

# 2012 Utility Performance Management Survey

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## Management Report Report on 2011 Data



**UPM** Survey



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## Introduction

In 2011, the Province of Ontario was slowly improving its economy after the downturn three years ago. Its manufacturing sector saw some modest recovery on a regional basis, however certain areas of the Province remain challenged with respect to recovery and uncertainty remains today. The manufacturing sector has been unable to deliver the growth in prosperity it has in the past and Ontario's employment rate has not been reassuring. Moreover, housing sale prices began worrying policy makers watching the increase in household debt in the country as a whole and also in key Provinces like Ontario. Concern over household debt repayment has been fostering increasing regulatory intervention by government. Interest rates remained low, stimulating some spending; however, uncertainty over the cost of money rising tended to dampen expenditures by the Province's resident population – despite their assumption of long term debt for housing. These stresses have had a carryover effect on businesses and service providers, such as utilities, and have had a direct impact on the way performance is perceived by consumers.

Municipalities are stretched thin and are still challenged to deliver new programs. As shareholders of Distribution Utilities and their affiliated businesses, most are seeking maximum returns from their investments. Provincial energy policy makers continue to analyse the existing structure of the electricity sector in the Province and are introducing structure concepts for consideration that might change how income streams to municipalities. Management of distribution utilities continues to be complex. Delivering the products associated with distribution utilities in the Province requires that management teams communicate well within their organizations, as well as with external stakeholders and customers.

Comparing performance against industry standards is important. It provides value to the shareholder, provides assurances of regulatory compliance, supports rate applications to deliver better products to the utility customer, and may help reduce uncertainty. Utility managers may use performance results to buttress their dealings with the customer and with the public in general.

## Executive Summary

The MEARIE Group's 2012 Utility Performance Management (UPM) Survey marks the 23<sup>rd</sup> year of the survey's production. The UPM Survey is designed to provide ongoing information to utility operators about their capabilities and the challenges that need to be considered in strategic planning and budget preparation. The ratios provided as a result of the analysis of survey results are comprehensive and examine financial performance, customer relations and service considerations, human resources and demand management. These ratios were developed using the more than 300 metrics collected and aggregated for comparison both over the entire participant group, and based on the size of the participants. The commentary on the results is unique to each utility.

The final information is provided in two reports: Volume I, the Management Report, and Volume II, the Statistics and Ratios Report. Volume I is comprised of two parts. The first part is an executive summary with overviews of the composite results, general comments about the survey, and an analysis of Industry Trends.



The second part is a confidential, customized Performance Scorecard, which graphically represents the unique results of each participant across key metrics. Volume II, the Statistics and Ratios Report contains the data input form; the Instructions and Guidelines provided with the survey, including addendums; all of the data responses; and the computed ratios. Volume I and Volume II are both available electronically. The Project Team presents these to you and trusts that you will find them useful in developing your strategic planning priorities. Thanks to each of the participant's staff who contributed information for the completion of the survey.

## **1. UPM SURVEY AND CONFIDENTIALITY AGREEMENT**

All parties with access to the information provided in the UPM Management Report and the raw data in the downloadable files must abide by the "Policy on Information Disclosure".

### **Policy on Information Disclosure**

The MEARIE Group recognizes the importance of maintaining the security of your information and has developed the following policy that applies to all participants (and their delegates) in the UPM Survey and staff of The MEARIE Group. UPM data is provided only to participating LDCs through a UPM Management Report, Performance Scorecard and soft copy database. All participants must consider this information as strictly confidential.

- i. An individual LDC will provide its authorization for the sharing of information identified as being information of that LDC by completing the Data Input Sheets or the Electronic Data Submission. This will result in the LDC's data being identified by name in the listing of participants' results, as opposed to being assigned an alphanumeric identifier. This enables participants to compare their data to that of specific LDCs that are of interest to them.
- ii. Except for the sharing of results among participants referred to in i) above, neither the MEARIE Group nor any participating LDC will release or disclose to any other person whatsoever any information pertaining to any individual LDC participant without that LDC's prior written authorization.
- iii. The obligations of confidentiality set out in this disclosure policy are subject to the requirements of applicable law.
- iv. The MEARIE Group will not be liable for breaches by participating LDCs of this disclosure policy.



## 2. Survey Overview

29 utilities participated in the 2012 survey, as follows:

Size	No. of Customers	No. of Participants
Large	40,000 and above	12
Medium	9,000 to 39,999	14
Small	8,999 and below	3

The MEARIE Group's 2012 Survey includes 313 data points organized by categories as follows: Utility Characteristics; Customers, Customer Service, Service Reliability; Base Rates, Customer Demand and Revenues; Human Resources; Financial Information, Assets, Liabilities and Equity, Revenues, Expenses, Other; and Smart Meters.

The input provided allows the computation of a total of 88 ratios in the areas of: Financial Performance, Customer Service, Efficiency, System Reliability, and Resource Management.

**Volume I – The Management Report** provides each participating utility with information from other utilities that can be used for comparison purposes, ideally promoting the sharing of information that will result in performance improvements. It is important that the following considerations be clearly understood by participants:

- Ratio results can vary significantly from one utility to the next due to differences in policies, procedures or strategic direction and need not be indicative of differences in performance. Many utility policies and procedures that affect these ratios have long-term impacts; a decision made by the utility may result in an apparent year over year decline in a ratio, with the longer term result being an improvement in utility operations.
- Factors such as utility size, customer mix and density, or the number of contract employees used by a utility also have bearing on the results.
- Municipal organization, employment and business conditions, and geographic characteristics of the utility may have bearing on the results.
- Weather conditions and unusual weather events will have an effect on yearly results, as may emergency situations, or uncontrollable natural disasters.
- Many of the ratios are inter-related. For example: increases in operating and maintenance expenditure levels may have an apparent negative effect on Operating and Maintenance per Customer ratios, but a positive effect on the reliability ratios.

Readers are cautioned neither to use these ratio values as the sole means of evaluating utility performance, nor to conclude there is an optimal value for the ratios.



Also, readers are cautioned against making general assumptions where the means are derived from a relatively small number of responses.

The survey results should be used as a starting point in the evaluation of utility performance. Further exchange of information between utilities is recommended as a performance management strategy.

**Volume II – The Statistics and Ratios Report** provides all data arranged according to the sections associated with the data input form. It is possible to conveniently view and compare all participant results in one metric at the same time. As well, grouped as they are according to sections, review of all metrics within one particular topic is possible (e.g., “utility characteristics” metrics are found in the first pages of the Volume similar to the data input form).

### 3. Composite Results

The tables of composite results of ratios have been developed **using data from all participants** in the 2012 UPM Survey compared against results from all participants in previous years’ surveys. Based on the historical data from previous years, the results are provided for 2011, 2010, 2009, and 2008.

The “Mean” or average is calculated for each measure. The number of responses is indicated for each calculation (count of responses).

Because the “Mean” can be skewed by “outliers” or extreme results, the data is also organized and presented by quartiles that show the distribution among the number of respondents. The first quartile is the value which has 25% of the data below it and 75% of the data above it. The third quartile has 75% of the data below it and 25% of the data above it.

## Composite Results: Overall Results Table

All Utilities	Count of Responses				Mean				1st Quartile				3rd Quartile			
	2008	2009	2010	2011	2008	2009	2010	2011	2008	2009	2010	2011	2008	2009	2010	2011
<b>Financial Ratios</b>																
FR010 Net Income as a % of Total Revenue	30	36	30	29	2.9	3.1	2.9	2.8	2.2	2.4	2.4	2.2	3.8	3.6	3.6	3.8
FR020 Debt/Equity Ratio	30	36	30	29	1.02	0.99	1.02	1.05	0.78	0.67	0.77	0.78	1.39	1.35	1.30	1.39
FR030 Current Ratio	30	36	30	29	1.6	1.9	1.6	1.4	0.9	1.0	1.0	0.9	1.8	1.7	1.7	1.8
FR040 Number of Days Cash Reserve	30	36	30	29	22.4	26.3	22.4	17.6	0.6	2.5	4.4	0.6	28.1	32.8	31.2	28.1
FR050 Number of Days Sales Outstanding	30	36	30	29	26.6	26.1	26.6	25.2	21.2	20.1	22.2	21.2	29.9	29.9	30.2	29.9
FR060 Average Number of Days Sales Outstanding	29	35	29	28	26.0	26.8	26.0	25.5	21.5	23.1	22.0	21.5	28.7	30.3	30.1	28.7
FR070 Number of Days of Unbilled Revenue	30	36	30	29	38.5	41.3	38.5	37.8	35.6	38.0	37.3	35.6	42.4	44.4	43.3	42.4
FR080 Average Number of Days of Unbilled Revenue	26	30	26	29	35.5	38.2	35.5	36.0	30.7	32.8	32.7	30.7	39.8	42.5	38.0	39.8
FR090 Write-offs as a % of Total Electricity Service Revenue	30	36	30	29	0.18	0.27	0.18	0.17	0.11	0.13	0.11	0.11	0.23	0.36	0.24	0.23
FR100 Bad Debt as a % of Total Electricity Service Revenue	30	36	30	29	0.1592	0.2257	0.1592	0.1739	0.0894	0.1090	0.0925	0.0894	0.2318	0.2876	0.2109	0.2318



## Composite Results: Overall Results Table

All Utilities	Count of Responses				Mean				1st Quartile				3rd Quartile			
	2008	2009	2010	2011	2008	2009	2010	2011	2008	2009	2010	2011	2008	2009	2010	2011
FR120 Times Interest Earned	28	34	28	29	2.89	2.71	2.89	2.74	1.97	2.07	2.18	1.97	2.91	2.81	3.00	2.91
FR130 Debt Service Coverage (EBITDA Interest Coverage)	27	33	27	28	5.25	4.72	5.25	4.97	3.79	3.94	4.39	3.79	5.53	5.88	5.79	5.53
FR140 Operating Ratio (%)	30	36	30	29	3.93	4.40	3.93	3.81	2.45	3.25	2.65	2.45	4.45	5.15	4.34	4.45
FR150 Distribution Revenue per Residential Customer (\$)	30	36	30	29	294	291	294	322	270	259	267	270	335	301	306	335
FR160 Distribution Revenue per General Service Customer (\$)	30	36	30	29	1,603	1,588	1,603	1,724	1,462	1,231	1,325	1,462	2,064	1,737	1,821	2,064
FR170 Distribution Revenue per Large Customer (\$)	13	15	13	15	89,280	307,977	289,280	366,355	146,133	172,908	173,459	146,133	464,503	435,286	402,907	464,503
FR190 Return on Total Assets Less Depreciation (%)	30	36	30	29	3.907	3.717	3.907	3.129	2.419	2.376	2.724	2.419	3.976	3.849	3.958	3.976
FR200 Percent Debt (%)	30	36	30	29	47.5	46.4	47.5	48.8	43.8	40.2	43.5	43.8	58.1	57.5	56.6	58.1
FR210 Fixed Charge Coverage (EBIT Interest Coverage)	29	34	29	28	3.26	2.77	3.26	2.96	2.30	2.37	2.62	2.30	3.15	3.41	3.48	3.15
FR220 Cash Flow/Debt	29	35	29	29	0.22	0.28	0.22	0.24	0.17	0.17	0.18	0.17	0.28	0.30	0.24	0.28



## Composite Results: Overall Results Table

All Utilities	Count of Responses				Mean				1st Quartile				3rd Quartile			
	2008	2009	2010	2011	2008	2009	2010	2011	2008	2009	2010	2011	2008	2009	2010	2011
FR230 Net Income as a % of Distribution Revenue	30	36	30	29	15.49	15.19	15.49	15.50	12.55	12.81	13.26	12.55	20.29	18.62	20.17	20.29
FR240 Profitability	30	36	30	29	0.32	0.27	0.32	0.31	0.25	0.26	0.29	0.25	0.38	0.37	0.38	0.38
FR250 Return on Equity (%)	30	36	30	29	7.61	7.59	7.61	7.51	5.98	6.05	6.13	5.98	9.64	9.01	9.51	9.64
FR260 Free Operating Cash Flow Plus Interest Over Interest	28	34	28	29	-0.25	0.35	-0.25	-0.26	-1.09	-1.30	-1.45	-1.09	0.76	0.70	1.25	0.76
FR270 Debt Over EBIT	30	36	30	29	10.64	7.21	10.64	7.12	4.90	4.13	5.19	4.90	7.88	7.55	6.73	7.88
FR280 Return on Assets (%)	30	35	30	29	2.50	2.48	2.50	2.28	2.03	1.69	1.85	2.03	2.77	2.79	3.18	2.77
FR290 Return on Capital Employed (%)	30	36	30	29	4.02	4.08	4.02	4.07	3.67	3.17	3.25	3.67	5.15	4.64	4.89	5.15
FR300 Operating Margin (%)	30	36	30	29	6.42	6.68	6.42	5.90	5.16	5.66	5.70	5.16	6.70	7.69	7.54	6.70
FR310 Net Margin (%)	30	36	30	29	2.94	3.18	2.94	2.90	2.21	2.44	2.43	2.21	3.89	3.67	3.70	3.89
FR320 Interest Coverage Ratio	29	34	29	28	3.45	3.12	3.45	2.99	2.30	2.52	2.68	2.30	3.14	3.41	3.64	3.14

## Composite Results: Overall Results Table

All Utilities	Count of Responses				Mean				1st Quartile				3rd Quartile			
	2008	2009	2010	2011	2008	2009	2010	2011	2008	2009	2010	2011	2008	2009	2010	2011
<b>Customer Service Ratios</b>																
CR010 Percent of Requests for New Low Voltage Service Met Within Min. Standard	30	36	30	29	98.82	98.52	98.82	98.59	97.76	97.85	97.80	97.76	100.00	100.00	100.00	100.00
CR020 Percent of Requests for New High Voltage Service Met Within Min. Standard	15	16	15	14	93.33	100.00	93.33	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
CR040 Percent of General Inquiry Telephone Calls Answered Within Min. Standard	29	35	29	27	84.14	85.32	84.14	83.28	76.83	77.86	74.27	76.83	92.69	96.00	92.68	92.69
CR050 Percent of Appointments at a Customer's Premises/Work Site Within Min. Standard	29	33	29	28	98.52	98.56	98.52	99.06	98.32	98.03	97.44	98.32	100.00	100.00	100.00	100.00
CR060 Percent of Requests for Written Responses Met Within Min. Standard	30	36	30	29	99.14	98.96	99.14	99.31	99.48	99.16	99.18	99.48	100.00	100.00	100.00	100.00
CR070 Percent of Emergency Calls for Urban Customers Met Within 60 Minutes	29	34	29	29	97.10	97.20	97.10	92.46	90.79	95.37	95.40	90.79	100.00	100.00	100.00	100.00
CR080 Percent of Emergency Calls for Rural Customers Met Within 120 Minutes	10	14	10	9	98.69	98.32	98.69	98.38	100.00	96.59	100.00	100.00	100.00	100.00	100.00	100.00
CR090 Percent of Calls Resolved by First Point of Contact	25	26	25	26	29.43	36.90	29.43	36.41	0.00	0.00	0.00	0.00	95.50	95.16	87.66	95.50
CR100 Percent of Bills Cancelled and Re-issued	27	33	27	27	0.77	0.72	0.77	0.64	0.10	0.11	0.11	0.10	0.50	0.63	0.44	0.50
CR110 Percent of Customers with a Retailer	30	36	30	27	12.79	14.08	12.79	10.10	7.97	11.87	10.83	7.97	11.59	16.12	14.96	11.59



## Composite Results: Overall Results Table

All Utilities	Count of Responses				Mean				1st Quartile				3rd Quartile			
	2008	2009	2010	2011	2008	2009	2010	2011	2008	2009	2010	2011	2008	2009	2010	2011
<b>Efficiency Ratios</b>																
ER010 System Unit Cost of Power (\$)	30	36	30	29	0.077	0.069	0.077	0.081	0.082	0.061	0.076	0.082	0.087	0.077	0.082	0.087
ER020 Controllable Expense per Customer (\$)	29	36	29	29	223.53	204.52	223.53	224.65	181.67	174.73	176.25	181.67	253.73	231.79	254.46	253.73
ER030 Controllable Expense per MWh Sold (\$)	29	36	29	29	9.70	8.89	9.70	9.60	7.27	6.76	6.93	7.27	10.80	10.99	12.55	10.80
ER040 Operating & Maintenance Expense per Customer (\$)	30	36	30	29	92.13	94.00	92.13	96.35	71.45	70.62	66.37	71.45	107.85	109.36	98.04	107.85
ER050 Operating & Maintenance Expense per MWh Sold (\$)	30	36	30	29	4.00	4.17	4.00	4.09	2.86	3.09	2.69	2.86	4.40	5.24	4.46	4.40
ER060 Billing and Collection Expense per Customer (\$)	30	36	30	29	46.67	49.42	46.67	46.64	34.99	36.56	35.71	34.99	53.39	61.29	54.12	53.39
ER070 Billing and Collection Expense per MWh Sold (\$)	30	36	30	29	2.03	2.21	2.03	2.00	1.47	1.46	1.44	1.47	2.45	2.85	2.68	2.45
ER080 Administration Expense per Customer (\$)	30	36	30	29	84.70	82.26	84.70	91.52	70.87	64.89	65.34	70.87	115.00	95.99	97.16	115.00
ER090 Administration Expense per MWh Sold (\$)	30	36	30	29	3.63	3.60	3.63	3.88	2.83	2.50	2.93	2.83	4.93	3.89	4.11	4.93
ER110 Customer Density (Per Square Kilometer)	30	36	30	29	318.0	299.4	318.0	320.7	150.8	121.6	134.2	150.8	502.3	462.1	473.5	502.3



## Composite Results: Overall Results Table

All Utilities	Count of Responses				Mean				1st Quartile				3rd Quartile			
	2008	2009	2010	2011	2008	2009	2010	2011	2008	2009	2010	2011	2008	2009	2010	2011
ER120 Cost per Customer Read for Meters	25	33	25	26	1.19	0.96	1.19	1.61	0.63	0.66	0.68	0.63	1.66	1.12	1.16	1.66
ER140 Inventory Turnover Ratio	29	34	29	28	2.42	1.98	2.42	2.20	1.14	1.27	1.18	1.14	2.74	2.25	3.16	2.74
ER150 Controllable Cost per Circuit km of Line	29	36	29	29	10,021.87	9,021.48	10,021.87	10,116.03	7,526.07	6,810.25	7,513.24	7,526.07	13,331.75	12,172.84	13,060.08	13,331.75
ER160 Asset Efficiency	30	36	30	29	1.02	0.99	1.02	1.04	0.92	0.86	0.93	0.92	1.12	1.13	1.11	1.12



## Composite Results: Overall Results Table

All Utilities	Count of Responses				Mean				1st Quartile				3rd Quartile			
	2008	2009	2010	2011	2008	2009	2010	2011	2008	2009	2010	2011	2008	2009	2010	2011
<b>Resource Management</b>																
MR010 Short Term Absences per FTE	24	32	24	24	2.86	2.42	2.86	2.76	1.80	1.59	1.64	1.80	3.22	2.97	3.26	3.22
MR020 Short Term Absenteeism: Days per FTE	25	33	25	26	3.72	3.47	3.72	3.71	3.22	2.34	2.37	3.22	4.55	4.63	4.33	4.55
MR030 Overtime Hours as a % of Regular Hours	25	34	25	26	3.37	3.62	3.37	3.56	2.04	2.16	1.85	2.04	4.72	5.18	4.66	4.72
MR040 Accidents: Frequency per 200,000 hours	25	34	25	25	0.92	0.86	0.92	1.39	0.00	0.00	0.00	0.00	2.66	0.77	1.20	2.66
MR050 Accidents: Severity Rate per 200,000 Hours	24	34	24	25	12.87	44.87	12.87	36.17	0.00	0.00	0.00	0.00	37.28	3.64	5.56	37.28
MR070 Staff Development Expenses per FTE	23	35	23	27	2,254	1,695	2,254	1,719	610	534	1,468	610	2,639	2,562	3,112	2,639
MR090 Cost of Safety Training per FTE	23	30	23	25	1,078	1,210	1,078	1,362	723	581	708	723	2,120	1,657	1,353	2,120
MR100 Number of Hours of Safe Work Practices Training per FTE	23	31	23	23	29.8	30.6	29.8	27.4	17.2	17.3	19.8	17.2	36.3	35.6	35.5	36.3
MR110 Employee Turnover Ratio	25	31	25	26	0.05	0.04	0.05	0.05	0.01	0.02	0.02	0.01	0.07	0.06	0.07	0.07
MR120 Percent of Total Staff in Executive Positions	27	33	27	26	5.73	5.72	5.73	6.69	2.14	2.02	1.97	2.14	9.40	8.16	8.31	9.40



## Composite Results: Overall Results Table

All Utilities	Count of Responses				Mean				1st Quartile				3rd Quartile			
	2008	2009	2010	2011	2008	2009	2010	2011	2008	2009	2010	2011	2008	2009	2010	2011
MR130 Percent of Total Staff in Management Positions	28	35	28	27	19.23	20.60	19.23	17.86	14.59	14.38	15.50	14.59	21.01	25.21	21.31	21.01
MR140 Percent of Total Staff in Front Line Positions	28	35	28	27	72.64	72.36	72.64	73.11	70.23	70.66	69.13	70.23	79.58	78.64	80.29	79.58
MR150 Total Compensation per FTE	25	32	25	25	80,617	74,808	80,617	86,192	81,016	73,515	73,905	81,016	89,278	83,751	85,750	89,278
MR160 Overtime Hours as a % of Total Hours Worked	25	34	25	26	3.23	3.45	3.23	3.40	1.99	2.11	1.82	1.99	4.50	4.93	4.45	4.50
MR170 Percent of Total Staff in Union Positions	28	34	28	27	67.52	65.48	67.52	65.82	60.64	60.63	63.72	60.64	73.08	74.78	74.40	73.08
MR180 Percent of Total Front Line Staff in Union Positions	28	33	28	27	91.23	88.29	91.23	101.35	83.60	89.03	86.63	83.60	100.00	100.00	100.00	100.00

## Composite Results: Overall Results Table

All Utilities	Count of Responses				Mean				1st Quartile				3rd Quartile			
	2008	2009	2010	2011	2008	2009	2010	2011	2008	2009	2010	2011	2008	2009	2010	2011
<b>System Reliability Ratios</b>																
SR010 System Average Interruption Duration Index (SAIDI)	30	36	30	29	1.73	2.03	1.73	3.48	1.46	0.82	0.76	1.46	5.46	2.52	2.07	5.46
SR020 SAIDI: Loss of Supply	30	36	30	28	0.63	0.87	0.63	0.74	0.03	0.03	0.00	0.03	0.58	0.99	0.30	0.58
SR030 SAIDI: LDC Distribution System	30	36	30	29	1.10	1.18	1.10	2.58	0.99	0.54	0.55	0.99	2.41	1.57	1.31	2.41
SR040 (CAIDI) Customer Average Interruption Duration Index	30	36	30	29	1.08	1.24	1.08	1.40	0.91	0.83	0.65	0.91	1.68	1.36	1.32	1.68
SR050 CAIDI: Loss of Supply	30	36	30	28	0.28	0.46	0.28	0.36	0.01	0.03	0.00	0.01	0.34	0.55	0.19	0.34
SR060 CAIDI: LDC Distribution System	30	36	30	29	0.81	0.78	0.81	1.01	0.63	0.49	0.55	0.63	1.20	0.92	0.81	1.20
SR070 System Average Interruption Frequency Index (SAIFI)	30	36	30	29	1.81	1.68	1.81	2.27	1.34	1.14	0.91	1.34	2.83	1.81	1.81	2.83
SR080 SAIFI: Loss of Supply	30	35	30	28	0.40	0.59	0.40	0.39	0.06	0.15	0.00	0.06	0.65	0.65	0.54	0.65
SR090 SAIFI: LDC Distribution System	30	36	30	29	1.42	1.10	1.42	1.86	0.99	0.69	0.70	0.99	2.02	1.33	1.52	2.02
SR100 Index of Reliability	30	36	30	29	0.99980	0.99977	0.99980	0.99960	0.99938	0.99971	0.99976	0.99938	0.99983	0.99991	0.99991	0.99983



## Composite Results: Overall Results Table

All Utilities	Count of Responses				Mean				1st Quartile				3rd Quartile			
	2008	2009	2010	2011	2008	2009	2010	2011	2008	2009	2010	2011	2008	2009	2010	2011
SR110 Index of Reliability: Loss of Supply	30	36	30	28	0.999928	0.999901	0.999928	0.999916	0.999933	0.999887	0.999966	0.999933	0.999997	0.999996	1.000000	0.999997
SR120 Index of Reliability: LDC Distribution System	30	36	30	29	0.999875	0.999865	0.999875	0.999706	0.999724	0.999821	0.999850	0.999724	0.999887	0.999938	0.999938	0.999887
SR130 System Average Automatic Reclosure Index (SAARI)	17	18	17	15	2.62	2.96	2.62	3.68	0.95	0.00	0.63	0.95	5.05	4.98	3.61	5.05
SR140 SAARI: Loss of Supply	15	17	15	10	0.30	0.37	0.30	0.33	0.00	0.00	0.00	0.00	0.35	0.02	0.20	0.35
SR150 SAARI: LDC Distribution System	13	17	13	12	2.47	2.75	2.47	2.83	0.00	0.00	0.00	0.00	4.25	5.06	3.61	4.25
SR160 Percent of Customers Experiencing Multiple Outages	9	10	9	8	22.38	14.24	22.38	16.54	0.00	0.03	0.00	0.00	12.50	12.23	17.63	12.50
SR170 Percent of Customers With Long Duration Outages	16	20	16	14	2.13	9.99	2.13	13.99	1.58	0.04	0.13	1.58	12.37	9.88	2.24	12.37
SR180 Total Outage Minutes per Customer	30	36	30	29	103.51	121.83	103.51	208.81	87.64	48.98	45.43	87.64	327.58	151.38	124.38	327.58





#### 4. General Observations

Unlike 2010, Average Annual Peak Load among the utilities participating in UPMSurvey 2012 retreated in 2011 to levels similar to those in 2008 and 2009. On an average basis the Average Annual Peak Load has decreased 5% over the 2007 to 2011 period. Average Distribution Revenues continued to grow making the increase over the period of the survey 19%. Notwithstanding this, the proportion of total revenues from each customer class remained at 2% for large customers, 40% for General Service Customers and 58% for residential customers. Distribution revenue per residential customer shows an increase over the period of 12%.

Net Income as a percent of Distribution Revenue has remained at 15%. A slight increase in Net Income in 2010 occurred, and a modest upward trend is evident in the mean for Net Income over the period. In 2011 the mean and lower quartile are trending down to 2007 levels and the third quartile is below 2010.

Costs of Operations and Maintenance, and Administration have once again increased year over year (10% and 18% respectively) and Budgeting and Billing expenses remain consistent over the 5 year period covered by the survey. There is little evidence that smarter technologies are creating a positive impact on costs, and it is possible these benefits are not yet showing an impact overall because of adjustments being made to accommodate the technology. Staff costs remain as one of the major contributions, as do regulatory costs and reporting, however it is also apparent that there has been a steady increase in customer density which affects both costs per customer and costs per MWh. With respect to costs per MWh, these were greater than costs per customer. In some cases, this may be reflective of lower peak values.

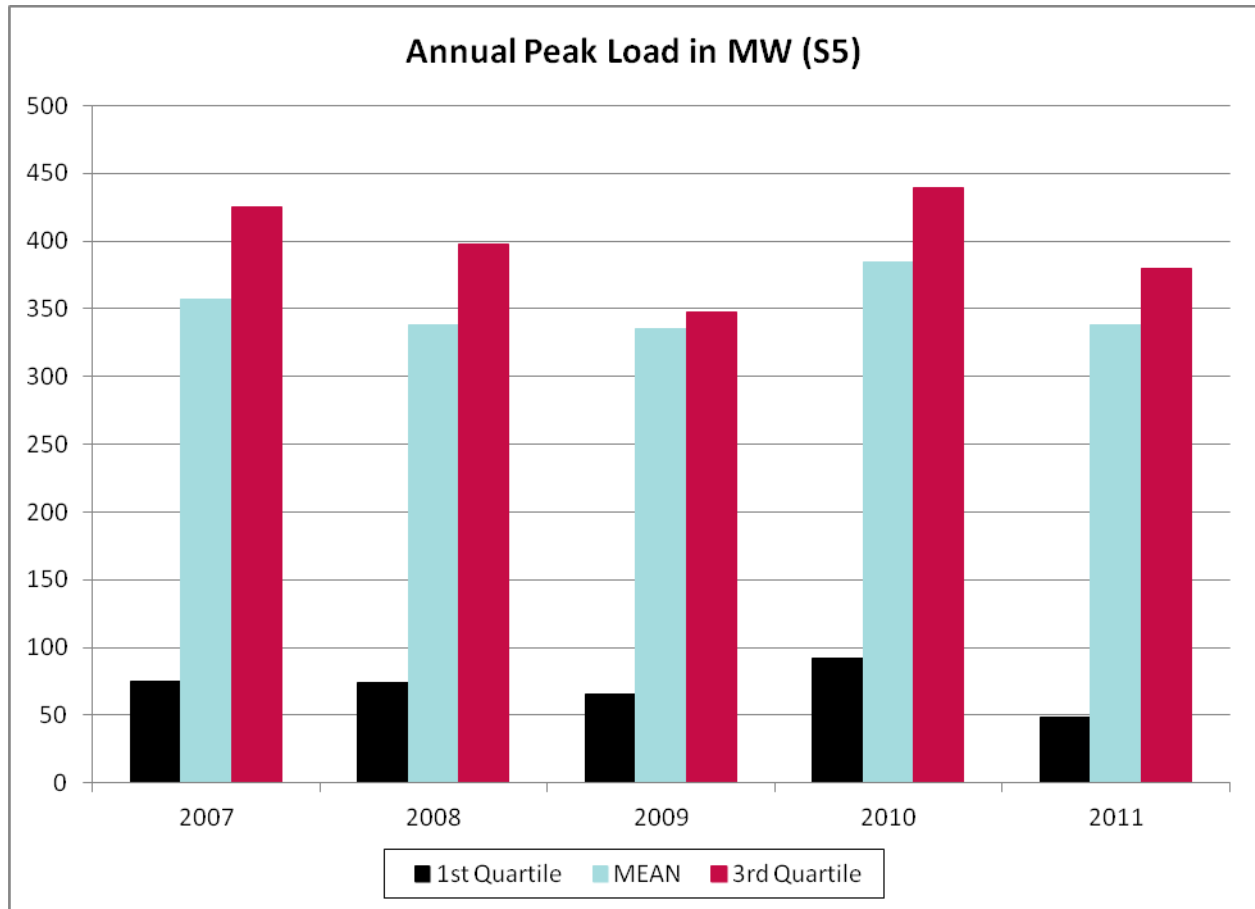
Due to the infrastructure based nature of the distribution utility business and the effect of regulation, incremental customer growth can affect the costs per customer and per megawatt in order to provide the services, reliable system and administrative reporting necessary. There is a different culture to be dealt with, including customers with broadening interests in self generation, efficiency opportunities and product delivery expectations. Management of controllable costs is made more difficult as a result because of the need to ensure sufficient staff and support is available to provide for the increases in customer density and the new products and services being requested. Smart metering costs over the period were approximately \$315 million in total among the participants.

Average Return on Equity over the participants in the 2012 UPMSurvey had a steady modest growth over the period 2007 to 2011, and the third quartile slightly increased over 2010 making it the highest return. The mean and 1<sup>st</sup> quartile numbers declined to levels similar to 2009. Average Return on Assets (ROA) was highest in 2010, as was the third quartile, while the 1<sup>st</sup> quartile was highest in 2011. Overall the ROA has declined 7% from 2007 to 2011.

On average, staff development costs showed a modest growth of 5% over the 5 year period reported. While 2010 was a high in costs for staff development being 49% over 2009, there was a 23% decline from 2010 to 2011. Unfortunately in 2010 and 2011, there was an upswing in accidents per 200,000 hours worked by staff year over year from 2009. Graphical illustrations of these trends follow.

## 5. Industry Trends

### *Annual Peak Load in MW (\$5)*

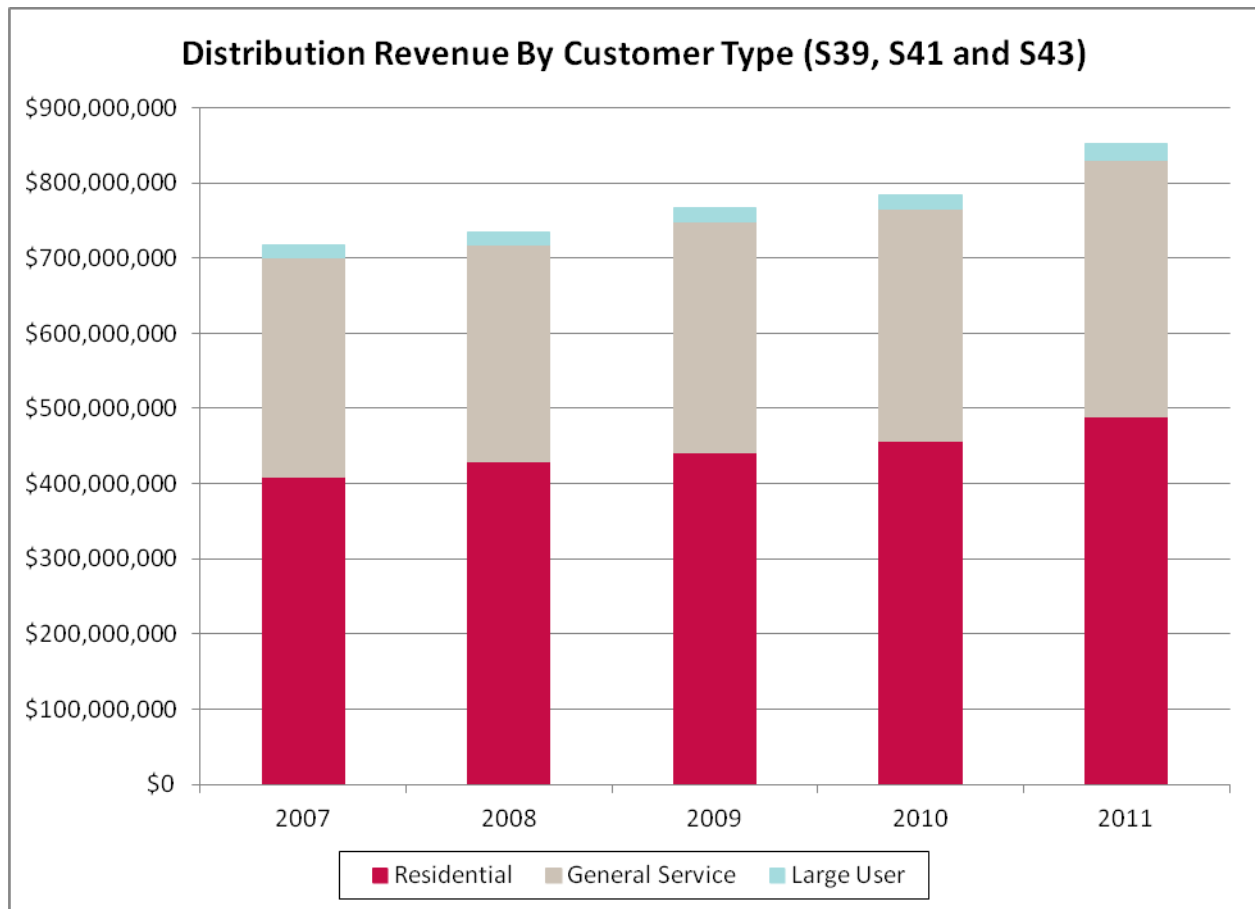


Between 2007 and 2011:

- The average Annual Peak Load in MW decreased by 5% from 357MW in 2007 to 338MW in 2011.
- The 1<sup>st</sup> and 3<sup>rd</sup> quartiles as well as the mean were at their highest in 2010 at 92MW, 385MW, and 439MW respectively.
- Both global economic conditions and conservation and efficiency efforts may have had a partial impact on this result.
- Whether the overall decrease in 2011 is reflective of consumer changes in peak usage remains undetermined.

### ***Distribution Revenue by Customer Type (\$39, \$41, and \$43)***

This graph shows total distribution revenue for Residential, General Service and Large User customers and compares each group to the total distribution revenue of all three together.

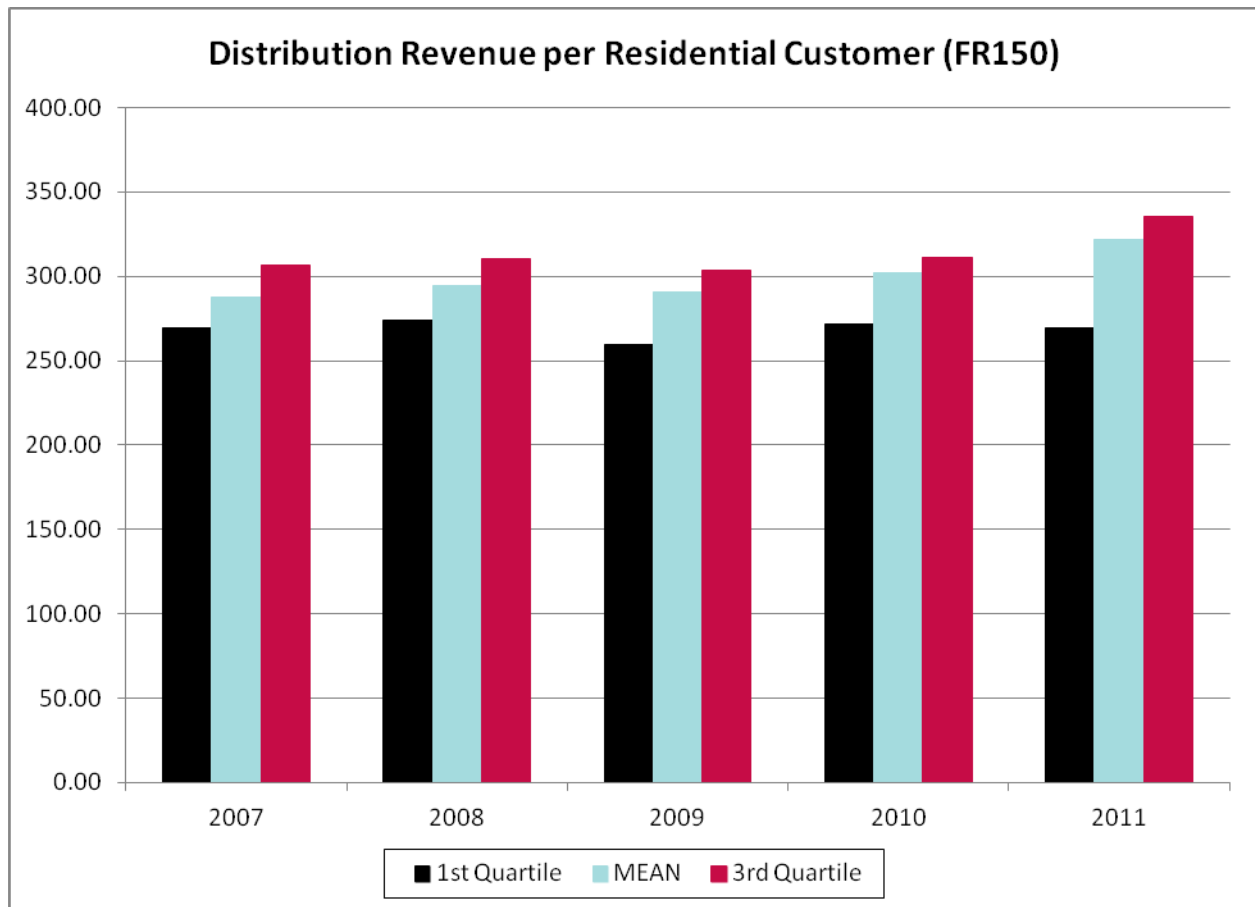


In the period covered 2007 to 2011 among the participating utilities:

- In total, distribution revenue from the three sources has increased by 19%.
- When comparing consecutive years, the largest year over year increase happened between 2010 and 2011 at 9%.
- Large User Distribution Revenue has maintained about a 2% share of the total.
- Residential Distribution Revenue has maintained about a 58% share of the total.
- General Service Distribution Revenue has maintained about a 40% share of the total.

### ***Distribution Revenue per Residential Customer (FR150)***

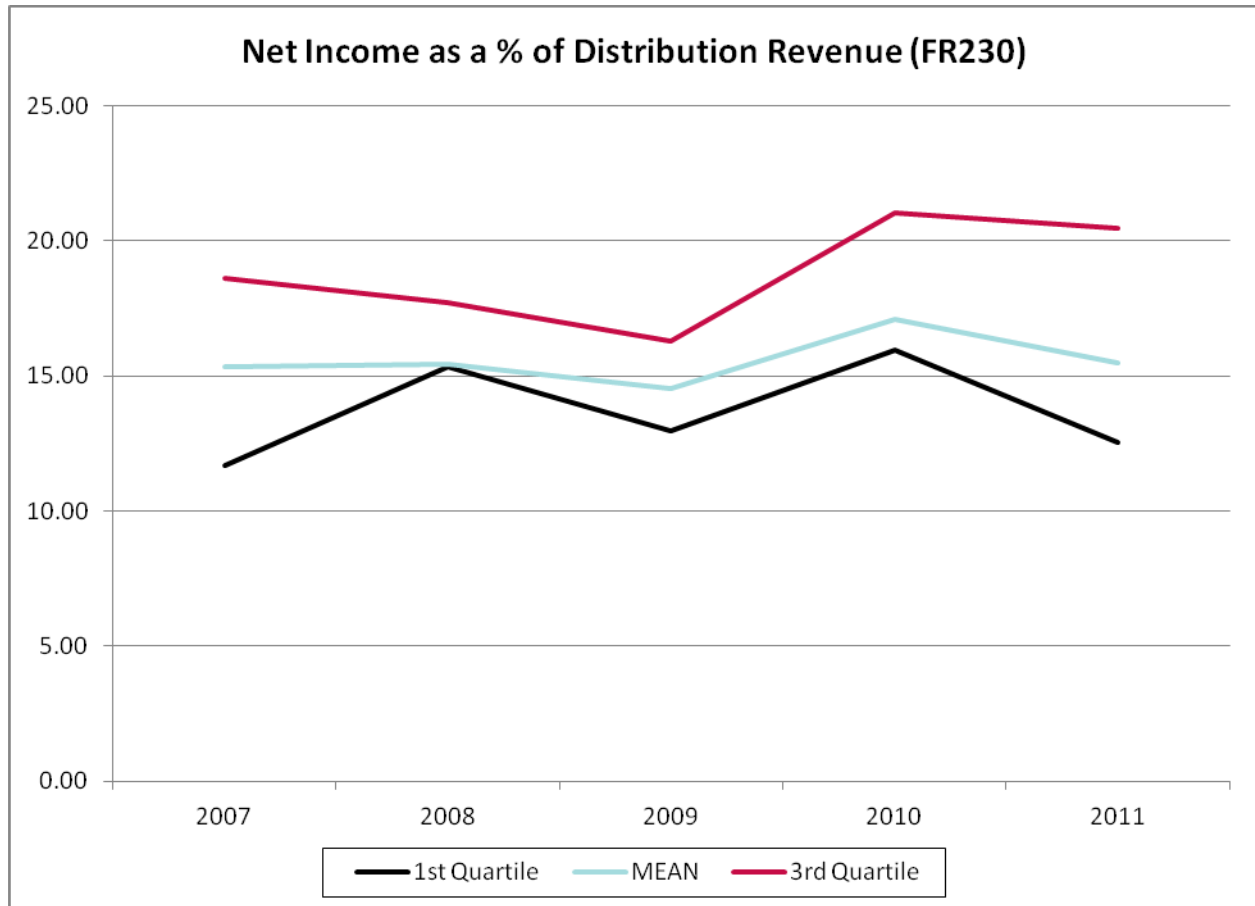
This ratio indicates average revenue from each residential customer. This rate should be used with FR160 and FR170 to gain an accurate picture of the customer base



In the period covered 2007 to 2011 among the participating utilities:

- The average Distribution Revenue per Residential Customer has increased 12%, from \$288 to \$322 since 2007.
- In 2011 both the mean and 3<sup>rd</sup> quartile peaked at \$322 for the mean and \$335 for the 3<sup>rd</sup> quartile. The 1<sup>st</sup> quartile hit a high in 2008 at \$274.
- In this same time period, the average Distribution Revenue per General Service Customer (FR160) increased by 3% and the average Distribution Revenue per Large Customer (FR170) increased by 37%.

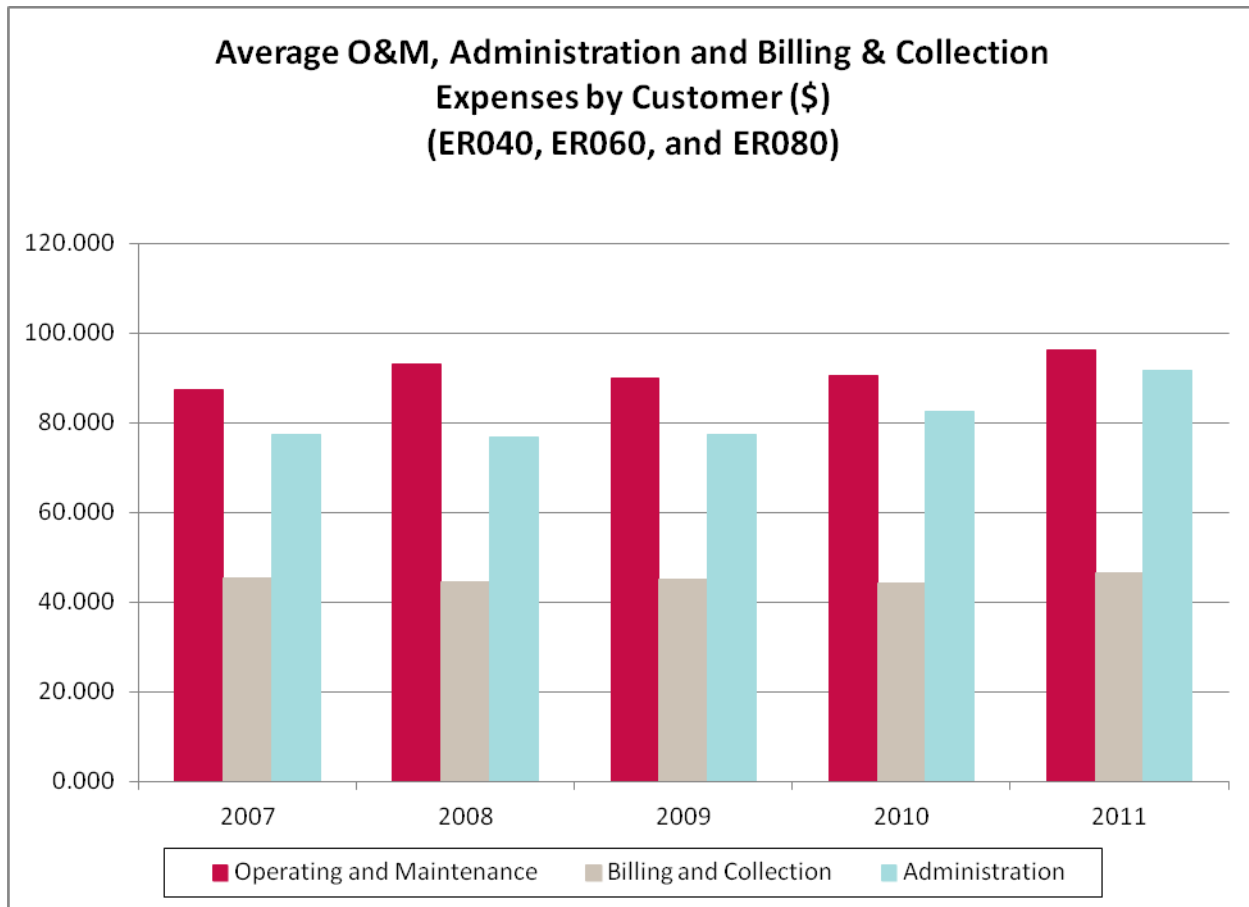
**Net Income as a % of Distribution Revenue (FR230)**



Between 2007 and 2011 among the participating utilities:

- The average Net Income as % of Distribution Revenue has remained around 15% over the five year period, with a slight increase in 2010 to 17%.
- The 1<sup>st</sup> and 3<sup>rd</sup> quartiles and the mean had the highest Net Income as a % of Distribution Revenue in 2010 with 16%, 21% and 17% respectively.
- Although this metric dropped slightly in 2011, the last two years show a modest upward trend for both the mean and the 3<sup>rd</sup> quartile.

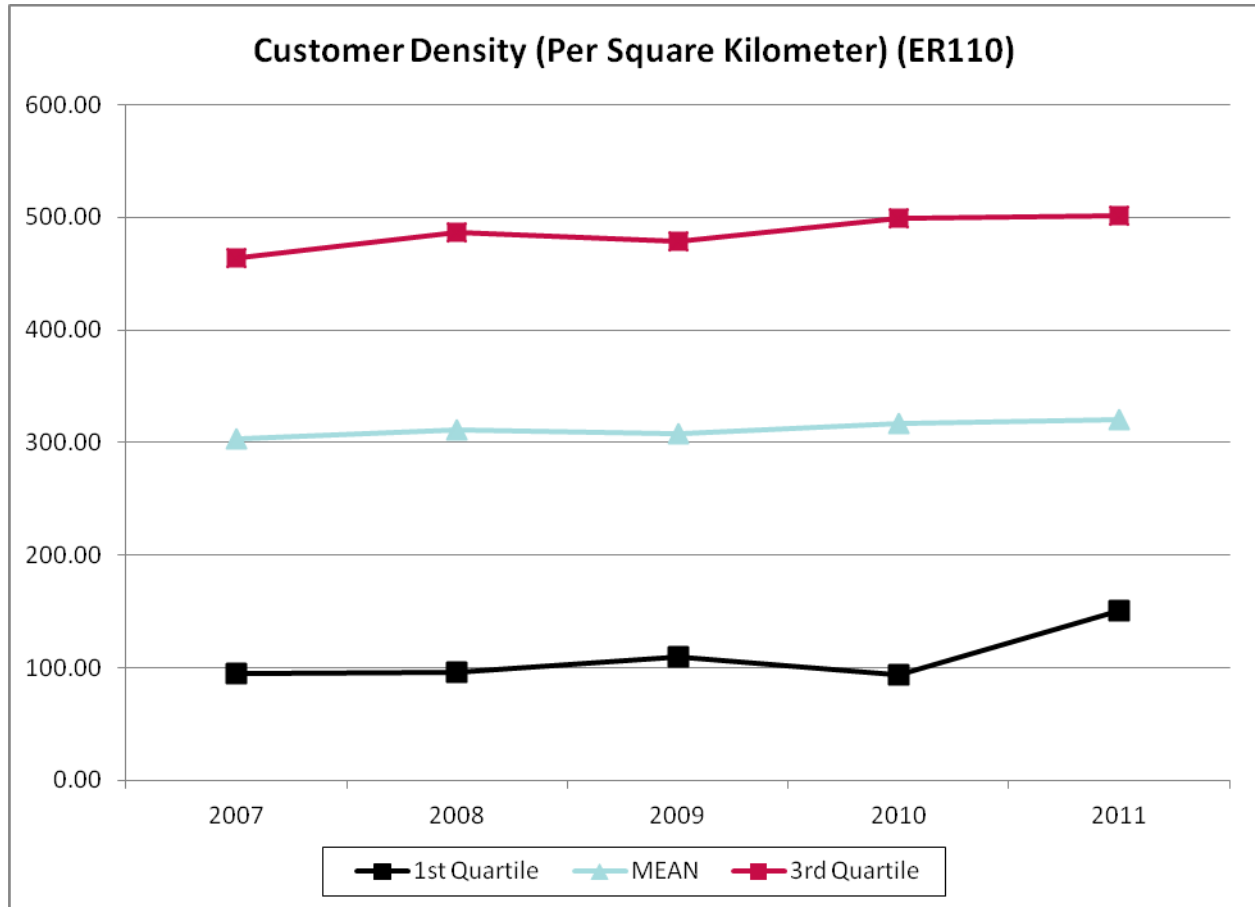
**Average O&M, Administration and Billing and Collection Expenses per Customer (\$)  
(ER040) (ER060) (ER080)**



From 2007 to 2011 among participating utilities:

- Average O&M Expense increased by 10% and average Administration Expense increased by 18%.
- Average Billing and Collection Expenses have stayed relatively level over the last five years, with a high in 2011 of \$46.65.
- Pressures on utility operations in terms of regulatory reporting and new regulatory responsibility may be contributing to maintaining administration expenses at this level while billing and collection expenses show little impact of smarter technologies. With respect to O&M, aging plant, the need for skilled labour, and upgraded equipment affect the expenses incurred.

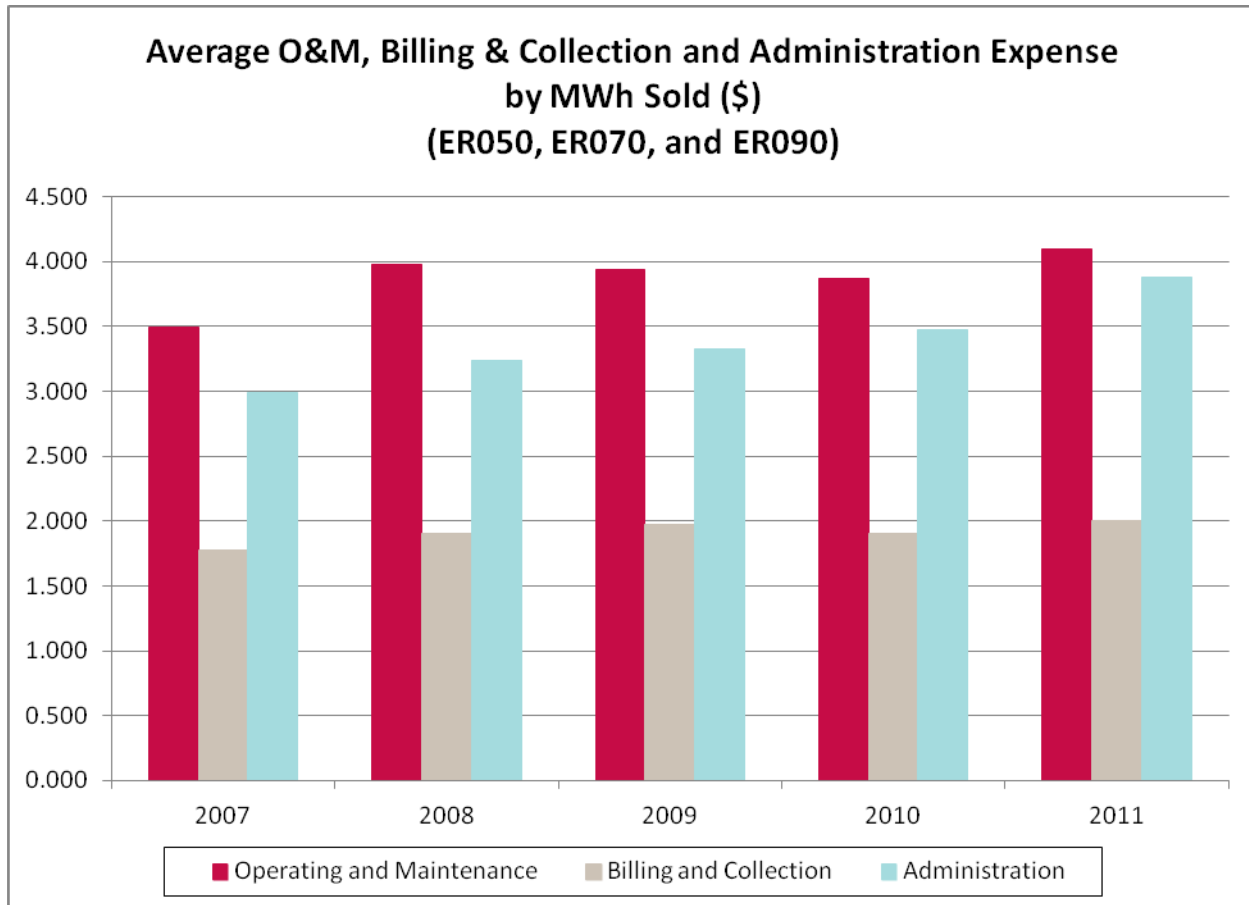
**Customer Density (Per Square Kilometer) (ER110)**



From 2007 to 2011 among participants:

- The average number of customers per square kilometer of total service area has increased steadily since 2007.
- LDCs with the lowest customer density showed a significant increase in 2011, increasing by 59% from a low of 95.08 to high of 150.81 reflective of a change in participants.
- LDCs with the highest customer density have increased customer density by 8% in the last five years, from 463 customers per square kilometer of total service area to 502.

**Average O&M, Billing and Collection and Administration Expenses per MWh Sold (\$)  
(ER050) (ER070) (ER090)**



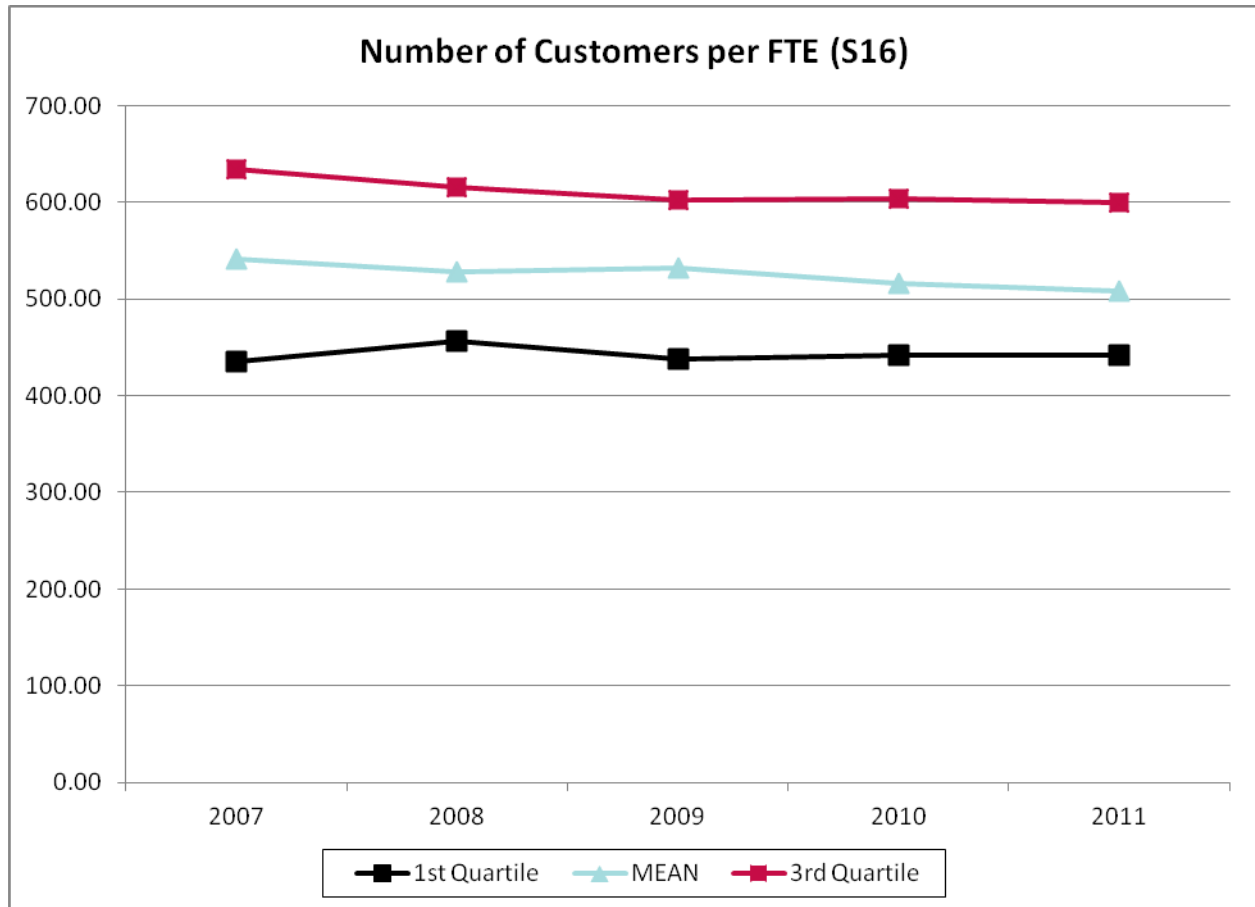
For the participating utilities in the period covered 2007 to 2011:

- The average O&M Expense per MWh sold increased by 17%, the average Billing & Collection Expense increased by 13% and the average Administration Expense increased by 30%.
- Expenses per MWh Sold have increased more than the Expenses per Customer.
- In 2011, all three types of expenses were at their highest.



### Number of Customers per FTE (S16)

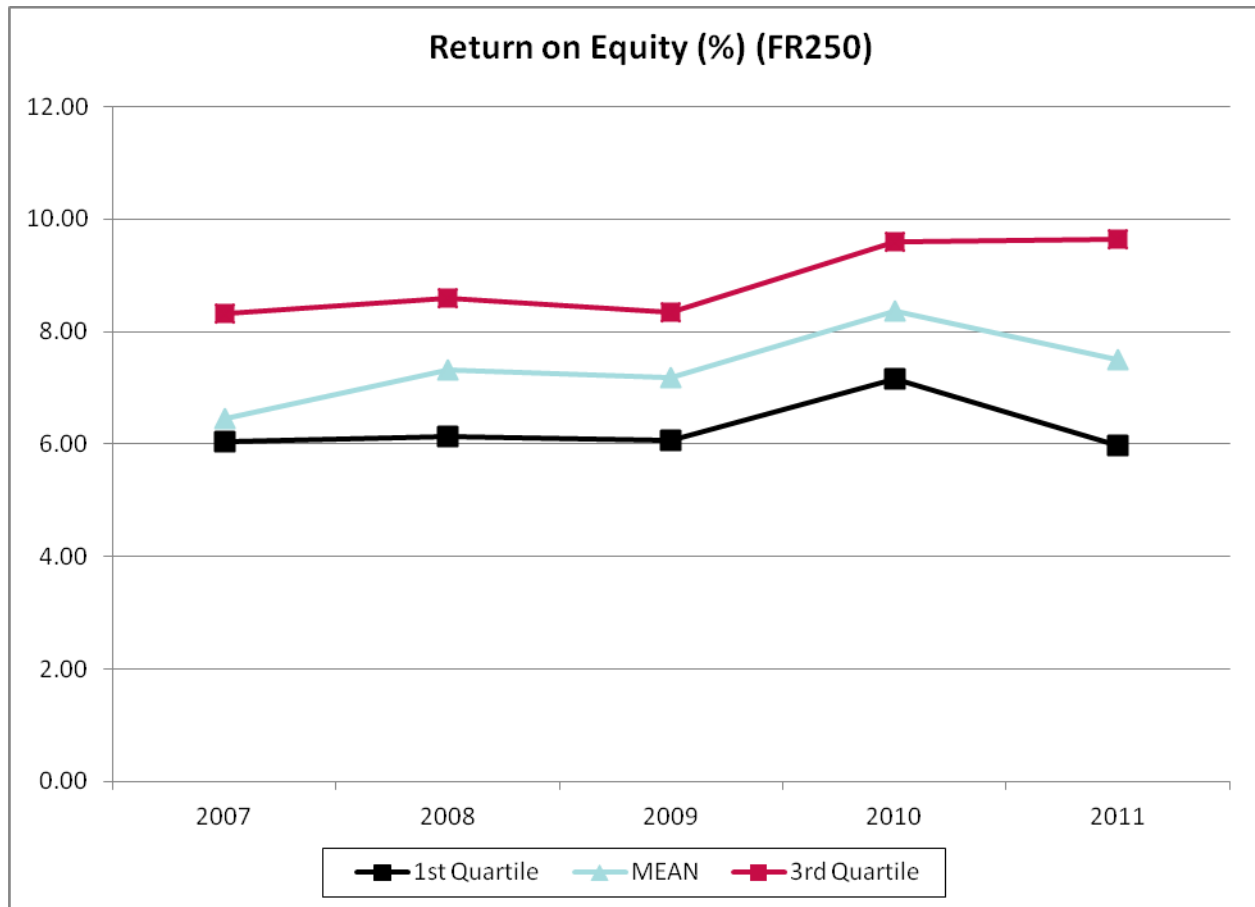
Note: The calculation for this has remained S2/S3 for all year; however, 2008 was the first year that both LDC and affiliate FTEs were included in S3 for some LDCs.



Over the period 2007 to 2011 the following can be noted with respect to Number of Customers per FTE (S16) for participating utilities:

- On average, the Number of Customers per FTE has decreased from 543 to 508 over this period.
- Both the 3<sup>rd</sup> quartile and the mean decreased 6% from 2007 to 2011.
- LDCs with the fewest customers per FTE saw a 2% increase in customers per FTE over the five year period.
- More work is being done on behalf of customers in all areas creating a change in this metric. It is possible that this decreasing trend over the period may continue as long as the intensity of reporting commitments is high and technological/equipment improvements are required.

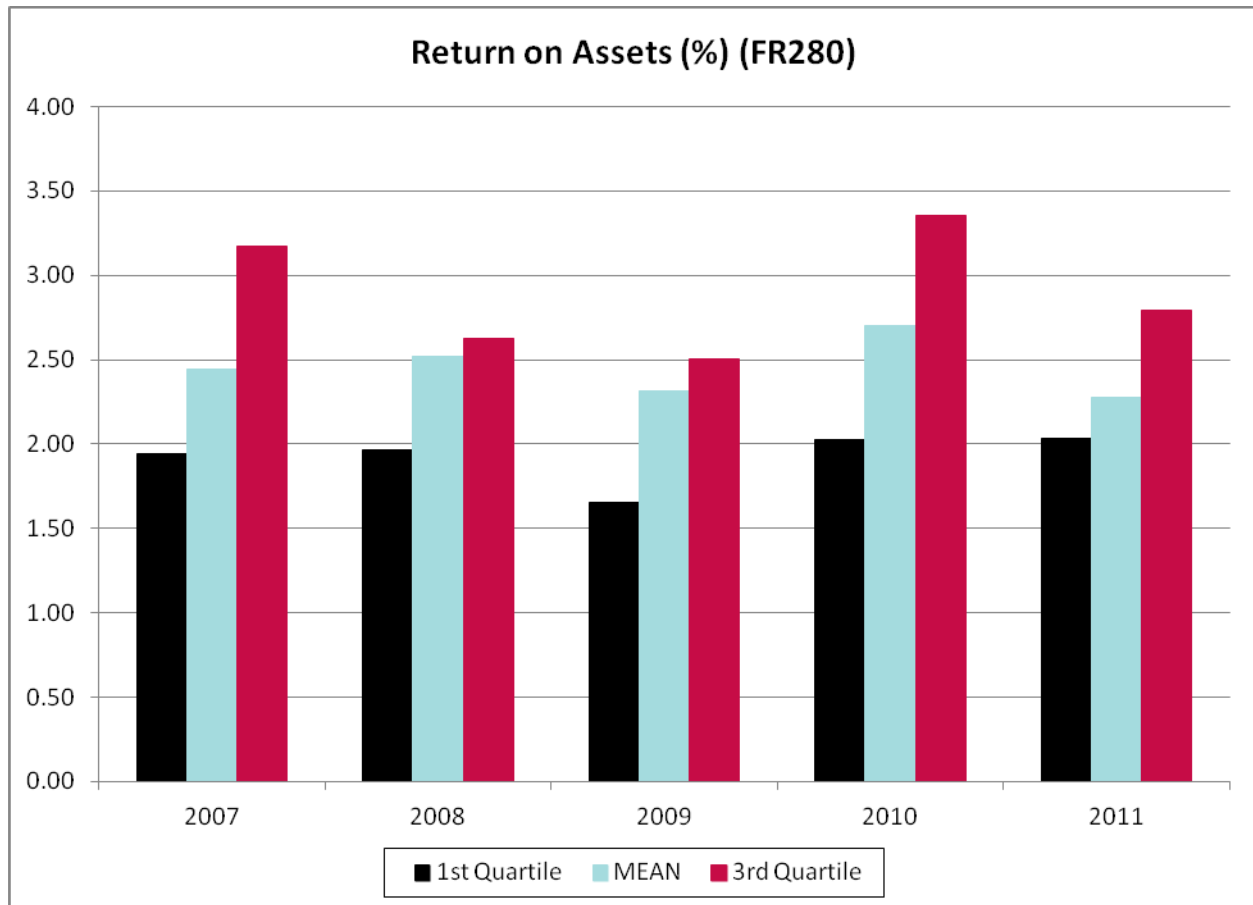
### Return on Equity (%) (FR250)



Between 2007 and 2011 among the participating utilities:

- The average Return on Equity has increased from 6.45% to 7.51%.
- Over this five year period, the mean and 1<sup>st</sup> quartile ROE hit a high point in 2010 and the 3<sup>rd</sup> quartile hit it's high in 2011.
- Both the mean and 3<sup>rd</sup> quartile increased by 16% between 2007 and 2011.
- Both the mean and the 1<sup>st</sup> quartile showed declines from 2010 in 2011, and returned to 2009 levels.

**Return on Assets (%) (FR280)**

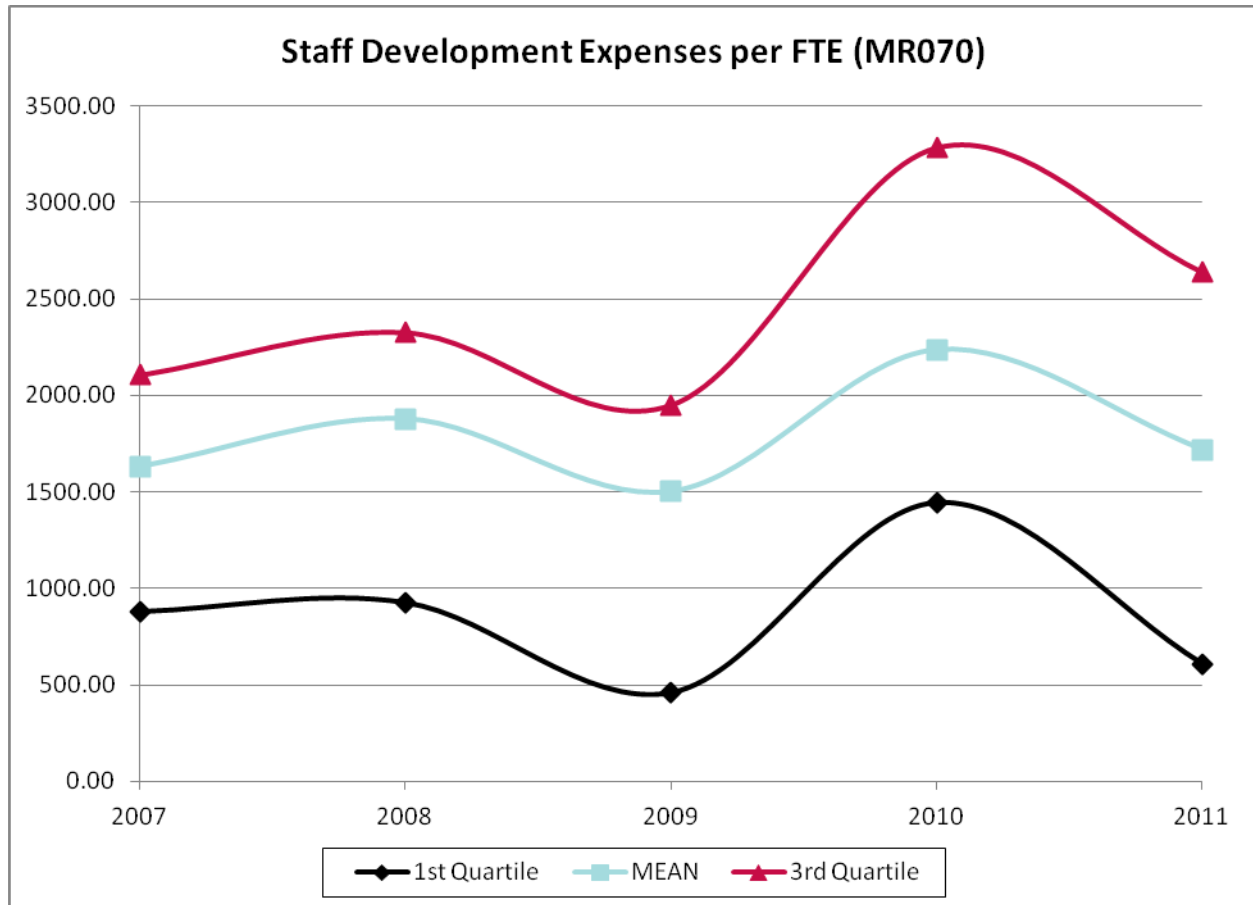


**Note:** this ratio was new for 2008, but the data has been calculated manually for 2007 in order to provide comparisons.

In the period covered 2007 to 2011 among the participating utilities:

- The average Return on Assets has decreased 7% from 2.44% to 2.28%.
- Both the 3<sup>rd</sup> quartile and mean realized the highest ROA in 2010, at 3.29% and 2.70% respectively.
- The 1<sup>st</sup> quartile ROA was highest in 2011 at 2.03%.

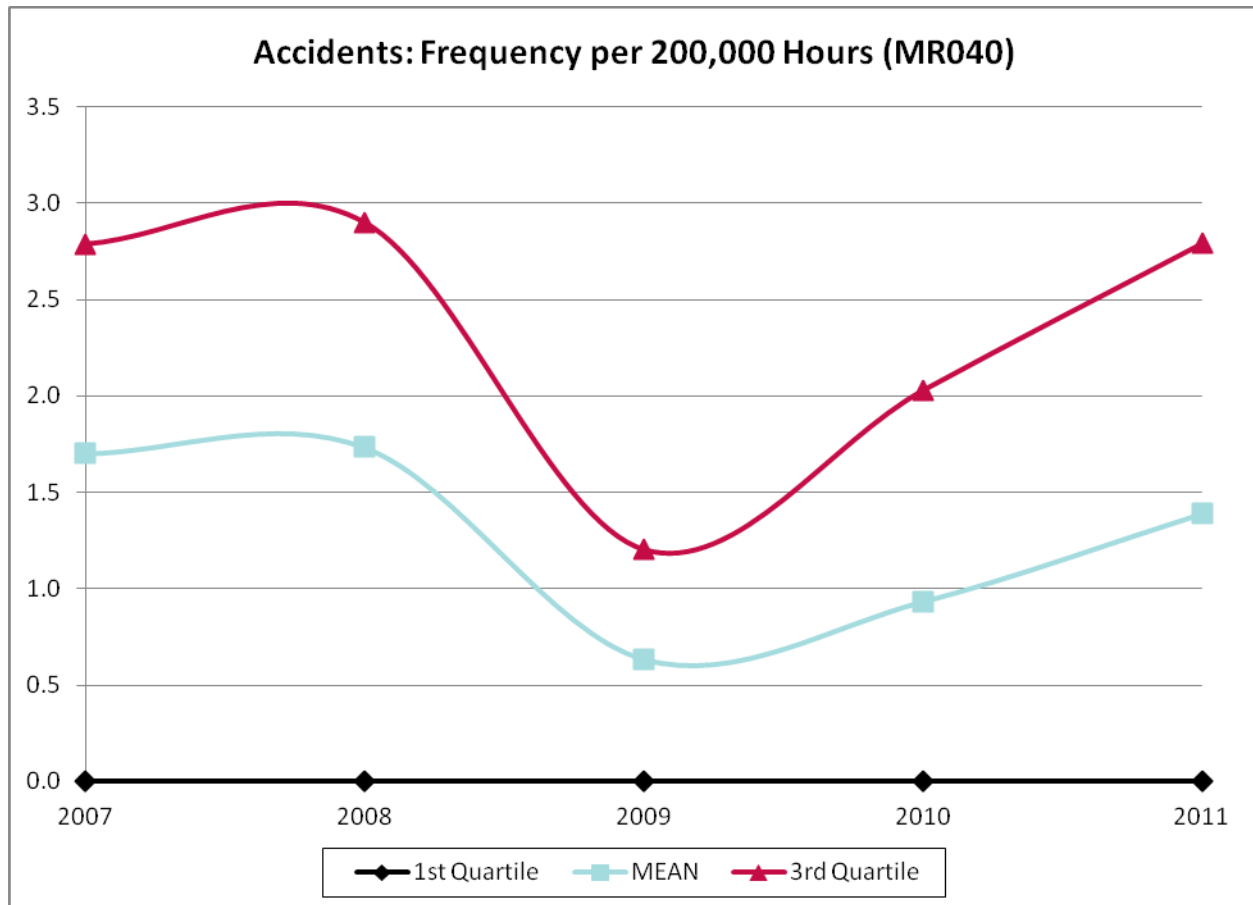
**Staff Development Expenses per FTE (MR070)**



In the period covered 2007 to 2011 among the participating utilities:

- The average LDC spent 5% more on Staff Development in 2011 than in 2007.
- There was a 49% increase in average expenses between 2009 and 2010 and a 23% decrease between 2010 and 2011 reflecting management response to training needs versus budget/economic considerations. There is a cyclic nature to the amount spent on staff development year over year.
- The 1<sup>st</sup> quartile group spent the least in 2009 at \$460 and overall has decreased spending by 31% since 2007.

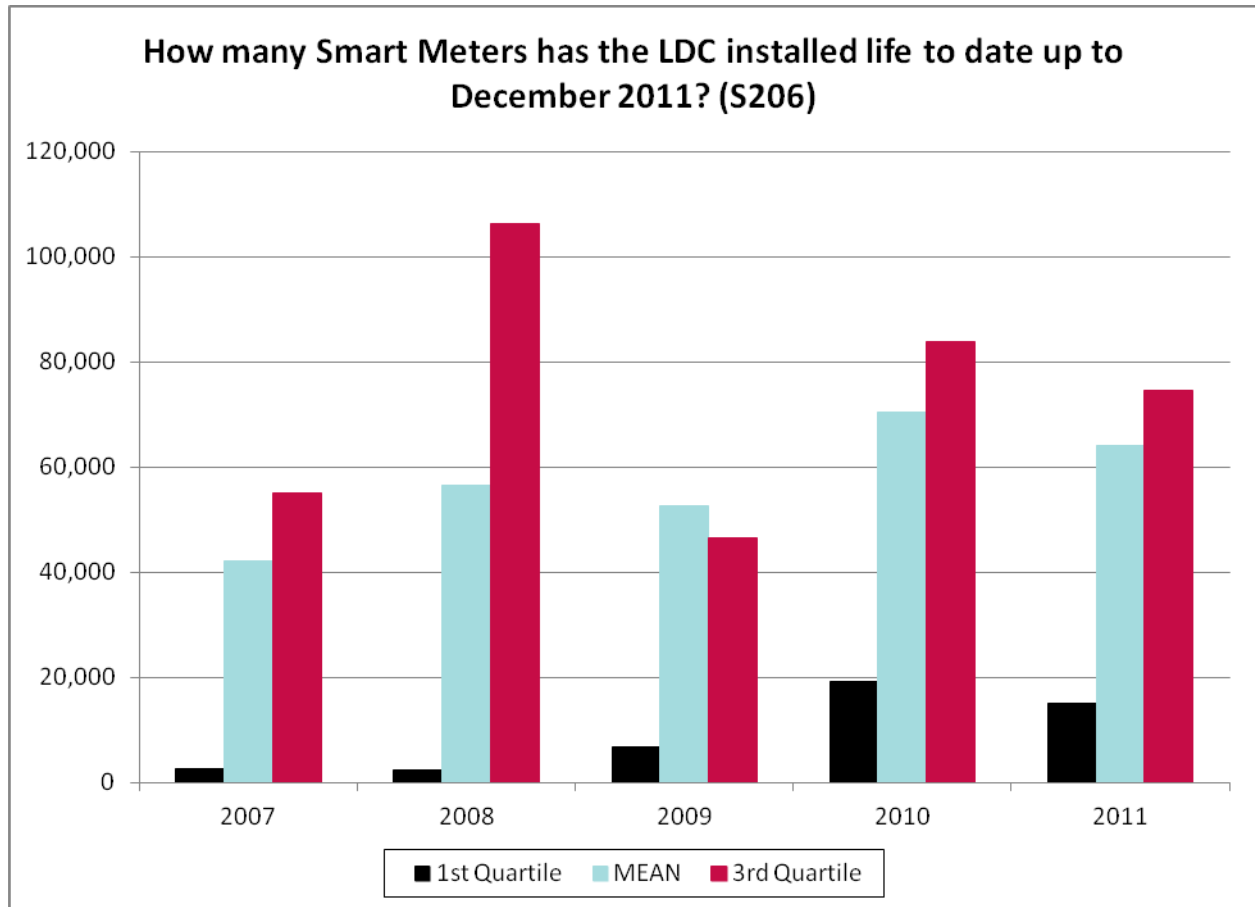
**Accidents: Frequency per 200,000 Hours (MR040)**



Between 2007 and 2011:

- On average, there has been an 18% decrease in the number of accidents since 2007 reflecting efforts by utilities and safety advocacy promoting zero accident tolerance levels and effects of staff awareness.
- Among participants, the lowest average frequency was in 2009 at 0.63 accidents per 200,000 Hours Worked and the highest frequency was 1.73 accidents per 200,000 Hours Worked in 2008.
- The 1<sup>st</sup> quartile is at 0 accidents for the last five years.
- The 3<sup>rd</sup> quartile reached its peak in 2008 with 2.9 accidents per 200,000 Hours Worked however both 2010 and 2011 have shown increases year over year and 2011 has approached the 2008 high.

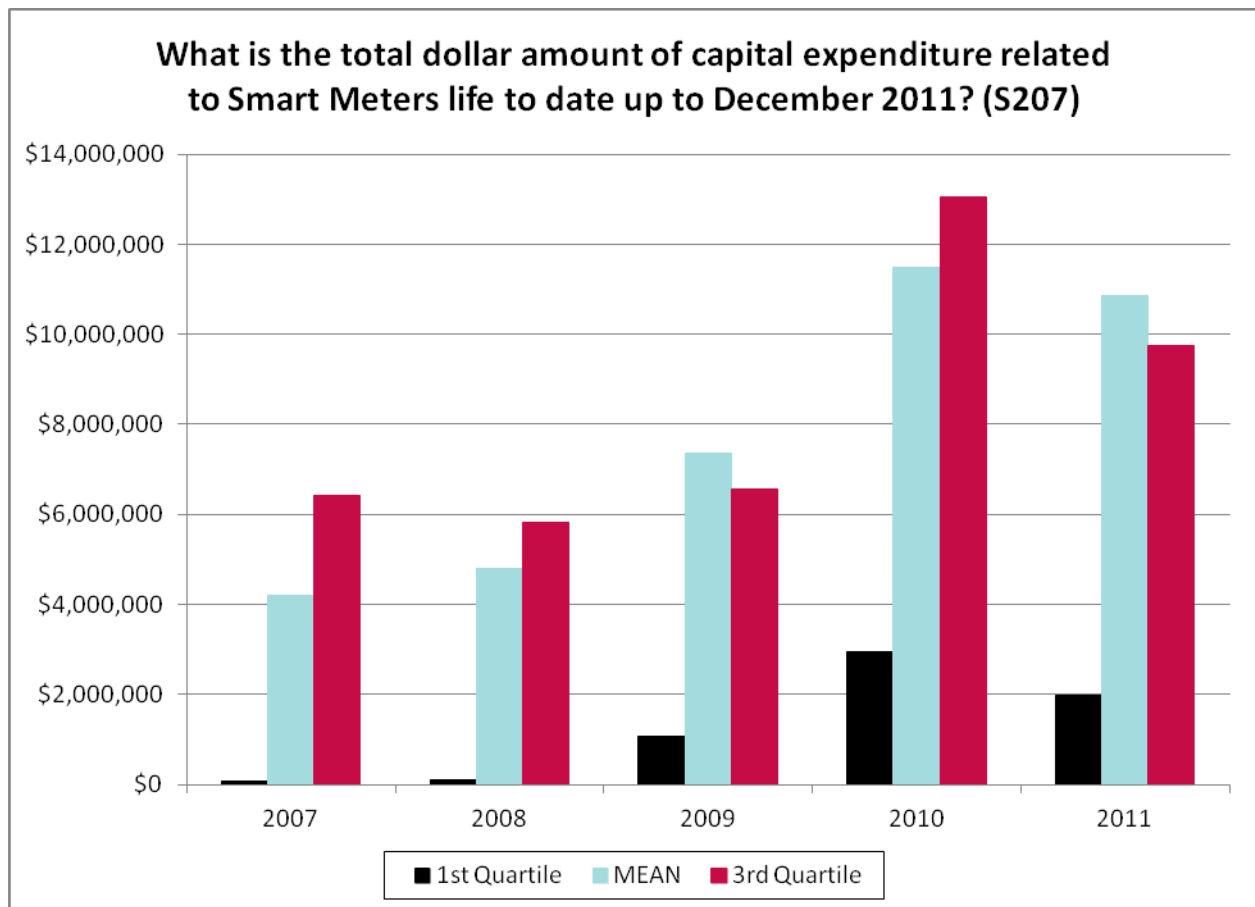
**How many Smart Meters has the LDC installed life to date up to December 2011? (S206)**



Since 2007:

- Currently 1,860,289 Smart Meters have been installed by the 29 surveyed utilities.
- 100% of the LDCs participating in the survey have installed Smart Meters.
- 10 of the 29 survey participants have already reached their installation targets.
- In the first two years of the program significant installations occurred in large utilities, with medium and small utilities reaching their installation targets more recently.
- Metering costs are reflecting changes relative to the methods employed to obtain meter data.

***What is the total dollar amount of capital expenditure related to Smart Meters life to date up to December 2011? (\$207)***



Since 2007 to the end of 2011 among the participating utilities:

- The average LDC has spent \$10,848,894 in capital expenditure related to Smart Meters.
- In total, \$314,617,935 of capital has been invested in Smart Meters.
- The program's range of expenditure by LDCs is \$728,249 to \$57,079,000.



# 2012 Utility Performance Management Survey

## Performance Scorecard ☒

Horizon Utilities Corporation

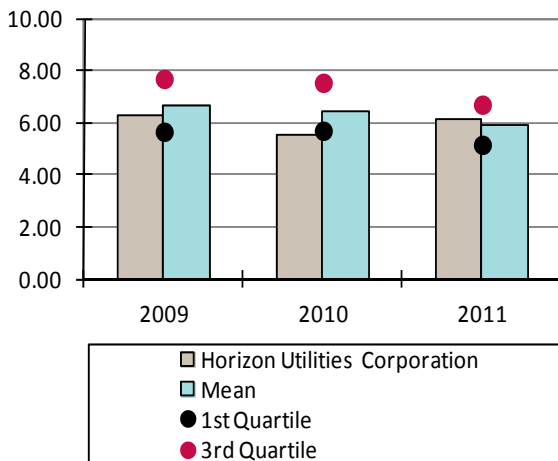


**UPM** Survey



## 1. Profitability

### FR300: Operating Margin (%)

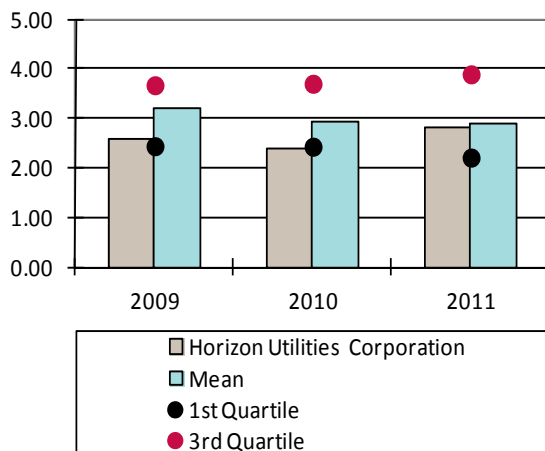


Operating Margin is defined as:

$$\frac{\text{EBIT}}{\text{Total Electricity Revenue}}$$

Operating margin reflects the profitability of the company as influenced by management decisions (interest and taxes are excluded). The higher the operating margin, the more profitable is the company's core business. This ratio indicates that in 2011 your LDC was slightly more effective than the average participant at managing your costs and contributing to the profitability of your business.

### FR310: Net Margin (%)

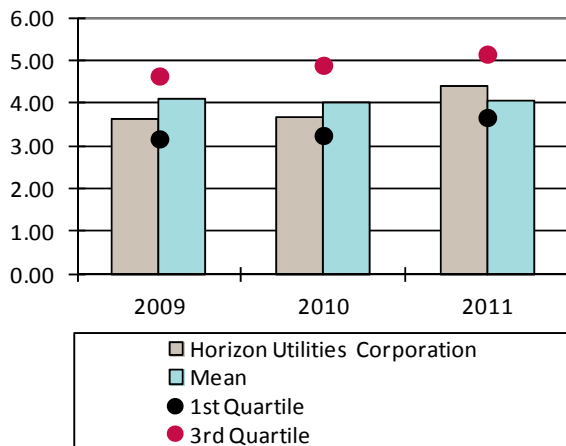


Net Margin is defined as:

$$\frac{\text{Net Income}}{\text{Total Electricity Revenue}}$$

Net margin is a measure of corporate profitability and a good way of comparing companies in the same industry, since such companies are generally subject to similar business conditions. Although your net margin has increased, you remain slightly below the average in 2011 with respect to generating sufficient income to cover financial expenses as well as operating expenses.

**FR290: Return on Capital Employed (%)**



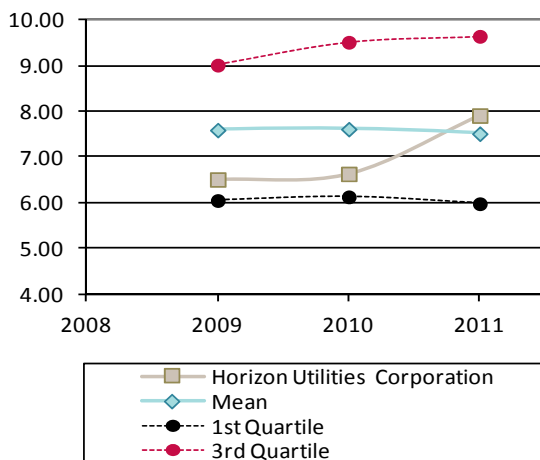
ROCE is defined as:

$$\frac{\text{Net Income}}{\text{Equity} + \text{Debt} - (\text{Cash} + \text{Short Term Investments})}$$

Equity + Debt - (Cash + Short Term Investments)

This ratio measures profit per dollar of capital employed. It is similar to Return on Assets but takes into account the sources of financing. It is commonly used as a measure for assessing whether a business generates enough returns to pay for its cost of capital. In 2011, your LDC is realizing greater returns from capital employed than the average participating utility - an increase from 2010.

**FR250: Return on Equity (%)**



ROE is defined as:

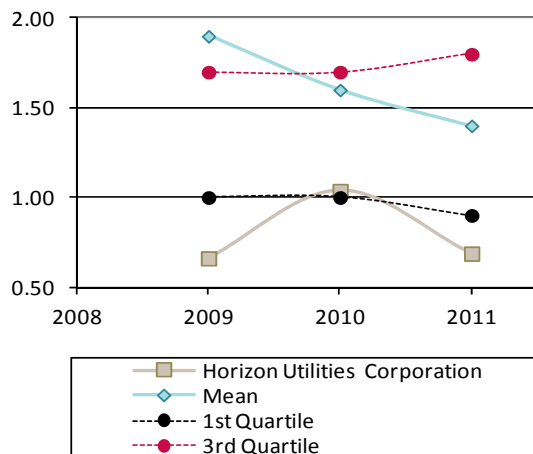
$$\frac{\text{Net Income}}{\text{Total Equity}}$$

(Including share capital and retained earnings)

This ratio measures profit per dollar of equity. Your ROE has increased in 2011 and compared to 2010 is above average for participating utilities.

## 2. Financial Strength

### FR030: Current Ratio



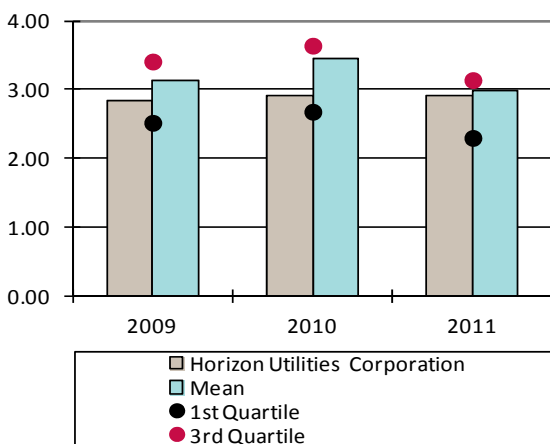
Current ratio is defined as:

$$\frac{\text{Current Assets}}{\text{Current Liabilities}}$$

It is a measure of the utility's liquidity. In 2011, you are in the 1<sup>st</sup> quartile for this metric, indicating a greater risk relative to most other participants with respect to meeting short term financial obligations.

It should be noted that when current liabilities exceed current assets (the current ratio is below 1), a company may have problems meeting its short-term obligations.

### FR320: Interest Coverage Ratio

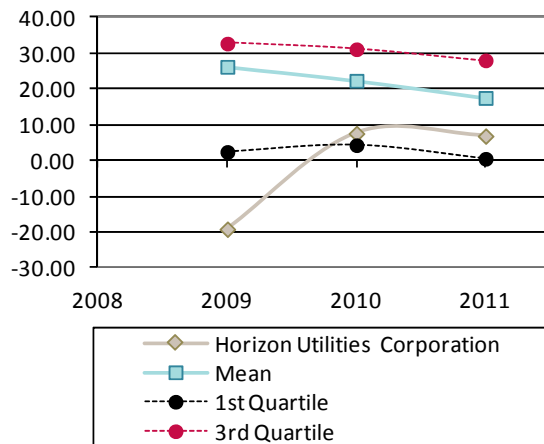


The Interest Coverage Ratio is calculated as:

$$\frac{\text{EBIT}}{\text{Expenses} - \text{Financial}}$$

It is a measure of a company's ability to honour its debt payments. 2011 results indicate your utility is close to the average for participants.

### FR040: Number of Days Cash Reserve



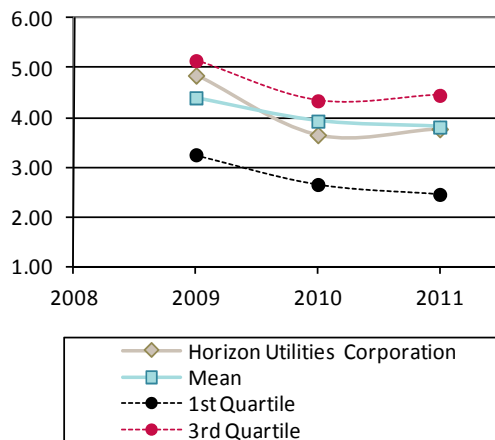
This ratio is defined as:

Cash + Short Term Investments  
(Cost of Power, Operations, Maintenance, Admin.,  
Financing charges, and Capital Expenditures) / 365

This ratio measures the utility's ability to meet its short term cash requirements. Your 2011 results are similar to 2010 and close to the 1<sup>st</sup> quartile.

Because your number of days reserve is lower than the mean, there is a greater risk in your utility relative to meeting your short term cash commitments than in most of the participants.

### FR140: Operating Ratio (%)



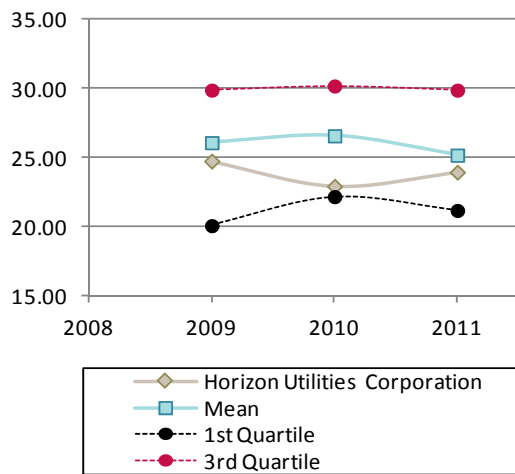
Operating Ratio is defined as

Total O & M Expenses  
Total Revenue

This ratio provides an indication of the utility's effectiveness in managing operation and maintenance costs as a percent of its total electricity revenue. Similar to 2010, your 2011 results indicate an average level of O&M costs per revenue relative to the other participants. Influences may include the age of plant and the amount of plant replacement carried out by the utility.

### 3. Asset Utilization

#### FR050: Number of Days Sales Outstanding



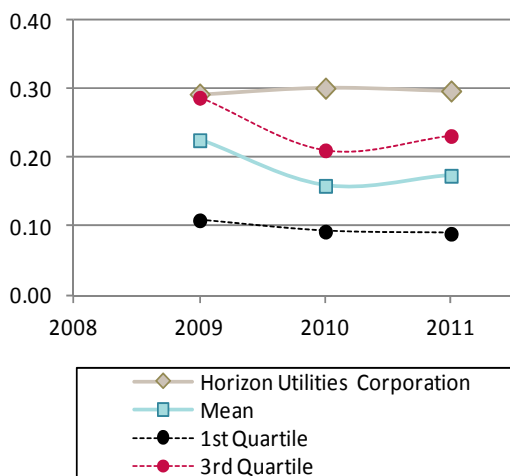
This ratio is defined as:

$$\frac{\text{Accounts Receivable: Electrical Energy at year end}}{(\text{Total Service Revenue} / 365)}$$

This ratio relates to the utility's ability to expedite the collection of its accounts receivable related to the sale of energy. It is influenced by utility collection practices and, together with the ratio Number of Days of Unbilled Revenue (FR070), will provide an indication of the utility's ability to manage its major accounts receivable balances.

You are near the average for this metric in 2011, reflecting good billing and collections practices.

#### FR100: Bad Debt as % of Revenue



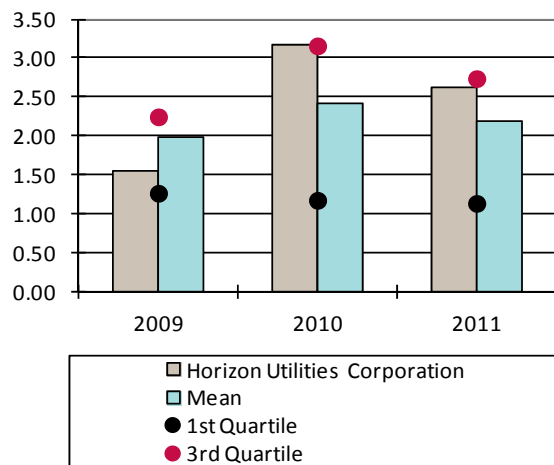
This ratio is defined as:

$$\frac{\text{Bad Debt}}{\text{Total Revenue}}$$

It indicates how effectively a utility is collecting revenue - the lower the percentage, the more effective the utility is at collecting service revenue. Major variances from year to year may result from economic conditions, or from large customers becoming insolvent.

You are in the third quartile for this ratio in 2009, 2010, and 2011, meaning that there is a higher risk to your utility than most participants.

### ER140: Inventory Turnover Ratio

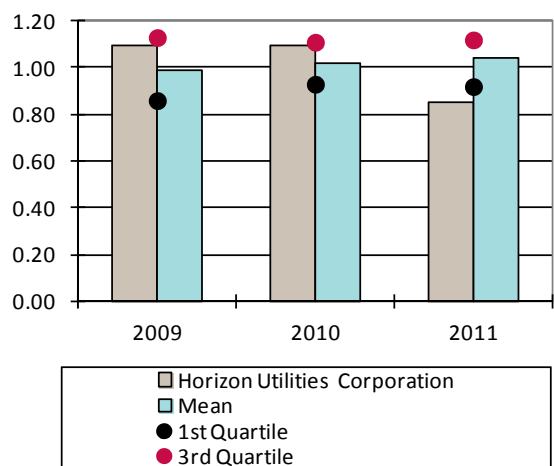


This ratio is defined as:

$$\frac{\text{Full Year of Cost of Materials Used}}{\text{Average Inventory}}$$

This ratio indicates how effectively a utility is managing its inventory. In 2010 and 2011, results indicate that you had a high rate of inventory turnover during a typical operating cycle. High rates of turnover may indicate unforeseen growth, or purchasing practices that are not accommodating normal operations.

### ER160: Asset Efficiency



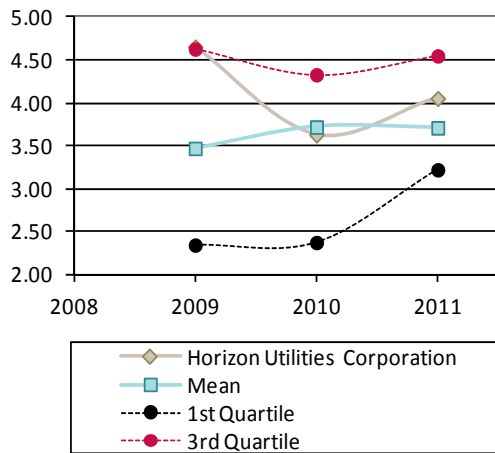
Asset Efficiency is defined as:

$$\frac{\text{Total Electricity Service Revenue}}{\text{Net Assets}}$$

The higher this ratio, the greater the revenue generated from existing assets. Your LDC was in the third quartile for this measure in 2009 and 2010, but you have dropped to the first quartile in 2011. Your capability to capture revenue from existing assets is declining and is less than most participating utilities.

#### 4. Employees

##### MR020: Short Term Absenteeism: Days per FTE

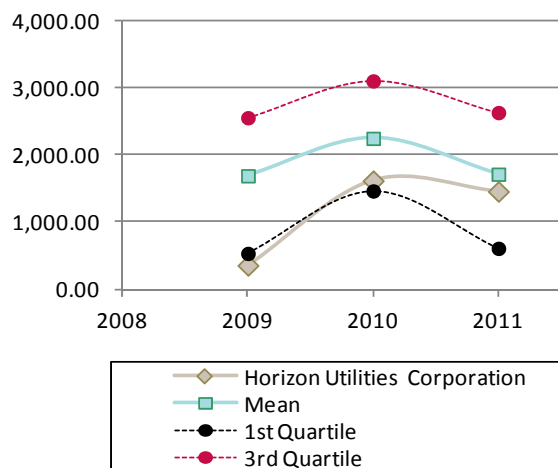


This ratio is defined as:

$$\frac{\text{Number of Short Term Absences}}{\text{Number of FTEs}}$$

This ratio calculates the number of work days lost due to short term absenteeism (5 days or less) per FTE. Absenteeism may be an indicator of employee satisfaction and/or health or safety or environmental conditions at the utility. In 2011, your employees took more short term absences than the average participating utility. The result is an increase over 2010.

##### MR070: Staff Development Expenses per FTE



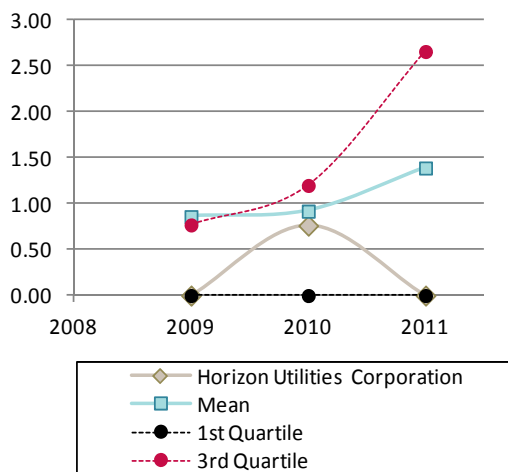
This ratio is defined as:

$$\frac{\text{Total Costs of Staff Development}}{\text{Number of FTEs}}$$

This ratio indicates the average cost spent per employee on staff development.

In 2011, your spending on staff development has increased to just below average from being at the 1<sup>st</sup> Quartile in 2009 and 2010. Spending is slightly less than the average participant.

### MR040: Accidents: Frequency per 200,000 hours

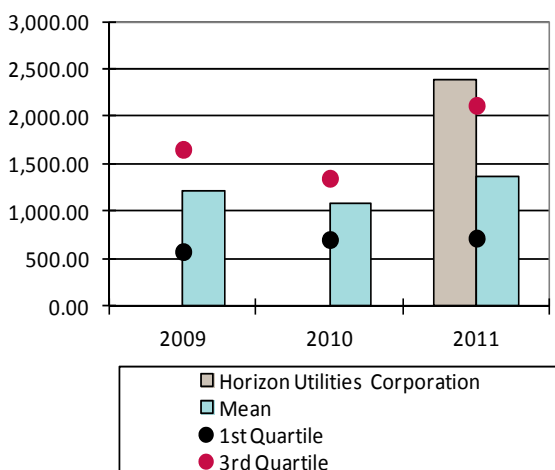


This ratio is defined as:

$$\frac{\text{Number of Compensable Injuries}}{\text{Number of Employee Hours Worked}} \times 200,000$$

It demonstrates the trend in frequency of on-the-job accidents. Only injuries where compensation is paid are included in this figure. A high accident frequency may indicate that more safety training is needed. In 2011 compensable injuries decreased to the 1<sup>st</sup> Quartile from just below average in 2010 reflecting an improvement. Your ratio is better than most 2011 participants.

### MR090: Cost of Safety Training per FTE



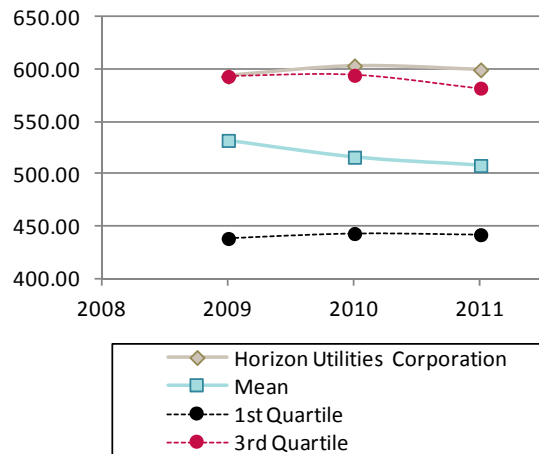
This ratio is defined as:

$$\frac{\text{Cost of Training on Safe Work Practices}}{\text{Number of FTEs}}$$

This ratio indicates the average cost spent per employee on safety training. It can be looked at in conjunction with MR040: Accidents: Frequency per 200,000 hours. Data limitations do not enable a trend to be assessed; however, in 2011 you spent more than most participants on safety training.



### S16: Number of Customers Per FTE



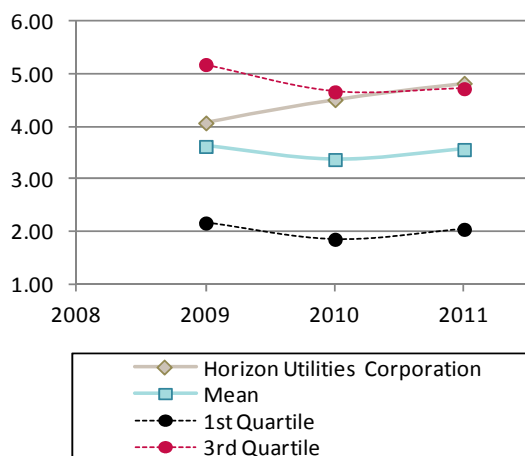
This ratio is defined as:

$$\frac{\text{Total Customers}}{\text{Total FTEs}}$$

This ratio is a traditional indicator of corporate performance; the greater the number of customers per employee, generally the more productive and efficient the organization. Your 2011 results indicate a higher than average ratio for this metric and most participants' ratios are below yours.

This ratio should not however be looked at in isolation. A high number could indicate growth in the total number of customers year over year. However, an increase in customers per FTE alone could reflect a policy of downsizing within the company.

### MR030: Overtime Hours as a % of Regular Hours



This ratio is defined as:

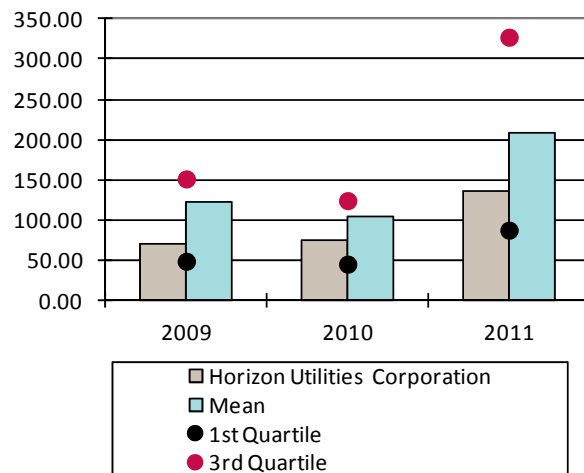
$$\frac{\text{Overtime Hours Worked}}{\text{Total Regular Hours}}$$

Although you were close to the average in 2009, in 2010 and 2011 your results are in the 3<sup>rd</sup> quartile and your employees worked more overtime compared with most participants' employees.

This measure provides an indication of how utilities manage their workload.

## 5. Customers

### SR180: Total Outage Minutes per Customer

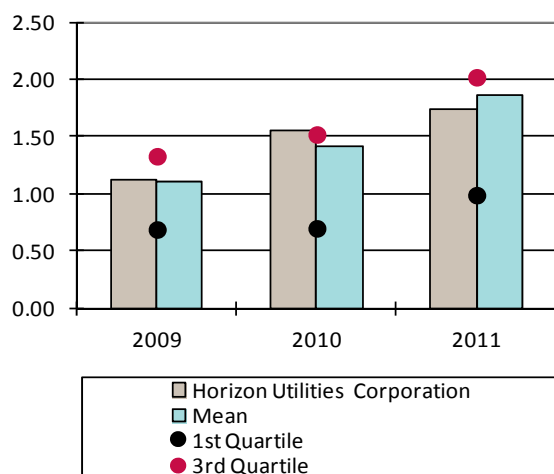


This ratio is defined as:

$$\frac{\text{Customer minutes of Interruption}}{\text{Number of Customers}}$$

This ratio takes into account total outage minutes per customer, including those caused by supply (Code 2). A higher ratio can be caused by such things as severe weather or by lack of adequate responsiveness on the part of the LDC. In 2011 the number of outage minutes per customer increased over 2010, however your result is below the average of utilities participating in the 2011 survey - better than many participants.

### SR090: SAIFI: LDC Distribution System

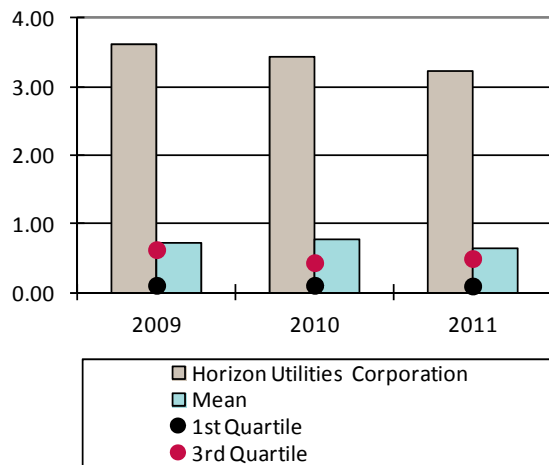


SAIFI is defined as:

$$\frac{\text{Total Number of Customer Interruptions}}{\text{Total Number of Customers}}$$

SAIFI is commonly used as a reliability indicator because it calculates the average number of interruptions that a customer would experience in a year. It is measured in units of interruptions per customer and it looks at the interruptions caused by the distribution system only. According to IEEE Standard 1366, the median value for North American utilities is approximately 1.10 interruptions per customer. 2011 results indicate an increase over 2010 and you are slightly below average relative to outages per customer for participants.

### CR100: Percent of Bills Cancelled and Re-issued

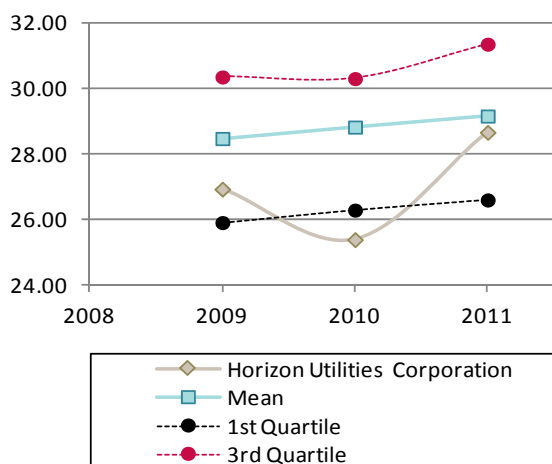


The calculation for this ratio is:

$$\frac{\text{Number of bills cancelled \& reissued}}{\text{Total number of bills issued}}$$

You are in the 3<sup>rd</sup> quartile with regards to rate of bill cancellation and re-issue in 2009, 2010, and 2011. This is an indication of a risk that improvements are necessary or that there should be a review of billing and collection procedures.

### S172: Monthly Bill for 1000kWh Residential Customers

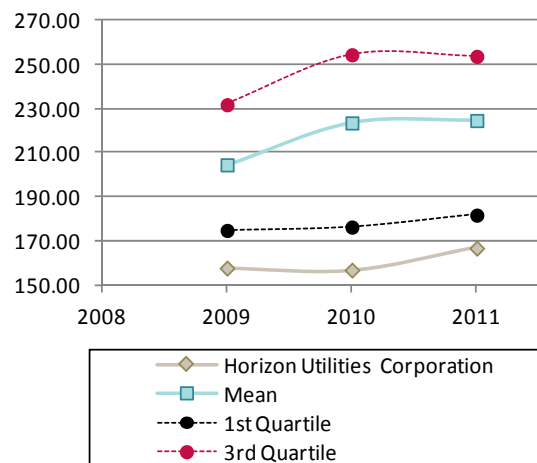


This figure includes both customer and distribution charges.

Your customers were paying less than most LDC customers in 2009 and 2010; however, in 2011 monthly bills are slightly below the average of participating utilities.

## 6. Efficiency

### ER020: Controllable Expense per Customer (\$)

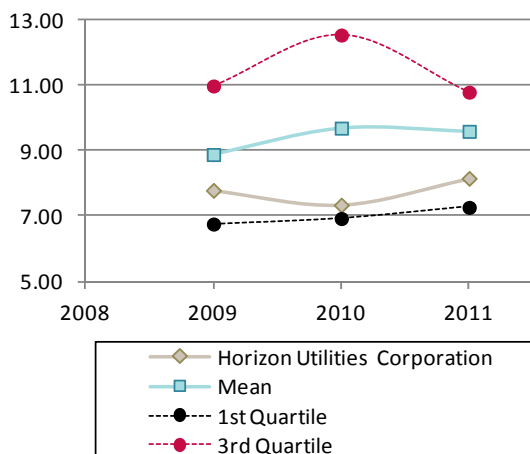


This ratio is defined as:

$$\frac{\text{Controllable Costs}}{\text{Total customers}}$$

This measure provides an indication of the utility's effectiveness in managing controllable costs. 2011 results are in the 1<sup>st</sup> quartile indicating that your controllable expenses per customer are lower than most participants. This ratio can be influenced by the degree to which a utility provides various customer services. It can also be influenced by the age of the plant.

### ER030: Controllable Expense per MWh Sold (\$)

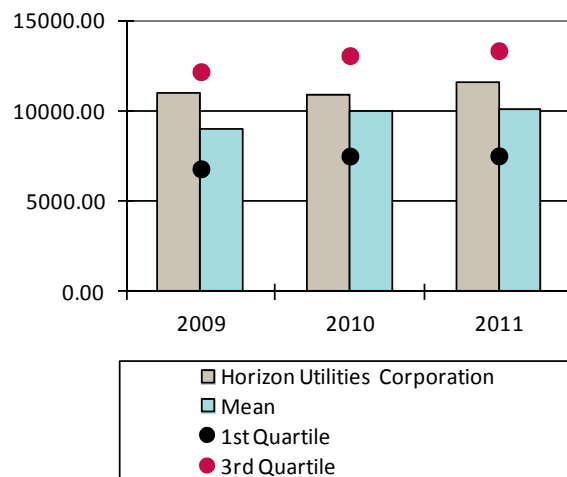


This ratio is defined as:

$$\frac{\text{Controllable Costs}}{\text{Total MWh Billed}}$$

This measure provides an indication of the utility's effectiveness in managing controllable costs. 2011 results are just above the 1<sup>st</sup> quartile, indicating lower levels of controllable expenses per MWh Billed than most 2011 participants. This result is consistent with previous years. As with ER020, this ratio can be influenced by the degree to which a utility provides various customer services. It can also be influenced by the age of the plant.

### ER150: Controllable Cost per Circuit km of Line

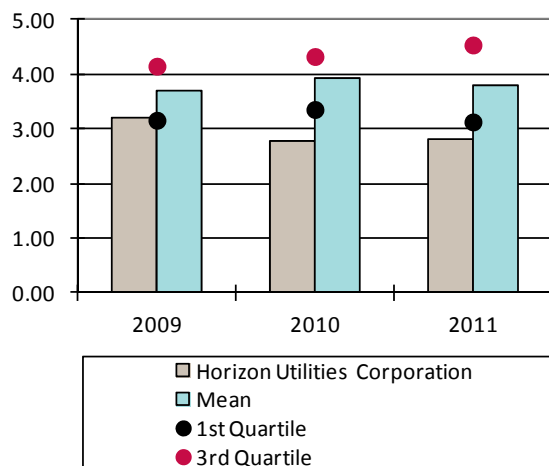


This ratio is defined as:

$$\frac{\text{Controllable Costs}}{\text{Total Circuit km of line}}$$

This measure provides an indication of the utility's effectiveness in managing controllable costs. In 2011, the ratio is above average in this metric indicating a slightly higher ratio of controllable costs per circuit km of line than the average LDC. This ratio may be impacted by customer density and by the age of the plant. The result is consistent with 2009 and 2010.

### S238: Distribution System Losses (%)



This metric identifies the losses associated with providing electricity from generators to end-users.

Losses can be the result of technical deficiencies or theft of power.

In 2011, results in the 1<sup>st</sup> quartile are comparable to 2010 and your LDC is reporting a smaller percent of losses than most of the 2011 participants.

# 2012 Utility Performance Management Survey

**UPM** Survey



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