

POWER SUPPLY REPORT
BOARD REFERENCE TAB D



To: Vincent Cameron
 From: Energy Services
 Date: August 24, 2009
 Subject: Purchase Power Summary – August, 2009

Energy Services Division (ESD) has completed the Purchase Power Summary for the month of August 2009.

ENERGY

The RMLD's total metered load for the month was 72,835,439 kWh, which was a increase of 9.34 % compared to August, 2008 figures.

Table 1 is a breakdown by source of the energy purchases.

TABLE 1

Resource	Amount of Energy (kWh)	Cost of Energy (\$/Mwh)	% of Total Energy	Total \$ Costs	\$ as a %
Millstone #3	3,651,118	\$4.61	5.01%	\$16,849	0.42%
Seabrook	5,881,670	\$6.77	8.08%	\$39,815	0.98%
Stonybrook	6,109,209	\$41.13	8.39%	\$251,290	6.20%
Constellation	22,320,000	\$66.50	30.64%	\$1,484,168	36.63%
PASNY	1,674,030	\$4.92	2.30%	\$8,236	0.20%
ISO Interchange	11,085,692	\$27.11	15.22%	\$301,209	7.43%
NEMA Congestion	0	\$0.00	0.00%	-\$12,560	-0.31%
Coop Resales	39,200	\$132.81	0.05%	\$5,206	0.13%
Stonybrook Peaking	74,240	\$167.51	0.10%	\$12,436	0.31%
Integrays	21,216,000	\$91.19	29.13%	\$1,934,614	47.75%
* Braintree Watson Unit	784,280	\$12.87	1.08%	\$10,096	0.25%
Monthly Total	72,835,439	\$55.62	100.00%	\$4,051,361	100.00%

*Includes in this amount \$(35,182.29) of Working Capital Credit.

Table 2

Resource	Amount of Energy (kWh)	Cost of Energy (\$/Mwh)	% of Total Energy
ISO DA LMP Settlement	8,795,931	25.24	12.08%
RT Net Energy Settlement	2,289,761	79.40	3.14%
ISO Interchange (subtotal)	11,085,692	27.11	15.22%

Table 2 breaks down the ISO interchange between the DA LMP Settlement and the RT Net Energy for month of August, 2009.

CAPACITY

The RMLD hit a demand of 155,759 kW, which occurred on August 18, 2009 at 2 pm. The RMLD's monthly UCAP requirement for August 2009 was 227,926 kW. Table 3 shows the sources of capacity that the RMLD utilized to meet its requirement.

Table 3

Source	Amount (kW)	Cost (\$/kW-month)	Total Cost \$	% of Total Cost
Millstone #3	4,980	64.07	\$319,045	16.97%
Seabrook	7,908	63.19	\$499,708	26.58%
Stonybrook Peaking	25,868	2.09	\$54,187	2.88%
Stonybrook CC	44,495	3.89	\$172,886	9.19%
Pasny	4,019	2.96	\$11,896	0.63%
HQICC	5,631	0.42	\$2,385	0.13%
ISO-NE Supply Auction	125,846	4.07	\$511,784	27.22%
* Braintree Watson Unit	9,179	33.61	\$308,474	16.41%
Total	227,926	\$8.25	\$1,880,365	100.00%

*Includes Semi-Annual payment of Debt Service \$263,970.

Table 4

Resource	Energy	Capacity	Total cost	% of Total Cost
Millstone #3	\$16,849	\$319,045	\$335,894	5.66%
Seabrook	\$39,815	\$499,708	\$539,523	9.10%
Stonybrook	\$251,290	\$172,886	\$424,176	7.15%
HQ II	\$0	\$2,385	\$2,385	0.04%
Constellation	\$1,484,168	\$0	\$1,484,168	25.02%
PASNY	\$8,236	\$11,896	\$20,132	0.34%
ISO Interchange	\$301,209	\$511,784	\$812,994	13.71%
Nema Congestion	-\$12,560	\$0	-\$12,560	-0.21%
Coop Resales	\$5,206	\$0	\$5,206	0.09%
Stonybrook Peaking	\$12,436	\$54,187	\$66,623	1.12%
Integrus	\$1,934,614	\$0	\$1,934,614	32.61%
* Braintree Watson Unit	\$10,096	\$308,474	\$318,571	5.37%
Monthly Total	\$4,051,361	\$1,880,365	\$5,931,726	100.00%

Table 4 shows the total dollar amounts for energy and capacity per source.

TRANSMISSION

The RMLD's total transmission costs for the month of August, 2009 are \$769,792. This is a 18 % increase from the July, 2009 cost of \$652,458. In 2008, the transmission costs for the month of August, were \$721,442.

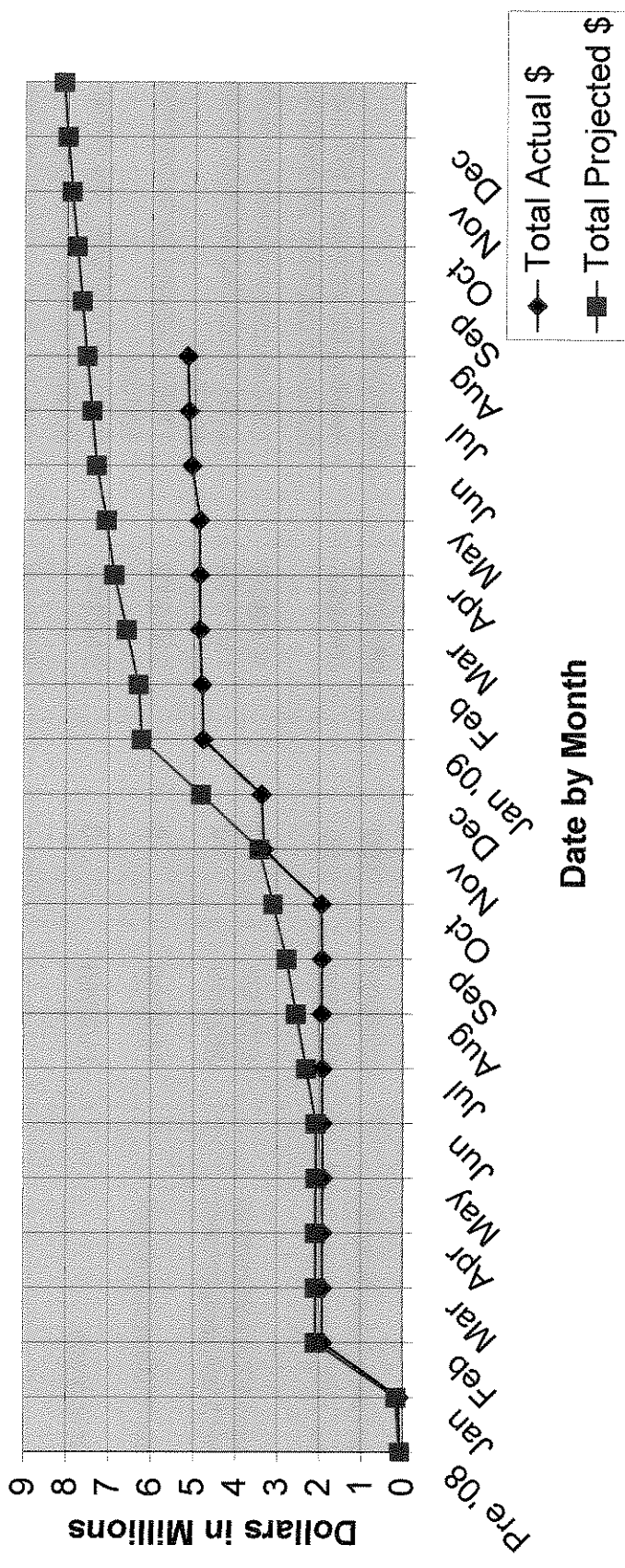
Table 5			
	Current Month	Last Month	Last Year
Peak Demand (kW)	155,759	138,287	133,494
Energy (kWh)	72,835,439	63,629,633	65,662,980
Energy (\$)	\$4,051,361	\$4,071,238	\$5,684,279
Capacity (\$)	\$1,880,365	\$1,609,039	\$1,487,507
Transmission (\$)	\$769,792	\$652,458	\$721,443
Total	\$6,701,518	\$6,332,735	\$7,893,228

Table 5 shows the current month vs. last month and last year (July, 2008).

ENGINEERING AND OPERATIONS
UPDATE
BOARD REFERENCE TABLE



Gaw Transformer Upgrade Project



Gaw Transformer Upgrade Project

Schedule Milestones	Start Date	% Complete	Completion Date	Notes
Conceptual Engineering	Jul-08	100	Jun-09	Complete
Major Equipment Procurement	Feb-09	80	Nov-09	Remaining: concrete, land materials, switchgear cubicles
Design Engineering	Jul-08	100	Jun-09	Complete
Scheduled Transformer Delivery	Dec-08	100	Dec-08	Complete
Construction Bid	Jan-09	100	Mar-09	Complete
Construction Contractor	May-09	35	Jan-10	
Construction Transformer Replacement	May-09	30	Jan-10	
Construction Switchgear Upgrades	Nov-09	0	Jan-10	Bid opening 9/9/09
Construction RMLD Personnel	Jan-09	55	Jan-10	Remaining: control wiring, panel relocations, feeder reassignment work
Tangible Milestones	Start Date	% Complete	Completion Date	Notes
Relocate Station Service transformers	06/22/09	100	07/17/09	Complete
Transformer 110C on concrete pad	06/01/09	100	07/22/09	Complete (new location creates space between 110A & 110B)
115kV circuit switchers replaced	07/25/09	100	08/02/09	Complete
Transformer 110C secondary work	07/27/09	95	10/05/09	Awaiting transformer 110C outage to terminate cables in control house
Transformer 110C replacement	08/31/09	90	10/09/09	110C decommissioned on 9/28/09
Transformer 110A replacement	09/21/09	10	11/27/09	110A scheduled for decommissioning on 10/13/09
Transformer 110B replacement	11/20/09	0	01/15/10	110B scheduled for decommissioning on 12/1/09
Switchgear upgrade	11/27/09	0	01/29/10	Bid opening 9/9/09. Bid classified for upgrade or new switchgear.
Feeder Reassignment work	11/01/09	0	01/29/10	Balances bus section and transformer loading





READING MUNICIPAL LIGHT DEPARTMENT
 FY10 CAPITAL BUDGET VARIANCE REPORT
 FOR PERIOD ENDING JULY 31, 2009

9/25/2009 8:38 AM

#	PROJECT DESCRIPTION	TOWN	ACTUAL COST JULY	YTD ACTUAL COST THRU 7/31/09	ANNUAL BUDGET	REMAINING BALANCE
<u>4 kV Retirement – Stepdown Areas</u>						
1	Reading	R	\$11,754	\$11,754	\$31,415	\$19,661
22	Wilmington - Main Street NEW	W			\$112,152	\$112,152
<u>System Projects</u>						
2	Station #4 Getaway 4W30 Replacements	R	\$437	\$437	\$201,712	\$201,275
3	Station #4 Getaway 4W17 Replacements NEW	R			\$170,779	\$170,779
4	Salem Street Area	W	\$22,728	\$22,728	\$171,923	\$149,194
5	High Capacity Tie 4W18/3W8 Franklin Street	R			\$129,004	\$129,004
6	Haverhill Street - Reconductoring NEW	R			\$184,460	\$184,460
<u>URD Upgrades</u>						
7	URD Completions-Sanborn Village, Reading; Perkins Farm, Lynnfield; and Chestnut Village, North Reading	VAR			\$38,496	\$38,496
<u>New Circuits and Circuit Expansions</u>						
8	Salem Street to Glen Rd 13kV Feeder Tie	W			\$80,063	\$80,063
9	Reading Center-Main Street	R	\$1,940	\$1,940	\$13,932	\$11,992
10	Reading Center-Haven Street	R		\$0	\$23,311	\$23,311
<u>Station Upgrades</u>						
<i>Station #4</i>						
11	Transformer Replacement-Part 1-Contractual Labor	R			\$1,231,500	\$1,231,500
11	Transformer Replacement-Part 2-Procured Equipment	R	\$1,193	\$1,193	\$344,800	\$343,607
11	Transformer Replacement-Part 3-RMLD Labor	R	\$69,648	\$69,648	\$432,405	\$362,757
11	Transformer Replacement-Part 4-Feeder Re-Assignment	R			\$228,159	\$228,159
<i>Station #5</i>						
23	15kV Circuit Breaker Replacement NEW	W			\$157,528	\$157,528
<u>New Customer Service Connections</u>						
12	Service Installations-Commercial/Industrial Customers	ALL	\$1,185	\$1,185	\$54,184	\$53,000
13	Service Installations - Residential Customers	ALL	\$15,199	\$15,199	\$176,623	\$161,423
14	<u>Routine Construction</u>					
	Various Routine Construction	ALL	\$79,458	\$79,458	\$1,537,896	\$1,458,438
Total Construction Projects			\$203,543	\$203,543	\$5,320,343	\$5,116,800
<u>Other Projects</u>						
15	GIS		\$27,440	\$27,440	\$52,984	\$25,544
16	Transformers/Capacitors Annual Purchases				\$241,389	\$241,389
17	Meter Annual Purchases		\$8,140	\$8,140	\$139,360	\$131,220
18	Purchase Two New Small Vehicles				\$62,000	\$62,000
19	Replace Line Department Vehicles				\$353,823	\$353,823
20	Cooling Towers				\$200,248	\$200,248
21	Security Upgrades				\$25,000	\$25,000
27	Hardware Upgrades				\$43,700	\$43,700
28	Software and Licensing				\$94,410	\$94,410
Total Other Projects			\$35,580	\$35,580	\$1,212,913	\$1,177,334
TOTAL RMLD CAPITAL PROJECT EXPENDITURES			\$239,123	\$239,123	\$6,533,256	\$6,294,134

**Reading Municipal Light Department
Engineering and Operations
Monthly Report
JULY, 2009**

FY 2010 Capital Plan

4 kV Retirement – Stepdown Areas

1. **Reading** – Progress continued on Pratt Street—Installed secondary cable, transferred services, and converted area. Framed for installation of primary cable on Prescott Street.

22. **Main Street – Wilmington** – No activity this month.

System Projects

2. **Station #4 Getaway Feeder 4W30 Replacement – Reading** – Project began. Pulled in ropes to pull cable for the new circuit

3. **Station #4 Getaway Feeder 4W17 - Wilmington** –

4. **Salem Street Area - Wilmington** – Reconductoring continued: Installed pole line and messenger.

5. **High Capacity Tie 4W18/3W8 Franklin Street – Reading** – No activity.

6. **Haverhill Street – Reading/Lynnfield** – No activity.

URD Upgrades

7. **URD Completions** – Sanborn Village, Reading; Perkins Farm, Lynnfield; and Chestnut Village, North Reading - No activity.

New Circuits and Circuit Expansions

8. **Salem Street to Glen Road 13 kV Feeder Tie – Wilmington** – No activity.

9. **Reading Center - Main Street** – Installed additional stand-off bushings in transformer for cutover; primary switching and re-energized. Replaced underground transformer on Main Street.

10. **Reading Center - Haven Street** – No activity.

Substation Upgrade Projects

11. **Transformer Replacement – Station 4 - Reading**
Part 1 – Contractual Labor – No financial activity.
Part 2 – Procured Equipment – 3.00kVA Transformer; midget fuse blocks.
Part 3 – RMLD Labor
Part 4 – Feeder Re-Assignment – No activity.

23. **15kV Circuit Breaker Replacement – Station 5 – Wilmington** – No Activity.

New Customer Service Connections

12. Service Installations – Commercial/Industrial Customers – This item includes new service connections, upgrades, and service replacements for the commercial and industrial customers. This represents the time and materials associated with the replacement of an existing or installation of a new overhead service, the connection of an underground service, etc. This does not include the time and materials associated with pole replacements/installations, transformer replacement/installations, primary or secondary cable replacement/installations etc. This portion of the project comes under routine construction.

13. Service Installations – Residential Customers – This item includes new or upgraded overhead and underground services, temporary overhead services, and large underground development.

14. Routine Construction – The drivers of the Routine Construction budget category YTD are listed. This is not an inclusive list of all items within this category.

<i>Pole Setting/Transfers</i>	\$ 5,827
<i>Maintenance Overhead/Underground</i>	\$ 39,054
<i>Projects Assigned as Required</i>	\$ 36,430
<i>Pole Damage (includes knockdowns) some reimbursable</i>	\$ 11,252
<i>Station Group</i>	\$ 421
<i>Hazmat/Oil Spills</i>	\$ 0
<i>Porcelain Cutout Replacement Program</i>	\$ 1,750*
<i>Lighting (Street Light Connections)</i>	\$ 511
<i>Storm Trouble</i>	\$ 0
<i>Underground Subdivisions</i>	\$ 1,187
<i>Miscellaneous Capital Costs</i>	-\$ 16,974
TOTAL	\$ 79,458

*In the month of July, 5 cutouts were charged under this program. Approximately 26 cutouts were installed new or replaced because of damage making a total of 31 cutouts replaced this month.

29 – Force Accounts – The Commonwealth of Massachusetts requires utility plant equipment relocations in conjunction with various roadway reconstruction projects.

No projects scheduled at this time.

Note: Reliability Report (SAIFI/CAIDI) presented at August Board meeting.





READING MUNICIPAL LIGHT DEPARTMENT
 FY10 CAPITAL BUDGET VARIANCE REPORT
 FOR PERIOD ENDING AUGUST 31, 2009

9/25/2009 8:40 AM

#	PROJECT DESCRIPTION	TOWN	ACTUAL COST AUGUST	YTD ACTUAL COST THRU 8/31/09	ANNUAL BUDGET	REMAINING BALANCE
<u>4 kV Retirement – Stepdown Areas</u>						
1	Reading	R	\$44,369	\$56,123	\$31,415	(\$24,708)
22	Wilmington - Main Street NEW	W			\$112,152	\$112,152
<u>System Projects</u>						
2	Station #4 Getaway 4W30 Replacements	R	\$1,558	\$1,995	\$201,712	\$199,717
3	Station #4 Getaway 4W17 Replacements NEW	R			\$170,779	\$170,779
4	Salem Street Area	W	\$49,492	\$72,220	\$171,923	\$99,703
5	High Capacity Tie 4W18/3W8 Franklin Street	R			\$129,004	\$129,004
6	Haverhill Street - Reconductoring NEW	R			\$184,460	\$184,460
<u>URD Upgrades</u>						
7	URD Completions-Sanborn Village, Reading; Perkins Farm, Lynnfield; and Chestnut Village, North Reading	VAR			\$38,496	\$38,496
<u>New Circuits and Circuit Expansions</u>						
8	Salem Street to Glen Rd 13kV Feeder Tie	W			\$80,063	\$80,063
9	Reading Center-Main Street	R	\$3,423	\$5,363	\$13,932	\$8,569
10	Reading Center-Haven Street	R			\$23,311	\$23,311
<u>Station Upgrades</u>						
<i>Station #4</i>						
11	Transformer Replacement-Part 1-Contractual Labor	R			\$1,231,500	\$1,231,500
11	Transformer Replacement-Part 2-Procured Equipment	R	\$3,000	\$4,193	\$344,800	\$340,607
11	Transformer Replacement-Part 3-RMLD Labor	R	\$31,480	\$101,128	\$432,405	\$331,277
11	Transformer Replacement-Part 4-Feeder Re-Assignment	R			\$228,159	\$228,159
<i>Station #5</i>						
23	15kV Circuit Breaker Replacement NEW	W			\$157,528	\$157,528
<u>New Customer Service Connections</u>						
12	Service Installations-Commercial/Industrial Customers	ALL	\$2,860	\$4,045	\$54,184	\$50,139
13	Service Installations - Residential Customers	ALL	\$13,789	\$28,988	\$176,623	\$147,635
14	<u>Routine Construction</u>					
	Various Routine Construction	ALL	\$92,503	\$171,961	\$1,537,896	\$1,365,935
Total Construction Projects			\$242,473	\$446,016	\$5,320,343	\$4,874,327
<u>Other Projects</u>						
15	GIS			\$27,440	\$52,984	\$25,544
16	Transformers/Capacitors Annual Purchases				\$241,389	\$241,389
17	Meter Annual Purchases			\$8,140	\$139,360	\$131,220
18	Purchase Two New Small Vehicles		\$31,510	\$31,510	\$62,000	\$30,490
19	Replace Line Department Vehicles				\$353,823	\$353,823
20	Cooling Towers				\$200,248	\$200,248
21	Security Upgrades				\$25,000	\$25,000
27	Hardware Upgrades				\$43,700	\$43,700
28	Software and Licensing				\$94,410	\$94,410
Total Other Projects			\$31,510	\$67,090	\$1,212,913	\$1,145,823
TOTAL RMLD CAPITAL PROJECT EXPENDITURES			\$273,983	\$513,106	\$6,533,256	\$6,020,150

**Reading Municipal Light Department
Engineering and Operations
Monthly Report
August, 2009**

FY 2010 Capital Plan

4 kV Retirement – Steardown Areas

1. **Reading** – Work continued on Prescott Street and Washington Streets —Installed pulling rope, primary cable, transformers, secondary cable, spacers, and hardware. Transferred services. Converted area.

22. **Main Street – Wilmington** – No activity this month.

System Projects

2. **Station #4 Getaway Feeder 4W30 Replacement – Reading** – Underground work continued including pumping manholes and pulling rope for new circuit.

3. **Station #4 Getaway Feeder 4W17 - Wilmington** –

4. **Salem Street Area - Wilmington** – Reconductoring continued: Installed p-line, spacer cable, spacers, tri blocks, and messenger.

5. **High Capacity Tie 4W18/3W8 Franklin Street – Reading** – No activity.

6. **Haverhill Street – Reading/Lynnfield** – No activity.

URD Upgrades

7. **URD Completions** – Sanborn Village, Reading; Perkins Farm, Lynnfield; and Chestnut Village, North Reading - No activity.

New Circuits and Circuit Expansions

8. **Salem Street to Glen Road 13 kV Feeder Tie – Wilmington** – No activity.

9. **Reading Center - Main Street** – Replaced padmount transformer on Main Street at VFW, installed new sections of cable, primary switching and re-energized.

10. **Reading Center - Haven Street** – No activity.

Substation Upgrade Projects

11. **Transformer Replacement – Station 4 - Reading**
Part 1 – Contractual Labor – No financial activity.
Part 2 – Procured Equipment – Vaults, relays, and steel for substation structures.
Part 3 – RMLD Labor
Part 4 – Feeder Re-Assignment – No activity.

23. **15kV Circuit Breaker Replacement – Station 5 – Wilmington** – No Activity.

New Customer Service Connections

12. Service Installations – Commercial/Industrial Customers – This item includes new service connections, upgrades, and service replacements for the commercial and industrial customers. This represents the time and materials associated with the replacement of an existing or installation of a new overhead service, the connection of an underground service, etc. This does not include the time and materials associated with pole replacements/installations, transformer replacement/installations, primary or secondary cable replacement/installations etc. This portion of the project comes under routine construction.

13. Service Installations – Residential Customers – This item includes new or upgraded overhead and underground services, temporary overhead services, and large underground development.

14. Routine Construction – The drivers of the Routine Construction budget category YTD are listed. This is not an inclusive list of all items within this category.

<i>Pole Setting/Transfers</i>	\$ 12,580
<i>Maintenance Overhead/Underground</i>	\$ 69,860
<i>Projects Assigned as Required</i>	\$ 62,710
<i>Pole Damage (includes knockdowns) some reimbursable</i>	\$ 15,690
<i>Station Group</i>	\$ 1,012
<i>Hazmat/Oil Spills</i>	\$ 0
<i>Porcelain Cutout Replacement Program</i>	\$ 3,710*
<i>Lighting (Street Light Connections)</i>	\$ 1,650
<i>Storm Trouble</i>	\$ 0
<i>Underground Subdivisions</i>	\$ 7,018
<i>Miscellaneous Capital Costs</i>	- \$ 2,269
TOTAL	\$171,961

*In the month of August, 13 cutouts were charged under this program. Approximately 28 cutouts were installed new or replaced because of damage making a total of 41 cutouts replaced this month.

29 – Force Accounts – The Commonwealth of Massachusetts requires utility plant equipment relocations in conjunction with various roadway reconstruction projects.

No projects scheduled at this time.

Reliability Report

Two key industry standard metrics have been identified to enable the RMLD to measure and track system reliability. A rolling 12-month view is being used for the purposes of this report.

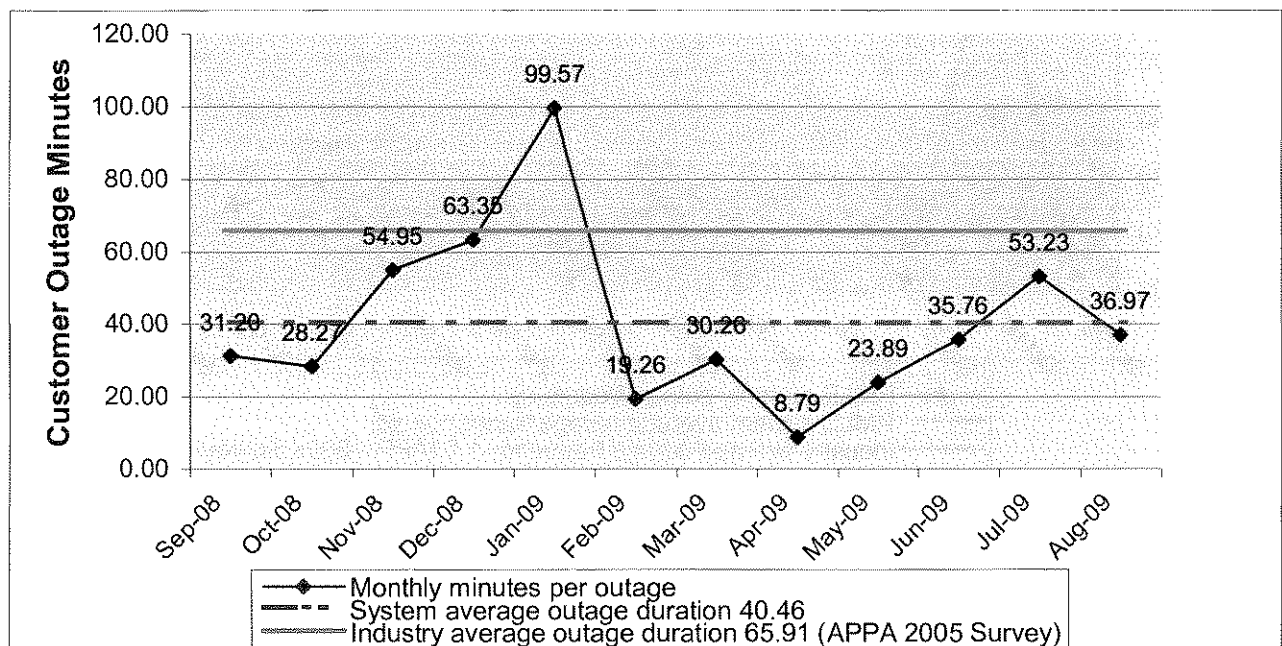
Customer Average Interruption Duration Index (CAIDI) – Measures how quickly the RMLD restores power to customers when their power goes out.

CAIDI = Total of Customer Interruption Duration for the Month in Minutes/ Total number of customers interrupted.

RMLD System CAIDI – 40.46 minutes

Industry Average – 65.91 minutes per outage (APPA 2005 Reliability Survey)

On average, RMLD customers that experience an outage are restored in 40.46 minutes.



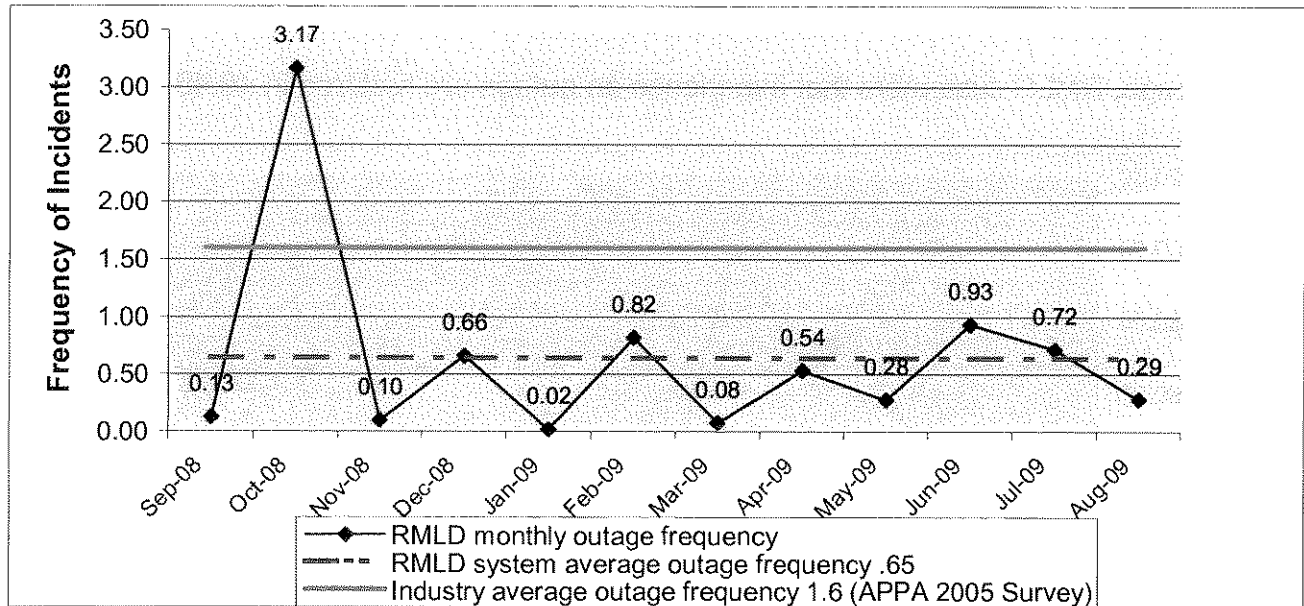
System Average Interruption Frequency (SAIFI) – Measures how many outages each customer experiences per year on average.

SAIFI = Total number of customer’s interrupted / Total number of customers.

RMLD System Average - .65 outages per year

Industry Average – 1.6 outages per year (APPA 2005 Reliability Survey)

Top quartile performance for the industry is one outage or less per year. The graph below tracks the month-by-month SAIFI performance.



Months Between Interruptions (MBTI)

Another view of the SAIFI data is the number of months Reading customers have no interruptions. At this time, the average RMLD customer experiences an outage every 18.46 months.