



**UTAH**

**SERVICE QUALITY**

**REVIEW**

**FY 2006 thru Qtr 2**

**(April – September 2005)**

**Report**

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## **EXECUTIVE SUMMARY**

PacifiCorp Power Delivery has a number of Customer Service Standard and Service Quality Measures and reports currently in place. These Standards and Measures are reflective of PacifiCorp's Performance (both personnel and network performance) in providing customers with 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, PacifiCorp has decided to exceed these Industry Standards. In other cases, largely where the Industry has no established Standards, PacifiCorp has developed metrics, reporting and targets. These existing Standards and Measures can be used over time both historically and prospectively to measure Customer Service Quality for service as delivered to our customers.

### **1 Service Standards Program Summary**

**Effective April 1, 2005 through March 31, 2008**

#### **1.1 PacifiCorp Customer Guarantees**

<u>Customer Guarantee 1:</u> 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.
<u>Customer Guarantee 2:</u> Appointments	The Company will keep mutually agreed upon appointments which will be scheduled within a two-hour time window.
<u>Customer Guarantee 3:</u> Switching on Power	The Company will switch on power within 24 hours of the 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 are excluded.
<u>Customer Guarantee 4:</u> Estimates For New Supply	The Company will provide an estimate for new supply to the applicant or customer within 15 working days after the initial meeting and all necessary information is provided to the Company.
<u>Customer Guarantee 5:</u> Respond To Billing Inquiries	The Company will respond to most billing inquiries at the time of the initial contact. For those that require further investigation, the Company will investigate and respond to the Customer within 10 working days.
<u>Customer Guarantee 6:</u> Resolving Meter Problems	The Company will investigate and respond to reported problems with a meter or conduct a meter test and report results to the customer within 10 working days.
<u>Customer Guarantee 7:</u> Notification of Planned Interruptions	The Company will provide the customer with at least two days notice prior to turning off power for planned interruptions.

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

## 1.2 PacifiCorp Performance Standards

<u>Network Performance Standard 1:</u> Improve System Average Interruption Duration Index (SAIDI)	The Company will improve SAIDI by 6% by March 31, 2008.
<u>Network Performance Standard 2:</u> Improve System Average Interruption Frequency Index (SAIFI)	The Company will improve SAIFI by 6% by March 31, 2008.
<u>Network Performance Standard 3:</u> Improve Under Performing Circuits	The Company will reduce by 20% the circuit performance indicator (CPI) for a maximum of five under performing circuits on an annual basis within five years after selection.
<u>Network Performance Standard 4:</u> Supply Restoration	The Company will restore power outages due to loss of supply or damage to the distribution system on average to 80% of customers within three hours.
<u>Customer Service Performance Standard 5:</u> 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.
<u>Customer Service Performance Standard 6:</u> Commission Complaint Response/Resolution	*The Company will a) respond to at least 95% of non-disconnect Commission complaints within three working days and will b) respond to at least 95% of disconnect Commission complaints within four working hours. The Company will c) resolve 95% of informal Commission complaints within 30 days.

*Note:*

- *Performance Standards 1, 2 & 4 are for underlying performance days and exclude those classified as Major Events.*

## 1.3 Reliability Definitions

This section will define the various terms used when referring to interruption types, performance metrics and the internal measures developed to meet its performance plans.

### **Interruption Types**

Below are the definitions for interruption events. For further details, refer to IEEE P1366-2003<sup>1</sup> Standard for Reliability Indices.

#### ***Sustained Outage***

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

#### ***Momentary Outage***

A momentary outage is defined as an outage of less than 5 minutes in duration. PacifiCorp has historically captured this data using substation breaker fault counts.

### **Reliability Indices**

#### ***SAIDI***

SAIDI (sustained 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 time-frame. 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 P1366-2003. 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 (sustained 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.

#### ***CPI99***

CPI99 is an acronym for Circuit Performance Indicator, which uses key reliability metrics (such as SAIDI and SAIFI) to identify underperforming circuits. It excluded Major Event and Loss of Supply or Transmission outages.

#### ***CPI05***

CPI05 is an acronym for Circuit Performance Indicator, which uses key reliability metrics (such as SAIDI and SAIFI) to identify underperforming circuits. Unlike CPI99 it includes Major Event and Loss of Supply or Transmission outages.

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<sup>1</sup> P1366-2003 was adopted by the IEEE Commissioners on December 23, 2003. The definitions and methodology detailed therein are now industry standards.

**Performance Types & Commitments**

PacifiCorp 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 P1366-2003.

***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 (with some minor considerations for changes in reporting practices) for establishing and evaluating meaningful performance trends over time.

***Post-Merger Commitment Target***

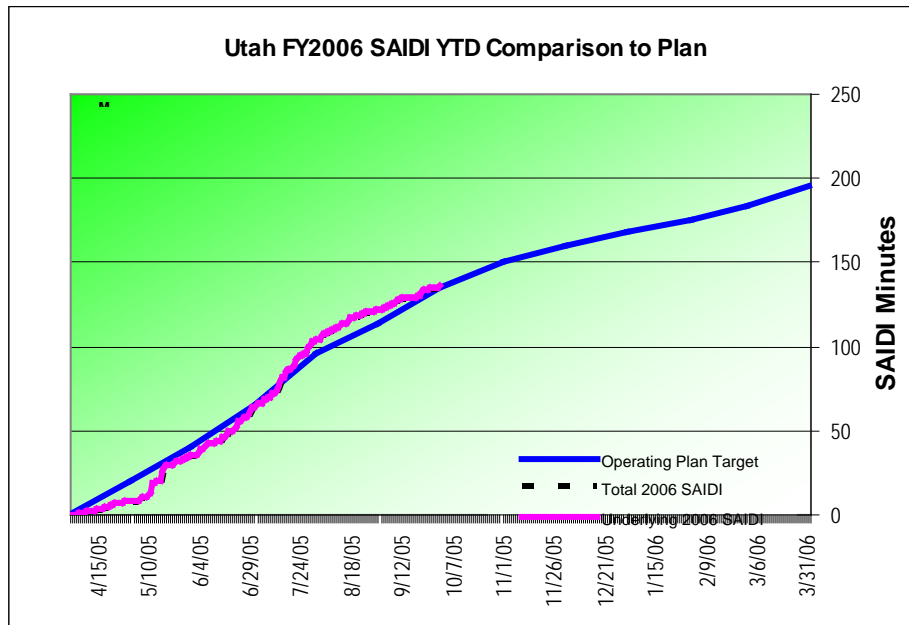
Because of the benefits that the Company and its customers and regulators experienced from the Service Standards Program, the Company filed and received approval to continue the program through 3/31/2008. From a reliability perspective, the Company continues to develop stretch goals that will deliver important improvements to its customers.

## 2 POST MERGER PERFORMANCE STANDARDS

### 2.1 System Average Interruption Duration Index (SAIDI)

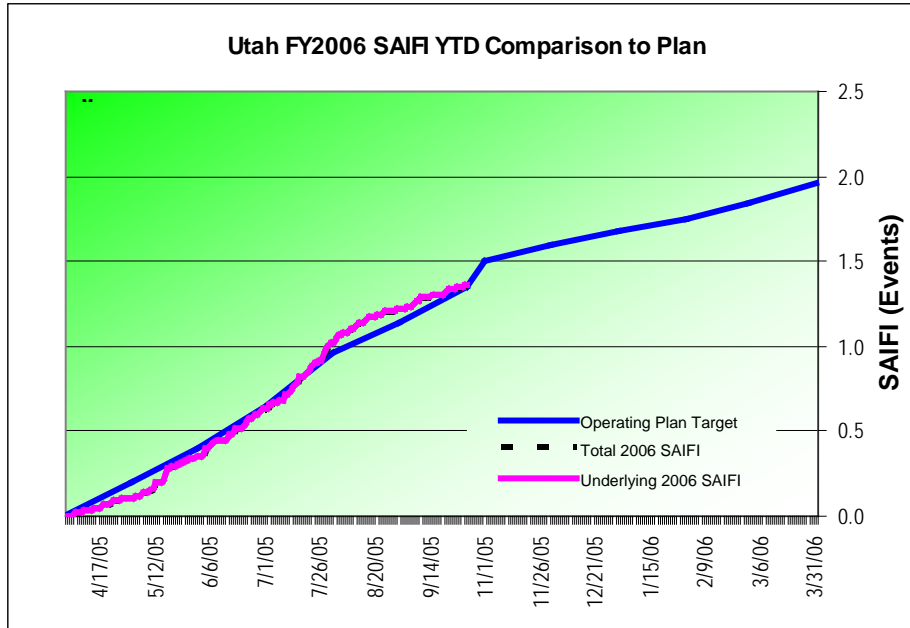
During the first half of Fiscal Year 2006, the Company paces on track to deliver reliability results that meet its modified Performance Standards Program commitment level. As seen in the following charts, actual results have paced close to targets. During this time, reliability has been impacted by thunderstorm, heat and brush fire events, however the Company has managed through these events effectively.

Second Quarter ending September 30, 2005				
Second Quarter		Year to Date		
	SAIDI Actual	SAIDI Plan	SAIDI Actual	SAIDI Plan
Utah Total	71	70	138	135



### 2.2 System Average Interruption Frequency Index (SAIFI)

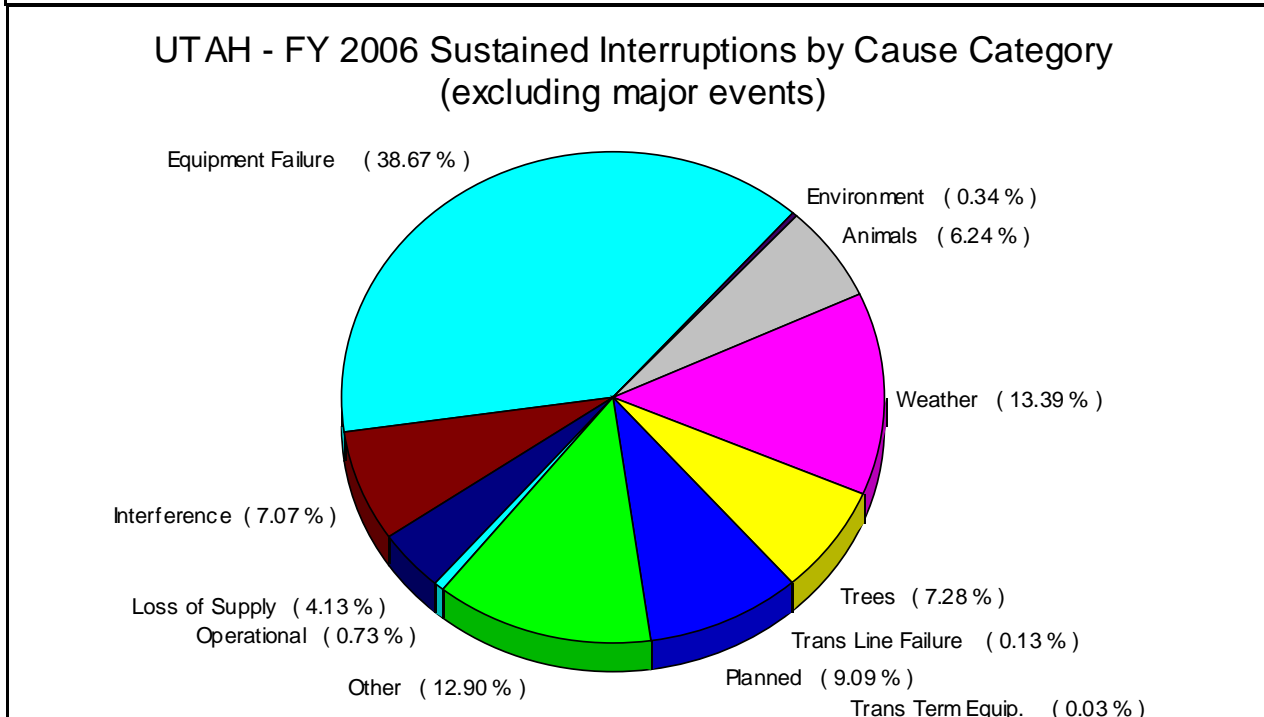
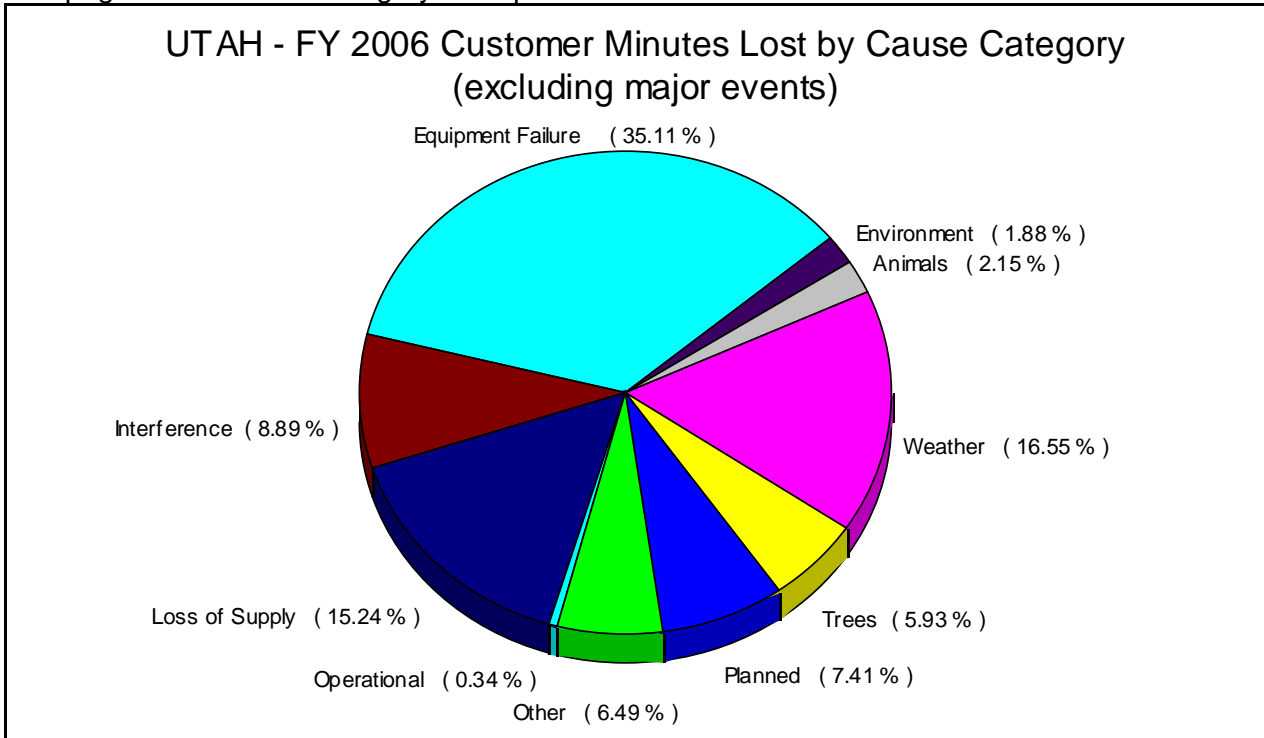
Second Quarter ending September 30, 2005				
Second Quarter		Year to Date		
	SAIFI Actual	SAIFI Plan	SAIFI Actual	SAIFI Plan
Utah Total	0.7	0.7	1.4	1.4





**2.3 Cause Code Analysis**

The charts below show customer minutes lost by cause category and sustained interruptions by cause category. Customer minutes lost is directly related to SAIDI (the average outage duration for a customer), while sustained interruptions depict the total number of outages by their causes. 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. See page 10 for Cause Category examples.



**2.4**

Cause Category	Description and Examples
<b>Environment</b>	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).
<b>Weather</b>	Wind (excluding windborne material); snow, sleet or blizzard; ice; freezing fog; frost; lightning.
<b>Equipment Failure</b>	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>Interference</b>	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.
<b>Animals and Birds</b>	Any problem nest that requires removal, relocation, trimming, etc; any birds, squirrels or other animals, whether or not remains found.
<b>Operational</b>	Accidental Contact by PacifiCorp or PacifiCorp'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.
<b>Loss of Supply</b>	Failure of supply from Generator or Transmission system; failure of distribution substation equipment.
<b>Planned</b>	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 backouts.
<b>Trees</b>	Growing or falling trees
<b>Other</b>	Cause Unknown; use comments field if there are some possible reasons.

## 2.4 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 time-frame. 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 target improvement. The improvements are to be completed within two years of selection. Within five years of selection, the average performance must improve by at least 20% (as measured by comparing current performance against baseline performance).

WORST PERFORMING CIRCUITS	BASELINE	PERFORMANCE 3/31/05
<b>Circuit Performance Indicator 2005 (CPI05)</b>		
Fiscal Year 2006:		
Cudahy 11	908	
Garden City 12	521	
Black Mountain 11	406	
Uinta 13	367	
West Roy 14	354	
<b>Circuit Performance Indicator 1999 (CPI99)</b>		
Fiscal Year 2005:		
Dumas 16	1,312	
West Com 11	1,035	
Quarry 15	735	
Brooklawn 12	557	
North Bench 13	225	
Fiscal Year 2004:		
Toquerville 32	1,596	
Toquerville 31	1,016	
Saratoga 13	885	
Nibley 21	465	
Middleton 24	823	
Fiscal Year 2003:		
University 1	344	18
West Cedar	4,306	645
Parowan Valley 25	1,121	3,135
Eureka 12	3,397	14
Coleman 15	1,574	339

**2.5 Restore Service to 80% of Customers within 3 Hours (across 3 years)**

UTAH RESTORATIONS WITHIN 3 HOURS					
Fiscal Year/Program to Date = 85%					
FY2006					
April	May	June	July	August	September
92%	84%	84%	84%	86%	86%
October	November	December	January	February	March

**2.6 Telephone Service and Response to Commission Complaints**

COMMITMENT	GOAL	PERFORMANCE
PS5-Answer calls within 30 seconds	80%	79%
PS6a) Respond to commission complaints within 3 days	95%	100%
PS6b) Respond to commission complaints regarding service disconnects within 4 hours	95%	92%
PS6c) Resolve commission complaints within 30 days	95%	100%

### 3 CUSTOMER GUARANTEES

#### 3.1 Utah State Customer Guarantee Summary Status

customer *guarantees*

April 2005 - September 2005



*Utah*

Description	FYTD 2006				FYTD 2005			
	Events	Failures	%Success	Paid	Events	Failures	%Success	Paid
CG1 Restoring Supply	1,094,970	4	100.00%	\$350	1,183,013	17	99.9%	\$1,950
CG2 Appointments	4,568	15	99.67%	\$750	4,909	30	99.4%	\$1,500
CG3 Switching on Power	14,023	24	99.83%	\$1,200	24,241	79	99.7%	\$8,275
CG4 Estimates	2,704	25	99.08%	\$1,250	3,348	88	97.4%	\$4,400
CG5 Respond to Billing Inquiries	4,969	5	99.90%	\$250	5,766	14	99.8%	\$700
CG6 Respond to Meter Problems	403	2	99.50%	\$100	559	7	98.7%	\$350
CG7 Notification of Planned Interruptions	20,527	5	99.98%	\$250	18,248	6	99.9%	\$300
	<b>1,142,164</b>	<b>80</b>	<b>99.99%</b>	<b>\$4,150</b>	<b>1,240,084</b>	<b>241</b>	<b>99.98%</b>	<b>\$17,475</b>

(Major Events Excluded)

## 4 MAINTENANCE COMPLIANCE TO ANNUAL PLAN

### 4.1 T&D Preventive and Corrective Maintenance Programs

#### Preventive Maintenance

The primary focus of the preventive maintenance plan is to inspect facilities, identify abnormal conditions, and perform appropriate preventive actions upon those facilities.

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

- Safety 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 careful visual inspections of each structure and the spans between each structure. (8 year cycle distribution and sub-transmission, 1 year cycle main grid)
- Pole test and treat includes intrusive tests performed on wood poles to determine the strength of the pole, with subsequent application of chemicals or other measures to maximize the lifespan of the pole. (16 year cycle)

#### ***Substations and Major Equipment***

- PacifiCorp inspects all substations to ascertain all components within the substation are operating as expected. These components can include breaker counters or target levels, which are critical information in monitoring the equipment. Abnormal conditions that are identified are prioritized for repair (corrective maintenance). (Monthly cycle)
- PacifiCorp also performs minor maintenance or overhauls on major substation equipment based on elapsed time or number of equipment operations, also to maximize the lifespan of this major equipment. (Based upon type of equipment)

#### 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.
- Outstanding conditions are recorded in a database and remain until corrected.

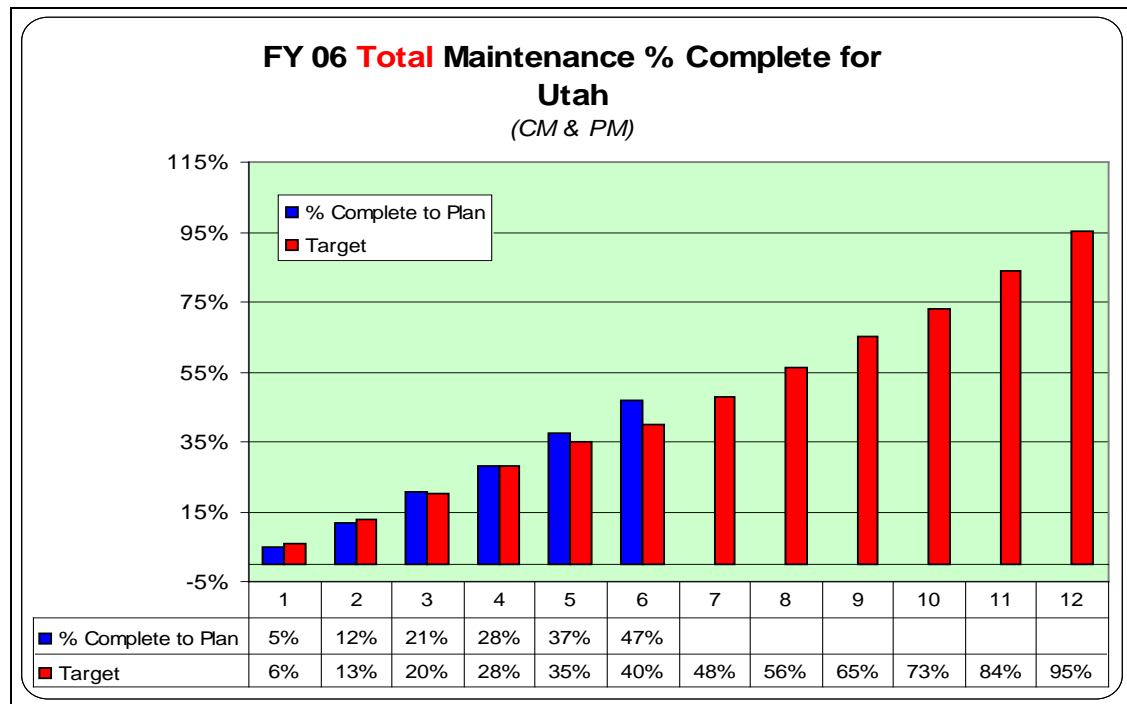
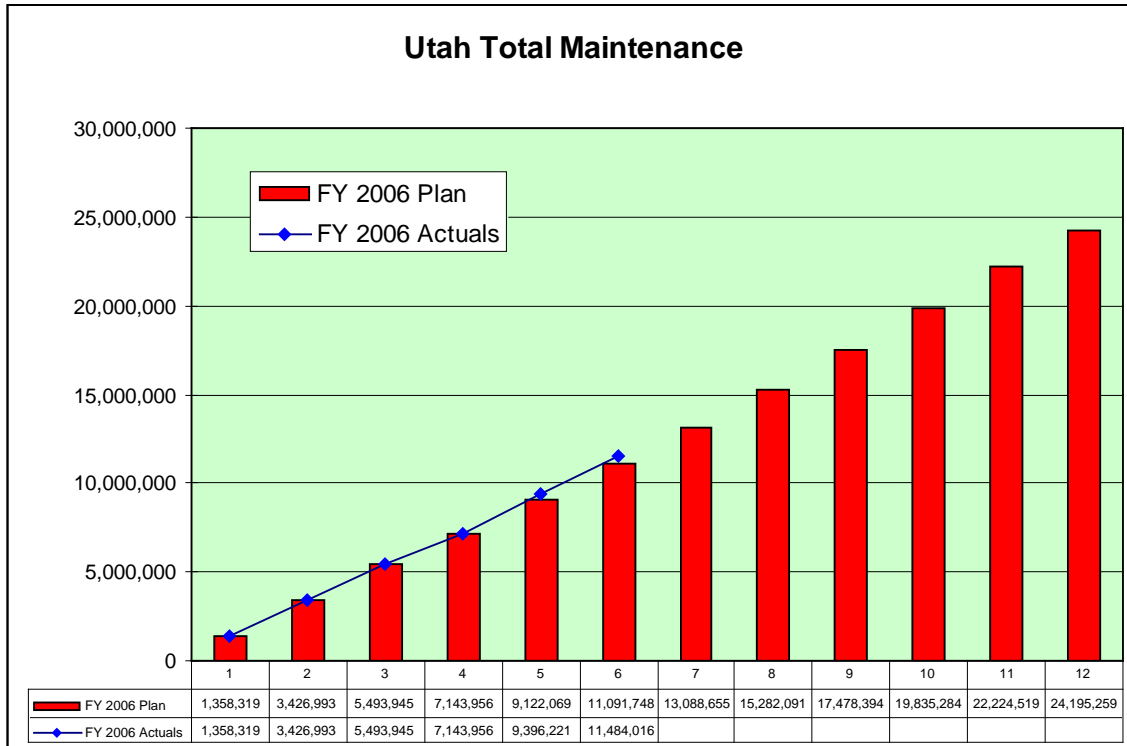
#### ***Substations and Major Equipment***

- 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.

### 4.2 Maintenance Spending

Fiscal 2006 Year-to-Date Spending through September 2005<sup>2</sup>

Second Quarter ending September 30, 2005 Year-to-date	Preventive Maintenance		Corrective Maintenance	
	Plan	Actual	Plan	Actual
	4,617,675	4,494,762	6,474,073	6,989,254



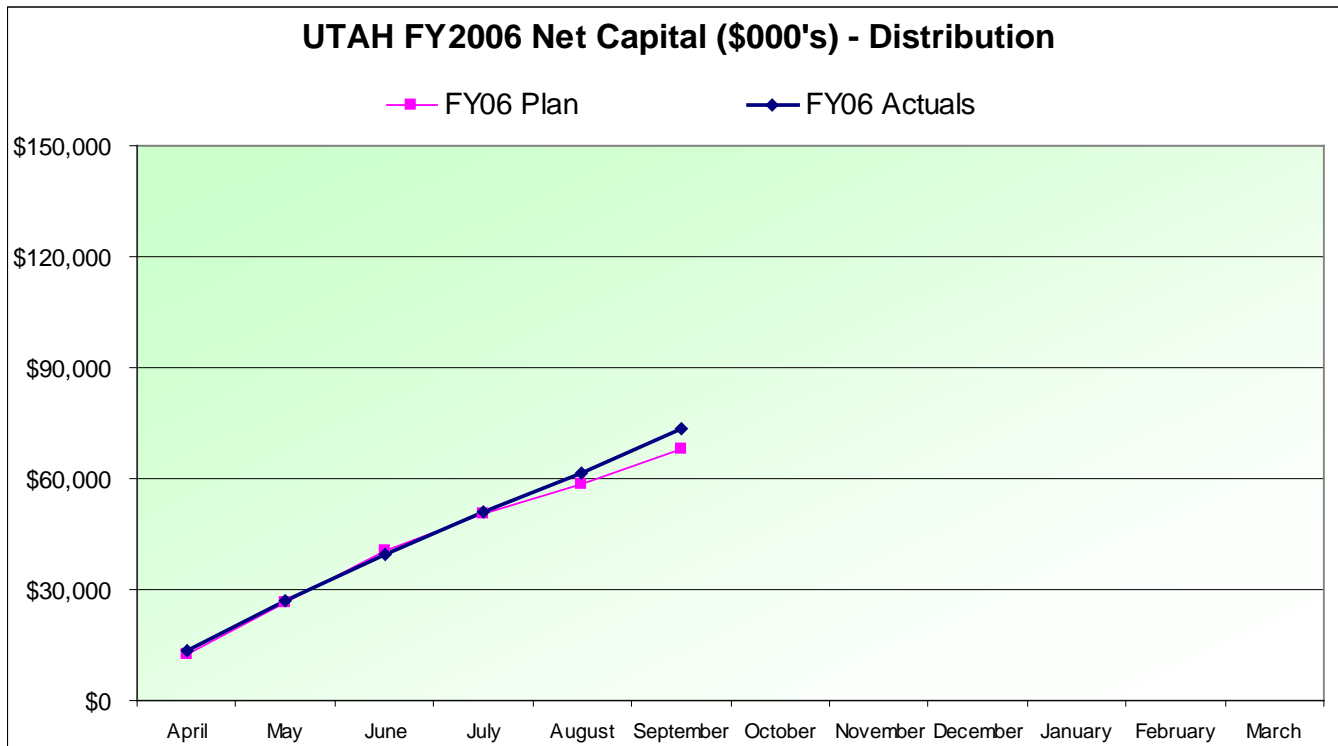
<sup>2</sup> Maintenance spending reflected here does not include Vegetation Management and Fault Locating costs, which when reported using FERC accounting methodology, FERC has traditionally considered maintenance.

## 5 CAPITAL INVESTMENT

### 5.1 FY2006 Capital Spending - Distribution

Second Quarter Ending September 30, 2005

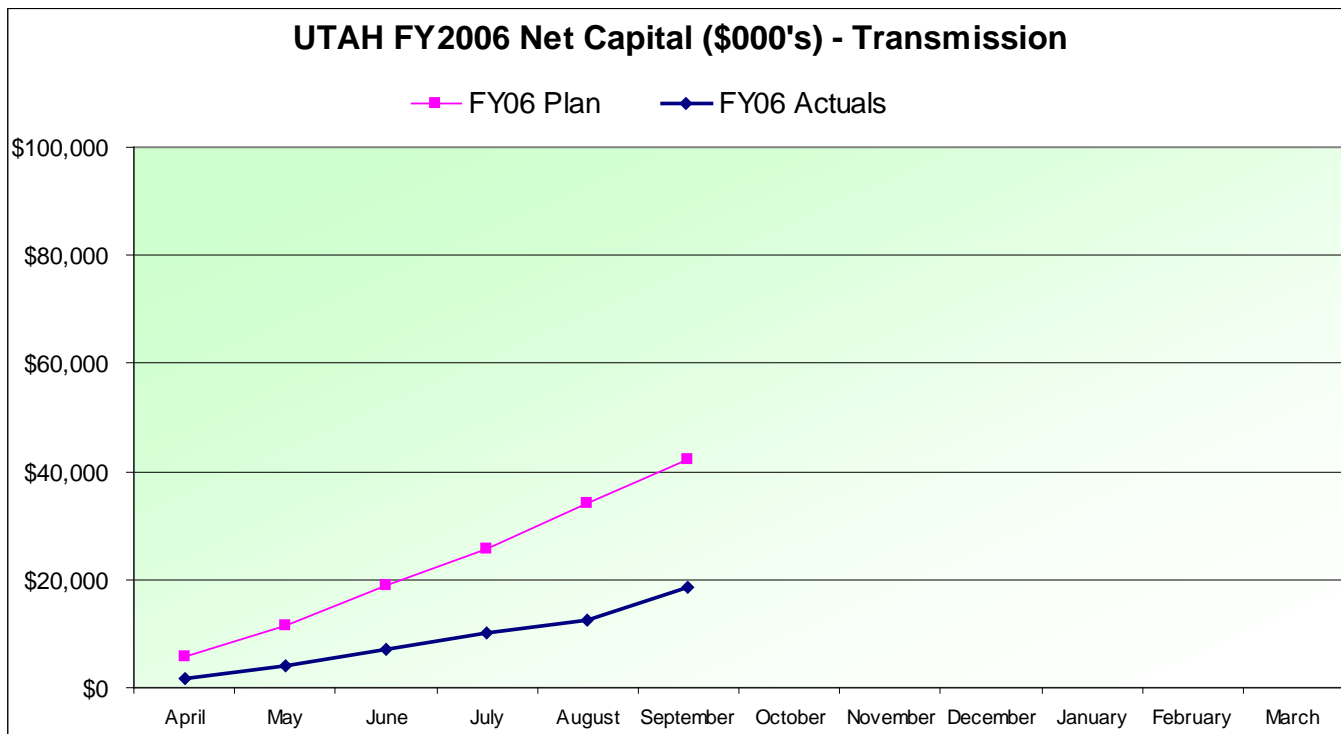
Investment Area	Actuals (\$M)	Plan (\$M)	Variance Explanation
1. Mandated	3.1	2.8	Highway Relocation work \$0.4M over plan.
2. New Connects	21.8	21.0	The largest variances are in Residential and Street Lighting
3. System Reinforcement	32.1	26.9	Subtransmission Reinforcements had a variance of \$5M
4. Replacements	13.0	12.0	Replace - Overhead Distribution Lines - Other had a \$1M variance
6. Upgrades & Modernize	3.6	5.1	Salt Lake & Ogden fiber optic communications project \$1.9M under
<b>Total - Distribution</b>	<b>73.6</b>	<b>67.8</b>	





### 5.2 FY2006 Capital Spending - Transmission

Second Quarter Ending September 30, 2005			
Investment Area	Actuals (\$M)	Plan (\$M)	Variance Explanation
1. Mandated	0.2	1.1	Public Accommodations \$1M under plan
2. System Reinforcement	0.0	0.0	No activity in this quarter
3. Replacements	2.2	2.5	Overhead Transmission Lines \$.3M under plan
4. Upgrades & Modernize	0.3	1.4	Substation improvements \$1.0M under.
<b>Total - Trans. Excl. IRP &amp; Interconnections</b>	<b>2.7</b>	<b>5.0</b>	
5. IRP & Interconnections	15.9	37.1	Lakeside 1 138kV \$3.3M under and Mona-Camp Williams #4 345kV \$1.7M under. Camp Williams-MidValley 345 Loop \$2.8M. Camp Williams-Ben Lomond 345 Loop \$2.1M under, SL Valley Add Capacitor \$0.7M under.
<b>Total - Transmission</b>	<b>18.6</b>	<b>42.1</b>	



## 6 VEGETATION MANAGEMENT

### 6.1 Production

**UTAH**  
**Tree Program Reporting**  
**FY2006 thru Q2**

	Distribution						
	Total	Line	Line	Miles	Miles	% of miles	
	Line	Miles	Miles	Ahead(behind)	on	on	Behind
	Miles	Scheduled	Worked	Schedule	Schedule	Schedule	Schedule
AMERICAN FORK	843	206	76	-27	816	96.8%	3.2%
CEDAR CITY	1,357	383	256	65	1357	100.0%	0.0%
JORDAN VALLEY	818	138	83	14	818	100.0%	0.0%
METRO	1,210	335	179	12	1210	100.0%	0.0%
MOAB	921	264	42	-90	831	90.2%	9.8%
PARK CITY	527	204	108	6	521	98.9%	1.1%
PRICE	573	339	147	-23	550	96.0%	4.0%
RICHFIELD	1,306	567	250	-34	1272	97.4%	2.6%
TOOELE	460	87	25	-19	441	95.9%	4.1%
LAYTON	285	95	80	32	285	100.1%	-0.1%
OGDEN	877	308	189	35	877	100.0%	0.0%
SMITHFIELD	564	209	77	-28	536	95.1%	4.9%
TREMONTON	724	152	91	15	724	99.9%	0.1%
VERNAL	438	298	73	-76	362	82.6%	17.4%
<b>TOTAL</b>	<b>10,902</b>	<b>3,584</b>	<b>1,676</b>	<b>-116</b>	<b>10,600</b>	<b>97.2%</b>	<b>2.8%</b>

Distribution cycle \$/tree: \$45.89

Distribution cycle removal % 51.40%

Transmission

Total	Line	Line	Miles	Miles	% of miles
Line	Miles	Miles	Ahead(behind)	on	on/behind
Miles	Scheduled	Worked	Schedule	Schedule	Schedule
6,026	938	469	-1	6,025	100%

Transmission \$/tree: \$24.66

Transmission removal % 86.70%

UTAH

April – September 2005

6.2 Budget

UTAH  
Tree Program Reporting  
FY2006 thru Q2

	2006 est.	2007 est.	2008 est.
<b>Distribution</b>			
Tree Budget	\$12,134,823	\$13,519,541	\$12,808,200
<b>Transmission</b>			
Tree Budget	<u>\$ 2,237,115</u>	<u>\$ 1,827,712</u>	<u>\$ 1,863,826</u>
<b>Total Tree Budget</b>	\$14,371,938	\$15,347,253	\$14,672,026

	Distribution			Transmission		
	Actuals	Budget	Variance	Actuals	Budget	Variance
<b>Fiscal year 2006</b>						
Apr	\$ 1,715,850	933,448	\$ 782,402	\$ 269,298	\$ 70,136	\$ 199,162
May	\$ 327,805	933,448	\$ (605,643)	\$ 102,702	\$ 156,869	\$ (54,167)
Jun	\$ 748,734	1,166,810	\$ (418,076)	\$ 221,536	\$ 206,586	\$ 14,950
Jul	\$ 571,474	933,448	\$ (361,974)	\$ 344,427	\$ 227,249	\$ 117,178
Aug	\$ 985,213	1,166,810	\$ (181,597)	\$ 139,448	\$ 458,436	\$ (318,988)
Sep	\$ 959,237	933,448	\$ 25,789	\$ 225,758	\$ 184,954	\$ 40,803
Oct						
Nov						
Dec						
Jan						
Feb						
Mar						
<b>Total</b>	<u>\$ 5,308,313</u>	<u>\$ 6,067,411</u>	<u>\$ (759,098)</u>	<u>\$ 1,303,168</u>	<u>\$1,304,229</u>	<u>\$ (1,062)</u>

Average # Tree Crews on Property (YTD) 88