the listed feeders, and provide the calculations.

*Response:*

Sharyland Utilities had no distribution feeders that recorded a SAIDI or SAIFI values for the reporting year that was more than 300% greater than the system average of all feeders.

## Sharyland Utilities, L.P. 2003 SU Outages Indices

Month	Customers	Customer Minutes per month	Total Number of Customers Affected for the Month	Customer Minutes of Interruption for the month	Number of Interruptions for the Month	SAIDI	SAIFI
<b>2003</b>							
January	768	34,283,520	47	3221	2	4.19	0.06
February	785	31,651,200	68	7034	4	8.96	0.09
March	803	35,845,920	0	0	0	0	0
April	808	34,905,600	0	0	0	0	0
May	830	37,051,200	0	0	0	0	0
June	853	36,849,600	0	0	0	0	0
July	938	41,872,320	0	0	0	0	0
August	947	42,274,080	9	1123	2	1.19	0.01
September	964	41,644,800	199	17790	3	18.45	0.21
October	979	43,702,560	0	0	0	0	0
November	992	42,854,400	0	0	0	0	0
December	997	44,506,080	0	0	0	0	0
	889	467,441,280	323	29168	11	32.82	0.36

**SAIFI** System Average Interruption Frequency Index - The average number of times that a customer's service is interrupted. SAIFI is calculated by summing the number of customers interrupted for each event and dividing by the total number of customer on the system being indexed. A lower SAIFI value represents a higher level of service reliability.

**SAIDI** System Average Interruption Duration Index - The average amount of time a customer's service is interrupted during a reporting period. SAIDI is calculated by summing the restoration time for each interruption event times the number of customers interrupted for each event, and dividing by the total number of customers. SAIDI is expressed in minutes or hours. A lower SAIDI value represents a higher level of service reliability.

### Outage Record

Outage	Time out	Time Restored	Length of Outage in minutes	Number of Customers Affected	Customer Minutes of outage	Feeder Number
1/3/2003	9:22 AM	11:41 AM	139	1	139	111
1/17/2003	7:22 AM	8:40 AM	67	46	3082	111
2/21/2003	7:35 AM	8:40 AM	65	3	195	115
2/23/2003	6:35 AM	9:50 AM	205	1	205	115
2/23/2003	6:35 AM	12:56 AM	381	2	762	115
2/25/2003	4:30 PM	6:30 PM	120	6	720	111
2/25/2003	7:53 PM	9:25 PM	92	56	5152	111
8/7/2003	6:25 PM	8:23 PM	118	8	944	114
8/13/2003	6:21 PM	9:20 PM	179	1	179	111
9/18/2003	6:30 PM	8:00 PM	90	191	17190	111
9/23/2003	10:15 AM	1:00 PM	165	2	330	114
9/25/2003	4:15 PM	5:00 PM	45	6	270	114

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