

## **SERVICE QUALITY**

## REVIEW

# January 1 – December 31, 2012 Report



January 1 – December 31, 2012

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## **EXECUTIVE SUMMARY**

Rocky Mountain Power has had a number of Performance Standards and Customer Guarantee service quality measures and reports currently in place. These standards and measures are reflective of Rocky Mountain Power's performance (both customer service and network performance) in providing customers with high levels of service. The Company developed these standards and measures using industry standards for collecting and reporting performance data where they exist. In some cases, Rocky Mountain Power has decided to exceed these industry standards. In other cases, largely where the industry has no established standards, Rocky Mountain Power has developed metrics, reporting and targets. These existing standards and measures can be used over time, both historically and prospectively, to measure the quality of service delivered to our customers. In 2012 the Company and stakeholders collaboratively developed reliability reporting rules that were intended to replace the Service Standards Program. Many elements of this report were supplemented or modified to reflect changes that occurred in the recently-adopted state rules.

## **1** Service Standards Program Summary<sup>1</sup>

•	
Customer Guarantee 1: Restoring Supply After an Outage	The Company will restore supply after an outage within 24 hours of notification with certain exceptions as described in Rule 25.
Customer Guarantee 2:	The Company will keep mutually agreed upon
Appointments	appointments, which will be scheduled within a two-hour time window.
Customer Guarantee 3:	The Company will switch on power within 24 hours of the
Switching on Power	customer or applicant's request, provided no construction
	is required, all government inspections are met and
	communicated to the Company and required payments
	are made. Disconnection for nonpayment, subterfuge or
	theft/diversion of service is excluded.
Customer Guarantee 4:	The Company will provide an estimate for new supply to
Estimates For New Supply	the applicant or customer within 15 working days after the
	initial meeting and all necessary information is provided to
	the Company and any required payments are made.
Customer Guarantee 5:	The Company will respond to most billing inquiries at the
Respond To Billing Inquiries	time of the initial contact. For those that require further
	investigation, the Company will investigate and respond to
	the Customer within 10 working days.
Customer Guarantee 6:	The Company will investigate and respond to reported
Resolving Meter Problems	problems with a meter or conduct a meter test and report
	results to the customer within 10 working days.
Customer Guarantee 7:	The Company will provide the customer with at least two
Notification of Planned Interruptions	days' notice prior to turning off power for planned
	interruptions.

## **1.1 Rocky Mountain Power Customer Guarantees**

Note: See Rule 25 for a complete description of terms and conditions for the Customer Guarantee Program.

<sup>&</sup>lt;sup>1</sup> In 2012, rules were codified in Utah Regulations R746-313. The Company, Commission and other stakeholders have been working to develop mechanisms that comply with these rules and that will supersede the Company's Service Standards Program.



## **1.2 Rocky Mountain Power Performance Standards<sup>1</sup>**

Network Performance Standard 1: Improve System Average Interruption Duration Index (SAIDI)	No goal at this time. Modification is pending rulemaking.
Network Performance Standard 2: Improve System Average Interruption Frequency Index (SAIFI)	No goal at this time. Modification is pending rulemaking.
Network Performance Standard 3: Improve Under Performing Circuits	The Company will reduce by 20% the circuit performance indicator (CPI) for a maximum of five underperforming circuits on an annual basis within five years after selection.
Network Performance Standard 4: Supply Restoration	The Company will restore power outages due to loss of supply or damage to the distribution system within three hours to 80% of customers on average.
Customer Service Performance Standard 5: Telephone Service Level	The Company will answer 80% of telephone calls within 30 seconds. The Company will monitor customer satisfaction with the Company's Customer Service Associates and quality of response received by customers through the Company's eQuality monitoring system.
Customer Service Performance Standard 6: Commission Complaint Response/Resolution	The Company will a) respond to at least 95% of non- disconnect Commission complaints within three working days; b) respond to at least 95% of disconnect Commission complaints within four working hours; and c) resolve 95% of informal Commission complaints within 30 days, except in Utah where the Company will resolve 100% of informal Commission complaints within 30 days.

Note: Performance Standards 1, 2 & 4 are for underlying performance days and exclude Major Events.

<sup>&</sup>lt;sup>1</sup> In 2012, rules were codified in Utah Regulations R746-313. The Company, Commission and other stakeholders have been working to develop mechanisms that comply with these rules and that will supersede the Company's Service Standards Program.



## **1.3 Reliability Definitions**

#### Interruption Types

Below are the definitions for interruption events. For further details, refer to IEEE 1366-2003<sup>2</sup> Standard for Reliability Indices.

#### Sustained Outage

A sustained outage is defined as an outage of greater than 5 minutes in duration.

#### Momentary Outage Event

A momentary outage is defined as an outage equal to or less than 5 minutes in duration. Rocky Mountain Power has historically captured this data using substation breaker fault counts, but where SCADA (Supervisory Control and Data Acquisition Systems) exist, uses this data to calculate consistent with IEEE 1366-2003.

#### Reliability Indices

#### SAIDI

SAIDI (system average interruption duration index) is an industry-defined term to define the average duration summed for all sustained outages a customer experiences in a given period. It is calculated by summing all customer minutes lost for sustained outages (those exceeding 5 minutes) and dividing by all customers served within the study area. When not explicitly stated otherwise, this value can be assumed to be for a one-year period.

#### Daily SAIDI

In order to evaluate trends during a year and to establish Major Event Thresholds, a daily SAIDI value is often used as a measure. This concept was introduced in IEEE Standard 1366-2003. This is the day's total customer minutes out of service divided by the static customer count for the year. It is the total average outage duration customers experienced for that given day. When these daily values are accumulated through the year, it yields the year's SAIDI results.

#### SAIFI

SAIFI (system average interruption frequency index) is an industry-defined term that attempts to identify the frequency of all sustained outages that the average customer experiences during a given time-frame. It is calculated by summing all customer interruptions for sustained outages (those exceeding 5 minutes in duration) and dividing by all customers served within the study area.

#### CAIDI

CAIDI (customer average interruption duration index) is an industry-defined term that is the result of dividing the duration of the average customer's sustained outages by the frequency of outages for that average customer. While the Company did not originally specify this metric under the umbrella of the Performance Standards Program within the context of the Service Standards Commitments, it has since been determined to be valuable for reporting purposes. It is derived by dividing PS1 (SAIDI) by PS2 (SAIFI).

#### **MAIFI**<sub>E</sub>

 $MAIFI_E$  (momentary average interruption event frequency index) is an industry-defined term that attempts to identify the frequency of all momentary interruption events that the average customer experiences during a given time-frame. It is calculated by counting all momentary operations which occur within a 5 minute time period, as long as the sequence did not result in a device experiencing a sustained interruption. This series of actions typically occurs when the system is trying to re-establish

<sup>&</sup>lt;sup>2</sup> IEEE 1366-2003 was adopted by the IEEE on December 23, 2003. The definitions and methodology detailed therein are now industry standards. Later, in Docket No. 04-035-T13 the Utah Public Utilities Commission adopted the standard methodology for determining major event threshold.



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energy flow after a faulted condition, and is associated with circuit breakers or other automatic reclosing devices.

#### Lockout

Lockout is the state of device when it attempts to re-establish energy flow after a faulted condition but is unable to do so; it systematically opens to de-energize the facilities downstream of the device then recloses until a lockout operation occurs. The device then requires manual intervention to reenergize downstream facilities. This is generally associated with substation circuit breakers and is one of the variables used in the Company's calculation of blended metrics.

#### CEMI

CEMI is an acronym for Customers Experiencing Multiple (Momentary Event and Sustained) Interruptions. This index depicts repetition of outages across the period being reported and can be an indicator of recent portions of the system that have experienced reliability challenges.

#### **CPI99**

CPI99 is an acronym for Circuit Performance Indicator, which uses key reliability metrics of the circuit to identify underperforming circuits. It excludes Major Event and Loss of Supply or Transmission outages. The variables and equation for calculating CPI are:

CPI = Index \* ((SAIDI \* WF \* NF) + (SAIFI \* WF \* NF) + (MAIFI<sub>E</sub> \* WF \* NF) + (Lockouts \* WF \* NF))

#### Index: 10.645

SAIDI: Weighting Factor 0.30, Normalizing Factor 0.029

SAIFI: Weighting Factor 0.30, Normalizing Factor 2.439

MAIFIE: Weighting Factor 0.20, Normalizing Factor 0.70

Lockouts: Weighting Factor 0.20, Normalizing Factor 2.00

Therefore,  $10.645 * ((3-year SAIDI * 0.30 * 0.029) + (3-year SAIFI * 0.30 * 2.439) + (3-year MAIFI_{E} * 0.20 * 0.70) + (3-year breaker lockouts * 0.20 * 2.00)) = CPI Score$ 

#### **CPI05**

CPI05 is an acronym for Circuit Performance Indicator, which uses key reliability metrics of the circuit to identify underperforming circuits. Unlike CPI99, it includes Major Event and Loss of Supply or Transmission outages. The calculation of CPI05 uses the same weighting and normalizing factors as CPI99.

#### Performance Types

Rocky Mountain Power recognizes two categories of performance: underlying performance and major events. Major events represent the atypical, with extraordinary numbers and durations for outages beyond the usual. Ordinary outages are incorporated within underlying performance. These types of events are further defined below.

#### Major Events

A Major Event is defined as a 24-hour period where SAIDI exceeds a statistically derived threshold value (Reliability Standard IEEE 1366-2003) based on the 2.5 beta methodology. For the time period January 1 through December 31, 2013, the major event threshold calculated is 5,554,098 customer minutes interrupted, calculated using a frozen customer count for the year of 856,927 customers, which equates to 6.48 Utah SAIDI minutes.



#### Underlying Events

Within the industry, there has been a great need to develop methodologies to evaluate year-on-year performance. This has led to the development of methods for segregating outlier days, via the approaches described above. Those days which fall below the statistically derived threshold represent "underlying" performance, and are valid. If any changes have occurred in outage reporting processes, those impacts need to be considered when making comparisons. Underlying events includes all sustained interruptions, whether of a controllable or non-controllable cause, exclusive of major events, prearranged and customer requested interruptions.

#### Controllable Events

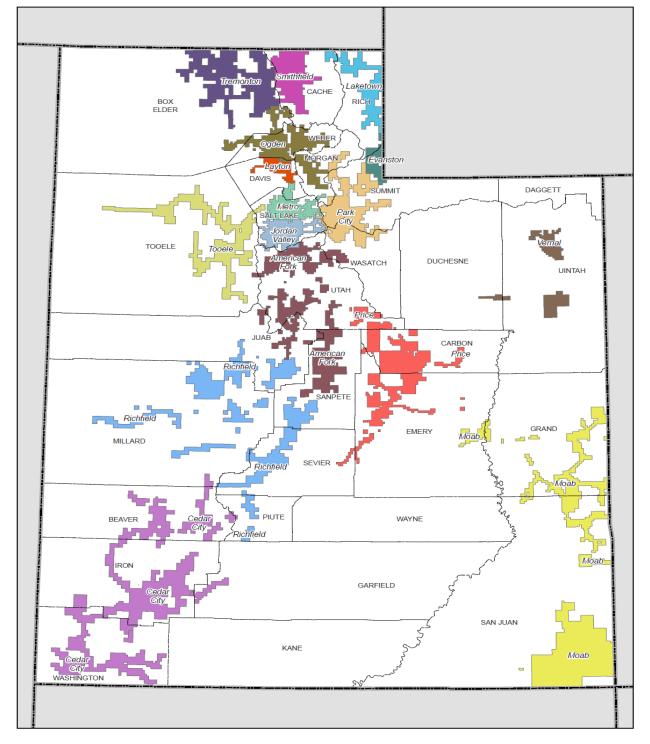
In 2008, the Company identified the benefit of separating its tracking of outage causes into those that can be classified as "controllable" (and thereby reduced through preventive work) from those that are "non-controllable" (and thus cannot be mitigated through engineering programs). For example, outages caused by deteriorated equipment or animal interference are classified as controllable distribution since the Company can take preventive measures with a high probability to avoid future recurrences; while vehicle interference or weather events are largely out of the Company's control and generally not avoidable through engineering programs. (It should be noted that Controllable Events is a subset of Underlying Events. The *Cause Code Analysis* section of this report contains two tables for Controllable Distribution and Non-controllable Distribution, which list the Company's performance by direct cause under each classification.) At the time that the Company established the determination of controllable and non-controllable distribution it undertook significant root cause analysis of each cause type and its proper categorization (either controllable or non-controllable). Thus, when outages are completed and evaluated, and if the outage cause designation is improperly identified as non-controllable, then it would result in correction to the outage's cause to preserve the association between controllable and non-controllable based on the outage cause code.



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## 1.4 Utah Distribution Service Area Map with Operating Areas/Districts

Below is a graphic showing the specific areas where the Company's distribution facilities are located.





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## 2 RELIABILITY PERFORMANCE

As shown in charts under subsections 2.1 and 2.2 below, the Company's 2012 year-end underlying reliability results continue to demonstrate improvements as measured by both SAIDI and SAIFI. History reflecting these metrics is displayed in Sections 2.3 and 2.4. A newly-added section discussing baselines, which are a new requirement contained within the state's reliability reporting rules are contained in Section 2.5. Cause code information, which is reported consistently with past Service Quality Review Reports is shown in Section 2.6. Finally, Section 2.7 contains reporting information that is consistent with certain new features proscribed in Utah Title 746.313.

During the period, five major events and four significant event days<sup>3</sup> were recorded; all significant event days were related to loss of supply outages. The major events, each of which were the result of weather, excluded 46 minutes from total performance during the period, and the significant event days account for approximately 19 minutes (12%) of the period's underlying results.

MAJOR EVENTS									
Date	Cause	SAIDI							
January 18-19, 2012	Thunderstorms/Pole Fires	6							
January 21, 2012	Thunderstorms/Pole Fires	7							
July 13, 2012	Thunderstorms	7							
September 1, 2012	Thunderstorms	11							
November 9-12, 2012	Snowstorms	15							
	46								

#### Major Event General Description

**January 18, 19, 21:** A Pacific storm system coming through California into Utah from January 18-21, 2012 caused substantial damage to facilities and significant customer interruptions in Rocky Mountain Power service territories. The storm impacted operations in two waves with a temporary lull (January 20) having very little activity. The first wave of the storm resulted primarily in pole fires due to light rain or snow mixing with accumulated dust or salt contamination on electrical facilities, and the second wave was snow-, wind- and tree-related outages with another round of pole fires. Several insulators from burned structures were collected by the Company for study.

Interruptions occurred on 171 substations serving 239 circuits. The longest interruption of the major event occurred on Jordan Valley's Herriman #11 circuit, affecting 5 customers for 1,628 minutes (27 hours) due to a pole fire. Facilities damage in Utah included replacement of 33 distribution poles, 2 transmission poles, 53 crossarms, 11 transformers, and approximately 7,000 line feet of conductor.

Since the storm occurred in two waves, the Company filed a single major event report for all three days, noting the normal day between them (January 20). In Docket No. 12-035-70, the

<sup>&</sup>lt;sup>3</sup> Significant event days are 1.75 times the standard deviation of the company's natural log daily SAIDI results (by state).



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Commission acknowledged the filing and recognized the Division's recommendation for approval of the filing but as separate major events, thereby designating the events as two Approved Major Events.

**July 13:** Thunderstorms in Utah caused extensive damage to Rocky Mountain Power facilities on July 13 resulting in more than 40,000 sustained customer interruptions. High winds slapped lines together, toppled trees and blew branches into distribution lines in several counties, primarily in the Company's Salt Lake City Metro and Jordan Valley operating areas. Most significantly, a microburst in Summit County hit a 138kV line at about 6:20pm and a sub-transmission line went out at 9:22pm, taking out power to more than 90% of the Company's Park City customers. In Docket No. 12-035-93, the Commission acknowledged the filing and recognized the Division's recommendation for approval.

**September 1:** A blustery day of thunderstorms in Utah on September 1, 2012 caused extensive damage to Rocky Mountain Power facilities due to lightning, wind and rain, primarily in the Company's Ogden operating area. High winds slapped lines together, toppled trees and blew branches into distribution lines. The National Weather Service issued flash flood warnings from Provo to Green River. Sustained interruptions occurred on 90 substations serving 110 circuits. In Docket No. 12-035-98, the Commission acknowledged the filing and recognized the Division's recommendation for approval.

**November 9-12:** Beginning on November 9, 2012, the Salt Lake Valley experienced a lake-effect enhanced snowstorm that delivered heavy, wet snow with an accumulation of 10 to 30 inches over the next few days. As the trees still carried significant foliage in early November, the snow-laden trees and limbs caused extensive damage to Rocky Mountain Power overhead facilities. Sustained interruptions occurred on 116 substations serving 211 circuits. In Docket No. 12-035-115, the Commission acknowledged the filing and recognized the Division's recommendation for approval.

SIGNIFICANT EVENT DAYS											
Date	UnderlyingPercent ofSAIDIUnderlyingSAIDI (157)		CD SAIDI	Percent of Total CD SAIDI (46)	CD Percent of Day	Primary Cause					
01/07/2012	5.6	3.6%	0.47	1.0%	8.4%	Loss of Supply					
01/11/2012	5.7	3.7%	0.04	0.1%	0.7%	Loss of Supply					
07/05/2012	3.2	2.1%	0.46	1.0%	14.2%	Loss of Supply					
10/25/2012	4.3	2.8%	0.98	2.1%	22.6%	Loss of Supply					
TOTAL	18.9	12.0%	1.95	4.2%	10.3%						

#### Significant Event General Descriptions

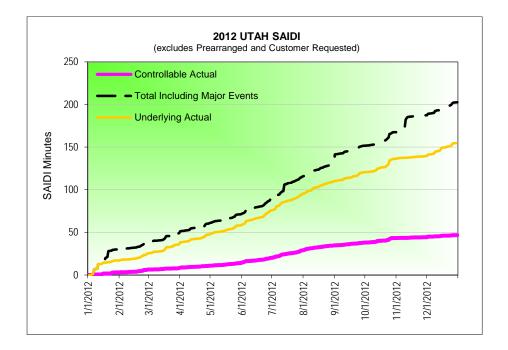
- 1/7/12 snowstorms and loss of Tooele to Terminal 138kV line
- 1/11/12 loss of 138kV due to conductor down between Praxair tap and Pine Canyon
- 7/5/12 several lightning caused pole fires and loss of substation or transmission lines
- 10/25/12 Parowan-West Cedar 138kV locked open due to floating conductor on 69kV



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## 2.1 System Average Interruption Duration Index (SAIDI)

	January 1 through December 31, 2012
UTAH	SAIDI Actual
Total	203
Underlying	157
Controllable Distribution	46

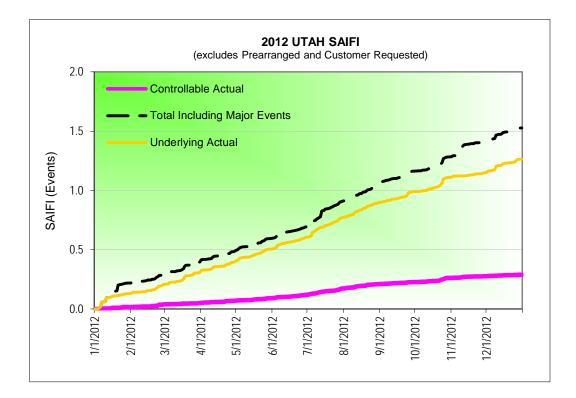




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## 2.2 System Average Interruption Frequency Index (SAIFI)

	January 1 through December 31, 2012
UTAH	SAIFI Actual
Total	1.527
Underlying	1.283
Controllable Distribution	0.275

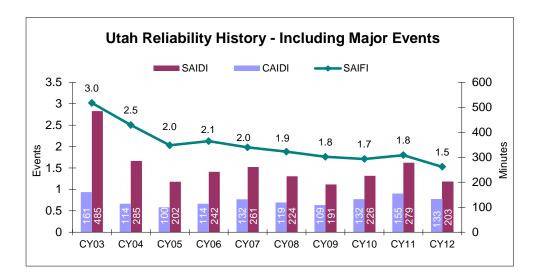


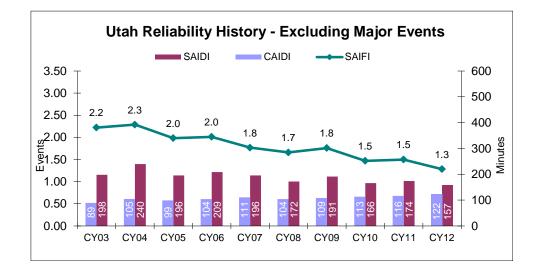


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## 2.3 Reliability History

Historically the Company has significantly improved reliability as measured by all key reliability indices. These are shown below, and demonstrate the efficacy of the long-term improvement strategies undertaken since early in the decade. It is particularly noteworthy that reliability has improved for both underlying and major event performance within the state.







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## 2.4 Controllable, Non-Controllable and Underlying Performance Review

In 2008 the Company introduced a further categorization of outage causes, which it subsequently used to develop improvement programs as deployed by engineering resources. This categorization was titled Controllable Distribution outages and recognizes that certain types of outages can be costeffectively avoided. So, for example, animal-caused interruptions, as well as equipment failure interruptions have a less random nature than lightning caused interruptions; other causes have also been determined and are specified in Section 2.5. Engineers can implement plans to mitigate against controllable distribution outages and provide better future reliability at the lowest possible cost. At that time, there was concern that the Company would lose focus on non-controllable outages<sup>4</sup>.

The graphic history demonstrates controllable, non-controllable and underlying performance on a rolling 12-month basis. Analysis of the trends displayed in the charts below shows a general improving trend for all charts. In order to also focus on non-controllable outages, the Company has continued to improve its resilience to extreme weather using such programs as its visual assurance program to evaluate facility condition. It also has undertaken efforts to establish impacts of loss of supply events on its customers and deliver appropriate improvements when identified. Further, it has recently deployed a new web-based notification tool for alerting field engineering and operational resources when devices have exceeded performance thresholds. These notifications are conducted regardless of whether the outage cause was controllable or non-controllable.

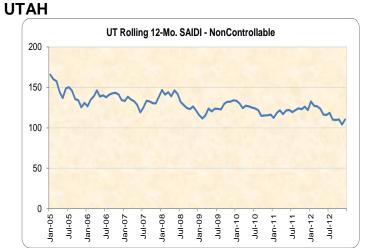
<sup>&</sup>lt;sup>4</sup> 3. The Company shall provide, as an appendix to its Service Quality Review reports, information regarding non-controllable outages, including, when applicable, descriptions of efforts made by the Company to improve service quality and reliability for causes the Company has

identified as not controllable.

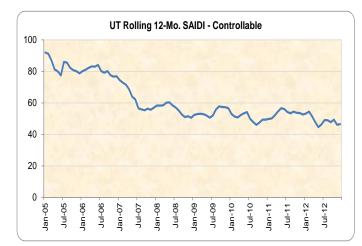
<sup>4.</sup> The Company shall provide a supplemental filing, within 90 days, consisting of a process for measuring performance and improvements for the non-controllable events.

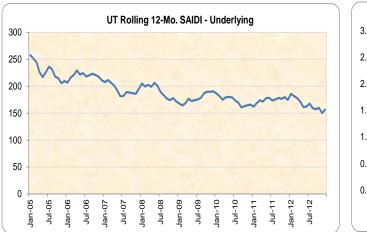


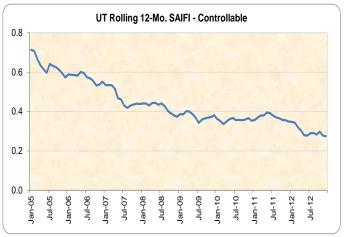
#### **Service Quality Review**

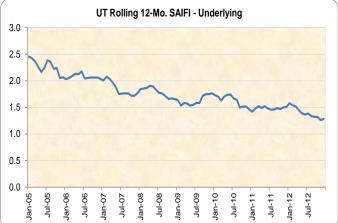












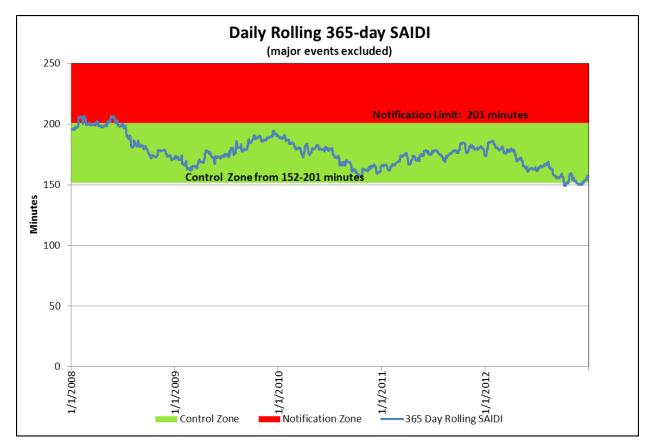


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## 2.5 Baseline Performance

In compliance with Utah Reliability Reporting Rules, the Company developed performance baselines that it subsequently filed for approval. While this process has not yet been completed, early discussions around these baseline levels suggest that stakeholders advocate annual refreshing of the methods that resulted in the baselines shown below. As a result, in future reports, the Company will provide a comparable dataset that shows the results of calculations if the last six years of daily reliability data is analyzed as was provided to support the results that were filed. This historic period is selected since major event thresholds rely on five years of data, and need to be augmented with the prior 365 days in order to construct the daily rolling 365-days curves used for these calculations. Using this history, the Company calculates a control limit using a 95% confidence interval level on the past six years of history resulting in 176 minutes. To establish a notification limit, the Company used a 95% probability level5 for the same history which resulted in 201 minutes for SAIDI.



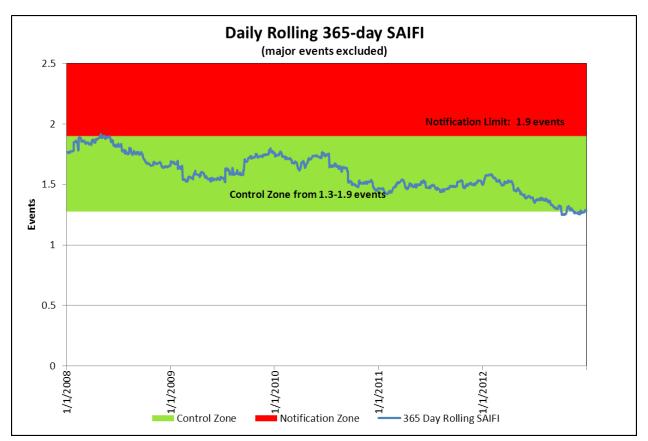
<sup>&</sup>lt;sup>5</sup> The Company applied 2 standard deviations to determine the calculated probability of the performance level.



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## 2.6 Cause Analysis (Pre-Title 746-313 Modification)

Certain types of outages typically result in a large amount of customer minutes lost, but are infrequent, such as Loss of Supply outages. Others tend to be more frequent, but result in few customer minutes lost.

The cause analysis tables below detail SAIDI<sup>6</sup> and SAIFI by direct cause, with separate tables for the Company's Controllable metrics and its Underlying metrics. (Both tables exclude major events.) Following the detail tables are pie charts showing the percentages attributed to each cause category with respect to three measures: total incidents, total customer minutes lost and total sustained customer interruptions, again with separate pie charts for Controllable and Underlying.

Note that the Underlying cause analysis table includes prearranged outages (*Customer Requested and Customer Notice Given* line items) with subtotals for their inclusion, while the grand totals in the table exclude these prearranged outages so that grand totals align with reported SAIDI and SAIFI metrics for the period. However, for ease of charting, the pie charts reflect the rollup-level cause category rather than the detail-level direct cause within each category. Therefore, the pie charts for Underlying include prearranged causes (listed within the *Planned* category). Following the pie charts, a table of definitions provides descriptive examples for each direct cause category.

UTAH CAUSE ANALYSIS - CONTROLLABLE DISTRIBUTION											
Direct Cause	Customer Minutes Lost for Incident	Customers In Incident Sustained	Sustained Incident Count	SAIDI	SAIFI						
ANIMALS	906,170.47	8,526	712	1.08	0.010						
BIRD MORTALITY (NON-PROTECTED SPECIES)	1,015,514.71	8,910	289	1.21	0.011						
BIRD MORTALITY (PROTECTED SPECIES) (BMTS)	1,117,969.87	5,811	66	1.33	0.007						
BIRD NEST (BMTS)	159,730.84	875	22	0.19	0.001						
BIRD SUSPECTED, NO MORTALITY	378,477.39	3,871	158	0.45	0.005						
ANIMALS	3,577,863.27	27,993	1,247	4.27	0.033						
B/O EQUIPMENT	5,692,588.32	36,832	803	6.80	0.044						
DETERIORATION OR ROTTING	26,074,057.23	123,858	4,302	31.13	0.148						
OVERLOAD	1,232,248.60	8,652	183	1.47	0.010						
EQUIPMENT FAILURE	32,998,894.15	169,342	5,288	39.40	0.202						
FAULTY INSTALL	62,127.60	1,247	34	0.07	0.001						
IMPROPER PROTECTIVE COORDINATION	54,744.85	560	25	0.07	0.001						
INCORRECT RECORDS	164,228.23	3,881	60	0.20	0.005						
INTERNAL CONTRACTOR	41,687.19	314	8	0.05	0.000						
PACIFICORP EMPLOYEE - FIELD	67,603.19	4,840	18	0.08	0.006						
PACIFICORP EMPLOYEE - SUB	14,113.93	1,266	3	0.02	0.002						
OPERATIONAL	404,504.99	12,108	148	0.48	0.014						
TREE - TRIMMABLE	1,945,107.99	20,992	289	2.32	0.025						
TREES	1,945,107.99	20,992	289	2.32	0.025						
UTAH CONTROLLABLE DISTRIBUTION	38,926,370.40	230,435	6,972	46.48	0.275						

<sup>&</sup>lt;sup>6</sup> To convert SAIDI (Outage Duration) and SAIFI (Outage Frequency) to Customer Minutes Lost and Sustained Customer Interruptions, respectively, multiply the SAIDI or SAIFI value by 837,545 (2012 Utah frozen customer count).



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UTAH CA	USE ANALYSIS - UN	IDERLYING	·		
Direct Cause	Customer Minutes Lost for Incident	Customers In Incident Sustained	Sustained Incident Count	SAIDI	SAIFI
ANIMALS	906,170.47	8,526	712	1.1	0.010
BIRD MORTALITY (NON-PROTECTED SPECIES)	1,015,514.71	8,910	289	1.2	0.011
BIRD MORTALITY (PROTECTED SPECIES) (BMTS)	1,117,969.87	5,811	66	1.3	0.007
BIRD NEST (BMTS)	159,730.84	875	22	0.2	0.001
BIRD SUSPECTED, NO MORTALITY	378,477.39	3,871	158	0.5	0.005
ANIMALS	3,577,863.27	27,993	1,247	4.3	0.033
CONTAMINATION	6,585.52	16	2	0.0	0.000
FIRE/SMOKE (NOT DUE TO FAULTS)	3,075,676.31	3,460	33	3.7	0.004
FLOODING	206.95	1	1	0.0	0.000
ENVIRONMENT	3,082,468.78	3,477	36	3.7	0.004
B/O EQUIPMENT	5,692,588.32	36,832	803	6.8	0.044
DETERIORATION OR ROTTING	26,074,057.23	123,858	4,302	31.1	0.148
NEARBY FAULT	807,711.22	1,847	8	1.0	0.002
OVERLOAD	1,232,248.60	8,652	183	1.5	0.010
POLE FIRE	10,258,201.46		291	12.2	0.070
EQUIPMENT FAILURE	44,064,806.83	230,119	5,587	52.6	0.275
DIG-IN (NON-PACIFICORP PERSONNEL)	2,120,046.11	15,825	276	2.5	0.019
	311,556.83	,	47	0.4	0.006
	706,251.49		91	0.8	0.005
VANDALISM OR THEFT	616,020.28	,	45	0.7	0.011
VEHICLE ACCIDENT	9,974,929.43	60,294	331	11.9	0.072
INTERFERENCE	13,728,804.15	93,951	790	16.4	0.112
	0.00		5	0.0	0.000
	146,682.58		9	0.2	0.001
	4,035,958.60	,	48	4.8	0.055
	21,176,044.06	227,101	408	25.3	0.271
SYSTEM PROTECTION	62.13		2	0.0	0.000
LOSS OF SUPPLY FAULTY INSTALL	25,358,747.38		<b>472</b> 34	<b>30.3</b> 0.1	0.327 0.001
	62,127.60 54,744.85	560	25	0.1	0.001
INCORRECT RECORDS	164,228.23	3,881	60	0.1	0.001
INTERNAL CONTRACTOR	41,687.19	,	8	0.2	0.000
PACIFICORP EMPLOYEE - FIELD	67,603.19		18	0.0	0.006
PACIFICORP EMPLOYEE - SUB	14,113.93	1,266	3	0.0	0.002
UNSAFE SITUATION	681.30		1	0.0	0.002
OPERATIONAL	405,186.29		149	0.5	0.014
OTHER, KNOWN CAUSE	356,122.84	5,963	126	0.4	0.007
UNKNOWN	5,471,216.58		1,289	6.5	0.082
OTHER	5,827,339.42		1,415	7.0	0.089
CONSTRUCTION	847,230.91	8,665	777	1.0	0.010
CUSTOMER NOTICE GIVEN	12,362,379.75		2,474	14.8	0.090
CUSTOMER REQUESTED	690,461.16		744	0.8	0.003
EMERGENCY DAMAGE REPAIR	15,676,095.19		1,533	18.7	0.237
ENERGY EMERGENCY INTERRUPTION	0.00	0	0	0.0	0.000
INTENTIONAL TO CLEAR TROUBLE	1,465,244.62	14,573	64	1.7	0.017
TRANSMISSION REQUESTED	564,895.95	8,835	34	0.7	0.011
PLANNED	31,606,307.57	308,706	5,626	37.7	0.369
TREE - NON-PREVENTABLE	2,548,682.21	22,312	395	3.0	0.027
TREE - TRIMMABLE	1,945,107.99	20,992	289	2.3	0.025
TREES	4,493,790.20	43,304	684	5.4	0.052
ICE	27,591.75		5	0.0	0.000
LIGHTNING	3,055,412.97	20,357	404	3.6	0.024
SNOW, SLEET AND BLIZZARD	3,579,252.09		257	4.3	0.022
WIND	5,586,953.04		432	6.7	0.053
WEATHER	12,249,209.85		1,098	14.6	0.100
UTAH including Prearranged	144,394,523.72		17,104	172.4	1.376
UTAH excluding Prearranged	131,341,682.81	1,074,483	13,886	156.8	1.283



Animals

Equipment

Operational

Trimmable Tree

#### UTAH

### **Service Quality Review**

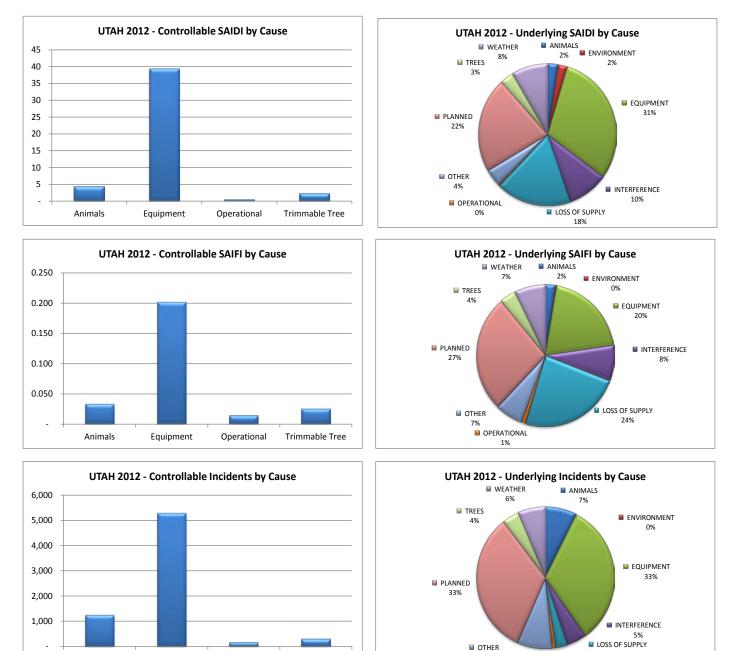
January 1 – December 31, 2012

OPERATIONAL

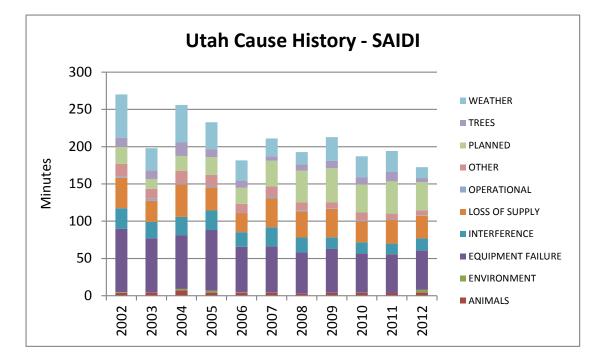
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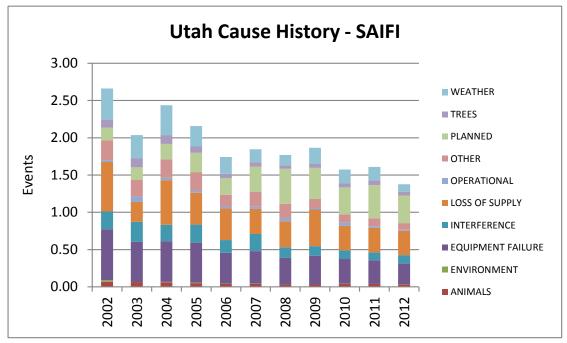
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January 1 – December 31, 2012

CATEGORY	DESCRIPTION AND EXAMPLES
Environment	Contamination or Airborne Deposit (i.e., salt, trona ash, other chemical dust, sawdust, etc.); corrosive environment; flooding due to rivers, broken water main, etc.; fire/smoke related to forest, brush or building fires (not including fires due to faults or lightning).
Weather	Wind (excluding windborne material); snow, sleet or blizzard; ice; freezing fog; frost; lightning.
Equipment Failure	Structural deterioration due to age (incl. pole rot); electrical load above limits; failure for no apparent reason; conditions resulting in a pole/cross arm fire due to reduced insulation qualities; equipment affected by fault on nearby equipment (i.e. broken conductor hits another line). B/O refers to bad order equipment.
Interference	Willful damage, interference or theft; such as gun shots, rock throwing, etc; customer, contractor or other utility dig-in; contact by outside utility, contractor or other third-party individual; vehicle accident, including car, truck, tractor, aircraft, manned balloon; other interfering object such as straw, shoes, string, balloon.
Animals and Birds	Any problem nest that requires removal, relocation, trimming, etc; any birds, squirrels or other animals, whether or not remains found.
Operational	Accidental Contact by Rocky Mountain Power or Rocky Mountain Power's Contractors (including live-line work); switching error; testing or commissioning error; relay setting error, including wrong fuse size, equipment by-passed; incorrect circuit records or identification; faulty installation or construction; operational or safety restriction.
Loss of Supply	Failure of supply from Generator or Transmission system; failure of distribution substation equipment.
Planned	Transmission requested, affects distribution sub and distribution circuits; Company outage taken to make repairs after storm damage, car hit pole, etc.; construction work, regardless if notice is given; rolling blackouts.
Trees	Growing or falling trees
Other	Cause Unknown; use comments field if there are some possible reasons.
Trans Line Failure	(Transmission Line Failure) Failure of transmission line
Trans Term Equip	(Transmission Termination Equipment) Failure of equipment at either end of a transmission line, such as at the transmission or distribution substation



January 1 – December 31, 2012

## 2.7 Reliability Reporting Post-Rule R.746-313 Modifications

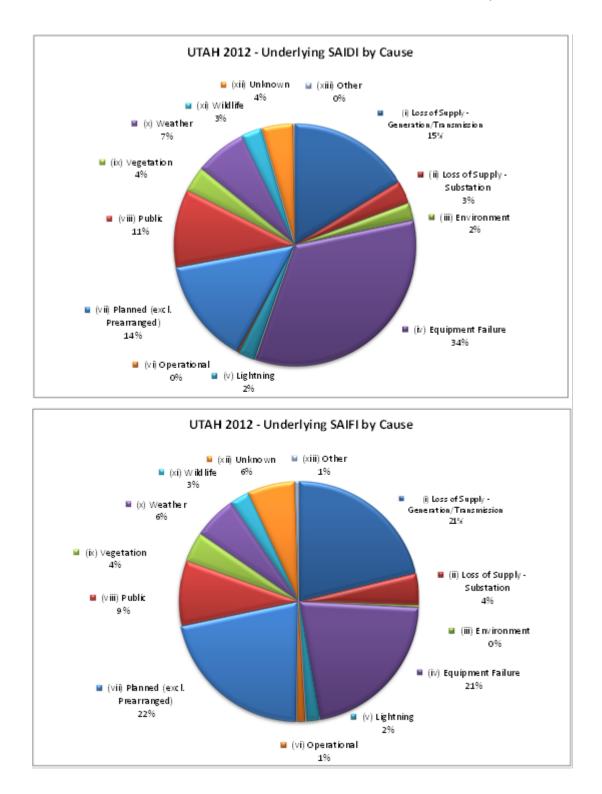
In 2012 the Company and stakeholders developed reliability reporting rules that are codified in Utah Rule R 746.313. Certain reliability reporting details were outlined in these rules that had not been previously required in the Company's Service Quality Review Report. Certain elements may be at least partially redundant or segmented differently than has been provided in the past. Thus, in order to include both the new required segmentation and the pre-reporting rule segmentation was considered the ideal reporting approach. As this report evolves, certain of these redundancies may be eliminated. The final rule required five year history at an operating area level of SAIDI, SAIFI and CAIDI. At a state level these metrics, in addition to MAIFI<sub>e</sub> are required.

Major Events and Prearranged Excluded		20	08			20	09		2010 2011			2012								
STATE	SAIDI	SAIFI	CAIDI	MAIFle	SAIDI	SAIFI	CAIDI	MAIFle	SAIDI	SAIFI	CAIDI	MAIFle	SAIDI	SAIFI	CAIDI	MAIFle	SAIDI	SAIFI	CAIDI	MAIFle
Utah	172	1.7	104	2.31	191	1.8	108	1.70	166	1.5	113	1.33	174	1.5	116	1.10	157	1.3	122	0.72
OP AREA																				
AMERICAN FORK	148	1.4	107		130	1.5	87		148	1.2	124		132	1.3	106		101	0.8	135	
CEDAR CITY	267	2.7	100		219	2.3	97		296	2.5	118		218	1.7	131		279	1.8	154	
CEDAR CITY (MILFORD)	1,129	5.7	199		590	5.4	110		389	2.1	183		980	8.1	121		363	2.8	129	
JORDAN VALLEY	142	1.3	106		146	1.2	120		112	1.0	116		113	0.9	121		106	0.8	129	
LAYTON	93	1.1	89		135	1.0	130		151	1.1	142		155	1.3	124		105	0.8	131	
MOAB	215	2.5	85		526	5.2	101		286	2.6	111		151	1.8	86		375	3.1	122	
OGDEN	209	2.1	101		208	2.8	74		171	1.8	96		204	1.8	116		153	1.3	117	
PARK CITY	220	2.2	99		327	2.4	137		251	2.2	116		186	1.6	116		184	1.8	100	
PRICE	243	3.9	62		218	2.3	94		505	3.4	150		421	2.5	166		133	1.4	97	
RICHFIELD	258	2.2	119		224	1.5	151		255	2.9	87		369	3.2	114		200	2.0	100	
RICHFIELD (DELTA)	285	3.0	95		400	5.8	69		189	2.5	76		316	3.6	89		329	2.9	113	
SLC METRO	164	1.5	107		165	1.4	116		144	1.3	107		178	1.5	117		129	1.2	112	
SMITHFIELD	172	1.5	116		277	2.1	134		229	1.7	135		174	1.6	106		267	2.6	102	
TOOELE	263	2.5	107		438	3.8	116		178	1.3	134		329	3.0	110		595	3.7	163	
TREMONTON	259	2.5	103		561	2.6	214		346	3.4	102		255	2.2	115		447	3.0	147	
VERNAL	70	0.9	80		116	0.7	156		105	0.9	115		117	2.2	54		236	2.9	82	

Litely Course Code nome	20	08	20	09	20	10	20	11	2012	
Utah Cause Category	SAIDI	SAIFI								
Environment	0	0.0	0	0.0	1	0.0	0	0.0	4	0.0
Equipment Failure	55	0.4	59	0.4	53	0.3	52	0.3	53	0.3
Lightning	3	0.0	10	0.1	7	0.1	9	0.1	4	0.0
Loss of Supply - Generation/Transmission	29	0.3	28	0.4	21	0.3	26	0.3	25	0.3
Loss of Supply - Substation	6	0.0	10	0.1	7	0.1	6	0.1	5	0.1
Operational	1	0.0	1	0.0	1	0.0	1	0.0	0	0.0
Other	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0
Planned (excl. Prearranged)	22	0.4	24	0.3	17	0.3	23	0.3	22	0.3
Public	20	0.1	16	0.1	15	0.1	15	0.1	16	0.1
Unknown	10	0.2	8	0.1	10	0.1	7	0.1	7	0.1
Vegetation	8	0.0	10	0.1	10	0.1	13	0.1	5	0.1
Weather	13	0.1	22	0.2	21	0.1	19	0.1	11	0.1
Wildlife	3	0.0	4	0.0	4	0.0	4	0.0	4	0.0
UTAH Underlying	172	1.7	191	1.8	166	1.5	174	1.5	157	1.3



January 1 – December 31, 2012





January 1 – December 31, 2012

## 2.8 Reduce CPI for Worst Performing Circuits by 20%

On a routine basis, the Company reviews circuits for performance. One of the measures that it uses is called circuit performance indicator (CPI), which is a blended weighting of key reliability metrics covering a three-year period. The higher the number, the poorer the blended performance the circuit is delivering. As part of the Company's Performance Standards Program, it annually selects a set of Worst Performing Circuits for improvements, which are to be completed within two years of selection. Within five years of selection, the average performance of the five-selection set must improve by at least 20% (as measured by comparing current performance against baseline performance).

WORST PERFORMING CIRCUITS	STATUS	BASELINE	Performance 12/31/2012
Program Year 12: (CY2011)			
Lincoln 15	IN PROGRESS	192	121
Huntington City 12	IN PROGRESS	371	495
Magna 15	IN PROGRESS	233	260
Gunnison 12	IN PROGRESS	246	297
Capitol 11	IN PROGRESS	143	133
TARGET SCORE = 190		237	261
Program Year 11: (CY2010)			
Decker Lake 12	IN PROGRESS	112	209
North Bench 13	IN PROGRESS	105	58
Newgate 14	IN PROGRESS	178	108
Newton 12	IN PROGRESS	194	124
St Johns 11	IN PROGRESS	755	661
TARGET SCORE = 215		269	232

Note: Goals were met for Program Years 1 through 10 and filed in prior reporting periods, however current performance of the previously selected worst performing feeders are shown below.



#### **Service Quality Review**

A DIVISION OF PACIFICORP					001	vice Quai	
UTAH					Januar	y 1 – Decem	ber 31, 2012
	Circuits Selected	Fruit Heights			Valley Center		, i
PROGRAM YEAR 10	Spring 2009	12	Mathis 12	Parrish 11	11	Hammer 15	
	Circuit	FRS12	MAT12	PRR11	VLY11	HAM15	
	CPI <sup>05</sup> 12/31/2012	216	168	146	83	103	
	CPI <sup>05</sup>	191	237	202	236	191	
	Circuits Selected	Cottonwood		Mountain Dell		West Ogden	
PROGRAM YEAR 9	Spring 2008	14	Holladay 12	11	Eden 12	14	
	Circuit	CTN14	HOL12	MTD11	EDN12	WOG14	
	CPI <sup>05</sup> 12/31/2012	76	80	450	389	42	
	CPI <sup>05</sup>	312	138	930	456	707	
	Circuits Selected	<b>BRIAN HEAD</b>	MCCLELLAN			QUAIL	
PROGRAM YEAR 8	Spring 2007	#11	D #12	UNION #16	ENOCH #12	CREEK #12	
	Circuit	BHD11	MCL12	UNN16	ENO12	QUA12	1
	CPI <sup>05</sup> 12/31/2012	#N/A	21	163	105	242	1
	CPI <sup>05</sup>	412	220	128	186	1094	
	Circuits Selected					Timber Lakes	
PROGRAM YEAR 7	May 2006	Tooele 12	Box Elder 12		Brighton 12	11	
	Circuit	TOO12	BOX12	OKY11	BRI12	TBL11	
	CPI <sup>05</sup> 12/31/2012	177		404	805	100	
	CPI <sup>05</sup>	228	319	367	608	309	
	Circuits Selected						
	Apr 2005 (FY2006)						
	on 2004		Garden City	Black			
PROGRAM YEAR 6	Performance	Cudahy 11	12	Mountain 11	Uintah 13	West Roy 14	
	Circuit	CUD11	GRC12	BLK11	UIN13	WRY14	
	CPI <sup>05</sup> 12/31/2012	68		1131	135	99	
	CPI <sup>05</sup>	908	521	406	367	354	
	Circuits Selected						
	Apr 2004 (FY2005)						
	on 2003	North Bench	5	West Com	0		
PROGRAM YEAR 5	Performance	13 NBE13	Dumas 16 DUM16	11 WCO11	Quarry 15	Brooklawn 12 BKL12	
	Circuit CPI <sup>05</sup> 12/31/2012				QRY15		
	CPI <sup>99</sup> CPI <sup>99</sup>	58			234	326	
		225	1312	1035	735	557	
	Circuits Selected						
	Apr 2003 (FY2004) on 2002						
PROGRAM YEAR 4	Performance	Toquonillo 22	Toquerville 31	Sarataga 12	Nibley 21	Middleton 24	
	Circuit	TOQ32	TOQ31	SAR13	NIB21	MDD24	
	CPI <sup>05</sup> 12/31/2012	00002		1		557	
	CPI <sup>99</sup>						
	Circuits Selected	1596	1016	885	465	823	
	Apr 2002 (FY2003)						
	on 2001		West Cedar	Parowan			
PROGRAM YEAR 3	Performance	University 1	28	Valley 25	Eureka 12	Coleman 15	
	Circuit	UNI01	WCD28	PRV25	EUR12	CLM15	
	CPI <sup>05</sup> 12/31/2012	0			111	95	1
	CPI <sup>99</sup>	344	4306		3397	1574	1
	Circuits Selected		4000	1121	5597	1374	
	May 2001 (FY2002)						
	on 2000	Woods Cross		Rattlesnake			
PROGRAM YEAR 2	Performance	11	Eden 11	22	Lark 11	Bothwell 11	
	Circuit	WDS11	EDN11	RAT22	LRK11	BTH11	
	CPI <sup>05</sup> 12/31/2012	172				235	1
	CPI <sup>99</sup>	703			1071	542	1
	Circuits Selected	,00	102	112	10/1	042	
	Sept 2000 (FY2001)						
	on 1998						
PROGRAM YEAR 1	Performance	Pioneer 11	Coalville 12	Lewiston 11	Pioneer 13	Pioneer 14	
	Circuit	PIO11	COA12	LEW11	PIO13	PIO14	
	CPI <sup>05</sup> 12/31/2012	175			196		Í
	CPI <sup>99</sup>	1197			1426	1106	
							i -



January 1 – December 31, 2012

## 2.9 CAIDI Performance

The table below shows the average time, during the reporting period, for outage restoration. This replaces previous reporting for the percent of customers whose power was restored within 3 hours of notification of an outage event, and transitions the Company's outage response reporting toward industry indices.

UTAH CAIDI (Average Outage Duration)					
Underlying Performance	122 minutes				
Total Performance	133 minutes				

## 2.10 Telephone Service and Response to Commission Complaints

COMMITMENT	GOAL	PERFORMANCE
PS5-Answer calls within 30 seconds	80%	80%
PS6a) Respond to commission complaints within 3 days	95%	100%
PS6b) Respond to commission complaints regarding service disconnects within 4 hours	95%	100%
PS6c) Address commission <sup>7</sup> complaints within 30 days	100%	100%

<sup>&</sup>lt;sup>7</sup> Rocky Mountain Power follows the definitions for informal and formal complaints as set forth in the Utah Code, Title 54, Public Utilities Statutes and Public Service Commission Rules, R746-200-8 Informal review (A) and Commission review (D).



January 1 – December 31, 2012

## 2.11 Utah State Customer Guarantee Summary Status

## customer*guarantees*

January to December 2012

Utah

			2012				2011				
	Description	Events	Failures	%Success	Paid	Events	Failures	%Success	Paid		
CG1	Restoring Supply	1,068,924	0	100.0%	\$0	1,239,102	1	99.9%	\$50		
CG2	Appointments	6,664	13	99.8%	\$650	6,559	6	99.9%	\$300		
CG3	Switching on Power	10,923	17	99.8%	\$850	10,563	8	99.9%	\$400		
CG4	Estimates	1,505	2	99.9%	\$100	1,561	4	99.7%	\$200		
CG5	Respond to Billing Inquiries	1,460	0	100.0%	\$0	2,243	0	100.0%	\$0		
CG6	Respond to Meter Problems	716	0	100.0%	\$0	796	0	100.0%	\$0		
CG7	Notification of Planned Interruptions	75,491	59	99.9%	\$2,950	80,677	54	99.9%	\$2,700		
		1,165,683	91	99.9%	\$4,550	1,341,501	73	99.9%	\$3,650		

Overall Customer Guarantee performance remains above 99%, demonstrating Rocky Mountain Power's continued commitment to customer satisfaction.

Two reconnects for credit that had been disconnected for non-payment were not reconnected within twenty-four hours; they are not included in the above numbers. (Credit customers are exempt from Customer Guarantee 3; however, the Company attempts to connect these customers within twenty-four hours and reports them separately in this report.)

Major Events are excluded from the Customer Guarantees program. The program also defines certain exemptions, which are primarily for safety, access to outage site and emergencies.



## 3 MAINTENANCE COMPLIANCE TO ANNUAL PLAN

### 3.1 **T&D Preventive and Corrective Maintenance Programs**

#### **Preventive Maintenance**

The primary focus of the preventive maintenance plan is to inspect facilities, identify abnormal conditions<sup>8</sup>, and perform appropriate preventive actions upon those facilities. Assessment of policies, including the costs and benefits of delivery of these policies, will result in modifications to them. Thus, local triggers that result in more frequent or more burdensome inspection and maintenance practices have resulted in refinement to some of these PM activities. As the Company continues this assessment, further variations of the policies will result in refinement to the maintenance plan. Certain of these activities were initiated during 2012 which resulted in lower costs for maintenance work items that were delivered.

#### Transmission and Distribution lines have a combination of preventive maintenance programs.

- Visual assurance inspections are designed to identify damage or defects that may endanger public safety or adversely affect the integrity of the electric system. (2 year cycle distribution and sub-transmission, 1 year cycle main grid)
- Detailed inspections are visual inspections of each structure and the spans between each structure.<sup>9</sup>
- Pole testing includes a sound and bore to identify decay pockets that would compromise the wood pole's structural integrity. (20 year cycle)

#### Substations and Major Equipment

- Rocky Mountain Power inspects all substations on a periodic basis to detect abnormal conditions, verify the integrity of security features and ensure the proper operation of equipment. During the performance of these inspections key operational data such as load readings and operational counters are gathered. This data is utilized in the performance of load studies and in prioritizing maintenance activities. Abnormal conditions that are identified during the inspections are prioritized for repair (corrective maintenance)
- Rocky Mountain Power also performs testing and other preventive maintenance tasks on substation equipment. The maintenance tasks are scheduled based on time intervals or through the performance of condition based assessments.

#### **Corrective Maintenance**

The primary focus of the corrective maintenance plan is to correct the abnormal conditions found during the preventive maintenance process.

#### Transmission and Distribution Lines

• Correctable conditions are identified through the preventive maintenance process.

<sup>&</sup>lt;sup>8</sup> The primary focus of the preventive maintenance plan is to inspect facilities, identify abnormal conditions, and perform appropriate preventive actions upon those facilities. Condition priorities are as follows:

Priority A: Conditions that pose an immediate hazard to the public or employees, or that risk immediate loss of supply or damage to the electrical system.

Priority B: Conditions that are nonconforming, but that in the opinion of the inspector do not pose an immediate hazard. Priority C: Conditions that are nonconforming, but that in the opinion of the inspector do not need to be corrected until the next scheduled work is performed on that facility point.

Priority D: Conditions that conform to the NESC and are not reportable to the associated State Commission. These conditions do not have a regulatory timeline for correction.

Priority G: Conditions that conform to the regulations requirement that was in place when construction took place but do not conform to more recent code adoptions. These conditions are "grandfathered" and are considered conforming.

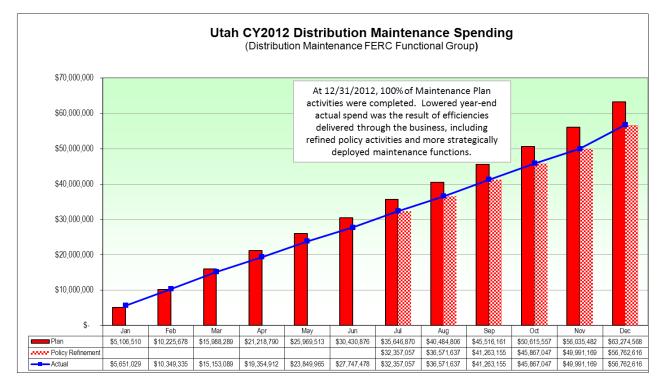
<sup>&</sup>lt;sup>9</sup> Effective 1/1/2007, Rocky Mountain Power modified its reliability & preventive planning methods to utilize repeated reliability events to prioritize localized preventive maintenance activities, using its Reliability Work Planning methodology. At this time, repeated outage events experienced by customers will result in localized inspection and correction activities, rather than being programmatically performed at either the entire circuit or map section level.



- January 1 December 31, 2012
- Outstanding conditions are recorded in a database and remain until corrected.
   Substations and Major Equipment
- Correctable conditions are identified through the preventive maintenance process, often associated with actions performed on major equipment.
- Corrections consist of repairing equipment or responding to a failed condition.

## 3.2 Maintenance Spending

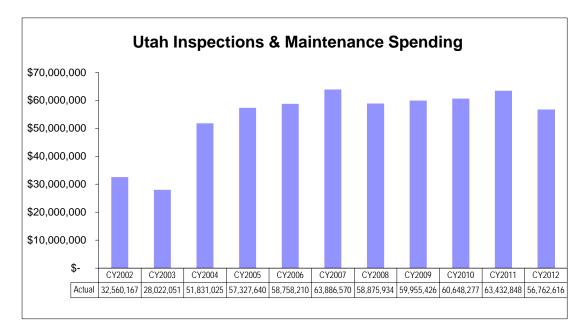
As identified above, during 2012 the Company evaluated many of its maintenance policies to determine the benefits to safety and reliability and made tactical changes for those policies, designed to lower costs to customer but deliver the same quality of service. This resulted in a reduction in maintenance during the year.





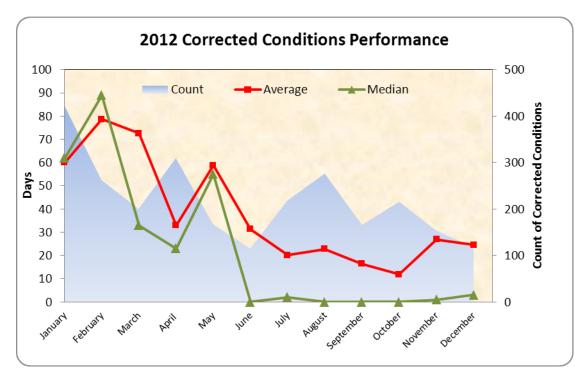


## 3.2.1 Maintenance Historical Spending



## 3.3 Distribution Priority "A" Conditions Correction History

The Company reports history of A priority corrections. This reporting element dates back to Docket-04-035-070, which expired on December 31, 2011. In this commitment the Company was required to correct distribution A priority conditions on average within 120 days. After the commitment expired, stakeholders requested the Company continue to report the information, believing it to be a useful indicator of work delivered by the Company. As can be seen in the chart below, performance well below the target average of 120 days has been consistently delivered.





## **4 CAPITAL INVESTMENT**

## 4.1 Capital Spending - Distribution and General Plant

Investment	Actuals (\$M)	Plan (\$M)	Significant Variances
1. Mandated	\$16.3	\$14.7	Mandated road relocations, environmental/avian protection, and public accommodations over plan, (+\$4.6M); partially offset by mandated regional & national regulatory (primarily mobile radio replacement), (-\$3M).
2. New Connects	\$49.1	\$42.3	Residential, commercial, and irrigation new connections over plan, (+\$7.8M); partially offset by industrial new connections, (-\$0.9M).
3. System Reinforcement	\$15.4	\$9.3	Feeder, substation, and subtransmission reinforcement over plan (+\$5.8M).
4. Replacements	\$22.2	\$16.7	Replacements for underground cable, vaults & equipment, storm & casualty, customer meters, substation bushings/glass/etc., and overhead distribution equipment over plan, (+\$9.1M); partially offset by substation transformers, tools, and communications replacements, (-\$3.4M).
5. Upgrade & Modernize	\$2.2	\$3.7	Spare equipment additions under plan, (-\$3M); partially offset by substation and feeder improvements, (+\$1.3M).
Total	\$105.2	\$86.7	





Utah Distribution & General Plant Capital Spend - 2012 Monthly (\$1,000)

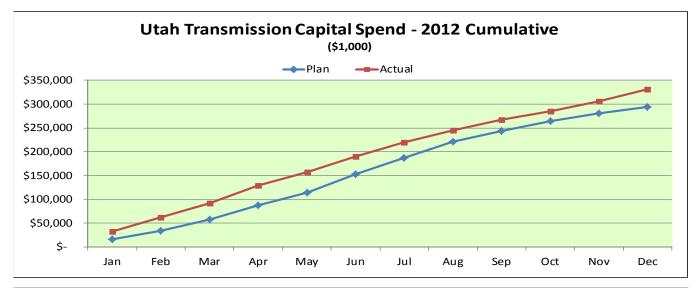




#### January 1 – December 31, 2012

### UTAH 4.2 Capital Spending - Transmission

Investment	Actuals (\$M)	Plan (\$M)	Significant Variances
1. Mandated	13.5	13.9	Mandated NERC reliability (non-conforming code issues) under plan, (-\$2.6M); mandated road relocations, and environmental/avian protection over plan, (+\$1.7M).
2. New Connects	1.1	0.0	Commercial new connections over plan, (+\$1M).
3. Local Transmission System Reinforcements	15.4	13.7	Local transmission substation reinforcement over plan, (+\$1.7M).
4. Main Grid Reinforcements / Interconnections	46.5	44.2	Main grid reinforcement over plan, (+\$4.2M); partially offset by generation/municipal interconnections, (-\$1.9M).
Energy Gateway 5. Transmission	240.9	210.5	Mona-Oquirrh line (+\$44.7M) and Clover sub (+\$4.2M) over plan; partially offset by Oquirrh-Terminal line (-\$8.1M), Sigurd Red Butte-Crystal line (-\$5.4M), and Populus-Terminal line (-\$4.3M).
6. Replacements	11.9	10.4	Replacements for substation meters & relays, storm & casualty, and overhead transmission poles & equipment over plan, (+\$4.2M); partially offset by substation switchgear/breakers/reclosers, and transformer replacements, (-\$2.3M).
7. Upgrade & Modernize	2.2	1.3	Local transmission substation and transmission upgrades over plan, (+0.8M).
Total	331.6	294.2	







January 1 – December 31, 2012

## UTAH

## 4.3 New Connects

	2011		2012										
	Jan - Dec 2011	Q1 Total	Q2 Total	Jan - Jun 2012	Jul	Aug	Sep	Q3 Total	Oct	Nov	Dec	Q4 Total	2012
Residential													
UT South	503	162	164	326	44	52	36	132	59	50	37	146	604
UT North/Metro	2,374	763	774	1,537	370	387	231	988	378	423	506	1,307	3,832
UT Central	3,631	954	947	1,901	253	572	393	1,218	768	481	619	1,868	4,987
Total Residential	6,508	1,879	1,885	3,764	667	1,011	660	2,338	1,205	954	1,162	3,321	9,423
Commercial													
UT South	165	53	45	98	17	15	10	42	22	20	16	58	198
UT North/Metro	639	259	205	464	74	54	80	208	72	67	59	198	870
UT Central	705	202	223	425	78	105	80	263	100	118	80	298	986
Total Commercial	1,509	514	473	987	169	174	170	513	194	205	155	554	2,054
Industrial													
UT South	13	1	-	1	-	1	-	1	-	-	-	-	2
UT North/Metro	6	3	1	4	-	-	-	-	-	-	-	-	4
UT Central	3	-	-	-	-	-	-	-	-	1	-	1	1
Total Industrial	22	4	1	5	-	1	-	1	-	1	-	1	7
Irrigation		_			_		-		_	_	_		
UT South	45	8	30	38	2	4	3	9	3	3	3	9	56
UT North/Metro	8	2	2	4	-	-	1	1	1	-	-	1	6
UT Central	19	6	17	23	-	-	-	-	-	1	3	4	27
Total Irrigation	72	16	49	65	2	4	4	10	4	4	6	14	89
TOTAL New Connects													
UT South	726	224	239	463	63	72	49	184	84	73	56	213	860
UT North/Metro	3,027	224 1,027	239 982	463 2,009	63 444	72 441	49 312	1,197	84 451	73 490	565	1,506	4,712
UT Central	3,027 4,358	1,027	982 1,187	2,009 2,349	444 331	441 677	312 473	1,197 1,481	451 868	490 601	565 702	1,506 2,171	4,712 6,001
TOTAL New Connects	4,358 <b>8,111</b>	<b>2,413</b>	2,408	<b>4,821</b>	838	<b>1,190</b>	834	<b>2,862</b>	1,403	<b>1,164</b>	<b>1,323</b>	3,890	11,573

Utah South region includes Moab, Price, Cedar City and Richfield

Utah North/Metro region includes SLC Metro, Ogden and Layton

Utah Central region includes American Fork, Vernal, Tooele, Jordan Valley and Park City

Region areas are subject to change for operational purposes and may differ from historical reporting

New Connects report reflects the volume of all new connections in the system in the reporting period, which may include temporary connections that are subsequently removed in future periods; therefore, it is not necessarily an auditable count of new permanent connections for the reporting period.



#### **Service Quality Review**

January 1 – December 31, 2012

#### UTAH

## **5 VEGETATION MANAGEMENT**

## 5.1 Production

#### UTAH **Tree Program Reporting** January 1, 2012 through December 31, 2012 Distribution

	Total		Calenda	r Year Report	ting		Cycle R	eporting	
		1/1/2012-							
	3 Year	12/31/2012		01/01/2012-	1/1/2012-	1/1/2011-	1/1/2011-	01/01/2011-	1/1/2011-
	Program/Total	Miles	12/31/2012	12/31/2012	12/31/2012	12/31/2013	12/31/2013	12/31/2013	12/31/2013
	Line Miles	Planned	Actual Miles	Ahead/Behind	% Ahead/Behind	Miles Planned	Actual Miles	Ahead/Behind	% Ahead/Behind
	column a	column b	column c	column d	column e	column f	column g	column h	column i
UTAH	11,491	3,830	3,691	-139	96.4%	7,588	7,518	-70	100.0%
AMERICAN FORK	858	286	326	40	114.0%	568	508	-60	89.4%
CEDAR CITY	1,338	446	171	-275	38.3%	895	827	-68	100.0%
JORDAN VALLEY	846	282	204	-78	72.3%	547	570	23	100.0%
LAYTON	386	129	145	16	112.7%	260	209	-51	80.4%
MOAB	963	321	653	332	203.4%	641	819	178	100.0%
OGDEN	1,051	350	265	-85	75.6%	700	534	-166	76.3%
PARK CITY	541	180	165	-15	91.5%	362	386	24	100.0%
PRICE	641	214	159	-55	74.4%	427	419	-8	100.0%
RICHFIELD	1,418	473	642	169	135.8%	937	793	-144	84.6%
SL METRO	1,133	378	326	-52	86.3%	704	875	171	100.0%
SMITHFIELD	848	283	142	-141	50.2%	565	501	-64	88.7%
TOOELE	480	160	148	-12	92.5%	317	239	-78	75.4%
TREMONTON	705	235	253	18	107.7%	476	668	192	100.0%
VERNAL	283	94	92	-2	97.5%	189	170	-19	100.0%

Distribution cycle \$/tree:	\$65.53
Distribution cycle \$/mile:	\$2,988
Distribution cycle removal %	32.30%

#### Transmission

Total	Line	Line	Miles	Miles	% of miles
Line	Miles	Miles	Ahead(behind)	on	on/behind
Miles	Scheduled	Worked	Schedule	Schedule	Schedule
6,295	1,107	1,388	281	6,576	104%

Transmission \$/mile:

Current distribution cycle begain January 1, 2011 and extends until December 31, 2013.

\$3,262

#### Notes:

Column a: Total overhead distribution pole miles by district

Column b: Total overhead distribution pole miles planned for the period January 1, 2012 through December 31, 2012

Column c: Actual overhead distribution pole miles worked during the period January 1 2012 through December 31, 2012

Column d: Miles ahead or behind for the period January 1, 2012 through December 31, 2012 (column c-column b)

Column e: Percent of actual compared to planned for the period January 1, 2012 through December 31, 2012 ((column c+b)x100)

Column f: Total overhead distribution pole miles planned for the period January 1, 2011 through December 31, 2013

Column g: Actual overhead distribution pole miles worked during the period January 1 2011 through December 31, 2013 Column h: Miles ahead or behind for the period January 1, 2011 through December 31, 2013 (column g-column f)

Column i: Percent of actual compared to planned for the period January 1, 2011 through December 31, 2013 ((column g+f)x100). Max = 100%



## UTAH 5.2 B

#### **Service Quality Review**

January 1 – December 31, 2012

5.2	Budget
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UTAH							
Tree	Program	Reporting					

	CY2013	CY2014	CY2015	
Distribution Tree Budget	\$11,595,374	\$11,595,374	\$11,595,374	
Transmission Tree Budget	<u>\$3,681,515</u>	<u>\$3,681,515</u>	<u>\$3,681,515</u>	
Total Tree Budget	\$15,276,889	\$15,276,889	\$15,276,889	

Distribution				Transmission		
	Actuals	Budget	Variance	Actuals	Budget	Variance
Calendar year 2012	·					
Jan	\$1,132,018	\$1,032,948	\$99,070	\$393,385	\$270,455	\$122,929
Feb	\$1,042,051	\$983,759	\$58,291	\$365,245	\$270,734	\$94,510
Mar	\$1,131,420	\$1,082,136	\$49,284	\$460,356	\$306,349	\$154,006
Apr	\$935,990	\$1,032,948	-\$96,958	\$393,679	\$316,640	\$77,039
Мау	\$1,176,148	\$1,082,136	\$94,012	\$379,183	\$333,156	\$46,026
Jun	\$724,190	\$1,032,948	-\$308,758	\$360,846	\$293,763	\$67,083
Jul	\$795,719	\$983,759	-\$188,040	\$346,717	\$338,236	\$8,481
Aug	\$887,261	\$1,131,324	-\$244,063	\$361,022	\$351,073	\$9,949
Sep	\$846,588	\$934,572	-\$87,984	\$318,723	\$307,293	\$11,429
Oct	\$1,107,927	\$1,131,324	-\$23,397	\$306,594	\$330,295	-\$23,701
Nov	\$1,136,883	\$983,759	\$153,124	\$283,678	\$267,935	\$15,742
Dec	\$1,121,426	<u>\$983,759</u>	\$137,667	<u>\$514,242</u>	\$256,361	\$257,881
Total	\$12,037,620	\$12,395,373	-\$357,753	\$4,483,668	\$3,642,292	\$841,376
Average # Tree Crews on Property (YTD) 69			69			

## 5.2.1 Vegetation Historical Spending

