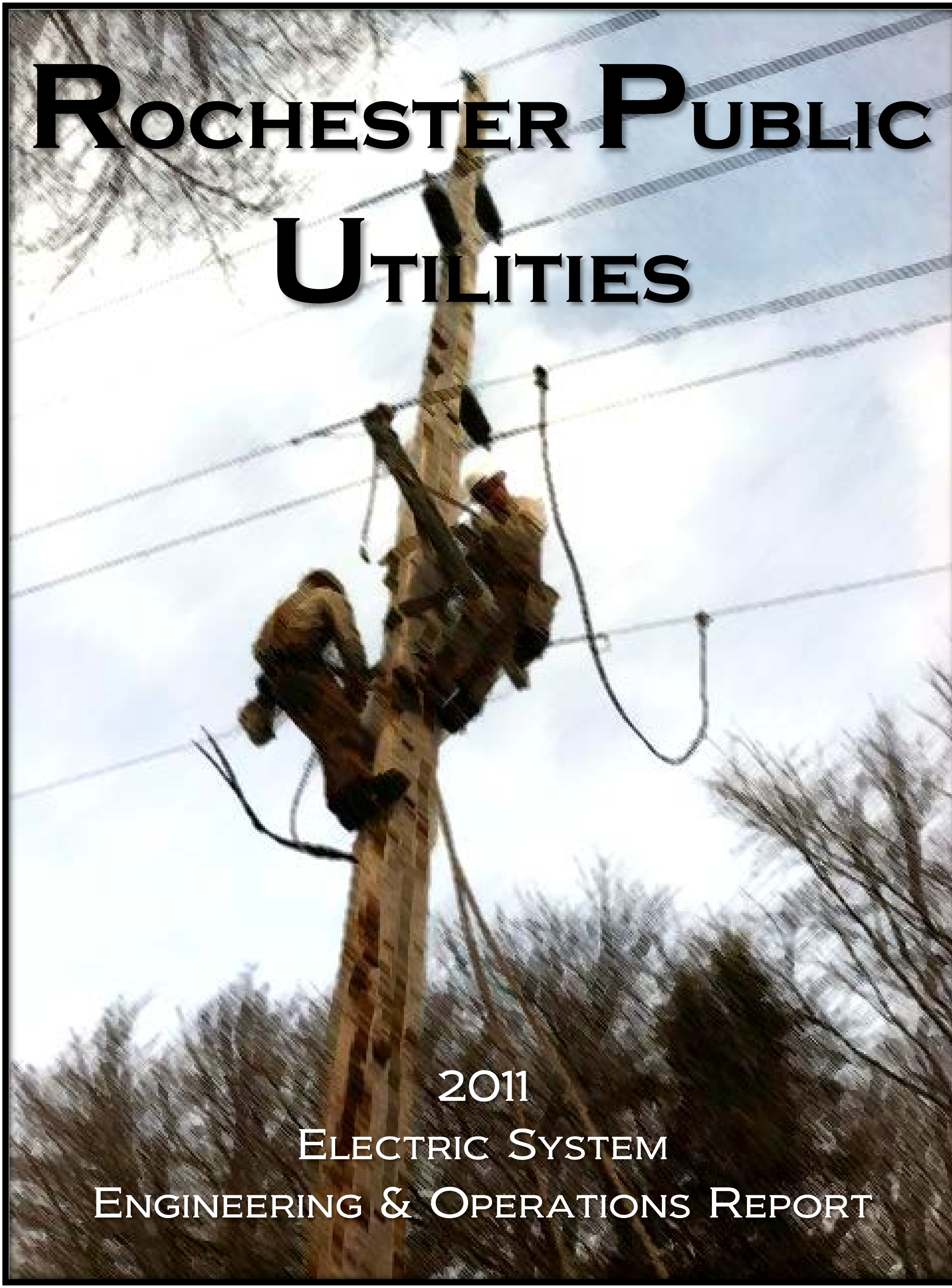
Rochester Public Utilities



2011
Electric System
Engineering & Operations Report

ROCHESTER PUBLIC UTILITIES
ENGINEERING & OPERATIONS REPORT
(Electric System)
2011

Cover Photo Description:

Photo above.
Pictured on the cover photo are two RPU line workers that were changing an overhead transformer. This work was part of a larger project to transfer some People's Cooperative customers to RPU's distribution system. This was one of many transformers that needed to be changed due to the distribution voltages being different between RPU and People's Cooperative. Of all the transformers that were changed during this process, approximately two-thirds of them were done by RPU crews climbing the poles, as shown on the photo, rather than using the standard method of bucket trucks. This project transferred 931 customers to the RPU system.

Report prepared by Mike Engle and Melissa Zamzow

ROCHESTER PUBLIC UTILITIES
ENGINEERING & OPERATIONS REPORT – 2011

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I. REVIEW OF UTILITY PERFORMANCE

A. Technical Services Summary

1. Revenue Services Maintained/Installed

LGS & Industrial Services (1 yr. cycle)	
Total number of services	40
Total number of services maintained on schedule	21
Services maintained (goal)	40
Services maintained (actual)	21
MGS Services (4 yr. cycle)	
Total number of services	432
Total number of services maintained on schedule	95
Services maintained (goal)	105
Services maintained (actual)	95
Single Phase Services (16 yr. cycle)	
Total number of services	49407
Total number of services maintained on schedule	
Services maintained (goal)	3000
Services maintained (actual)	*
Poly Phase Services (12 yr. cycle)	
(SGS, Commercial)	
Total number of services	N/A
Total number of services maintained on schedule	N/A
Services maintained (goal)	N/A
Services maintained (actual)	N/A

2. Substation/Miscellaneous

Transformer, breaker, and switch oil tests	187
Switches, breakers, & associated relays maintained (13.8kV)	29
Switches, breakers, & associated relays maintained (161kV)	8
Substation transformers maintained	2
Radio and TV interference problems	8
Distribution transformers maintained	139
Voltage/Power Quality Problems/Projects	46

Notes:

Maintenance cycles for substation equipment are:

- 13.8kV breakers	5 yr.
- 161kV breakers	5 yr.
- transformers	5 yr.
- protective relays in substations	5 yr.
- protective relays in power plants	5 yr.

B. Gopher State One-Call Activity

Total Requests

Water	7,409
Electric	8,969
Gross Total	9,961

* Not available at this time. Reports have not been written to retrieve this information from the CCS System.

C. Division Performance Indices

The following statistics have been developed as indicators of Division performance. Some are considered reflective of Division performance as a whole (DIV), while others are more related to a particular Section's performance (EN, P, SO, or TD). There are very few single-year indicators that we have total control over: the weather can intervene in many of them. However, multi-year averages should be indicative of Division efforts, and are also useful in comparing RPU to regional and national performance.

Target indices are being established in relation to national averages, to RPU's internal goals, and/or to simply improving present performance.

Formulas used are the same as those used by APPA. Statistics involving number of customers or employees use year-end quantities.

Some indices remain unavailable due to difficulties in establishing a reliable method of gathering the information. Each year, we will evaluate the cost-versus-benefit value of each of the indices, and determine whether to continue to collect the information.

Rochester Public Utilities
2011 Performance Indicators
Operations Division

Item	Name	Target Value	Previous 5 Year Avg	2011	2010	2009	2008	2007	Comments
100	Avg Customer-Minutes Without Power (SAIDI)	< 53	59.21	49.06	111.4	56.9	25.44	53.23	June 17th Tornado in 2010
101	Avg Outage Length in Minutes (CAIDI)	< 40	94.44	59.41	157.65	80.24	75.59	99.3	June 17th Tornado in 2010
102	Avg Installed Cost/Residential Subd Lot	---		*	*	*	*	1,520.95	Very little residential development in 2011
103	Avg Installed Cost/Ft-1PH URD in Conduit	---	7.71	8.11	8.19	7.12	7.60	7.51	Designer calculations, no equipment
104	Avg Installed Cost/3PH Circuit Ft 336MCM	---	18.80	18.7	18.54	18.79	19.61	18.34	Designer calculations, no equipment
200	600V Distr Transformer KVA/Peak Sys KW	1.5 - 1.75	1.80	1.72	1.8	1.905	1.828	1.75	480V and Below

Maintenance & Construction Section

Item	Name	Target Value	Previous 5 Year Avg	2011	2010	2009	2008	2007	Comments
205	Paid (Non-Billed) Overtime Hours/Tech Services	---	626.28	711.5	430	403.9	1032	554	
500	Avg Number of Customers Served/T&D Employee	> 1,200	1,651.00	1694	1663	1644	1663	1591	
501	Distribution Circuit Miles/T&D Employee		25.26	26.51	25.57	25.04	25.16	24.02	
502	Avg Tree Trimming Cost/Mile - Transmission		582.61	411.38	862.94	759.54	502.54	376.63	
503	Avg Tree Trimming Cost/Mile - OH Distribution		1,466.05	1802.33	1508.84	1,496.30	1,095.52	1,427.26	
505	Paid (Non-Billed) Overtime Hours/T & D		2,225.00	2233.1	2401.4	2209.55	1896	2384.95	
506	Total Number of Accidents + Near-Misses/T & D	0	13.00	10	10	14	16	15	

Rochester Public Utilities
2011 Performance Indicators
Operations Division

Power Resources Section

Item	Name	Target Value	Previous 5 Year Avg	2011	2010	2009	2008	2007	Comments
300	Forced Outage Factor - Hydro Wheel 1	0	0.56	0.67	2.11	0	0	0	
	Forced Outage Factor - Hydro Wheel 2		0.41	0.67	1.4				
301	Forced Outage Factor - SLP #1	0	32.30	0	0	0.52	0	161	
302	Forced Outage Factor - SLP #2	0	29.66	2.12	0	2.18	0	144	
303	Forced Outage Factor - SLP #3	0	39.93	1.99	1.37	1.23	13.58	181.5	
304	Forced Outage Factor - SLP #4	0	38.83	0.54	2.08	2.51	11.34	177.7	
305	Forced Outage Factor - Combustion Turbine 1	0	20.45	0.02	0.68	0.39	36.9	64.24	
305B	Forced Outage Factor - Combustion Turbine 2		8.12	0.2	7.75	28.53	1.66	2.45	
306	Availability Factor - Hydro Wheel 1	95	98.39	99.17	92.77	100	100	100	
	Availability Factor - Hydro Wheel 2		39.17	99.28	96.58				
307	Availability Factor - SLP #1	95	92.32	96.36	96.99	84.96	95.37	87.94	
308	Availability Factor - SLP #2	95	93.33	94.24	96.8	91.47	95.37	88.78	
309	Availability Factor - SLP #3	95	86.53	92.36	94.32	74.11	81.35	90.52	
310	Availability Factor - SLP #4	95	84.15	92.96	93.41	81.18	67.29	85.89	
311	Availability Factor - Combustion Turbine 1	95	75.30	98.77	98.4	95.52	48.03	35.76	
311B	Availability Factor - Combustion Turbine 2	95	86.29	97.01	89.47	58.86	91.46	94.64	
312	Capacity Factor - Hydro Wheel 1	---	52.16	63.22	41.74	39.42	52.95	63.46	
	Capacity Factor - Hydro Wheel 2		25.93	64.41	65.24				
313	Capacity Factor - SLP #1	---	3.65	1.02	0.88	0.89	4.46	11	
314	Capacity Factor - SLP #2	---	14.81	0.57	0.41	24.98	29.13	18.95	
315	Capacity Factor - SLP #3	---	15.53	0.65	7.68	1.19	24.27	43.88	
316	Capacity Factor - SLP #4	---	15.33	0.8	2.12	7.55	24.69	41.49	
317	Capacity Factor - Combustion Turbine 1	---	0.05	0.18	0.05	0	0	0	
317B	Capacity Factor - Combustion Turbine 2		5.13	1.05	1.3	2.61	5.89	14.79	
318	O&M Cost Per Net MWH - Hydro Wheel 1		4.53	1.07	5.26	4.50	6.17	5.64	
	O&M Cost Per Net MWH - Hydro Wheel 2		3.97	10.87	8.96				
319	O&M Cost Per Net MWH - SLP #1		57.50	45.37	76.09	79.93	56.77	29.34	
320	O&M Cost Per Net MWH - SLP #2		38.13	67.13	33.92	29.82	32.74	27.05	
321	O&M Cost Per Net MWH - SLP #3		34.18	77.21	43.83	9.62	20.22	20	
322	O&M Cost Per Net MWH - SLP #4		12.39	5.6	28.08	10.13	10.66	7.49	
323	O&M Cost Per Net MWH - Combustion Turbine 1		19.42	9.66	10.92	-13.64	36.82	53.35	
323B	O&M Cost Per Net MWH - Combustion Turbine 2		4.91	6.87	12.71	-0.92	2.11	3.77	
324	URGE Test Rating (MW) - Hydro Wheel 1	> 1,500	1,590.00	1,650	1,650	1,650	1,500	1,500	
	URGE Test Rating (MW) - Hydro Wheel 2	> 1,500	660.00	1,650	1,650				
325	URGE Test Rating (MW) - SLP #1	> 9,500	9,423.60	9465	9310	9310	9565	9468	
326	URGE Test Rating (MW) - SLP #2	> 13,500	14,027.40	14,155	13,814	13,814	14,330	14,024	
327	URGE Test Rating (MW) - SLP #3	> 24,000	23,850.00	22,000	24,750	24,750	23,500	24,250	
328	URGE Test Rating (MW) - SLP #4	> 59,000	55,980.60	51,170	56,767	56,767	56,467	58,732	
329	URGE Test Rating (Seas Avg, MW)- C.Turbine 1	> 35,000	29,874.40	30,160	28,810	28,810	30,176	31,416	Avg of Winter/Summer ratings
330	URGE Test Rating (Seas Avg, MW)-C. Turbine 2	> 49,500	49,481.60	49,575	49,608	49,608	49,465	49,152	
331	Total URGE Rating of All Units	> 192,000	184,887.60	179,825	186,359	184,709	185,003	188,542	
332	Labor Hours/MWH Gross Generation		0.26	0.21	0.23	0.14	0.45	0.27	Plant labor only
333	Total Overtime Hours		1,151.84	681.2	734	304	1911.5	2128.5	
334	Incidence Rate of Injury Days Lost		4.09	0.7	0	7.61	8.71	3.45	
335	Avg Training-Safety Hours Per Employee		26.98	24.9	16.3	21.6	40.9	31.2	
336	Avg Training-Safety Cost Per Employee		1,298.95	1043.00	727.00	990.31	2211.59	1522.86	
337	Avg Sick Leave Hours Per Employee	< 44	39.36	33.2	35.8	35.6	46	46.2	
338	Avg Number of Employees (Including Director)		52.80	51	53	56	53	51	

II. TRANSMISSION SYSTEM SUMMARY

A. Circuit Miles of 161kV Transmission 42.42

B. Transmission Substation Transformers

Substation	Transformer	Voltage	MVA
Cascade Creek	GSU 2	13.8/161kV	37.5/50/62.5/70
Silver Lake	GSU 4	13.8/161kV	37.5/50/62.5/70

Total Transmission Substation Capacity 75/100/125/140

C. Distribution Substation Transformers 161/13.8kV
Rates listed are 55°C rise self-cooled/first stage of cooling/second stage of cooling/65°C rise with both stages of cooling.

Substation	Transformer	MVA
Cascade Creek	T1	20/27/33/37
	T2	15/20/25/28
Bamber Valley	T1	15/20/25/28
	T2	15/20/25/28
Zumbro River	T1	15/20/25/28
	T2	15/20/25/28
IBM	T1	20/27/33/37
	T2	20/27/33/37
Northern Hills	T1	15/20/25/28
	T2	15/20/25/28
Silver Lake	T4	20/27/33/37
	T3	20/27/33/37
Crosstown	T1	20/27/33/37
	T2	20/27/33/37
Westside*	T1	20/27/33/37
Willow Creek	T1	15/20/25/28
	T2	15/20/25/28
Total Distribution Substation Capacity		295/396/489/548

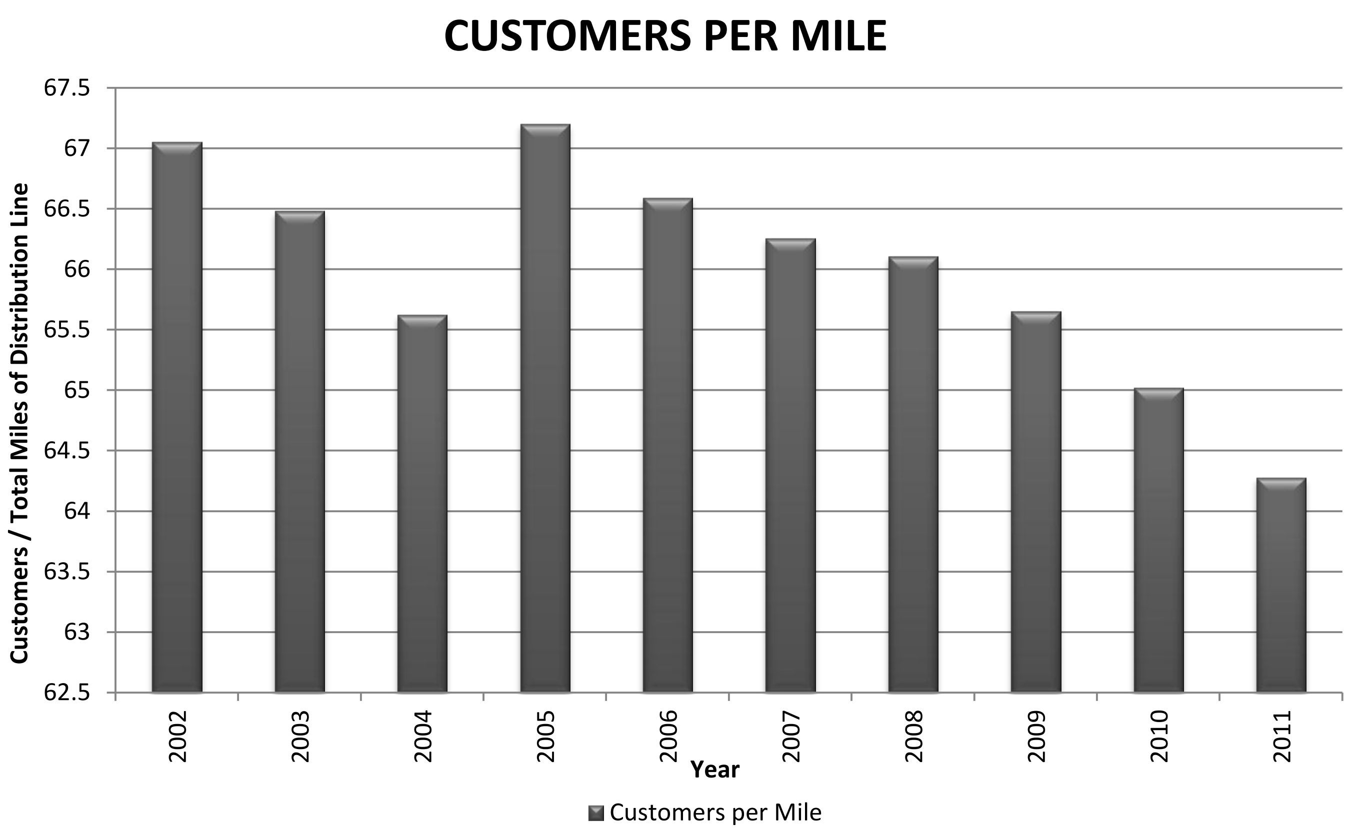
*The transformer at Westside has not been placed into service yet

III. DISTRIBUTION SYSTEM SUMMARY

A. Circuit Miles

3Ø Circuit Miles	
1. Overhead (9.34 miles added in 2011)	170.8
2. Underground (1.45 miles added in 2011)	130.84
Total 3Ø Miles	301.64
2Ø Circuit Miles	
1. Overhead (.66 miles added in 2011)	2.86
2. Underground (0 miles removed)	0
Total 2Ø Miles	2.86
1Ø Circuit Miles	
1. Overhead (13.72 miles added in 2011)	124.51
2. Underground (1.84 miles added in 2011)	339.64
Total 1Ø Miles	464.15
Total Miles of Distribution System Line	768.65

Figure 1



B. Utility Poles (totals as of 12/31/2011)

1. Total Number of Wood Distribution Poles in System (30’-55’) 13,060
Net Pole Usage (Poles Issued-Returned to Stock) 125

2. Total Number of Transmission Poles in System 980

Concrete		Wood		Steel	
Height	Count	Height	Count	Height	Count
85	11	30 *	1	55	1
90	9	35 *	9	65	1
95	10	40	9	70	1
100	4	45	6	75	7
105	3	50	89	76	1
110	2	55	37	80	7
115	1	60	36	85	18
120	0	65	66	86	1
125	0	70	53	88	1
Total	40	75	45	89	2
		80	107	90	36
		85	142	91	1
		90	126	93	2
		95	56	94	2
		100	15	95	16
		105	5	97	2
		110	8	98	1
		115	1	99	1
		120	0	100	11
		125	1	102	1
		Total	812	103	1
				105	11
				110	1
				111	1
				120	0
				125	1
				Total	128

3. Rented Poles in the System

RPU Rents from Qwest	719
RPU Rents from PCPA	32
Total Number of Poles RPU Rents	751

Qwest Rents from RPU	2,743
Charter Communications Rents from RPU	7,188
McLeod Rents from RPU	496
PCPA Rents from RPU	199
Norlight Rents from RPU	9
Onvoy	0
Enventis Telecom	5
Arvig Comm. Systems	506
Total Number of Poles Rented from RPU	11,146

C. Street and Rental Lights

Total Number of Streetlights and Rental Lights on System

A. Streetlights

	2010	2011	Net Change
175W MV	423	0	-423
250W MV	14	6	-8
400W MV	23	10	-13
175MH	35	34	-1
250MH	45	45	0
100W HPS	6710	6693	-17
150W HPS	0	8	8
250W HPS	1403	1377	-26
400W HPS	221	201	-20
Total	8874	8374	
40W LED	13	0	-13
47W LED	6	7	1
70W LED	0	423	423
75W LED	11	0	-11
100W LED	0	1	1
157W LED	0	30	30
175W LED	0	1	1
Total	30	462	

B. Rental Lights

	2010	2011	Net Change
70W MV	1	1	0
70W HPS	31	31	0
100W HPS	386	428	42
150 MV	0	1	1
175W MV	117	149	32
250W HPS	613	635	22
400W MV	10	22	12
400W HPS	20	30	10
150HPS Roadway	147	143	-4
Total	1325	1440	

***MH = Decorative lights installed at Shoppes on Maine**
***MV Increase in MV lights due to PCS transfers**
***LED Lights are being evaluated and are installed at test sites.**

IV. SERVICE TERRITORY

A. Geographic Area

	Square Miles
1974 assigned area:	30.88
Acquired through 12-31-11:	27.618
Current assigned territory:	58.50

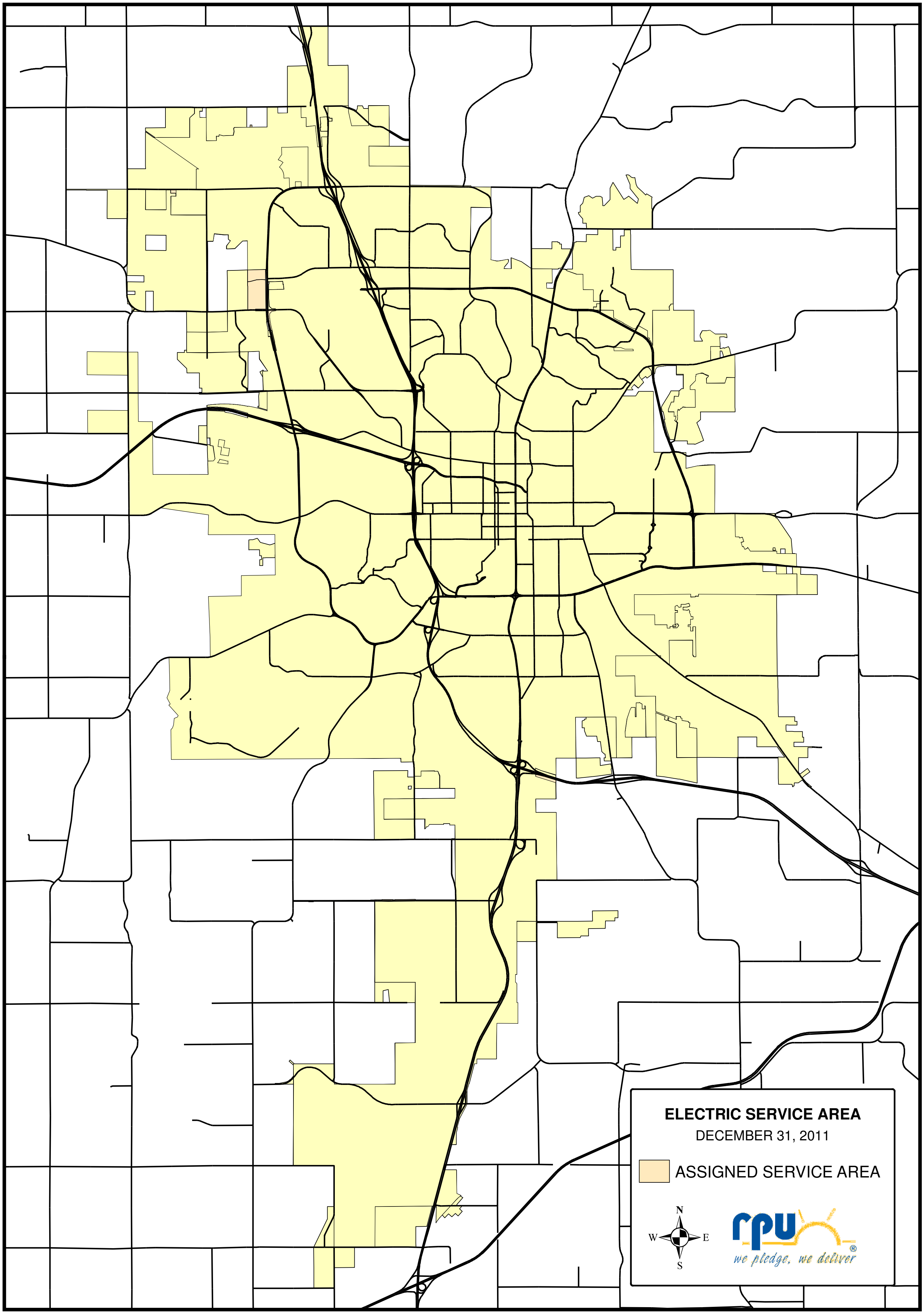
B. Chronology of Events

- Approximately 931 customers were transferred from Peoples system to RPU's system. The majority of those customers were in the Marvale area. This completed the transfer of existing customers from the 2008 agreement.
- On September 19th, 2011 , RPU received notice of Peoples intent to cancel the 2008 Service Territory Agreement. The existing 2008 agreement will terminate on January 1st 2013.

C. Compensation paid in 2011

Millrate payments:	$ 638,400

D. Escrow Account (was closed due to the 2008 agreement)


ELECTRIC SERVICE AREA
DECEMBER 31, 2011
ASSIGNED SERVICE AREA
N
W
E
S
rpu
we pledge, we deliver

V. DEMAND MANAGEMENT SUMMARY

A. Project Status

- Installed 22 residential and 0 commercial load management terminals.
- Maintained load management hardware.
- Responded to 32 load management callouts.

B. Residential Load Management Terminal Installations

	2009	2010	2011
A/C	23	28	20
Dual	0	0	0
W/H	0	1	2
Total	23	29	22

VI. TRANSFORMER SUMMARY

A. New Distribution Purchases

	2010		2011	
	Number	KVA	Number	KVA
Aerial	146	4,300	225	4,012
Padmount	80	7,120	146	11,262
	226	11,420	371	15,275

B. Miscellaneous

	2009	2010	2011
Ratio of Connected kVA vs. System Peak Demand	1.905	1.8	1.72

Table 1

ENGINEERING/OPERATIONS
TRANSFORMER SUMMARY
2011

Size (KVA)	RPU Transformers in Use 120/208 V	RPU Transformers in Use 277/480 V	RPU Transformers in Stock 120/208 V	RPU Transformers in Stock 277/480 V	Customer Transformers In Use	RPU Transformers In Use	Total Transformers in Use	Total KVA in Use
5	0	0	0	0	0	15	15	75
10	6	0	0	0	0	597	597	5970
15	3	0	0	0	0	863	863	12945
25	5	15	0	3	0	1965	1965	49125
37.5	1	3	0	8	0	2069	2069	77587.5
45	18	0	0	0	0	16	16	720
50	0	0	0	15	0	1194	1194	59700
75	151	15	0	14	0	412	412	30900
100	0	0	0	0	0	85	85	8500
112.5	79	7	4	1	0	86	86	9675
150	146	14	6	6	0	160	160	24000
167.5	0	0	0	0	0	7	7	1172.5
225	70	23	2	1	1	97	98	21825
250	0	0	0	0	3	0	3	0
300	67	25	5	3	0	92	92	27600
500	56	39	2	2	7	95	102	47500
750	15	40	1	0	0	55	55	41250
1000	2	18	1	2	1	20	21	20000
1500	0	16	0	0	1	16	17	24000
2000	0	4	0	0	0	4	4	8000
2500	0	10	0	1	2	10	12	25000
3500	0	0	0	0	0	2	2	7000
	619	**229**	**21**	**56**	**15**	**7860**	**7875**	**502545**

Customer Owned 11,975 kVA
RPU Owned Transformers 490,570 kVA

VII. OPERATIONS SUMMARY

A. Number of Capacitors

1. Total 13.8kV capacitance in service (12/31/2011)	84,000 KVAR
2. Capacitance installed in 2011 prior to peak	0 KVAR

(There are no PCB contaminated capacitors on the RPU system.)

B. Electric Customers

	2008	2009	2010	2011
Industrial	2	2	2	2
Commercial	4540	4546	4599	4701
Residential	42861	43123	43614	44700
Streetlighting & Highway	3	3	3	3
Interdepartmental	1	1	1	1
Total Electric Customers	47406	47675	48219	49407

This customer count data is shown as weighted annual averages as reported to U.S. Dept. of Energy on Form EIA-861.

C. Historical/Current Year Records

Historical		
System Net Peak (winter) MW	192	12/15/2008
System Net Peak (summer) MW	292.1	7/20/2011
System Net Energy For Load-Max Day (kWh)	5,874,607	7/20/2011
System Net Energy For Load-Max Month (kWh)	142,094,781	7/1/2006

Current		
System Net Peak (winter)	180	12/6/2011
System Net Peak (summer)	292.1	7/20/2011
Maximum Day	5,874,607	7/20/2011
Maximum Month	141,476,891	7/1/2011

D. Yearly System Data (MWH)

	2008	2009	2010	2011
Steam	196,145	44,826	25,587	6,213
Hydro	13,002	9,678	13,242	14,056
Combustion Turbine	25,806	12,200	5,790	4,874
Total System Generation	234,954	66,726	44,619	25,144
Purchased Power (Scheduled)	1,324,665	1,235,081	1,260,920	1,263,798
System Net Energy for Load	1,328,421	1,245,714	1,273,864	1,275,759
System Net Peak (MW)	270.4	261.1	278.3	292.1

E. Estimates For Next Year

System Net Energy For Load (MWH)	1,320,000
Monthly Consumption (Peak)	142,000
Peak Demand (MW)	300,000

F. Miscellaneous Statistics

Figure 3

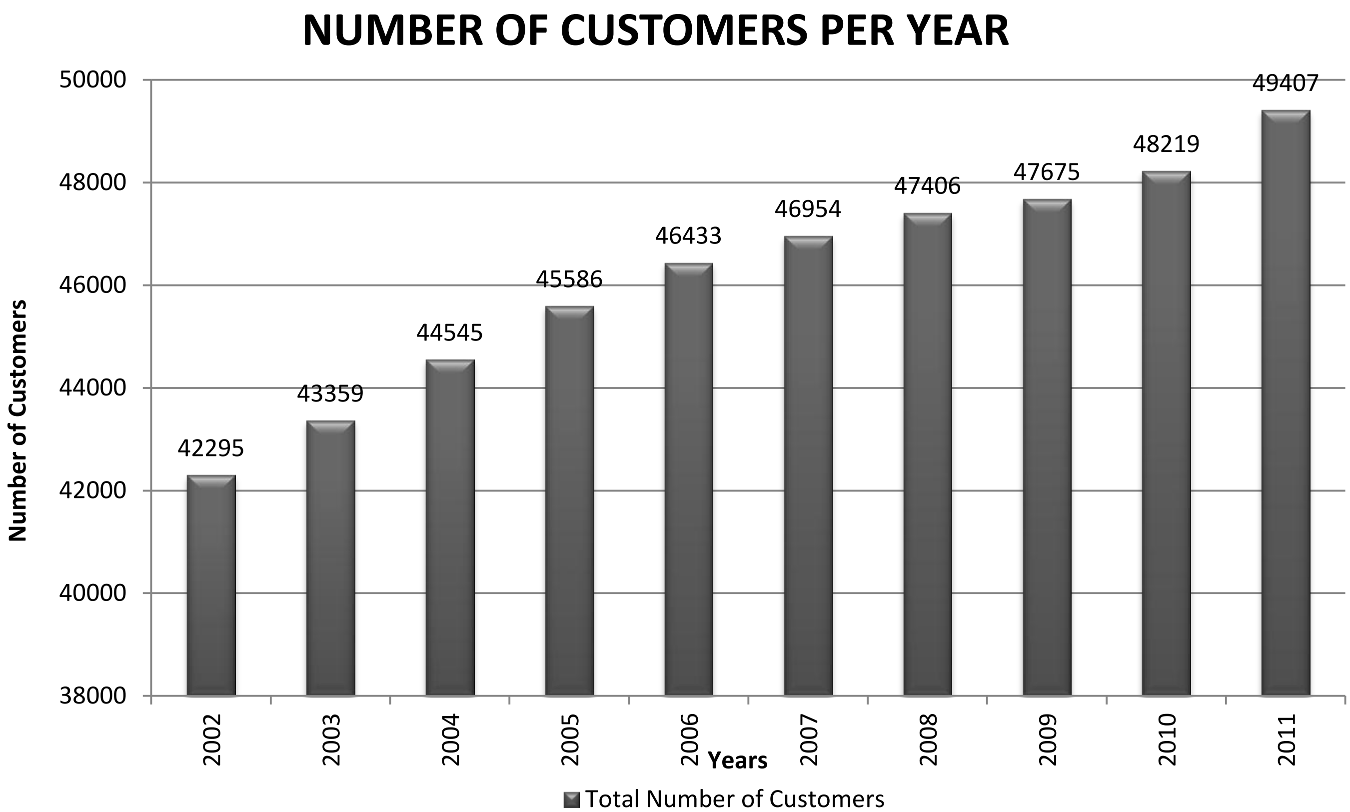


Figure 4

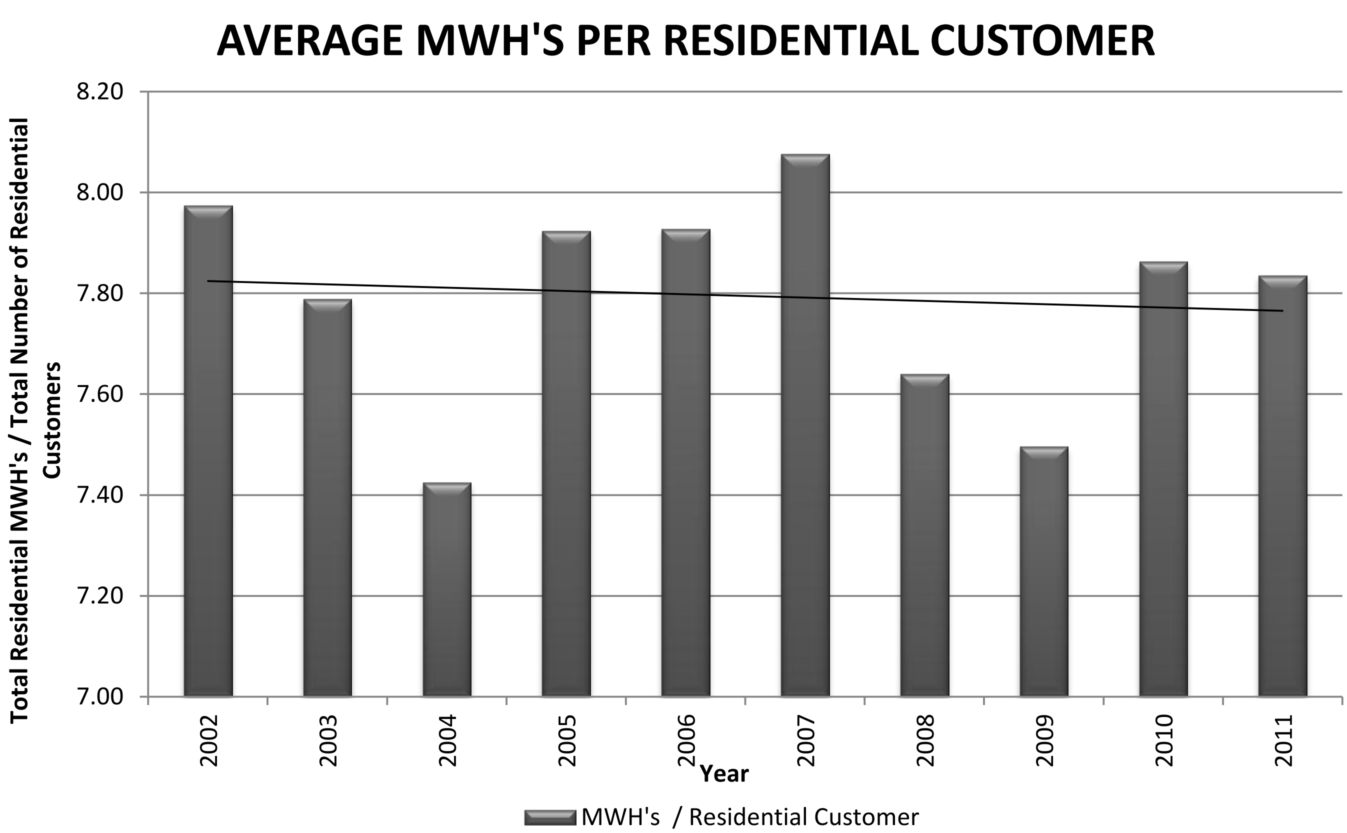


Figure 5

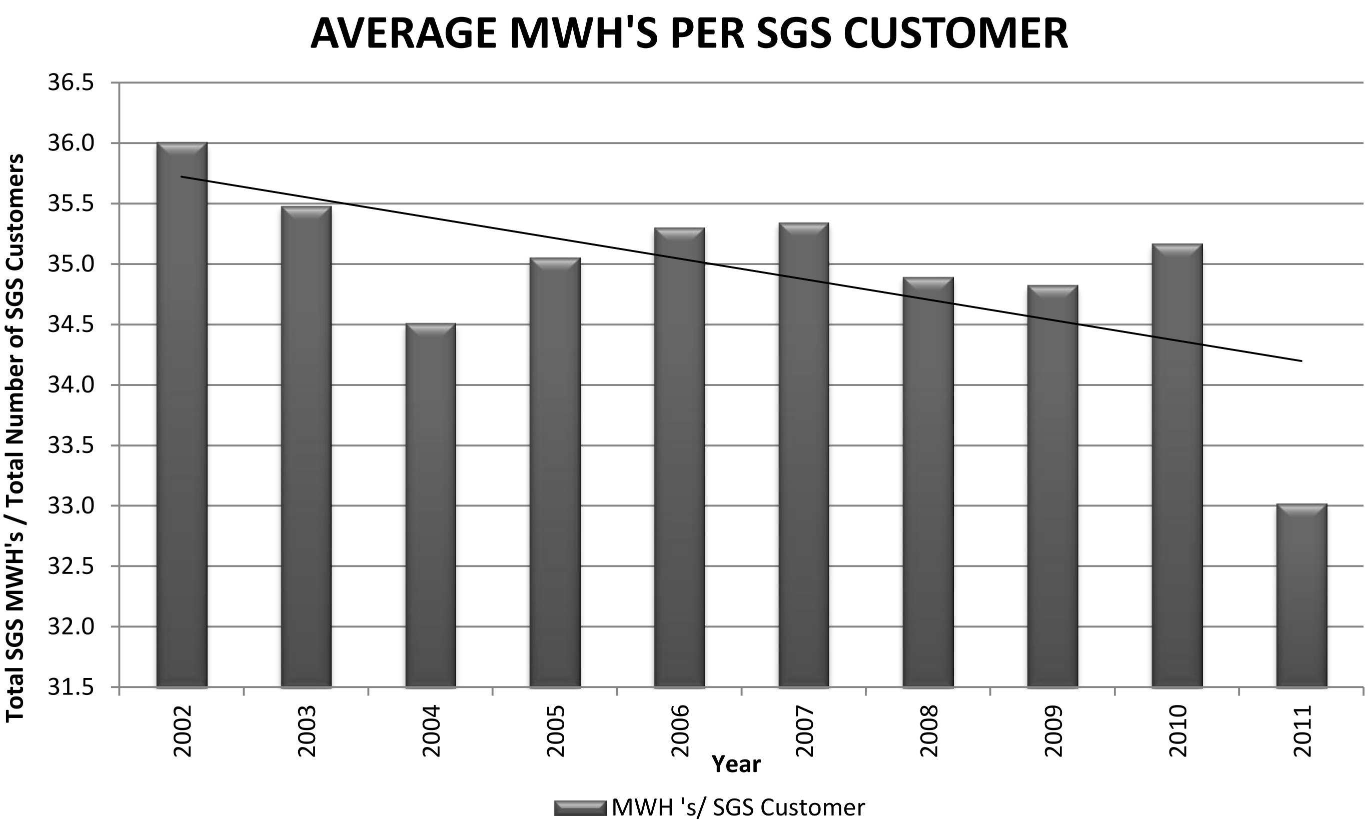


Figure 6

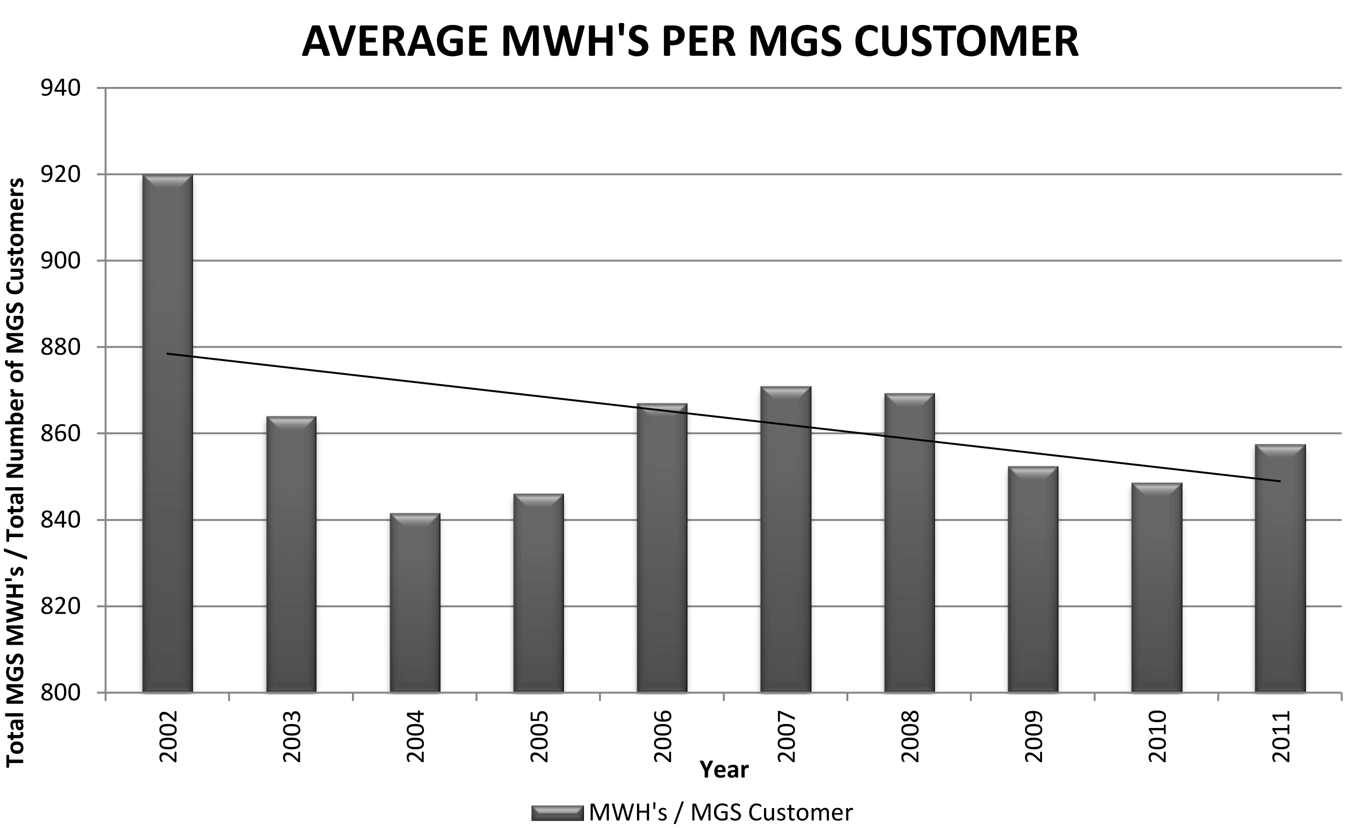


Figure 7

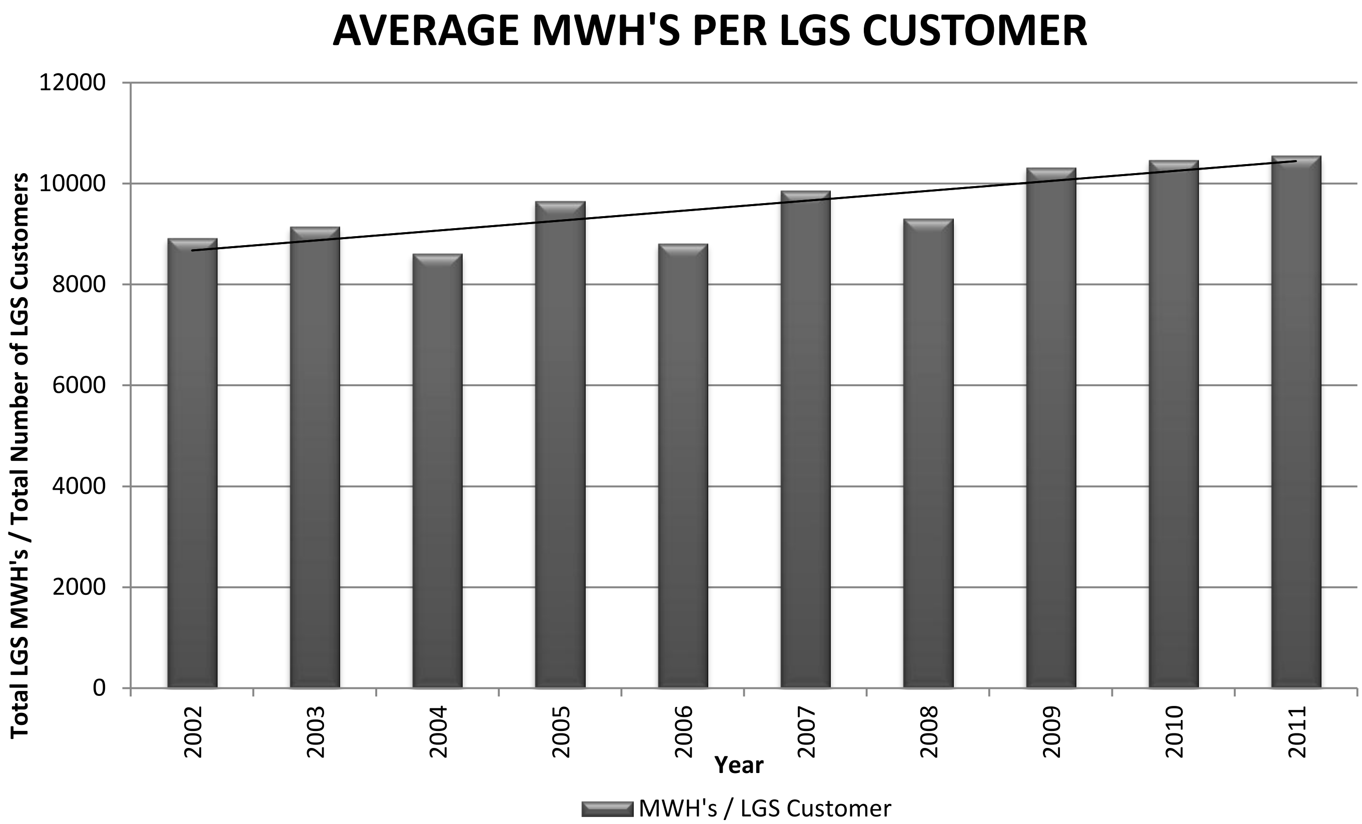


Figure 8

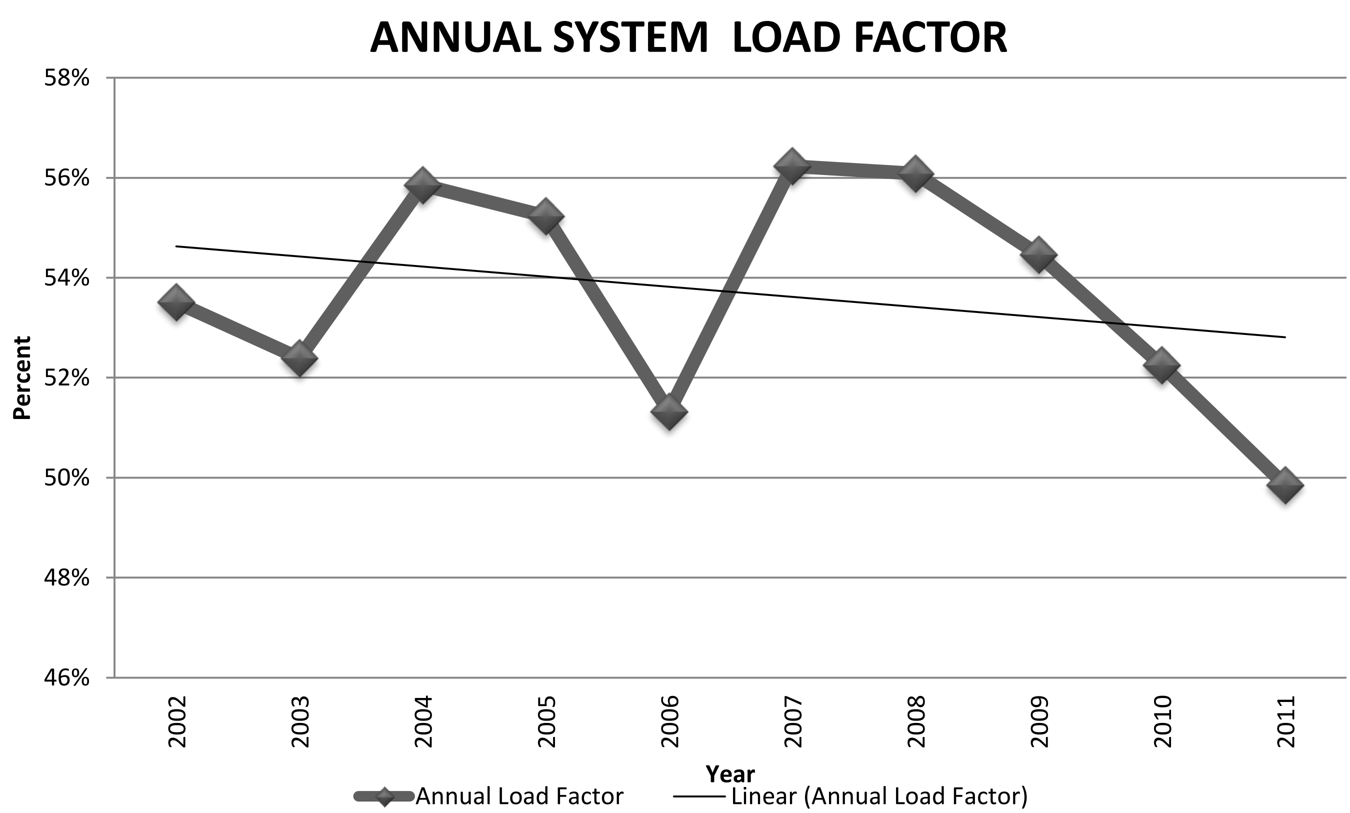


Figure 9, Annual Minimum & Maximum Demands, shows the ten-year trend for annual peak demand. Historically this trend showed a 5 to 6 MW per year increase in system demand. From 2000 through 2006 the increase in peak demand averaged roughly 10 MW per year. 2006 through 2009 showed a decrease in system demand of approximately 9 MW per year due to a number of factors including, energy conservation, limited new construction activity, and cooler than normal summer temperatures. The maximum system demand increased this year from 278.3 MW in 2010 to 292.1 MW in 2011. This increase was a result of normal average summer temperatures, new customers transferred to RPU's system, and some increase in new construction.

Figure 9

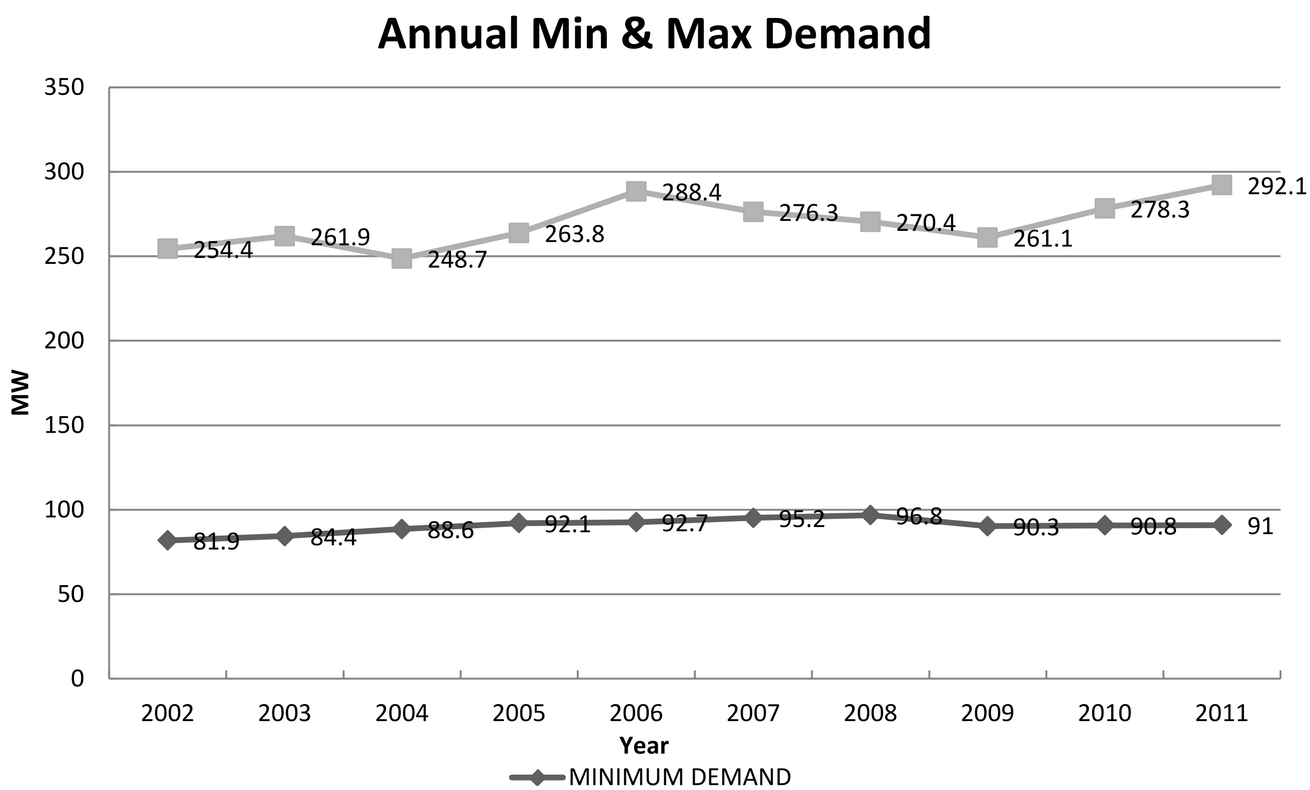
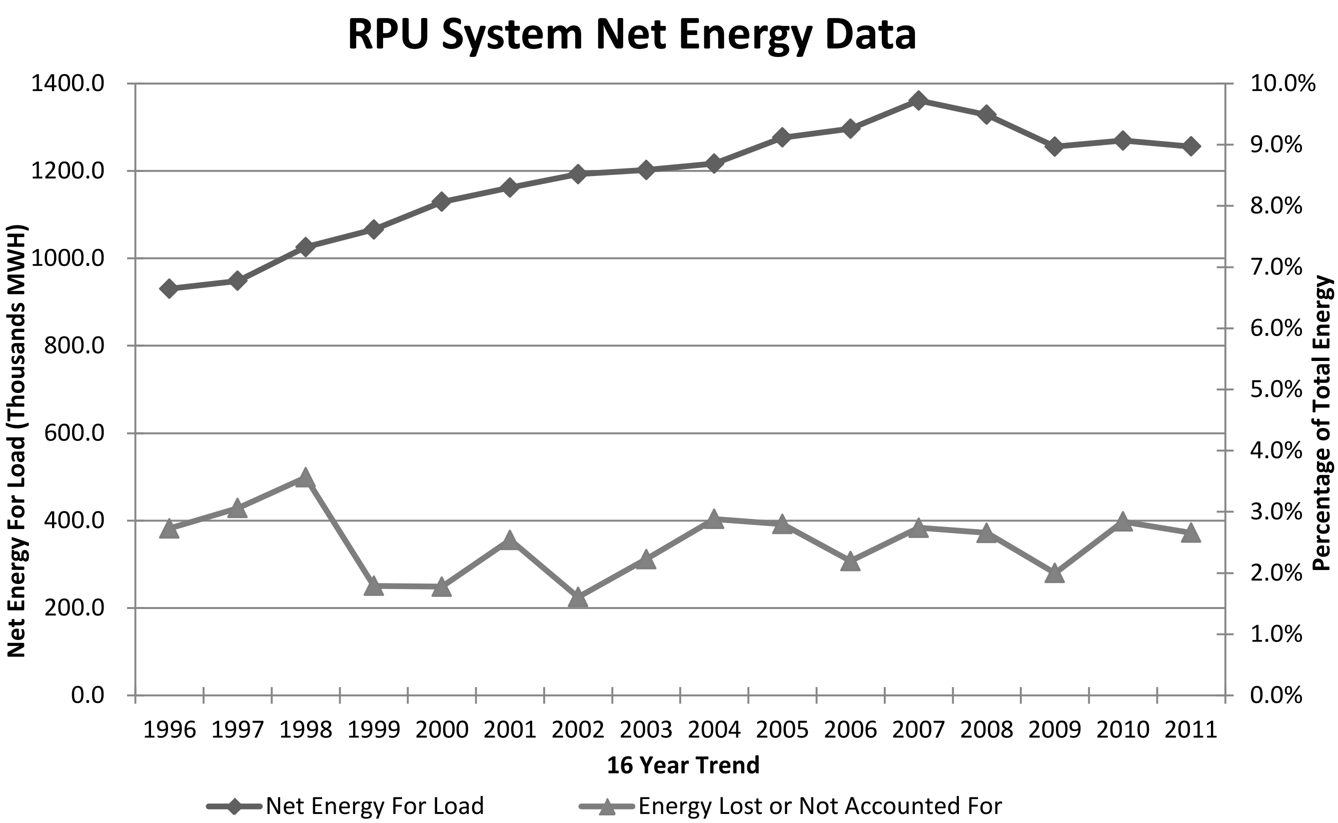


Figure 10, RPU System Net Energy Data, shows both the system net energy for load and the energy lost and unaccounted for, or system losses for 1996 through 2011. For the 16 years shown, system net energy for load rises an average of 2.18% while the demand rises an average of 3.39% per year for the 1996 to 2011 period. In 2010 the net energy for load and the system peak were 2.7% and 6.6% respectively. In 2011 net energy for load decreased 1.1% and system peak increased 4.9%

System losses and unaccounted for energy, as a percentage of total energy, has decreased from 2.8% in 2010 to 2.7% in 2011. The amount of system loss and unaccounted for energy is below the historical average of 3.0%

Figure 10



G. System Reliability Statistics

Please refer to Figure 6 and Section G for system reliability statistics and trends.

AVERAGE SERVICE AVAILABILITY INDEX – ASAI

The ASAI index is the ratio of total customer hours that service was available divided by the total customer hours demanded in a time period. The formula to calculate ASAI is:

$$\text{ASAI} = \frac{[(\text{customer-hours demanded}) - (\text{customer hours off})]}{(\text{customer-hours demanded})} \times 100$$

customer-hours = (12-month average number of customers) x 8760 hours demanded

The unit of ASAI is percent, and is generally carried out to four decimal places (such as: 99.9986%). A common usage of ASAI is: “the efficiency of the distribution system to deliver electric energy to our customer is _____%”

CUSTOMER AVERAGE INTERRUPTION DURATION INDEX – CAIDI

CAIDI is the weighted average length of an interruption for customers affected during a specified time period. The formula to determine this average is:

$$\text{CAIDI} = \frac{\text{sum of customer-minutes off for all sustained interruptions}}{\text{Total \# of customers affected by the sustained interruptions}}$$

The unit of CAIDI is minutes. A common usage of CAIDI is: “The average customer that experiences an outage on the distribution system is out for ___________ minutes.”

SYSTEM AVERAGE INTERRUPTION DURATION INDEX – SAIDI

SAIDI is defined as the average duration of interruptions for customers served during a specified time period. Although similar to CAIDI, the average number of customers served is used instead of number of customers affected. The formula used to determine SAIDI is:

$$\text{SAIDI} = \frac{\text{sum of customer-minutes off for all interruptions}}{\text{Total \# of customers served}}$$

The unit of SAIDI is minutes. A common usage of SAIDI is: “If all the customers on the distribution system were without power the same amount of time, they would have been out for _________ minutes”.

SYSTEM AVERAGE INTERRUPTION FREQUENCY INDEX – SAIFI

SAIFI described the average number of times that a customer’s power is interrupted during a specified time period. “SAIFI-short” is calculated using the number of customers affected by momentary interruptions (such as brief breaker or recloser operations). “SAIFI-long” is calculated using the number of customers affected by sustained interruptions.

$$\text{SAIFI-long} = \frac{\text{total \# of customers affected by sustained interruptions}}{\text{Average number of customers served}}$$

$$\text{SAIFI-short} = \frac{\text{total \# of customers affected by momentary interruptions}}{\text{Average number of customers served}}$$

The units for SAIFI are “interruptions per customer”. A common usage of SAIFI is: “On the average, customers on the distribution system experienced _______ interruptions".

System Performance Measures & Reliability Indices

Year	ASAI (%)	CAIDI (Minutes)	SAIDI (Minutes)	SAIFI LONG (Interruptions/Customer)	SAIFI SHORT (Interruptions/Customer)
1996	99.9960	15.39	20.96	0.37	0.99
1997	99.9957	17.14	22.65	0.44	0.88
1998	99.9205	113.48	417.84	2.30	1.39
1999	99.9815	36.50	97.26	1.25	1.41
2000	99.9962	15.62	20.11	0.64	0.65
2001	99.9937	13.93	33.01	0.89	1.47
2002	99.9916	47.19	44.16	0.94	2.33
2003	99.9943	30.01	30.28	1.01	0.31
2004	99.9936	52.29	33.99	0.65	0.83
2005	99.9934	46.15	34.88	0.76	0.37
2006	99.9862	99.30	72.47	0.73	0.27
2007	99.9899	65.41	53.23	0.81	0.30
2008	99.9936	69.01	33.59	0.49	0.48
2009	99.9892	80.24	56.90	0.71	0.27
2010	99.9788	157.65	111.40	0.71	0.46
2011	99.9906	59.41	49.06	0.83	0.36
Overall Averages	99.9870	48.66	67.32	0.92	1.05

Five-Year Moving Averages

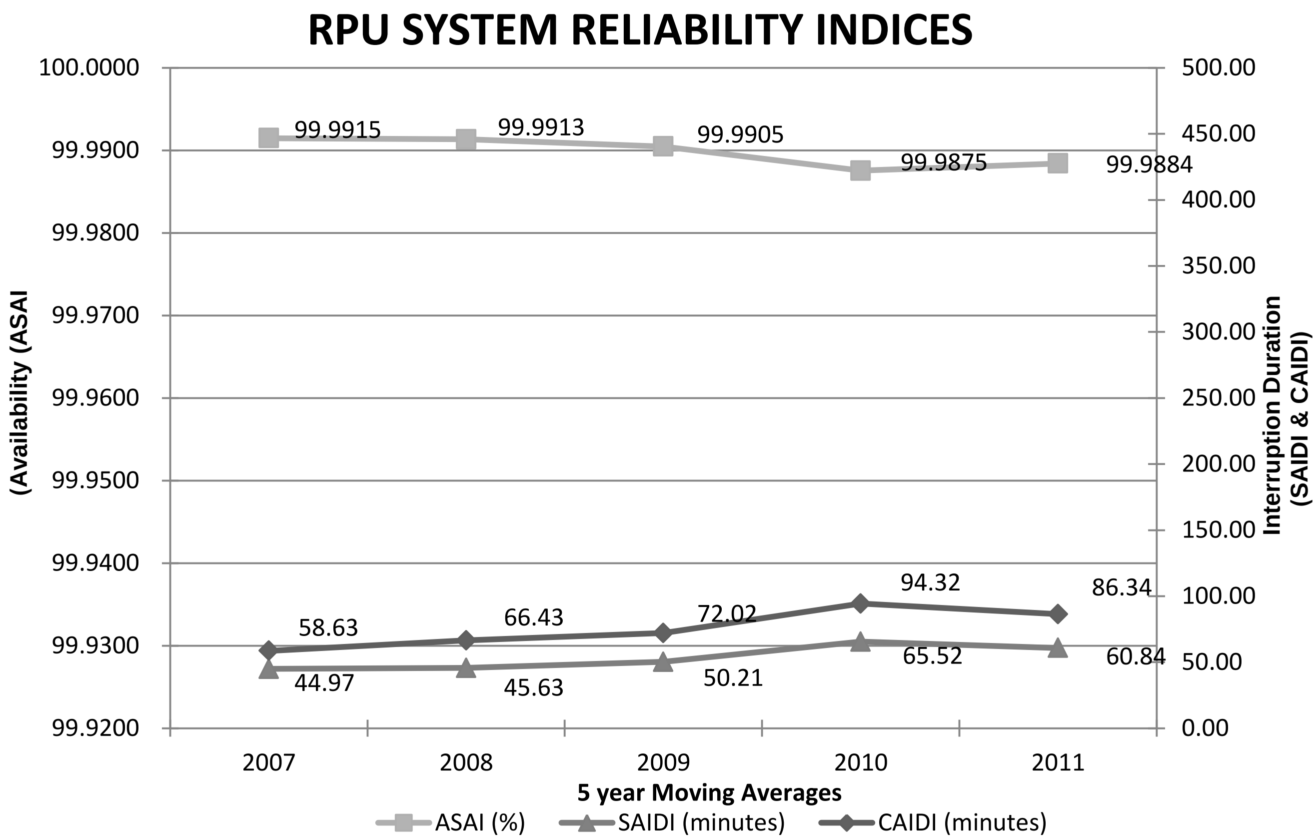
Year	ASAI (%)	CAIDI (Minutes)	SAIDI (Minutes)	SAIFI LONG (Interruptions/Customer)	SAIFI SHORT (Interruptions/Customer)
1999	99.9753	44.87	129.74	1.14	1.09
2000	99.9780	39.62	115.76	1.00	1.06
2001	99.9775	39.33	118.17	1.10	1.16
2002	99.9767	45.34	122.48	1.20	1.45
2003	99.9915	28.65	44.96	0.95	1.23
2004	99.9939	31.81	32.31	0.83	1.12
2005	99.9933	37.91	35.26	0.85	1.06
2006	99.9918	54.99	43.16	0.82	0.82
2007	99.9915	58.63	44.97	0.79	0.42
2008	99.9913	66.43	45.63	0.69	0.45
2009	99.9905	72.02	50.21	0.70	0.34
2010	99.9875	94.32	65.52	0.69	0.36
2011	99.9884	86.34	60.84	0.71	0.37

NOTES:

1. Record-keeping methods for performance statistics were standardized during late 1986.
2. All outages of 1 minute or less, even instantaneous recloses of a temporary fault are recorded as 1-minute outages.
3. In 1998, Rochester experienced a complete blackout due to failure of transmission systems of DPC and NSP during a severe storm.
4. In 1999, Rochester experienced a partial blackout due to loss of a mile of 161kV line and relaying problems.
5. In 2006 RPU switched from a manual system to an automated process using outage management software to respond to and track outages. The statistics are all inclusive for all types of outages, including TD Major and Planned Outages.
6. 2010 indices include the effects of the June tornado.

Figure 11, RPU System Reliability Indices, displays the five year moving average of three important system performance measurements. Trends that show generally high average service availability index (ASAI) and low customer average and system average interruption duration indices (CAIDA and SAIDI) are desirable. In 2011, ASAI increased very slightly (99.9875 to 99.9884%), SAIDI decreased 7.2% (65.52 to 60.84 minutes), and CAIDI decreased 8.5% (94.32 to 86.34 minutes) from 2010 values.

Figure 11

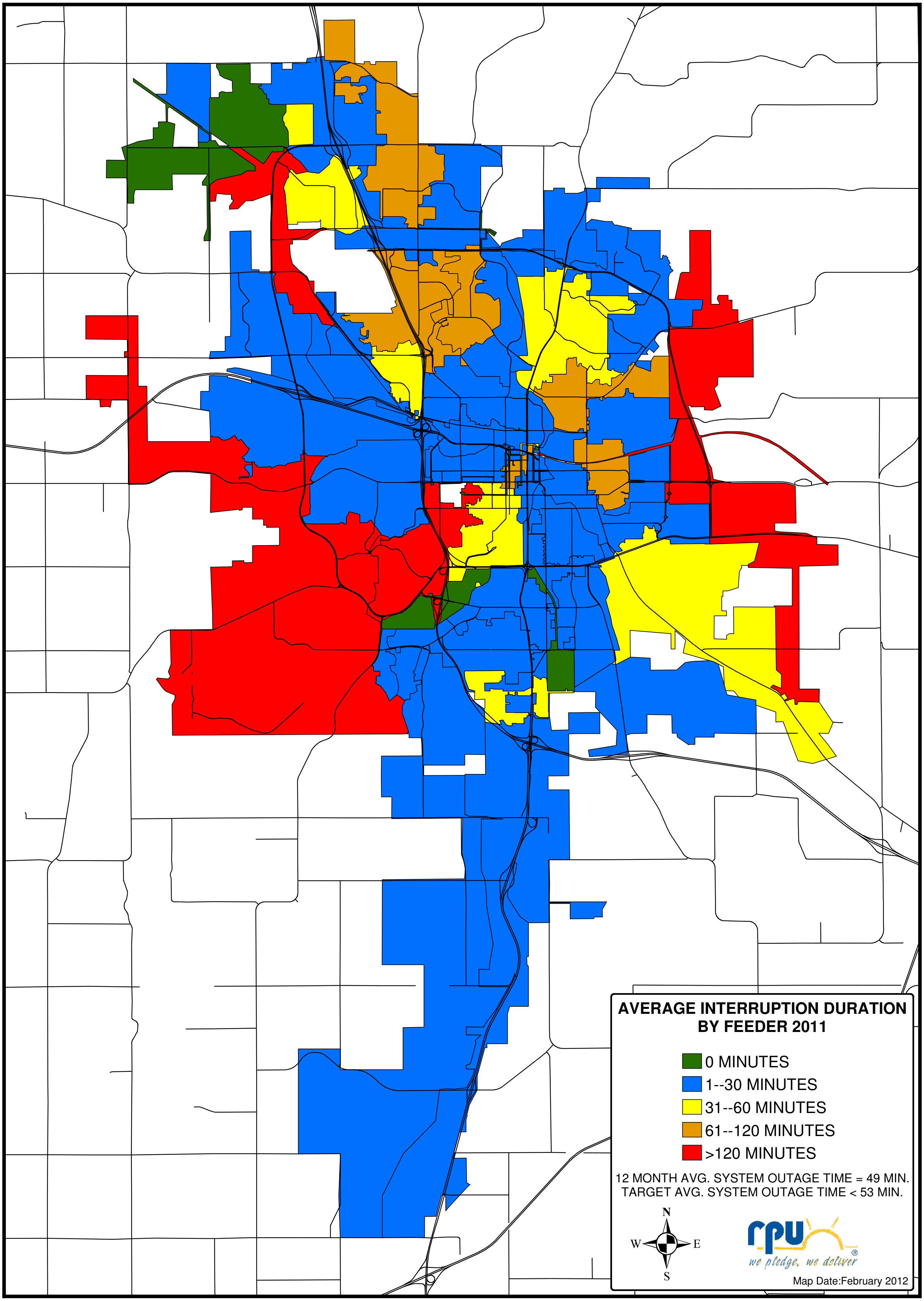


H. Estimated Number of Customers Per Feeder

Feeder ID	Customers	Feeder Dedicated to
1301	1146	
1302	736	
1303	492	
1304	205	
1311	972	
1312	1206	
1313	1	
1401	0	
1402	0	
1404	0	
1411	0	
1412	0	
1413	0	
1414	0	
207	0	
301	1146	
302	474	
303	726	
304	1256	
305	1544	
401	1197	
402	1960	
403	1619	
404	155	
405	1948	
406	0	
601	272	
602	18	
603	633	
604	644	
605	1573	
611	388	
612	865	
613	838	
614	1672	
701	828	
702	579	
703	2146	
704	961	
705	112	
711	755	
712	2068	
713	1244	
714	278	
715	0	
801	2193	
802	0	
803	1684	
804	1163	
805	1208	
811	0	
812	2052	
813	1097	
814	960	
815	180	
903	323	
904	900	
905	1679	
911	1992	
912	1046	
Total	**49134**	

*NOTE: Customers such as Seneca Foods and IBM have many meters, but are considered as one service location.

I. Average Annual Outage by Service Area Map



VIII. POWER PRODUCTION DATA

	2011 POWER PLANT PRODUCTION REPORT								
	SLP UNIT #1	SLP UNIT #2	SLP UNIT #3	SLP UNIT #4	SILVERLAKE PLANT	GAS TURBINE 1	GAS TURBINE 2	HYDRO WHEEL 1	HYDRO WHEEL 2
GROSS GENERATION KWH	716,000	502,000	1,344,000	4,388,000	6,950,000	N/A	N/A	N/A	N/A
NET GENERATION KWH (IN SERVICE)	663,804	471,401	1,214,252	3,863,950	6,213,407	441270	4592060	N/A	N/A
NET GENERATION KWH (TOTAL)	-479,477	-725,077	-1,782,000	1,842,100	-1,144,454	441270	4592060	7825600	7972800
Btu/KWH GROSS*	16356	5806	3024	12202	10982	17848	10539	N/A	N/A
Btu/KWH NET (IN SERVICE)*	17642	6182	3347	13857	12283	17848	10539	N/A	N/A
CAPACITY FACTOR	1.02	0.57	0.65	0.8	0.76	0.18	1.05	63.22	64.41
AVAILABILITY FACTOR	96.36	94.24	92.36	92.96	93.98	98.77	97.01	99.17	99.28
FORCED OUTAGE FACTOR	0	2.12	1.99	0.54	1.16	0.02	0.2	0.67	0.63
COAL CONSUMPTION TONS--Adjusted	429	10228	14377	1797	26831	N/A	N/A	N/A	N/A
GAS CONSUMPTION MCF	2790	73223	91237	15241	0	7811	47997	N/A	N/A
OIL CONSUMPTION GAL.	N/A	N/A	N/A	N/A	N/A	0	0	N/A	N/A

* actual coal use

B. Miscellaneous

1. Coal Summary – Tons

Beginning Inventory January 1		38,659.125
<u>2011</u>		
Galatia – Alma, Wisc	5,712.31	
PRB – Alma, Wisc.	18,758.34	
Total Shipments		24,470.652
Available for Burn		63,129.775
Total Tons of Coal Burned (Adjusted)		26,816.56
Ending Inventory – December 31		34,375.215

2. Steam Summary (Silver Lake Plant)

Total Steam Generated	63,680 Mlb

IX. ENVIRONMENTAL/REGULATORY ACTIVITIES

Regulatory Compliance /Inspections
RPU facilities were generally operated in compliance with applicable environmental regulations and permit conditions. No NOVs were issued for environmental non-compliance.

Permits
No changes in either the SLP or Cascade Creek air emission permits occurred in 2011. In the fall, the process to compile and complete the SLP Title V air permit renewal application process began. The current permit expires on September 15, 2012 and an application for permit reissuance is due by March 19, 2012.

Continuous Emissions Monitoring Systems (CEMS)
Quality Assurance/Quality Control activities including Linearities, Relative Accuracy Test Audits, Cylinder Gas Audits, and Continuous Opacity Monitor System Audits were all completed and passed on the CEMS at both SLP and Cascade Creek facilities.

Acid Rain Control Regulations
Unit 4 at the Silver Lake Plant and CT2 & CT3 at the Cascade Creek facility is subject to the federal Acid Rain program and must meet sulfur dioxide (SO_2) and emissions requirements. SO_2 mass emissions are limited by the number of SO_2 allowances allocated. The annual SO_2 allocations for SLP Unit 4 are 3,126 tons. In 2011, RPU retained all of its surplus SO_2 allowances and emitted less than 5 tons of SO_2 from SLP Unit 4.

Cross State Air Pollution Rule (CSAPR)
On July 6, 2011, EPA finalized new rulemaking to reduce emissions of SO2 and NOx. This rule, previously referred to as the Regional Transport Rule, replaces the Clean Air Interstate Rule (CAIR) vacated in 2009. CSAPR requires states to significantly improve air quality by reducing power plant emissions that contribute to ozone and/or fine particle pollution in other states. CSAPR requires a total of 33 states to reduce annual Sulfur Dioxide (SO2) emissions, annual Nitrogen Oxides (NOx) emissions and/or ozone season NOx emissions to assist in attaining the 1997 ozone and fine particle and 2006 fine particle National Ambient Air Quality Standards. The rule was to go into effect on January 1, 2012 but on December 30, 2011, the United States Court of Appeals for the D.C. Circuit issued a ruling to stay the CSAPR pending judicial review. Unit 4 at the Silver Lake Plant and all units at Cascade Creek are subject to this rule.

Mercury and Air Toxics Standards (MATS)
On December 21, 2011, EPA finalized the MATS under the Clean Air Act, consistent with the February 2008 D.C. Circuit Court's opinion regarding the vacatur of the Clean Air Mercury Rule (CAMR). This rule addresses hazardous air pollutant emission standards for coal- and oil-fired electric generating units greater than 25MW and creates emission limits for mercury (Hg), particulate matter (PM), Hydrogen Chloride (HCl) and carbon monoxide (CO). In its draft phase, the rule was referred to as the Electric Generating Utility MACT (EGU MACT). MATS becomes effective on April 16, 2012. SLP Unit 4 will need to comply with standards in this rule by April 16, 2015.

Industrial Boiler MACT (IB MACT)
On March 21, 2011, EPA finalized national emission standards for the control of hazardous air pollutants (HAPs) from new and existing industrial, commercial, and institutional boilers and process heaters with a heat input greater than 10 mmBtu per hour and located at major sources of HAPs. This rule is typically referred to as the Industrial Boiler MACT (IB MACT) rule. The IB MACT rule created emission limits for mercury (Hg), particulate matter (PM), Hydrogen Chloride (HCl) and carbon monoxide (CO). On the same day of finalizing the rule, EPA also issued a notice announcing its intent to reconsider certain provisions of the final rule. The rule would have become effective May 20, 2011 but on May 18, EPA issued a subsequent notice staying the effective dates of the final rule until judicial review had been completed or the agency finalized its reconsideration of the standard. EPA issued the proposed reconsiderations for the rules on December 23, 2011 for public comment with the finalized rules expected in June 2012. On January 9, 2012, the D.C. District Court issued an order vacating EPA's March 21, 2011, stay of the rules. SLP units 1, 2, and 3 will need to comply with standards in this rule by May 20, 2014.

Green House Gas Reporting Rule

2011 was the first year for facilities that emit 25,000 metric tons or more of CO_2 equivalent (CO_2e) GHG emissions per year from the combustion or use of fossil fuel to report the previous year's emissions. GHG emissions include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), sulfur hexafluoride (SF_6), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and other fluorinated gases. The rule does not require control of GHGs. Both the Silver Lake Plant and the Cascade Creek facilities are subject to this rule. SLP emitted 98,715 tons of CO_2e GHG emissions while the Cascade Creek facility emitted 3,389 tons of CO_2e GHG emissions.

Hydro Operations

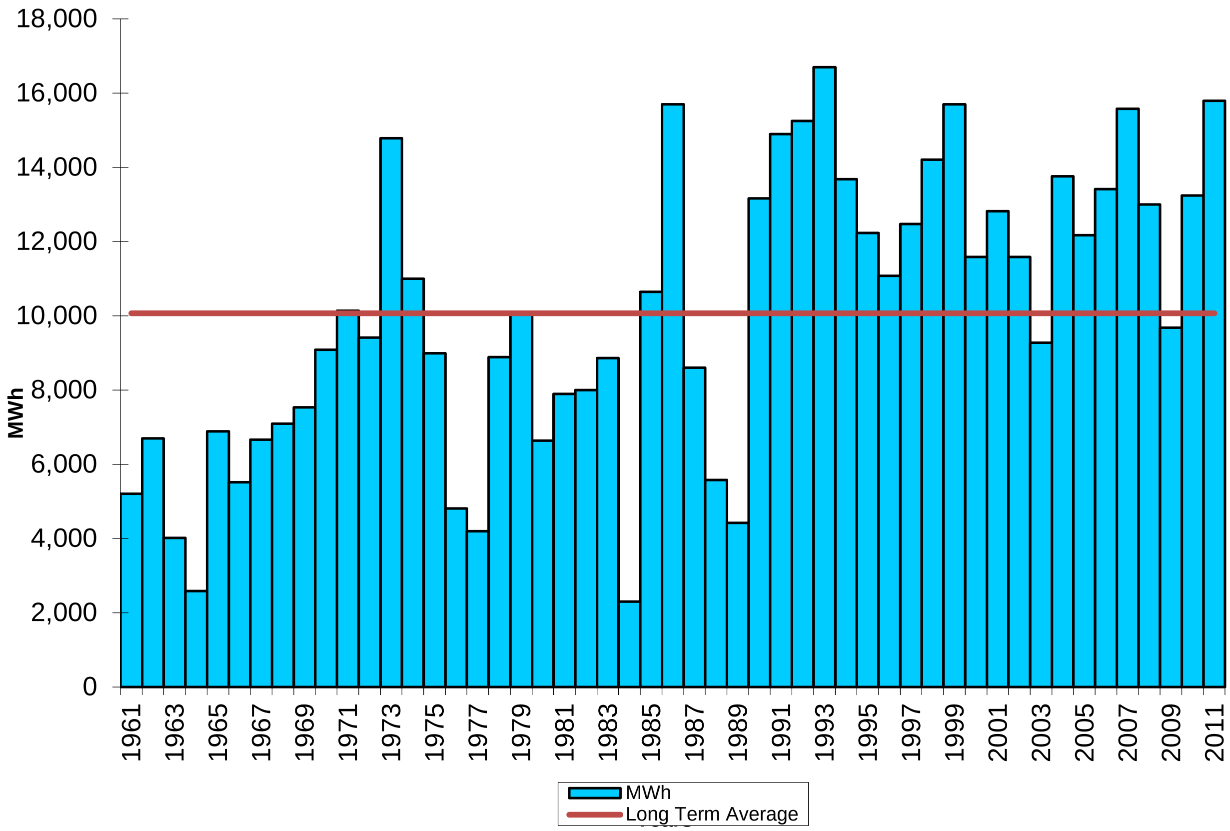
The Zumbro Hydro Plant produced 15,798 MWh of energy during 2011. This is significantly above the long-term average for the Hydro facility.

ANNUAL HYDROELECTRIC GENERATION

YEAR	MWh	YEAR	MWh	YEAR	MWh	YEAR	MWh
1961	5,208	1974	10,998	1987	8,600	2000	11,586
1962	6,697	1975	8,990	1988	5,576	2001	12,824
1963	4,020	1976	4,809	1989	4,419	2002	11,586
1964	2,590	1977	4,198	1990	13,169	2003	9,280
1965	6,887	1978	8,886	1991	14,896	2004	13,763
1966	5,517	1979	10,041	1992	15,252	2005	12,177
1967	6,666	1980	6,639	1993	16,702	2006	13,412
1968	7,095	1981	7,901	1994	13,683	2007	15,582
1969	7,539	1982	8,002	1995	12,232	2008	13,002
1970	9,084	1983	8,860	1996	11,075	2009	9,679
1971	10,139	1984	2,297	1997	12,478	2010	13,241
1972	9,417	1985	10,649	1998	14,206	2011	15,798
1973	14,784	1986	15,698	1999	15,696		

AVERAGE 10,069

Figure 12



2011 Silver Lake Plant Air Emissions Report

Hours of Operation	Unit 1	Unit 2	Unit 3	Unit 4	Total
Total Hours	164	3,966	5,199	201	9,530

Fuel Use	Unit 1	Unit 2	Unit 3	Unit 4	Total
Tons of Coal Burned	407	10,078	16,312	1,771	28,567
MMCF of natural Gas Burned	2.82	73.59	106.46	15.24	198.11

Heat Input	Unit 1	Unit 2	Unit 3	Unit 4	Total
MMBtu's of Coal Burned	8,755	219,545	352,780	37,942	619,022
MMBtu's of Gas Burned	2,859	74,201	107,542	15,421	200,022
Total Heat Input	11,614	293,746	460,322	53,363	819,044

Fuel Characteristics	Unit 1	Unit 2	Unit 3	Unit 4	Total
MMBtu per MCF of Natural Gas	1,015	1,008	1,010	1,012	1,011
Average Percent Ash - Coal	8.66	8.94	8.88	9.40	8.97
Average MBtu/Lb - Coal	10,757	10,893	10,814	10,713	10,834
Average Percent Sulfur - Coal	0.85	0.83	0.92	0.81	0.85
Average Moisture - Coal	15.98	14.85	15.14	15.19	15.29

Emissions	Unit 1	Unit 2	Unit 3	Unit 4	Total
SO2 Emission Rate lb/mmbtu	1.15	1.01	1.13	0.04	0.83
Tons of SO2 Emissions (CEMS)	6.63	148.71	259.67	1.18	416.19
Tons of SO2 Emissions (Test Dat	6.55	158.37	284.86	27.26	477.03
Tons of SO2 Emissions (Pt75)				5	
Tons of CO2 Emissions (Pt75)				4,666	
Tons of NOx Emissions (Pt75)				9	
Tons of NOx Emissions	4.87	121.16	194.33	21.61	341.98
Tons of CO Emissions	0.22	5.61	8.55	1.08	15.46
Tons of VOC Emissions	0.02	0.50	0.78	0.10	1.40
Tons of TSP Emissions	0.91	23.36	37.50	4.32	66.10
Tons of PM-10 Emissions	0.40	10.14	18.15	1.01	29.70
Tons of Lead Emissions	0.00	0.07	0.11	0.01	0.19

2011 Silver Lake Plant Air Emissions Compliance Summary

	Stack 1/2	Unit 1	Unit 2	Unit 3:	Unit 4
Hours On line	3996	164	3966	5199	201
SO2 LbPerMbtu 1 Hour Exceedances	7			0	0
Hours of CEMS Downtime	0			1	137
Opacity 6 Minute Exceedances	127			44	0
Hours with Opacity 6M Exceedances	84			26	0
Number of Opacity 6M Violations	43			18	0
COMS Downtime 6M Periods	61			75	0
			Unit 4 NOx lb/mmbtu:		
Calibration Failures	2			6	629
Calibration Warnings	3			22	39

U4 SO2 Allowances	Allotted:	28,970	Used:	14,467		Available:	14,503
For the year 2011 (100%)	Allotted:	3,138	Used:	5	0%	Available:	3,133

2011 Silver Lake Plant Air Emissions Compliance Summary

	Stack 1/2	Unit 1	Unit 2	Unit 3:	Unit 4
Hours On line	3996	164	3966	5199	201

	Stack 1/2	Unit 1	Unit 2	Unit 3:	Unit 4
SO2 LbPerMbtu 1 Hour Exceedances	7			0	0
Hours of CEMS Downtime	0			1	137

	Stack 1/2	Unit 1	Unit 2	Unit 3:	Unit 4
Opacity 6 Minute Exceedances	127			44	0
Hours with Opacity 6M Exceedances	84			26	0
Number of Opacity 6M Violations	43			18	0
COMS Downtime 6M Periods	61			75	0

Unit 4 NOx lb/mmbtu:

	Stack 1/2	Unit 1	Unit 2	Unit 3:	Unit 4
Calibration Failures	2			6	629
Calibration Warnings	3			22	39

U4 SO2 Allowances	Allotted:	28,970	Used:	14,467		Available:	14,503
For the year 2011 (100%)	Allotted:	3,138	Used:	5	0%	Available:	3,133

ROCHESTER PUBLIC UTILITIES
ELECTRIC OPERATING PERMIT FEES

Agency	Permit or Fee	Annual Fee Amount 2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
MPCA	SLP - Air Emission	$ 96,954	$ 107,248	$ 47,193	$ 138,643	$ 138,231	$ 130,571	$ 127,677	$ 164,652	$ 127,651	$ 58,059
	SLP – NPDES	$ 13,000	$ 16,900	$ 1,230	$ 1,230	$ 1,580	$ 1,230	$ 1,230	$ 1,230	$ 1,230	$ 1,230
	SLP – Haz. Waste Generator	$ 198	$ 205	$ 235	$ 420	$ 411	$ 413	$ 425	$ 453	$ 477	$ 485
	CCGT – Air Emission	$ 2,782	$ 935	$ 658	$ 293	$ 156	$ 403	$ 827	$ 1,859	$ 772	$ 899
	SC – Haz. Waste Generator	$ 198	$ 205	$ 1,421	$ 420	$ -	$ 683	$ 425	$ 425	$ 425	$ 425
	Storm Water (SLP, CCCT & SC)	$ 630	$ 840	$ 840	$ 1,200	$ 1,200	$ 800	$ 800	$ 800	$ 800	$ 400
	RPU/IBM GenSet Air Emissions Fee	$ -	$ -	$ 1,626	$ -	$ -	$ 25	$ 61	$ 25	$ 25	$ 25
	Toxic Pollution Prevention Fee (TRI)	$ 9,001	$ 7,963	$ 3,128	$ 9,363	$ 9,509	$ 8,228	$ 7,454	$ 8,408	$ 5,647	$ 2,762
MDNR	SLP – Water Appropriation (Surface Water)	$ 41,436	$ 24,873	$ 77,879	$ 72,878	$ 78,044	$ 62,020	$ 71,716	$ 66,164	$ 30,786	$ 2,431
	SLP – Water Appropriation (Groundwater)			$ 643	$ 518	$ 269	$ 509	$ 173	$ 189	$ 140	$ 140
	Power Line License Fees	$ 285	$ 1,976	$ 2,585	$ 7,612	$ -	$ 1,507	$ -	$ -	$ 3,238	$ -
MN DOC/PUC	Assessment-PPSP/ADCP/EFA	$ 6,998	$ 14,892	$ 6,436	$ 6,934	$ 8,799	$ 14,808	$ 14,474	$ 18,543	$ 9,944	$ 11,269
DPS/ERC	Haz. Material Incident Response Act	$ 800	$ 800	$ 800	$ 800	$ 800	$ 800	$ 800	$ 800	$ 800	$ 800
	SARA (SLP, CCCT & SC)	$ 225	$ 225	$ 225	$ 225	$ 225	$ 225	$ 225	$ 225	$ 225	$ 225
ANNUAL TOTAL		$ 172,508	$ 177,061	$ 144,899	$ 240,535	$ 239,224	$ 222,223	$ 226,287	$ 263,772	$ 182,160	$ 79,151
Percent Change from Previous Year		21%	3%	-18%	66%	-1%	-7%	2%	17%	-31%	-57%
Cost of Permit Fees / Capacity KW		$0.92	$0.93	$0.76	$1.27	$1.26	$1.17	$1.19	$1.39	$0.96	$0.42

Notes:
* Discharge Fees were included prior to 2004
**Beginning in 2005, a $20/Mgal surcharge was applied to the volume of water discharged in months of June, July & August that exceeded volume used in Jan.
***Non-hydro capacity standardized at 190,000 kW.

SUMMAY OF TOTALS	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Air Emission Fees (CE 504004)	$ 99,736	$ 108,183	$ 49,477	$ 138,936	$ 138,387	$ 130,999	$ 128,565	$ 166,536	$ 128,448	$ 58,984
Other Operating Fees (CE 504004)	$ 31,335	$ 44,006	$ 16,900	$ 28,204	$ 22,523	$ 28,695	$ 25,833	$ 30,884	$ 22,786	$ 17,596
Water Appropriation Fees (CE 504003)	$ 41,436	$ 24,873	$ 78,522	$ 73,396	$ 78,313	$ 62,529	$ 71,889	$ 66,353	$ 30,926	$ 2,571

X. RPU Organizational Chart

GENERAL MANAGEMENT (134)

Koshire, Larry
Wilson, Kathy
Cooke, Bob

POWER RESOURCES (133)

Schlink, Wally

POWER PRODUCTION

Power Production Management (108)
Dzubay, Tony

Power Resources Services (108)
- Mueller, Matthew
- Smith, Kathy
- Williamson, Tom
- Open

Work Planning (108)
- Mueller, Tony

Coal Crew (109)
- *Davis, Nick (111)
- Baier, Bob
- Greenwaldt, Terry
- Pyfferoen, Todd
- Quandt, Steve
- Reiser, Wade
- Seim, Wayne

Measures & Controls (170)
- *Button, Jay
- Erickson, Brad
- Lafflam , James
- Olson, Jeff
- Schriever, Larry

Power Resources Operations (110)
- *Haase, Mitch
- Amos, Brad
- Berg, Scott
- Cobb, Ron
- Diep, Alan
- Fleischaker, Sven
- Folkert, Gregg
- Grant, Keith
- Holloway, Larry
- Holtorf, David
- Keller, Tom
- Kelly, Shawn
- Kruger, Dan
- Lacey, James
- Quandt, Chad
- Soto, Jesus
- Stamp, Steve
- Valli, Chris
- Wildeman, Roger
- Open
- Open
- Open

Power Resources Maintenance (111)
- *Davis, Nick
- Ellingson, Tom
- Elpert, Monte
- Heppner, Greg
- Hill, Mark
- Morrow, Randy
- Nienow, Steve
- Nord, Richard
- Pettis, Jim
- Putzier, Kristopher
- Sanders, Greg
- Schaudenecker, Robert
- Shones, Jacob
- Wegman, Dick
- Open

100-Cascade Creek GT #1
101-SLP Unit #1
102-SLP Unit #2
103-SLP Unit #3
104-SLP Unit #4
105-Hydro
106-Power Acquisition
157-SLP Common Costs
162-Generation Fuel
163-Cascade Creek GT #2
164-Cascade Creek GT Common
165-SLP Steam

PORTFOLIO OPTIMIZATION (171)

Sutton, Jeremy

CUSTOMER RELATIONS (132)

Schlink, Wally
Open

CUSTOMER CONTACT (150)

Tompkins, Mary
- Crom, Cindy
- Drugg, Jessica
- Kruger, Nancy
- Radermacher, Jolene
- Ward, Jamie
- Miller, Denise
- Open

MARKETING (137)

Hanson, Patty
- Bierbaum, Dirk
- Humphrey, Stephanie
- Open
- McRoberts, Doug (114)

COMMUNICATIONS (118)

- Benson, Anthony

FIELD SERVICES (151)

Hensel, Joe

INVENTORY MANAGEMENT (141)

Ledebuhr, Bob (139)
- Sommer, Mike
- McHugh, Jessica
- Nelson, Todd
- Quimby, Dan
- Trom, Keith

WORK MANAGEMENT & INTEGRATED SERVICES

Work Management & Integrated Services Management (166)
Cook, William

Facilities Management (147)
- *Steve Monson (147)
- Ollendieck, Phil
- Tauzell, John

Fleet (146)
- *Steve Monson (147)
- Book, Jim
- Little, Dave
- Steffl, Tim

Drafting, Mapping & Property Management (117)
- Andrist, Heidi
- Moore, Ryan
- Open

Environment & Regulatory (152)
- Diekvoss, Craig
- Osweiler, Todd

Work Management (166)
- *Open

CORPORATE SERVICES (136)

Sue Parker

FINANCE & ACCOUNTING (138)

Blom, Bryan
- Anderson, Judith
- Borgschatz, Mary
- Button, Barb
- Cook, Roxanne
- Engle, Terri
- Heppelmann, Mike
- Highum, Jody
- Kronebusch, Jessica
- Livingston, Tina
- Towne, Lani

INFORMATION SERVICES (144)

Teng, Phil
- Andrews, Laura
- Bly, Linda
- Folkert, John
- Gartner, Lori
- Olufson, Charles
- Peterson, Frank
- Preston, Jim
- Voss, Clark

BUSINESS SERVICES (145)

Donahue, Deb
- Anderson, Lana
- Boldt, Jill
- Kanz, Elizabeth
- Zamzow, Melissa

PROCUREMENT

Procurement Management (139)
Ledebuhr, Bob

Procurement (140)
- Shelstad, Sylvia
- Open

142-Organization Costs
158-Payroll Taxes
159-Employee Benefits/Insurance
154-Transmission & Distribution Services
156-Organization Costs
160-Payroll Taxes
161-Employee Benefits/Insurance

CORE SERVICES (135)

Mark Kotschevar

INFRASTRUCTURE PLANNING & DESIGN

Infrastructure Planning & Design Management (115)
Anderton, Randy

Engineering (Electric 116, Water 128)
- Cook, Steve
- Pentek, Charles
- Rovang, Doug
- Stiller, Neil
- *Engle, Mike
- Klug, Jerrod
- Richardson, Donn
- Riess, Chad

CONSTRUCTION, MAINTENANCE, & FIELD OPERATIONS

Construction, Maintenance & Field Operations Management - T&D (112)

Transmission & Distribution (113)
- *Fiek, Steve
- Gardner, Sam
- Himango, Jim
- Nash, Brian
- Olson, Bjorn
- *Bennett, Pete
- Gunderson, Brad
- St. Marie, Tom
- Sturgis, John
- Wilde, Mike
- Behrens, Matt
- Castillo, Rob
- Clark, Chad
- Evenson, Rich
- Floeter, Charles
- Hall, Nick
- Helmbrecht, Dan
- Johnson, Mark
- Keach, Todd
- Larson, Mark
- Laugen, Steve
- McDowell, Sean
- Meiners, Tyler
- Peterson, Chad
- Quandt, Jared
- Timmerman, Lee
- Tupper, Matthew
- Wagenaar, Jeff
- Webb, Collin
- Open

Technical Services (114)
- *Sturm, Dan
- Kranz, Jeff
- Majerus, Bill
- Mason, Ted
- McRoberts, Doug
- Minogue, Peter
- Schmitz, William

Work Planning (114)
- Toft, Daniel

Meter Shop (119)
- *Sturm, Dan (114)
- Alberts, Ina
- Carlson, Doug
- Fogarty, Kevin
- Gordon, Sam
- Kvittem, Earl
- Reinhardt, Randy
- Reiter, Glenn
- Open
- Open

Work Planning (113)
- See, Sang

Construction, Maintenance & Field Operations Management - Water (127)
Johnson, Cary

Water Distribution & Operations (127)
- Bjelland, Duane
- Brekke, Matthew
- Demarino, Chris
- Heimer, Mike
- Horsman, Roger
- Jestus, Timothy
- Johnson, Steve
- Kruger, Ron
- Langbehn, Craig
- Laughton, Ed
- Lenn, Jon
- Meyers, Kevin
- Mullen, Jay
- Rain, Rich
- Rendler, Scott
- Sethre, J Terry
- Open

Work Planning (127)
- Rindels, Wylie

SYSTEM OPERATIONS & TRANSMISSION MANAGEMENT (107)

Nickels, Scott
- *Luckadoo, Ricky
- Blackburn, Sam
- Cocker, Jane
- Frantz, Bob
- Gossman, Joe
- Heimer, William
- Kinzer, Dan
- Open

SAFETY (167)

Cooke, Bob

= Dual Reporting
* = Supervisor
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